This Article argues that corporate status became popular in the nineteenth century as a way to organize production because of the unique manner in which incorporation permitted organizers to lock in financial capital. Unlike participants in a partnership, shareholders in an incorporated enterprise could not extract capital from the firm without explicit approval of a board of directors charged with representing the interests of the incorporated entity, even when that interest might sometimes conflict with the interests of individual shareholders. While this ability to lock in capital has occasionally led to abuses, the ability to commit capital generally helped promote and protect the interests of shareholders as a group by making it possible for the entity to invest in long-term, highly specific investments. It also helped protect a wide range of enterprise participants who made specialized investments in reliance on the continued existence and financial viability of the corporation.

The ability to lock in capital grew out of the fact that a corporate charter created a separate legal entity, whose existence and governance were separate from any of its participants. Although the idea that the law creates a separate legal “person” when a corporation is formed has been played down in the legal scholarship of the last two decades in favor of the view that a corporation is simply a “nexus” through which natural persons interact, recent legal scholarship has begun to reconsider the importance of entity status. Entity status under the law, and the associated separation of governance from contribution of financial capital through the formation of a corporation, allowed corporate participants to do something more than engage in a series of business transactions, or relationships, or even projects. It made it possible to build lasting institutions. Investments could be made in long-lived and specialized physical assets, in information and control systems, in specialized knowledge and routines, and in reputation and relationships, all of which could be sustained even as individual participants in the enterprise came and went. And these business institutions, in turn, could accomplish more toward the improvement of the wealth and standard of
INTRODUCTION

The phrase “lock-in,” when used in the context of corporate law, generally has a negative meaning, suggesting the dreaded fate of a minority shareholder in a closely held corporation who cannot sell her shares (perhaps because there are restrictions on stock sales, or perhaps because there is just no market for such shares), and cannot compel the corporation to pay out any of its income or assets to shareholders. Similarly, the phrase “separation of ownership from control” refers to a feature of publicly traded corporations that has been widely regarded by legal scholars and economists for the last few decades as the source of one of

1. See, e.g., WILLIAM A. KLEIN & JOHN C. COFFEE, JR., BUSINESS ORGANIZATION AND FINANCE: LEGAL AND ECONOMIC PRINCIPLES 139 (8th ed. 2002) (“Under partnership law, it is easy for a partner to terminate his or her involvement in the firm . . . Corporate law just creates the opposite problem (which is sometimes referred to as ‘lock-in’).”). See 2 F. HODGE O’NEAL & ROBERT B. THOMPSON, O’NEAL’S CLOSE CORPORATIONS: LAW AND PRACTICE § 9.02 (3d ed. 2003). The authors note: [A] shareholder in a close corporation does not have the exit option available to a shareholder in a publicly held corporation, who can sell shares in a securities market if dissatisfied with the way the corporation is being operated. Shares in a close corporation, particularly less than a controlling interest, cannot be easily sold.

the most serious infirmities of the corporate form. But while restrictions on withdrawing capital from corporations and the control of corporations by individuals who are not major shareholders can both be abused, I argue in this Article that it was precisely these features of corporations that made the corporate form so useful in the development of modern industrial economies. I develop that argument by exploring why U.S. business entrepreneurs in the nineteenth century began seeking out and using the corporate form to organize their businesses.

Although the legal rules that form the basis of contemporary corporations had their basis in earlier law, the corporate form that we are familiar with in the United States today emerged over the course of the nineteenth century, and during that one century, corporations became the dominant way to organize large-scale businesses. Today corporations are among the most influential forces in economic activity worldwide.

Why did the corporate form become the preferred way to organize large-scale business when it did? And what did the adoption of a corporate form accomplish for the organizers of business that could not have been accomplished through other nineteenth century legal forms? Business historians have hypothesized three possible explanations: the ability to amass large amounts of capital, limited liability, and the centralization of control.

2. An extensive literature questions the efficiency of corporations in which the role of "owner" is separated from "control." See, e.g., KLEIN & COFFEE, supra note 1, at 173 ("[T]he separation of ownership and control... has remained the point of departure for most modern commentary about the publicly held corporation. To the extent one believes that management is free from constraints, it is easy to believe that the interests of shareholders are not being well served."). See generally FRANK H. EASTERBROOK & DANIEL R. FISCHER, THE ECONOMIC STRUCTURE OF CORPORATE LAW (1991); FOUNDATIONS OF CORPORATE LAW (Roberta Romano ed., 1993); Bernard S. Black, Shareholder Passivity Reexamined, 89 Mich. L. Rev. 520 (1990); Victor Brudney, Corporate Governance, Agency Costs, and the Rhetoric of Contract, 85 Colum. L. Rev. 1403 (1985); Eugene F. Fama, Agency Problems and the Theory of the Firm, 88 J. Pol. Econ. 288 (1980); Eugene F. Fama & Michael C. Jensen, Separation of Ownership and Control, 26 J.L. & Econ. 301 (1983); Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. Fin. Econ. 305 (1976); Henry G. Manne, Mergers and the Market for Corporate Control, 73 J. Pol. Econ. 110 (1965); Ralph K. Winter, Jr., State Law, Shareholder Protection, and the Theory of the Corporation, 6 J. Legal Stud. 251 (1977).

3. According to one survey, by the year 1800 only 335 charters had been issued in the United States for business corporations—88 percent of which had been issued after 1790. See 2 JOSEPH STANCLIFFE DAVIS, EIGHTEENTH CENTURY BUSINESS CORPORATIONS IN THE UNITED STATES, in ESSAYS IN THE EARLIER HISTORY OF AMERICAN CORPORATIONS 3, 24 tbl.1 (1917). By 1890, there were nearly 500,000 business corporations. See DOW VOTAW, MODERN CORPORATIONS 24 (1965). By 1904, the total par value of manufacturing stocks and bonds listed on the major exchanges for public trading was $6.8 billion, more than half the book value of all manufacturing capital as measured in the 1904 census. See WILLIAM G. ROY, SOCIALIZING CAPITAL: THE RISE OF THE LARGE INDUSTRIAL CORPORATION IN AMERICA 5 (1997) (citing U.S. BUREAU OF THE CENSUS, HISTORICAL STATISTICS OF THE UNITED STATES: COLONIAL TIMES TO 1970 (1975)).

important in many situations, it was a fourth factor that turned out to be the critical advantage of the corporate form: the ability to commit capital, once amassed, for extended periods of time—for decades and even centuries. How exactly does organizing a business through a corporation facilitate these things, and why were they important?

The Article suggests that the chartering of a corporation legally transformed the business enterprise in ways that would have been impossible or extremely difficult to achieve through individual proprietorship, partnership, or other forms of contract law—at least as these forms were understood by the law in the early nineteenth century. The first way was that incorporation gave the enterprise "entity" status under the law, and the second was that incorporation required governance rules that legally separated business decisionmaking from contributions of financial capital.

organization as a major economic asset by legitimating a combination of strong central direction and limited commitments (meaning limited liability). "[T]he corporate form encouraged the muster or retention of resources by offering investors an assured frame of limited commitments ..." Id. at 26; see also RONALD E. SEAVOY, THE ORIGINS OF THE AMERICAN BUSINESS CORPORATION 1784–1855, at 50 (1982) (noting that incorporation in early nineteenth century New York was advantageous because it "offered the protection of limited liability for investors in speculative enterprises"). "Incorporation would ... facilitate the ownership of property and the sharing of profits among a larger number of persons to help mobilize capital." Id. at 63. "The only advantages of an incorporation under the statute consist in a capacity to manage the affairs of the institution by a few... agents, and by an exonation from any responsibility beyond the amount of the individual subscriptions." Id. at 70 (quoting Slee v. Bloom, 19 Johns. 456, 474 (N.Y. 1822) (Spencer, C.J.)); SHAW LIVERMORE, EARLY AMERICAN LAND COMPANIES: THEIR INFLUENCE ON CORPORATE DEVELOPMENT 2 n.2. (Octagon Books 1968) (noting that business leaders in the late eighteenth and early nineteenth century were looking for an organizational vehicle in which outsiders could passively invest). "Perpetuity, concentration of managerial powers in the right hands, and free transferability of interest are the essential means to that end." LIVERMORE, supra, at 2 n.2.

5. Much legal scholarship in the last two decades has dismissed the importance of the legal convention that defines corporations as legal "persons" in favor of a view that a corporation is a nexus through which natural persons interact with each other. See, for example, EASTERBROOK & FISCHER, supra note 2, which summarized prior research and set a baseline for future research on the "nexus of contracts" view of corporations. However, a number of corporate scholars have lately been revisiting the importance of corporate personhood and entity status. See, e.g., William T. Allen et al., The Great Takeover Debate: A Meditation on Bridging the Conceptual Divide, 69 U. CHI. L. REV. 1067 (2002) (defining and discussing the entity model of corporations); Margaret M. Blair, Firm-Specific Human Capital and Theories of the Firm, in EMPLOYEES AND CORPORATE GOVERNANCE 58, 86 (Margaret M. Blair & Mark J. Roe eds., 1999) (noting that certain kinds of multilateral and multidimensional relationships and agreements among individuals may be facilitated by giving separate entity status to the corporation). In an especially important article on the role of entity status, Henry Hansmann and Reinier Kraakman discuss how entity status is used to partition assets among potential claimants. Henry Hansmann & Reinier Kraakman, The Essential Role of Organizational Law, 110 YALE L.J. 387 (2000). See the discussion infra notes 7–14 and accompanying text. The history of the development of entity status in the law of business organizations is explored in Henry Hansmann et al., Legal Entities, Asset Partitioning, and the Evolution of Organizations (Feb. 2002) (unpublished manuscript on file with UCLA Law Review).

6. Eugene Fama and Michael Jensen offer an economic theory about the benefits of separation, noting that separation allowed firm participants to specialize in either risk taking or decisionmaking. See
Entity status for incorporated businesses meant that a chartered corporation was recognized as a distinct legal entity, separate from any of its investors or managers, for purposes of buying, selling, or holding property, of making contracts, and of suing and being sued. As Henry Hansmann and Reinier Kraakman have discussed at length in their recent *Yale Law Review* article,\(^7\) the creation of a separate legal entity allows business organizers to partition the assets used in the business. Partitioning has two aspects: Individual participants in the business are not held personally responsible for the debts or liabilities of the business (this aspect is commonly referred to as “limited liability” in the context of business corporations\(^8\)), and 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.\(^9\)

Some legal scholars have stressed the important role played by limited liability in allowing business corporations to attract capital in the form of modest investments by many small investors.\(^10\) Without minimizing this important

\(^{7}\) Hansmann & Kraakman, *supra* note 5, at 393.\(^{8}\) Hansmann and Kraakman use the phrase “defensive asset partitioning” to describe this type of partitioning in more general contexts. Id. at 393.\(^{9}\) In the more general context of the key elements of entity status under the law, this form of asset partitioning is referred to as “affirmative asset partitioning” (AAP). Id. at 393; Hansmann et al., *supra* note 5, at 1. Hansmann, Kraakman, and Squire stress that the key feature of AAP is that the personal creditors of the parties they refer to as “owners” of the business cannot compel dissolution of the business to satisfy creditors’ claims against the “owners.” Hansmann et al., *supra* note 5, at 1. In fact, these authors define a legal entity as an organization that exhibits AAP. Id. at 11 (“[W]e view AAP as the central legal characteristic of modern organizations.”). Protecting the business from the personal creditors of the participants in the business may have been important to business entrepreneurs of the nineteenth century. However, as we shall see, it may have been even more important that neither the individual shareholders of firms that were incorporated, nor their heirs, could compel dissolution of an incorporated business in order to withdraw their share of the value of the business.\(^{10}\) See, e.g., STEPHEN B. PRESSER, *PIERCING THE CORPORATE VEIL* (1991) (summarizing the early history of limited liability). Limited liability shifts some of the risk of the business to nonshareholder participants. Modern finance theory casts doubt on whether mere risk shifting, by itself, should reduce the overall costs of capital (or other inputs). Also, historians have raised considerable doubt about whether limited liability was the primary reason for seeking a corporate charter in the first half of the nineteenth century. See the discussion infra Part III.E.
role, I stress in this Article the role played by the other side of asset partitioning, which I call "resource commitment."\(^{11}\) Hansmann and Kraakman have recently argued, similarly, that "the truly essential aspect of asset partitioning is... the reverse of limited liability—namely, the shielding of the assets of the entity from claims of the creditors of the entity’s owners or managers."\(^{12}\)

Perhaps as important as protecting the assets of the enterprise from participants’ creditors, however, was the role that incorporation played in establishing a pool of assets that was not subject to being liquidated or dissolved by any of the individual participants who might want to recover their investment. This role extends also to the heirs of these participants, who might prefer to see the assets of the business liquidated rather than accept a pro rata claim on potential distributions from the business in the settlement of the estate of the deceased corporate participant. Such a protected pool of assets could therefore be committed more credibly to the enterprise for a substantial amount of time. Investors in corporate shares could subscribe in small units, but once the funds paid to purchase those shares had been committed, limits were imposed—sometimes severe ones—on the ability of investors to withdraw funds from the business.\(^{13}\) The commitment of capital by shareholders, I argue, helped protect the at-risk investments made by other corporate participants. To again use a phrase from Hansmann and Kraakman, the capital contributed or pledged in the form of equity shares helped secure a pool of "bonding assets,"\(^{4}\) which made it easier to draw in other risky contributions to the enterprise. The most important other investors in the first half of the nineteenth century probably included

11. Hansmann, Kraakman, and Squire also suggest that limited liability is not as central to entity form, nor even to the ability to raise capital, as resource commitment. Hansmann et al., supra note 5, at 8–9.

12. Hansmann & Kraakman, supra note 5, at 390. Hansmann and Kraakman do not address the importance of shielding the assets of the entity from the shareholders themselves, an important factor this Article identifies. The possibility that one purpose of the corporate form was to prevent shareholders themselves from prematurely withdrawing capital is not consistent with the notion that shareholders are the "owners" (who, under standard definitions of ownership, ought to have the right to withdraw their assets at any time). This further illustrates the reasons I believe it is important to avoid calling shareholders "owners" of corporations. See, e.g., Margaret M. Blair, Corporate "Ownership": A Misleading Word Muddies the Corporate Governance Debate, BROOKINGS REV., Winter 1995, at 16.

13. Early corporations were often capitalized with "assessable" shares. EDWIN MERRICK DODD, AMERICAN BUSINESS CORPORATIONS UNTIL 1860 WITH SPECIAL REFERENCE TO MASSACHUSETTS 74 (1954). "The usual method of financing... business corporations during the period seems to have been to obtain stock subscriptions on which little or nothing was paid at the outset, it being expected that all or most of the money needed would be obtained by means of future calls." When the company incorporated, for example, it might issue 1000 shares of stock at $100 per share, but it might allow investors to buy in by paying only, say, $10 per share up front, and pledging to pay up to the remaining $90 per share if subsequently assessed by the board. Thus early shareholders were often not only committed to the amount they had already paid in, but could be required to pay in more later. See the discussion infra notes 165–167 and accompanying text.

banks and trade creditors (as well as the other shareholders), but the mechanism of separate entity status, and the resulting ability to lock in the assets, protected the interests of nonfinancial contributors assets as well as the interests of financial investors.\textsuperscript{15}

Which brings us to the second critical contribution of corporate law, as it evolved in the nineteenth century. Incorporating a firm created a governance mechanism which separated the role of contributing financial capital from the role of operating the business and making regular decisions about the use of assets in the business. When a corporation is formed, initial investors not only commit a pool of capital to be used in the business, but they also yield control over the business assets and activities to a board of directors that is legally independent of both shareholders and managers. This Article argues that such a yielding of legal control rights by equity investors and other corporate participants became increasingly important in bringing together teams of managers who specialized in running the business, as well as in establishing long-term stable relationships with suppliers and customers.\textsuperscript{16}

Entity status and separate governance, then, facilitated the accumulation of what business historian Alfred Chandler has called "organizational capabilities." Chandler's broad and groundbreaking work documents the development and growth of dozens of the great corporate enterprises that came to dominate their markets by the early twentieth century. He claims that the accumulation of organizational capabilities was perhaps the single most important factor contributing to long-term sustained profitability and growth in these dominant companies.\textsuperscript{17} By themselves, entity status and separate governance do not

\textsuperscript{15} In the late eighteenth and early nineteenth centuries, the state legislature granting the corporate charter also often granted the enterprise some special franchise, such as the right-of-way to build a turnpike, or the right to supply water to some community. In such a case, one could argue that the state or community had also committed resources (the franchise, the right-of-way, the special access to markets, etc.) to the corporation that were subsequently at risk in the enterprise. Later in this Article I will argue that a substantial amount of specialized "human capital" was also often put at risk in business ventures. See infra notes 28--29 and accompanying text.

\textsuperscript{16} Another role governance separation played, which has been emphasized more strongly in the literature to date, is that it enabled financial capital investors to play a more passive role, which made their investments easier to partition and trade, and therefore easier to diversify. But investors in the earliest corporations were rarely very diversified, and liquid markets for trading in corporate shares did not develop much until the second half of the nineteenth century. See ROBERT E. WRIGHT, THE WEALTH OF NATIONS REDISCOVERED (2002) (discussing the history of the development of financial markets in the United States prior to 1850); see also ALFRED D. CHANDLER, JR., THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS 59--60 (1977) [hereinafter VISIBLE HAND] (noting that ten of the largest corporations in the United States in the 1820s were in Lowell, Massachusetts, and "[t]he shares of these firms were closely held").

\textsuperscript{17} Organizational capabilities "accounted for the long-term persistence of profits by the same players over the decades." ALFRED D. CHANDLER, JR., ORGANIZATIONAL CAPABILITIES AND THE ECONOMIC HISTORY OF THE INDUSTRIAL ENTERPRISE, 6 J. ECON. PERSP., Summer 1992, at 79, 83. See also ALFRED D. CHANDLER, JR., SCALE AND SCOPE: THE DYNAMICS OF INDUSTRIAL CAPITALISM (1990) [hereinafter SCALE AND
ensure the success of a business. But once the initial capital had been contributed by equity investors, entity status and separate governance helped keep that capital in the enterprise, and thereby helped the firm draw in other valuable resources. If the resources were successfully used, the firm could accumulate both organizational and reputational assets, as well as additional specialized physical assets. These tangible and intangible assets, in turn, further increased the pool of bonding assets in the firm, facilitating the continued use of specialized assets.

This Article lays out this basic argument, supported at this point by evidence that is largely anecdotal and circumstantial. This evidence consists of the fact that other organizational forms such as individual proprietorships, partnerships, and so-called "joint stock" companies (which were considered a species of partnership) were available to organizers of business enterprises and were commonly used at the beginning of the nineteenth century. But none of these forms created organizations with "entity" status, in the sense that property could be held in the name of the entity, rather than in the name of the individuals involved in the enterprise, and none established governance mechanisms that were clearly separate from the participants. But at that time, few business enterprises employed more than about a hundred people, and none employed thousands. As technological developments began to make larger scale business possible and more profitable, the demand for the corporate form grew dramatically. By the latter half of the nineteenth century, business people were clamoring to use the corporate form, and states were accommodating them by passing increasingly general and less restrictive chartering rules.

As the corporate form became more widely and readily available, it appears, more businesses began to accumulate and use such organizational assets as hierar-
Locking in Capital

chical management systems, internal information and control systems, structured internal approaches to research and development activities, specialized marketing operations, internal training programs, and the development and management of portfolios of patents, brand identities, and other intellectual capital. These intangible systems and organizational structures helped make the institution of the corporation durable, even as the individual participants came and went.¹⁹

The Article proceeds in four parts. Part I describes the problem of large-scale production as a “team production” problem and discusses the contracting problems that arise in such production.²⁰ The essence of the team production problem is that varied inputs from a number of individuals are needed, these inputs are difficult or impossible to monitor or specify contractually, and the output is a joint output, not readily divisible or attributable to individual inputs. These inputs and investments are often enterprise-specific, because their value, once they have been sunk into the enterprise, is tied to the overall success of the enterprise. The specificity, or “sunk” quality of the investments, increases the difficulty of writing simple contracts among individuals that could elicit and coordinate the use of such inputs. Part I argues that it might be possible and efficient to organize small production “teams” using individual proprietorships or partnerships—both of which could be established without special charters under common law. But, as teams get larger and team members become increasingly specialized, these two forms of organization become increasingly constraining.

Part II argues that by the late eighteenth and early nineteenth century, business people were experimenting with organizational forms that would give them the benefits that we now associate with corporations. In particular, they began forming so-called “joint stock companies” that utilized trust law, in combination with partnership law, to lock in the business assets, yet provide liquidity to the investors.²¹ They also increasingly sought corporate charters from state legislatures.²² Part II explores the history of the use of the unincorporated joint stock company, showing why this form was ultimately less successful than the corporate form.

Part III traces the history of the corporate form in particular, how it was used by organizers of commercial enterprises. The chartering of business corporations enabled business organizers to create organizations that the law regarded

¹⁹. See Richard R. Nelson & Sidney G. Winter, An Evolutionary Theory of Economic Change 14 (1982) (defining and discussing “routines” in business institutions as one of the mechanisms by which the knowledge gained from prior experience is stored in corporations).

²⁰. Lynn Stout and I argue that the role of independent boards of directors in corporations can be understood as a solution to a “team production” problem. See Margaret M. Blair & Lynn A. Stout, A Team Production Theory of Corporate Law, 85 VA. L. REV. 247 (1999).

²¹. See the discussion infra Part II.

²². See the discussion infra notes 146–150 and accompanying text.
as separate entities, with governance that was separated, at least formally, from the contribution of capital. This could not be accomplished under common law rules for individual proprietorships and ordinary partnerships, and the joint stock form was unable to fully accomplish legal entity status. Originally these features may not have been the thing that most attracted business organizers to the corporate form, but as the opportunities to increase the scale of production became more obvious and attractive over time, these features became more important. Entity status and separate governance, I argue, provided a new solution to the “team production” problem because these innovations encouraged corporate team members to make credible commitments to each other to continue—and perhaps expand—their investments in the business. The holding of business assets in corporate form helped bond these commitments.

In Part IV, I discuss the emergence of large-scale enterprise, and the corresponding development of a social class of highly skilled “professional” managers, scientists, technicians, and marketing specialists employed by large corporations. Other scholars have studied the rapid expansion of share ownership during the late nineteenth century, and have asked why thousands of middle class people were (and continue to be today) willing to invest their savings in organizations and enterprises over which they exercise little control or influence. But few have asked the question of why thousands of similar people might have also been willing, in the late nineteenth century, to give up their independent farms and small businesses, and commit their livelihoods and reputations to organizations they did not control and over which they had no

23. Early corporations, which were created by special charters issued by legislatures, nearly always came with special privileges or franchises. See the discussion infra note 139 and accompanying text. The political pressure for general incorporation statutes was driven by a democratic impulse to eliminate these special privileges. See HURST, supra note 4, at 32–33; see also SEAVOY, supra note 4, at 6 (describing how general incorporation laws had the “effect of democratizing entrepreneurship” and also equalized opportunities). But if incorporation did not provide special privileges, why would new business organizers want to use the corporate form? The historical works I have examined generally assert, or proceed on the assumption that, incorporation was attractive even without special franchises, but few scholars have directly addressed the question of why.

24. Michael J. Whincop, Entrepreneurial Governance, in BRIDGING THE ENTREPRENEURIAL FINANCING GAP: LINKING GOVERNANCE WITH REGULATORY POLICY (Michael J. Whincop ed., 2001), at 90. Whincop notes: [T]he corporate form . . . locks each of the parties into the enterprise, and denies them ready exit. Adopting this form enables parties to give credible commitments to stay with the enterprise, which may be of value when the enterprise involves developing assets with idiosyncratic value over a substantial period of time.


property rights.\textsuperscript{26} I hypothesize that both kinds of investors were drawn in by the fact that the organizations in question—business corporations—were increasingly likely to be backed by substantial "bonding assets" of both a tangible and intangible type.

The corporate form does not now seem so unique or remarkable, so that its benefits might seem trivial. But it is worth exploring what it was that made the corporate form so attractive to business organizers as the U.S. economy moved from an agrarian, small-scale production economy to a large and modern industrial economy. In the Conclusion, I speculate that understanding this process may help shed light on the problems plaguing the economic transitions underway around the world, as well as on governance arrangements in small start-up firms. I suggest that entity status, together with legal separation of governance, helped to protect and encourage coordinated, specialized investments by all of the constituents of the enterprise.

I. ORGANIZING TEAM PRODUCTION

It is, perhaps, self-evident that it takes substantial capital resources to build and operate a railroad. Land must be purchased or rights-of-way obtained, steel track must be laid down, engines, freight cars, passenger cars, and stations must be purchased or built, staffed, and maintained, and dependable supplies of coal or other fuel supplies must be arranged. All of these resources, once invested, are likely to be difficult to liquidate or redeploy to another type of business. Similarly, large-scale production of manufactured goods often requires substantial amounts of committed capital resources to build factories and warehouses, secure raw materials, and finance inventories of goods headed to market; and there is a corresponding dearth of potential buyers for unused or unwanted business assets. Economists, historians, business leaders, and policymakers have long understood the importance to industrialization and economic development of the ability to amass large amounts of physical and financial capital.

\textsuperscript{26} Historian Olivier Zunz explores this question in analyzing the emergence of a class of middle managers. See OLIVIER ZUNZ, MAKING AMERICA CORPORATE, 1870–1920, at 39 (1990). Zunz asks:

If the republican virtues of smallness and independence were so deeply ingrained in the middle class, how were corporations able to break into this class so easily and coopt large parts of it? Was it easy to take a successful professional away from private practice and entice him to work for a corporation? Did corporations offer other inducements besides a good salary? In other words, why did a part of the middle class participate in the corporate political economy and the other resist it?\textsuperscript{id} Zunz' answer is that, even though middle managers in corporations were not paid particularly well relative to their peers who were independent entrepreneurs or professionals, they apparently gained psychic benefits and personal satisfaction from the opportunity to direct substantial corporate resources. See id. at 49 (discussing the motives of middle managers at the Chicago, Burlington & Quincy railroad). Also, see the discussion infra notes 153–155 and accompanying text.
Less well understood and appreciated by economists, but long recognized by business people, is the fact that building a railroad also requires substantial intangible inputs, like technology and management skill. Finance capital and physical capital do not operate themselves. They must be coordinated, managed, maintained, and operated daily by people, who must then develop systems, routines, and reputational and information networks to carry out their tasks. Production and distribution on a large scale, then, requires a wide variety of inputs from many different individuals. Often, the needed inputs are highly specialized to particular tasks, and difficult to specify in advance, but must be worked out over a long period of time.

A. The Team Production Problem

To begin to understand the problem of finding an adequate legal structure for assembling and coordinating multiple complex inputs in order to undertake large-scale production processes, it is useful to start with an examination of

27. See, e.g., id. at 37 ("Railway management in all its various departments may be said to involve the employment and the patronage of all the arts and sciences.") (citing The Railway Review, Mar. 19, 1892). Chandler analyzes the economic development and growth led by large corporations in the United States as being the product of a "revolution" in the ability of business to marshal and coordinate management skill and resources. See VISIBLE HAND, supra note 16. The idea in economic theory that new ideas are themselves an important force for economic change and development goes back at least to Schumpeter, but until the last decade or so mainstream economists have modeled technological change as the residual—or unexplained part—of economic growth. Only lately have mainstream economists undertaken serious efforts to explicitly model the accumulation of knowledge and expertise as an important factor in economic growth. See generally Richard R. Nelson & Paul M. Romer, Science, Economic Growth, and Public Policy, in TECHNOLOGY, R&D, AND THE ECONOMY 49 (Bruce L.R. Smith & Claude E. Barfield eds., 1996) (discussing the importance of knowledge and ideas in the theory of economic growth).

28. PETER F. DRUCKER, CONCEPT OF THE CORPORATION 8 (1972). Drucker observes that "the essence" of large-scale modern organization and production is that, within organizations, people of very diverse skills and knowledges work together. This, traditionally, could never be done except in very small groups, teams of four or five at most. Today we do it—or at least try—with very large numbers—thousands of people with different knowledges, coming together in a business, a government agency, or an armed service—under a management with specific knowledge of building and directing the large-scale organization. Id. Chandler focuses on how business organizations in the late nineteenth and early twentieth century assembled a large cadre of middle-level managers, divided up and coordinated their responsibilities, and developed new techniques of accounting and reporting to help coordinate their efforts. VISIBLE HAND, supra note 16. Zunz discusses the development of a large social class of middle managers. ZUNZ, supra note 26.

29. For example, Glenn Porter and Harold Livesay note that manufactured machinery, like agricultural machinery and sewing machines "were technologically complex, expensive items requiring close and often extended contact between manufacturer and consumer or required elaborate innovative marketing apparatus." GLENN PORTER & HAROLD C. LIVESAY, MERCHANTS AND MANUFACTURERS: STUDIES IN THE CHANGING STRUCTURE OF NINETEENTH-CENTURY MARKETING 4 (1971).
the contracting problems that arise in what economists call "team production" situations.  

Team production is simply production that requires various inputs of differing types from two or more individuals, and for which the output is not easily separable into the components that are attributable to the various inputs individually. Because inputs are complex and may not even be well understood at the beginning of the enterprise, it is difficult or impossible to write contracts among the team members specifying what each is to contribute. And because the outputs cannot be broken up into the parts each team member is responsible for, there is no obvious way that the outputs (or losses, as may happen in a risky venture) should be divided up among the team members.

In 1793, for example, a group of men formed a type of partnership called a "joint stock company" with the idea of mining coal in Pennsylvania. The Lehigh Coal Mine Company (the Company) purchased one tract of land which already had a small mine on it, and acquired options from the State of Pennsylvania for about 10,000 more acres believed to bear substantial amounts of coal. Over the next fourteen years, members of the Company periodically attempted to mine coal from the area, and then to get it to market either by floating it down the Lehigh River, which was not navigable during much of the year, or by transporting it in wagons over virtually impassable roads. The Company attempted numerous times to get the State of Pennsylvania to improve the navigation of the river, or to improve the road, to no avail. In order to construct the necessary transportation improvements itself, it called for further contributions from its subscribers "until calling was useless." The Company was never able to make money at this enterprise during that period.

The example illustrates a team production problem: Two of the necessary inputs (the coal in the ground and the knowledge and skill at mining it), had little value unless the product could be brought to market cheaply. The venture

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30. Stout and I review economic theories of the contracting problems in team production in Blair & Stout, supra note 20, at 265–87.

31. Armen Alchian and Harold Demsetz are generally viewed as having been the first to use the phrase and define the concept for use in economic modeling. See Armen A. Alchian & Harold Demsetz, Production, Information Costs, and Economic Organization, 62 AM. ECON. REV. 777 (1972). See Blair & Stout, supra note 20, at 265–67, for a discussion of Alchian and Demsetz' theoretical contribution.

32. ORDER OF THE BOARD OF MANAGERS, A HISTORY OF THE LEHIGH COAL AND NAVIGATION COMPANY (1840) [hereinafter A HISTORY OF THE LEHIGH COAL AND NAVIGATION COMPANY]. The original is in the special collection of the Hagley Museum and Library, in Wilmington, Delaware.

33. Id. at 3. Investors in unincorporated joint stock companies, which were partnerships with some but not all of the characteristics of corporations, were called "subscribers," or sometimes "stockholders" because they jointly contributed the capital stock used by the partnership. See infra Part II for more discussion of the differences between unincorporated joint stock companies and corporations. The Lehigh Coal Mining Company was an unincorporated joint stock company. LIVERMORE, supra note 4, at 240.
needed a third input: a functional transportation system. But just as the coal could have no market without the transportation system, the transportation system might have no use (at least initially) without the coal. Whoever invested in either part of the whole enterprise would be dependent upon investments being made in the other part of the enterprise for the project to have value.

Dispirited after fourteen years without success, the Company began leasing its land and mineral rights to others. In 1817, another partnership involving Josiah White, Erskine Hazard, and George F. A. Hauto, which operated a wire-making works in Philadelphia, wanted to purchase anthracite coal cheaply for use in their factory. They visited the Lehigh mines, studied the problem of navigation on the river, and discovered that the most recent law governing river improvement on the Lehigh River had expired. The team of White, Hazard, and Hauto then negotiated a twenty-year lease with the first Company for the coal lands, in exchange for an annual rent of one ear of corn, and a promise to deliver at least 40,000 bushels of coal annually to Philadelphia and surrounding districts. The team then sought an act authorizing them to improve the navigation of the Lehigh, and the act was passed in 1818. In exchange for this right, the team was to construct a "slack-water navigation" system on the river from Stoddartsville to Easton, a distance of approximately fifty miles. The team then planned to construct a series of "wing dams and channel walls" in the river so that the water would, at all points, be deep enough that a flat boat loaded with coal could float down the river without running aground on rocks in the river. White, Hazard, and Hauto would also have to construct usable roads from the coal mines to the river. The three decided it would be feasible to do these things, at a cost that would make it worthwhile.

The next problem this new team faced was raising the money to fund their project. Their plan was to do this by seeking subscribers in a new joint stock company they wanted to form for that purpose. But before discussing how they did that, I will briefly review the generic problems that tend to arise in team production situations, and the various organizational forms that were available under the law at the time to White, Hazard, and Hauto.

As already mentioned, two characteristics of team production are that production requires complex, difficult-to-specify inputs from a number of persons, and the output is not easily separable into the portions that are attribut-

34. A HISTORY OF THE LEHIGH COAL AND NAVIGATION COMPANY, supra note 32, at 4-5.
35. According to Webster's Revised Unabridged Dictionary, a "slack-water navigation" system refers to "navigation in a stream the depth of which has been increased, and the current diminished, by a dam or dams." WEBSTER'S REVISED UNABRIDGED DICTIONARY OF THE ENGLISH LANGUAGE 1351 (1913).
36. A HISTORY OF THE LEHIGH COAL AND NAVIGATION COMPANY, supra note 32, at 6. The partners estimated that the river fell at a rate of twenty-five feet per mile from Stoddartsville to Mauch Chunk, a distance of about 36.5 miles, and then fell another 364 feet from Mauch Chunk to Easton, a distance of about fourteen miles. Id. at 6-7.
able to each input provider individually. We have already seen that the inputs needed to bring anthracite coal to market in sufficient quantity and at a sufficiently low cost to be profitable included the physical inputs of coal-bearing land, plus labor and management, plus a useful transportation system. Because all were needed, the application of any one of the inputs by itself could not achieve the goal of bringing coal to market. The inputs must be used together and coordinated. Hence, the value provided by the coal lands could not be separated from the value provided by the river navigation system.

But consider just the transportation side of the equation, and briefly assume that it would have value by itself. Then suppose, for example, that Hauto was particularly adept at fund raising and business management, that Hazard was good at hiring and managing unskilled and skilled workers using available earth-moving and construction equipment to construct the wing dams and channel walls, and White was particularly clever mechanically (as, in fact, he turned out to be). Moreover, suppose (as was the case) that these three men do not have enough financial capital to undertake the project on their own, so they have to seek inputs from investors. All of the participants in the enterprise are needed to undertake the river navigation project, but there will be no obvious way to decide who should get what out of the joint project.

Team production problems are made much more complicated if the inputs are complex and difficult to specify in advance, and if, once invested in the joint enterprise, the inputs cannot be readily recovered and redeployed to other uses—at least not without significant losses in value—so that some of the investment is inherently "enterprise specific." This will undoubtedly be the case in this venture. The rights granted by the state to improve the navigation of the river cannot be redeployed if the venture fails. Neither can the time and effort spent by the three partners. And once paid out in wages to workers, for supplies and cash and renting earth-moving equipment, the money contributed by the financial investors cannot be redeployed either. The value of these investments will ultimately be tied to the success (or failure) of the enterprise as a whole. On whatever terms White, Hazard, Hauto, and their investors go into

37. Chandler stresses that investments in physical and organizational assets made by the earliest large business corporations were often highly enterprise-specific. See, e.g., VISIBLE HAND, supra note 16, at 87 (describing the specialized investments and specialized skills and training required to operate a railroad).

38. The literature on the importance of "asset specificity" in choice of organizational form is now too voluminous to cite in detail, but much of this literature goes back to Oliver Williamson, who has argued in numerous articles and books that "asset specificity" is one of the key characteristics that increases the transaction costs of organizing such production through market transactions. See, e.g., Oliver E. Williamson, The Modern Corporation: Origins, Evolution, Attributes, 19 J. ECON. LITERATURE 1537, 1548 (1981) ("The production cost advantages of markets decrease and the (comparative) governance costs of markets increase as assets become progressively more specific."). See generally OLIVER E. WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS (1975); OLIVER E.
business together, there may be positive rents, or losses, that will have to be shared in some way. Under many of the possible sharing rules each would be vulnerable if any of the other members of the “team” were to embezzle from the business, use assets of the business for their personal benefit, fail to work hard, or just mismanage their part of the business. Each would also be vulnerable to what economists have called a “hold-up problem”—the problem that one partner might use the threat of walking away from the business (and possibly forcing dissolution) to extract a greater share of the rents from the others (or a smaller share of the losses).

Because the organization of the river navigation project will require the participants in the venture to engage in a long-term business relationship with uncertain returns, they must have some way of organizing their joint business that allocates rewards and risks, assigns decision rights, provides incentives to induce all team members to make the requisite investments, and discourages holdups.

Consider the possibilities available to them. Imagine the participants entering into a series of contracts among themselves. Suppose Hauto, for example, had negotiated the grant of rights to improve the river by himself, so that he alone would have the right to control use of the river’s power for transportation purposes. He could contract with White to design the dams and channel walls, and contract with Hazard to carry out the actual construction. Hazard, in turn, could hire and oversee the workers who do the actual work. Hauto could then try to borrow the necessary capital from a bank in Philadelphia, although the bankers might require Hauto to put up substantial assets of his own as collateral, because the project would obviously be very risky.

Under such a network-of-contracts approach, however, each of the participants would probably be reluctant to extend himself or herself very far. The bank, as noted, would probably insist on collateral, forcing Hauto to bear most of the risk personally. Hazard would also not want to bear the full risk of the project, and would probably insist on dividing up the construction work into segments, and being paid in advance for each segment. White would have little incentive to be very creative about solving design and construction problems as the project proceeds (and would probably be inclined to blame Hazard for poor workmanship when such problems arose).

WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM (1985) [hereinafter ECONOMIC INSTITUTIONS].

39. CHARLES R.T. O'KELLEY & ROBERT B. THOMPSON, CORPORATIONS AND OTHER BUSINESS ASSOCIATIONS: CASES AND MATERIALS 8 (2d ed. 1996) (noting that “[t]he greater the team-specific investment made[,] . . . the less satisfactory will be [the] organization as an implicit team”). O'Kelley and Thompson's notion of "implicit team" refers to a group of individuals whose inputs are coordinated through a series of contracts or understandings, but not through any form of combined ownership of, or legal control over, the inputs. See id. at 8-9.
The potential incentive problems in this kind of complex project are myriad, and endemic to enterprises that involve team production. Economists and legal scholars have discussed these in the literature on relational contracts. It is not my intention to revisit all of those arguments here. Instead, I take as a premise that, by the nature of team production, it is extremely difficult to write long-term contracts to organize such production because the expectations of each party toward the other cannot be specified in a way that is enforceable by a court. If the participants in the river improvement project try to specify all the risks and rewards in advance, each will have some incentive to put risk off onto the others, or to shirk in ways that are hard to detect by a court, or to hold up the other parties. Instead, suppose that they all agree on vague terms by which they will work together, and further agree to decide later how to divide up the proceeds after they see how well the business does. In such a case, each will have an incentive to expend resources positioning himself or herself to capture more of the proceeds. Hazard may try to buy new earth-moving equipment for himself, which would enhance his ability to contract for other construction projects in the future, but then try to charge the cost of the new earth-moving equipment to the project. Similarly, White may spend more resources than necessary traveling back and forth from the construction site to study its progress, charging the business for his time and travel expenses. If, say, White were also responsible for seeking commitments from other coal miners in the area to bring their coal-hauling business to the Lehigh River, he might incur unnecessary expenses in cultivating relationships with those potential customers.

These kinds of contracting problems might well be alleviated if the three individuals and their investors share community or family ties that might encourage them to trust each other, or to behave in trustworthy ways. But one of the

40. See, e.g., SIMON JOHNSON ET AL., COURTS AND RELATIONAL CONTRACTS (Nat’l Bureau of Econ. Research, Working Paper No. 8572, 2001) (finding that while relationships are the basis of most transactions between firms, the effectiveness of courts also has a perceptible effect on the level of trust in business relationships); Marc Galanter, Justice in Many Rooms: Courts, Private Ordering, and Indigenous Law, 19 J. LEGAL PLURALISM 1, 17–27 (1981) (presenting empirical evidence supporting the idea of contracts enforced by social relationships); Stewart Macaulay, Non-Contractual Relations in Business: A Preliminary Study, 28 AM. SOC. REV. 55, 55–67 (1963) (introducing the concept of "relational" contracts as contracts supported by a network of relationships rather than by courts).

41. It may not be possible in advance to describe in detail what each party must do, and/or a court may not be able to verify whether either of them fulfilled their obligations under the contract.

42. Zunz tells the story of an independent sales agent for E. I. Du Pont de Nemours Powder Company who had a dispute with headquarters over relationship-building expenses the agent wanted to bill to the company, including "[c]ontribution to fund for family of miner killed in mine," "[a]ssisting miner in burial of child," and "[p]resent to party for information regarding party who was said to use L. & R. powder." ZUNZ, supra note 26, at 32. These and similar relationship-building expenses became the cause of tension between the firm and the sales agent. Id.

43. Unsurprisingly, Stout and I find that people who share a common group identity are more likely to trust each other and to be trustworthy toward one another. See Margaret M. Blair & Lynn A.
key features of the United States in the early nineteenth century was that people were beginning to perceive opportunities to expand production, transportation, and marketing beyond their own communities, and were seeking ways to do that. Nothing in the historical record of the Lehigh Companies suggest that there were family ties among the participants, although many business relationships of this period involved such ties. Absent such constraining forces, what other ways could the team members structure their legal relationship to reduce contracting costs?

In the early nineteenth century, the law provided four basic approaches to organizing the team production enterprise into a single “firm”: (1) Individual proprietorships, in which a lone team member would own or finance all the assets of the business, be personally responsible for all the debts and other obligations of the business, and hire the others as employees or contractors; (2) partnerships, in which the participants would jointly own and manage the assets of the business and share responsibility for the liabilities of the business; (3) unincorporated joint stock companies, which were a type of partnership that made it easier to raise capital from passive partners; and (4) corporations. The next part briefly discusses the advantages of individual proprietorships and simple partnerships, although neither of these organizational forms would work for Hazard, White, and Hauto, because, even among all three of them, they did not have enough capital to take on the river navigation project.

In Part II, then, I consider how Hazard, White, and Hauto might address some of their problems by forming a joint stock company, and in Part III I review the evolution of the corporate form for use in business enterprises in the United States, and discuss why, ultimately, these three individuals sought a special charter from the state of Pennsylvania by which they could incorporate their business.

B. Individual Proprietorship

Oliver Williamson was among the first economists to observe that business relationships such as those required for a large-scale transportation or


\[\text{44. Chandler tells us that until well after 1840, "the family remained the basic business unit." VISABLE HAND, supra note 16, at 16. Teemu Ruskola discusses what he calls "clan corporations" in China, which were professionally managed commercial enterprises organized in the form of a family. See Teemu Ruskola, Conceptualizing Corporations and Kinship: Comparative Law and Development Theory in a Chinese Perspective, 52 STAN. L REV. 1599 (2000). Traditional Chinese family law, he argues, "performed many of the functions that modern American corporation law performs today." Id. at 1606. Of the unincorporated businesses that managed to achieve large scale in the United States by the early twentieth century, I would guess that all or nearly all of them were managed by members of an extended family, but I have not yet done the research to confirm this.}\]
manufacturing business involve a high level of transaction costs if the parties attempt to organize their activities through market transactions or contracts. Thus, he and others have proposed that such businesses will be more efficient if ownership and control over all the assets used in the business are concentrated into the hands of a single owner and decisionmaker. In principle, an individual proprietorship could achieve this. In a business organized as a proprietorship, a single entrepreneur-owner would own or lease the physical assets used in the business, hire other individuals to supplement her own efforts, pay fixed salaries or wages to such employees, be liable for any debts, and receive any profits from the business.

At the turn of the nineteenth century, most manufacturing and trading businesses were organized as individual proprietorships or partnerships. In 1817, for example, Dr. Charles Lukens of Philadelphia, bought out the interests of his father-in-law and another partner in the Brandywine Iron Works and Nail Factory. Lukens leased the factory building and property from them, and took over operation of the factory as a sole proprietor. As sole proprietor, he would have had to hire workers and perhaps a shop floor supervisor to see that the nails and other iron products were produced to specifications, that the equipment was maintained, and raw materials utilized efficiently. Under the common law that would have been well established in the early nineteenth century, the shop floor

45. Williamson does not use the phrase "team production," but builds his analysis of markets and organizational hierarchies around the problem of organizing production activities in which there are serious information problems, individuals have limits on their ability to calculate and weigh the relevant risks and rewards ("bounded rationality"), specific investments must be made, and individuals are not perfectly trustworthy, but instead are "opportunistic." See ECONOMIC INSTITUTIONS, supra note 38, at 47.

46. See generally Id.; Oliver D. Hart, Incomplete Contracts and the Theory of the Firm, 4 J.L. ECON. & ORG. 119 (1988); Hart & Moore, supra note 6; Benjamin Klein et al., Vertical Integration, Appropriable Rents, and the Competitive Contracting Process, 21 J.L. & ECON. 297 (1978). None of these economists, however, considers the question of how the choice of legal organizational form for the business affects the allocation rights, powers, and protections available to the individual firm participants. See Naomi R. Lamoreaux, Partnerships, Corporations and the Limits on Contractual Freedom in the U.S. History: An Essay in Economics, Law, and Culture (unpublished manuscript) (considering the impact of organizational form on these questions in the nineteenth century).

47. Individual proprietorships would thus provide for centralization of control of the business which is one of the benefits of incorporation discussed in the Introduction. But the amount of capital that can be amassed by an individual proprietor is limited by the wealth and borrowing capacity of the proprietor, and there would be no way to ensure that the capital could be committed beyond the lifetime or attention span of the individual proprietor.

48. See the discussion infra Part I.C.

49. The Brandywine Iron Works and Nail Factory later came to be called Lukens Steel Company. Some of the basic factual details about the company in this account are taken from CHRISTOPHER T. BAER, A GUIDE TO THE HISTORY AND RECORDS OF THE LUKENS STEEL COMPANY, accession 50 (1994), which documents the corporate records of this enterprise preserved at the Hagley Museum and Library in Wilmington, Delaware. Other hypothetical details are based solely on my own speculation.
supervisor would probably be an “agent” of Lukens,\(^5\) able to enter into contracts for the sale of products or the purchase of raw materials on behalf of the business. Lukens, in turn, might pay the supervisor and workers fixed wages, or alternatively, Lukens might hire the supervisor as an independent contractor, and then the supervisor (or “foreman”) might hire, manage, and pay the individual unskilled workers himself, out of his pay from Lukens.\(^5\) The courts at the time would recognize and enforce Lukens’ property rights in, and associated responsibilities for, the business and its output, and would enforce the terms of the employment relationship between Lukens and each of the others. Lukens might also hire an independent agent to sell the products of his factory for him.\(^5\) In dealing with third parties, Lukens would be held responsible for liabilities of the business, even if the foreman had signed the contract incurring liabilities on behalf of Lukens.

By addressing the team production problem in this manner, Lukens would be motivated to work hard, and to cultivate new markets. He would also want to find better ways to reduce costs and manage the accounts of the business. Lukens might, for example, want to hire someone with engineering or other technical skills to develop new products or new methods of producing products, or he might have to learn these skills himself.\(^5\) If the business were organized as a proprietorship, however, the incentives of all of his employees to undertake these initiatives on their own could be expected to be substantially attenuated, and there could be other “agency” problems as well in the relationship between Lukens and his employees and agents.\(^5\)

Until about the last two decades, the “theory of the firm” under mainstream economics envisioned “firms” essentially as individual proprietorships. Even now, in introductory economics texts, firms are generally modeled as bundles of physical assets (for example, a factory and some machines) owned by an entre-

\(^{50}\) See, e.g., HURST, supra note 4, at 5 (“[T]he common law early and consistently recognized binding relations of principal and agent, between themselves as well as to third parties.”).

\(^{51}\) Such an approach to organizing unskilled labor in factories, known as “inside contracting,” was apparently common early in the industrial revolution. See Peter Cappelli, Market-Mediated Employment: The Historical Context, in THE NEW RELATIONSHIP: HUMAN CAPITAL IN THE AMERICAN CORPORATION (Margaret M. Blair & Thomas A. Kochan eds., 2000).

\(^{52}\) Louis Galambos and Joseph Pratt note that early factories were often owned by engineers who provided the technical expertise. See LOUIS GALAMBOS & JOSEPH PRATT, THE RISE OF THE CORPORATE COMMONWEALTH 20 (1988). These factories produced generic, unbranded products, and their owners did not typically have much marketing expertise. Therefore, they often hired independent agents to market their products for them. ZUNZ, supra note 26, at 13.

\(^{53}\) In 1824, Lukens’ factory was the first in America to roll boiler plate, and Lukens cultivated the market for this product. Lukens also rolled the sheet iron for the first experimental iron-hulled steamboat in 1825. BAER, supra note 49, at 1.

\(^{54}\) See, e.g., PAUL MILGROM & JOHN ROBERTS, ECONOMICS, ORGANIZATION AND MANAGEMENT 214 (1992) (“The general problem of motivating one person or organization to act on behalf of another is known among economists as the principal-agent problem.”).
preneur, who hires units of undifferentiated labor to run the factory and operate the machines. In the 1960s, theorists began looking at the implications for firm behavior of the fact that the managers of large corporations were hired agents. As agents rather than owners, they might not have an incentive to maximize the profits from the operation of the factory. Then, by the late 1970s, theorists began to model the relationship between investors in corporations and the hired managers of these firms as "agency" relationships, as if the role played by shareholders in contemporary corporations corresponded neatly to the role played by individual proprietors in small businesses. Subsequently, a vast legal literature has grown up around the idea that corporate directors and managers are "agents" of shareholders.

Today, to the extent that mainstream economic theorists attempt to "open the black box" to understand what goes on inside corporations, they generally model a corporation as a "nexus of contracts" rather than as a separate entity. I hypothesize below, however, that incorporation transforms the relationships among contributors of financial and human capital into something different from a simple agency relationship, and that understanding the role of separate entity status under the law is critical to understanding how this happens. But first, I consider the problems that may arise in business relationships between the firm and third parties when a business is organized as an individual proprietorship.

In a proprietorship of any size that purchases supplies and sells output to parties outside the business, credibility with customers and suppliers, as well as specialized employees, will depend almost entirely on the proprietor's skill, personal relationships, and reputation as a business person, or on relationships and reputation that his direct agents build up. The fact that the proprietor's personal reputation is at stake in the business might make him more accountable to suppliers, creditors, or customers with whom he deals directly than his agent might be. But the identity between the proprietor and the business makes the business itself more vulnerable to things that happen to the proprietor, not only within the business context, but also to exogenous factors such as his good health and whether his fortunes in other aspects of his life permit him to keep his assets invested in the business. If he dies, a descendent or other relative might

57. See Jensen & Meckling, supra note 2; see also Fama, supra note 2; Fama & Jensen, supra note 2; Oliver E. Williamson, Corporate Governance, 93 YALE L.J. 1197 (1984).
58. Early entrepreneurs often tried to build up trustworthy reputations in the communities where they operated by contributing to local eleemosynary institutions. See Peter Dobkin Hall, What the Merchants Did With Their Money: Charitable and Testamentary Trusts in Massachusetts, 1780–1880, in ENTREPRENEURS: THE BOSTON BUSINESS COMMUNITY, 1700–1850, at 371 (Conrad Edick Wright & Katheryn P. Viens eds., 1997).
take up the business, or the business could be purchased from his estate by someone else. Charles Lukens, in fact, died suddenly in 1825. His widow, Rebecca Lukens, who had inherited her father's share of the mill property the previous year, then took over the commercial side of the ironworking business. Her brother-in-law, Solomon Lukens, left his farm to come serve as superintendent of the factory, helping the family to keep the business going. But when such things happen, the new proprietor must expend resources securing and perhaps rebuilding those relationships. Likewise, if there is a crisis in the proprietor's family, the proprietor might have to pull resources out of the business to take care of those needs.

Given these vulnerabilities, it would not be surprising if customers and suppliers avoided being overly dependent on doing business with a single proprietor and if machinists, foremen, bookkeepers, sales agents, and other skilled workers might want to keep their options open by continuing to work for other businesses too, rather than becoming specialized employees and agents of a single individual. According to Alfred Chandler, there were no middle managers at work anywhere in the economy as late as 1840.

59. Rebecca Lukens thereby became, according to Baer's brief history, "the first woman in America to operate an iron works." BAER, supra note 49, at 1. Prior to the reforms of the 1840s, married women were not able to own property or even to protect it from the control of their husbands' creditors, regardless of whether they acquired property prior to or during their marriage. If Rebecca Lukens had remarried prior to the reform of married women's property laws in Pennsylvania in 1848, ownership of the mill would have passed to her new husband. See Richard H. Chused, Married Women's Property Law: 1800-1850, 71 GEO. L.J. 1359, 1399 n.209 (1983).

60. The brief history provided by Baer in the documents collection at the Hagley Library does not discuss whether Rebecca Lukens encountered significant prejudice when she attempted to deal with the suppliers, customers, and colleagues of Charles Lukens. But she was apparently reasonably successful in these commercial relationships. The business remained profitable, but did not grow much until 1840, when Solomon Lukens left the business, and Joseph Bailey came in as a partner. At this point, the business was renamed R.W. Lukens & Company. BAER, supra note 49, at 1.

61. VISIBLE HAND, supra note 16, at 3. The exception might be the postal system, which had been created by then. The Post Office Act of 1792 led to the switch from postriders to stagecoaches and a hub-and-spoke system. Richard R. John, Elaborations, Revisions, Dissents: Alfred D. Chandler Jr.'s The Visible Hand After Twenty Years, 71 BUS. HIST. REV. 151, 186 (1997). This led the post office administration to employ middle managers to staff distribution centers. Id. at 185. Chandler dates this organizational innovation to the 1850s, when the postal service switched to the use of railroads to carry mail, though it had actually occurred by 1800. Id. at 195-96. But the postal system did not have the problem that Rebecca Lukens' steel mill or other individual proprietorships would have had—it was run by the U.S. government, which could clearly make the necessary long-term commitment of resources to the enterprise, and which would survive the coming and going of various individual managers. As of 1840, most business enterprises were traditional single-unit enterprises, managed by their owners. VISIBLE HAND, supra note 16, at 14. Virtually the only exceptions were specially chartered banks and franchises to build and operate transportation infrastructure projects such as canals. These were likely to be organized as corporations.
C. Partnerships

Returning to the Lehigh River navigation project, an obvious alternative for Hazard, White, and Hauto—one which they had, in fact, already taken advantage of by the time our story began—was to go into business together as partners. Partnership, according to one commentator, is "probably the oldest form of business organization." Under common law in the early to mid-nineteenth century, business people could form a partnership simply by agreeing to act as partners and by agreeing to share the profits from the business (as well as the net assets in the event of a liquidation).

Under the rules of partnership that would have applied at the time, assets used in the business might be joint property of the partners, or owned separately by any one of the partners and leased to the business. If owned jointly, it might have been contributed to the business by a partner in exchange for the partnership share, or purchased with partnership funds. Contracts entered into with third parties by any single partner in connection with the business were legally binding on all partners. Unless the partners specified otherwise in a formal partnership agreement, the agreement would be assumed to be at will. This meant that any partner could terminate the relationship, and thereby force dissolution of the assets of the business, at any time and for any reason.

62. Robert W. Hillman, Private Ordering Within Partnerships, 41 U. MIAMI L. REV. 425, 428 (1987); see also 3 JAMES KENT, COMMENTARIES ON AMERICAN LAW 1 (Da Capo Press 1971) (1828) (noting that the law of partnerships "has also been cultivated and greatly enlarged, under a course of judicial decisions, until the law of partnership has at last attained the precision of a regular branch of science, and forms a distinguished part of the code of commercial jurisprudence"). This will be important later because, by contrast, the law governing joint stock companies and corporations was very much undeveloped at the time.

63. Kent stresses that it was the "communion of profit" that makes an agreement among individuals to work together into a "partnership," not the nature of what each contributes. 3 KENT, supra note 62, at 3. "If one person advances funds, and another furnishes his personal services or skill, in carrying on a trade, and is to share in the profits, it amounts to a partnership." Id. at 2. This is an early recognition by the law that contributions of human capital were considered of (potentially) equal value to contributions of financial capital.

64. In this part, I consider only the rules for standard general partnerships. I will discuss joint stock associations, which were a type of partnership, infra Part II.A.

65. In the case of real estate and other property held by the partnership, the partners would be considered "tenants in common" and each would be considered to have a direct interest in the real estate, in proportion to his or her share in the profits. The law did not regard the partnership as a separate entity, so land and other assets could not be held in the name of the partnership. 3 KENT, supra note 62, at 14–16.

66. Id. at 17.

67. Id. at 28.

68. Chandler tells us that traditional business enterprises in the early nineteenth century were generally "short-lived." "They were almost always partnerships which were reconstituted or disbanded at the death or retirement of a partner . . . or when one partner decided he wanted to work with another businessman." VISIBLE HAND, supra note 16, at 8.
exception was if they had explicitly agreed to continue in the relationship until a specific time, or until specified conditions were met (such as the completion of a particular project or venture). A partnership would also be automatically dissolved if a partner died, became insane, or went bankrupt. Although there were no legal limits on the number of individuals that could become partners, under a classic general partnership arrangement of the time, each individual partner had full authority to bind the other partners contractually, and all were, individually and collectively, responsible for the obligations of the business. So business people had to be quite selective in choosing partners. A third party who sued a partnership was required to name all of the partners individually in the complaint. Partners, meanwhile, could not sue the partnership (to do so would be to sue themselves), and the partnership could not sue an individual partner (for the same reason).

Being a partner in a joint business rather than an employee of an individual proprietor would in some ways improve the protection each team member has in the relationship, and would probably improve his or her incentives to do a good job. Because all would jointly own the assets of the business and have

69. 3 KENT, supra note 62, at 29; see also EDWARD H. WARREN, CORPORATE ADVANTAGES WITHOUT INCORPORATION 18 (1929) ("[E]ven if the partnership is not at will, the weight of authority in this country is that any partner may dissolve it at any time."). Premature dissolution was treated as a breach of contract, however, so that the breaching party might be held liable for damages. Id. at 18 n.1.

70. 3 KENT, supra note 62, at 30–33. One reason why the personal bankruptcy of one of the partners would compel dissolution of the partnership is that the creditors of the bankrupt partner would have a claim against partnership assets to pay the debts owed by the bankrupt partner. Id. at 33–34.

71. Id. at 10. Although partnership assets were not clearly protected from seizure by creditors of the individual partners, partnership assets could not be seized to pay a bankrupt partner’s debts until all the partner’s personal assets had been seized, and all the debts of the partnership had been paid. Id. Hansmann, Kraakman, and Squire note that this gave partnerships partial or weak “affirmative asset partitioning.” Hansmann et al., supra note 5, at 3. Because they define “entity” status by whether an organization has any affirmative asset partitioning, they regard partnerships as entities. Id. at 8. But as will be discussed in more detail infra notes 116–128 and accompanying text, courts in the early nineteenth century did not recognize partnerships as separate entities for the purpose of holding property. In fact, partnership law in the United States did not unequivocally recognize ordinary general partnerships as separate entities for the purpose of holding property until the late twentieth century, under the terms of the 1997 Revised Uniform Partnership Act. Its predecessor, the 1914 Uniform Partnership Act left this question ambiguous. See REVISED UNIF. P’SHP ACT § 201 (2003).

72. An interesting exception relevant to this Article is that courts appear to have recognized the right of a joint stock association, which is considered in Part II, to sue its members to compel them to pay in their original pledges. See WARREN, supra note 69, at 350, and the discussion infra Part II.

73. Lamoreaux has argued that partners in a firm are less vulnerable to hold-up problems than employees. See Lamoreaux, supra note 46, at 18. She explains:

Partnerships offer greater protection against hold-up than ordinary contracts, because if one partner tries to extort income from another, the aggrieved party can threaten to dissolve the enterprise and force the exploiter either to buy him out or to bear proportionately the costs of liquidating firm-specific assets. The ability to exit thus provides an incentive for partners to resolve their differences in a mutually satisfactory way.

Id. The threat to dissolve the partnership is obviously not costless, but could be used in extreme situations.
Locking in Capital

an enforceable legal claim to a pro rata share of the profits, each would therefore have increased incentives to make appropriate investments in improving the business. Each would have legal access to all the business records, which could help them to monitor their partners to ensure the others were not shirking. And, if one of them felt he was not getting his fair share, he could threaten to dissolve the relationship in order to force the previously agreed-upon sharing of the proceeds. Finally, because each partner would have been jointly liable for contract and tort claims against the partnership, each will also have an incentive to be careful in his business relationships with subcontractors, suppliers, and customers.

Decisionmaking in partnerships can be unwieldy, however. Because partners have the legal authority to bind each other in contracts with outsiders, partnership law requires that all partners approve before new partners can be admitted, or major transactions or sales of property undertaken.

Partnership thus grants considerable power and control rights to individual team members who are partners. In some ways, this protects each team member against unfair expropriation of the benefits of team production and provides positive incentives for all partners. But in other ways, partnership also allows individual team members to use their control rights to hold up the other team members, and it enhances their mutual ability to engage in wasteful "rent-seeking" activities. With additional partners, this risk is increased relative to

74. Ex ante agreements about the division of rents could lead partners to shirk their duties, however, if they believe the team will earn rents without their contribution and that they will get their pro rata share of those rents in any case. For this reason, Bengt Holmstrom suggests that a solution to the team production problem might be to arrange for an outsider to receive all the rents generated by the team if the rents fall below some specified minimum level that would only be reached if no one shirked. Only if the rents exceeded that minimum would team members get any of them. See Bengt Holmstrom, Moral Hazard in Teams, 13 Bell J. Econ. 324 (1982). This is a solution rarely seen in practice, at least not in explicit form. Stout and I suggest, however, that placing the assets in a separate legal entity might serve as an alternative version of this solution to this problem. See Blair & Stout, supra note 20, at 269.

75. See Lamoreaux, supra note 46, at 18.

76. Clifford Holderness argues that aggregate ownership arrangements such as partnerships impede the "alienability" of property relative to individual ownership, and relative to ownership by a separate entity. See Clifford G. Holderness, Joint Ownership and Alienability, 23 Int'l Rev. L. & Econ. 75, 83-84 (2003).

77. In a contemporary example of the importance of the hold-up problem to the organizational design of businesses, D. Gordon Smith describes the vulnerability of entrepreneurs to venture capitalists and vice versa over the question of when and on what terms the other party can exit. D. Gordon Smith, Control Over Exit in Venture Capital Relationships, (June 5, 2001), available at http://papers.ssrn.com/sol3/delivery.cfm/SSRN-ID272231_code01060460.pdf?abstractid=272231#PaperDownload. Smith notes that "neither an entrepreneur nor a venture capitalist would be willing to enter a relationship in which the other had unconstrained power over the exit decision ...." Id. at 6. Holger Müller and Karl Wärneryd discuss these problems with partnerships, and suggest that the corporate form makes possible "outside ownership," which they argue can reduce the costs associated with these problems under some circumstances. See Holger M. Müller & Karl Wärneryd, Inside Versus Outside Ownership: A Political Theory of the
the incentive benefits that partnerships provide. Partnership is thus likely to provide a solution to the team production problem only in certain restricted situations: where the number of team members is small, and/or the personal, professional, family, or community ties are relatively strong. 78

We must also consider the advantages and disadvantages of the partnership form in dealing with third parties such as subcontractors, suppliers, and customers. Third parties who enter into explicit contracts with partners may be somewhat protected by full and unlimited liability bearing upon all the partners. 79 But such protection does not itself encourage partners to make relationship-specific investments. To make such investments, outsiders would want to be assured that the business is reliable and sustainable. In a partnership, such credibility would depend not only on the good health, good fortune, and reputation of a single individual (as in an individual proprietorship), but on the health, fortune, and reputation of every partner, as well as their ability to continue cooperating. This is because any partner can encumber assets of the business or can exit at any time, thus forcing a dissolution or restructuring of the business. Although creditors of the partnership would have priority in any dissolution and winding up of the partnership business, neither outsiders nor even the individual partners themselves could ensure that the business itself would be continued.

Thus, while a few individuals known to each other and their communities might be able to sustain a modest-sized manufacturing, trading, or other business for a while as a partnership, the implicit veto power that partnership rules give to each partner, and the vulnerability of the pool of bonding assets to the fortunes, talents, and good behavior of every partner would likely become problematic as the business grew. Participants in a large network of business

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78 See CHARLES R. T. O'KELLEY & ROBERT B. THOMPSON, CORPORATIONS AND OTHER BUSINESS ASSOCIATIONS: CASES AND MATERIALS 56 (3d ed. 1999) ("The archetypical general partnership, for which general partnership law's default and immutable rules are ideal, is a small, intimate firm in which each partner participates in all aspects of the business and has substantial confidence in the trustworthiness and skill of fellow partners."). O'Kelley and Thompson also suggest that "general partnership law norms will be most efficient if partners make similar contributions of services and capital." Id. at 57. Howard Bodenhorn presents evidence that partnerships in the early nineteenth century generally involved individuals of similar age, experience, and means, and that partners were required to make substantial contributions of human, physical, and financial capital to the partnership, which he argues functioned to bond their promises not to act opportunistically. HOWARD BODENHORN, PARTNERSHIP AND HOLD-UP IN EARLY AMERICA (Nat'l Bureau of Econ. Research, Working Paper No. 8814, 2002), available at http://www.nber.org/papers/w8814.

79 "Limited partnerships," under which certain passive partners might be protected from personal liability, were authorized by statute in New York in 1822, and other states later followed New York's lead. WARREN, supra note 69, at 302. But even in limited partnerships, some subset of the partners must be designated as general partners and bear full liability. Id. at 302-03. It wasn't until late in the twentieth century that state laws began to provide for limited liability partnerships (in which all partners have limited liability) as a standard organizational form.
relationships—in which mutual success depends on numerous individuals making team-specific investments over a sustained period of time—require some assurance of continuity and financial stability. Partnership appears to be a poor vehicle for providing such continuity and stability. Partnership can thus help to amass capital, but this organizational form does not provide for centralized control, and cannot facilitate the commitment of capital for extended periods of time.

II. JOINT STOCK COMPANIES AND CORPORATIONS

The central hypothesis of this Article is that demand for the corporate form surged in the mid-nineteenth century United States because this form uniquely facilitated the establishment of lasting enterprises that could accumulate substantial enterprise-specific physical assets, and form extensive specialized organizational structures. It is difficult to pinpoint any particular point in time in which “modern” incorporation law—especially entity status and separate governance—became freely available to business organizers. This is because modern rules for formation and governance of contemporary corporations evolved over many years as state legislatures passed statutes that expanded the purposes for which corporate status would be granted and the terms under which they could be organized. But it is clear from the historical record that as early as the late eighteenth century, business people were trying to find legal ways to assemble assets and people in a way to allow the organizations to survive and grow. Quite simply, they began trying to build lasting business institutions.

Those early efforts took two paths: the unincorporated joint stock company and the specially chartered corporation. Joint stock companies were devised using partnership law, supplemented by trust law, to create organizations with many of the characteristics of corporations that business people wanted, but without the necessity of obtaining a special charter from the legislatures. Meanwhile, state legislatures were gradually granting corporate charters to more people, for more purposes. Once corporate charters were freely available, the benefits of the corporate form relative to the joint stock company—the most important being the unquestioned legal status of chartered corporations as separate juridical persons—caused the use of the latter to die out.

80. Chandler tells us that partnerships were the dominant way to organize business activities prior to the 1840s. See VISIBLE HAND, supra note 16, at 36. But apparently this form was not adequate as business enterprises began expanding significantly in the 1850s. The “limited partnership” form, available under some state statutes, solved some of the asset partitioning problems because limited partners could not withdraw their capital for the duration of the partnership, and were protected from personal liability. See, e.g., SEAVOY, supra note 4, at 97. Active partners were also not supposed to withdraw their capital for the duration specified in the partnership agreement, but, as noted above, courts of equity probably would have upheld their right to withdraw at will, but would have made them liable for damages.
This part reviews the historical development of the law, explaining the parallel development of joint stock companies and corporations, and the legal differences between them. Then in the next part, I discuss the historical development of the corporate law that the corporation was a separate legal entity, and show how entity status and separate governance helped to solve team production problems in a number of early corporations.

A. Joint Stock Companies

Although most business historians agree that partnerships and individual proprietorships were the most common way that business enterprises were organized in the United States until well into the nineteenth century, chartered joint stock companies were being organized in Europe to undertake trade missions as early as the early seventeenth century. In the earliest joint stock companies, a group of merchants would pool their “stocks” (the goods they had for trade), and collectively hire a ship to undertake a trade mission. The charters that these groups had been granted by their respective kings gave them monopolies over rights to trade, as well as the rights to establish colonies, in certain parts of the world. The companies’ ships would embark on their trade missions, and when they returned, the stock of goods acquired in trade would be divided among the merchants and the “company” dissolved, to be reformed for the next trade mission. Later, some chartered companies decided to quit dividing up the proceeds at the end of each trade mission, and, instead committed their initial capital for an extended period. In 1623, the Dutch East India Company was granted the right of perpetual existence. Under this new arrangement, the company members would no longer be able to demand repayment at the end of each voyage (this marked the beginning of the “resource commitment” feature of joint stock companies), but they could, instead, sell their “shares” in the company. In 1654, the British East India Company also adopted a rule of perpetual existence, accompanied by full transferability of shares. Many similar organizations were established in Britain and throughout Europe, demonstrating the principle that business people could establish permanent organizations involving a relatively large and changing number of people with fixed capital and separate management.

81. Hansmann, Knaakman, and Squire provide a detailed history of this development. Hansmann et al., supra note 5.
82. The British East India Company was chartered in 1600; the Dutch East India Company was chartered in 1602. Id. at 43.
83. Id.
84. Id.
85. Id. at 44.
During the late seventeenth and early eighteenth centuries, entrepreneurs pursuing other kinds of businesses—especially banking and insurance—sought charters to organize themselves in this way. In fact, the demand for charters in England outstripped the willingness of Parliament to grant them. As a result, a number of "companies" copied the organizational form and began selling shares, despite not receiving special charters. Financial markets developed rapidly to foster trading in the shares of these companies. In 1720, however, a financial market boom in England ended suddenly and disastrously. In response to the associated scandals, Parliament passed an act that, though vague in its wording, appeared to make it illegal to sell shares in unchartered joint stock companies. This act slowed the development of this organizational form in England for more than one hundred years, until the so-called "Bubble Act" was repealed in 1825.

Early American settlers would have been familiar with the joint stock company form, because at least one such company, the Hudson's Bay Company, was chartered to trade in parts of the colonies. A few joint stock companies were formed in the colonies before the American Revolution. And of course, after the Revolution, no one questioned the authority of the states to grant charters. But they apparently did so sparingly, with one source estimating that only 335 charters for business corporations had been issued in the United States by 1800.
Just as happened in England, however, business people tried to achieve the benefits of corporate status for themselves in the United States through private contracts, and without seeking a charter from the state legislatures. The organizations they formed were technically partnerships in which partners agreed to place the assets used in the business into a trust controlled by a group of trustees, and then sell transferable claims on distributions from that trust. In this way, the promoters were able to achieve resource commitment (assets stayed in the trust, even as individual investors came and went) with some separation of control. One historian tells us that land promoters formed so-called “business trusts” in this fashion to market land in the late eighteenth and early nineteenth centuries, for example. The Lehigh Coal Mine Company that we met in Part I was an example of such an association, as was the Lehigh Navigation Company formed by White, Hazard, and Hauto.

*The History of the Lehigh Navigation Company* gives us some idea of how these organizations worked in practice. At the formation of the Company in 1818, the promoters sought out subscribers, conditioning the commitment of the investment funds on the findings of a committee that they formed of “two of our most respectable citizens,” who were sent to examine the actual condition of the Lehigh River and surrounding lands. According to the *History*: “They both came to the conclusion, and so reported, that the improvement of the navigation was perfectly practicable, and that it would not exceed the cost of fifty thousand dollars, as estimated, but that the making of a good road to the mines was utterly impossible.”

At this point, the *History* tells us, the Lehigh promoters split into two groups, one which thought the coal business would prove profitable, but had doubts about the potential of the navigation business, and one which thought the river improvement project would be feasible and profitable, but had doubts about the coal mining aspect of the venture. The Lehigh Navigation Company

91. See, e.g., *Seavoy*, supra note 4, at 63 (noting that early New England mills organized as joint stock companies for which contract agreements “specified most of the powers of corporations except the two key ones, perpetual existence and a single legal entity,” which “could only be granted by the state”). Hugh Sowards and James Mofsky note that there is no record of how many unchartered joint stock companies may have been formed in the late eighteenth and early nineteenth century, precisely because such organizations were not granted charters, nor were they otherwise registered. Hugh L. Sowards & James S. Mofsky, *Factors Affecting Development of Corporation Law*, 23 U. MIAMI L. REV. 476, 481 (1969) (discussing firms that did not seek special grants, but were organized to achieve some of the benefits of the corporate form); see also WILIAM R. BAGNALL, THE TEXTILE INDUSTRIES OF THE UNITED STATES (1893) (indicating that unincorporated joint stock companies were not infrequently used to organize firms in the textile business prior to 1813). See generally *Livermore*, supra note 4 (describing joint stock companies used in land speculation).

92. The documents which set up these trusts were sometimes called “deeds of settlement.”


95. *Id.*
then proceeded to raise $50,000 from investors "on the terms that those who furnished the money should have all the profits accruing from the navigation up to twenty-five per cent, all profits beyond that to go to White, Hauto and Hazard, who also retained the exclusive management of the concern."96 Later, in October 1818, a new association was formed, called Lehigh Coal Company, "for the purpose of making a road from the river to the mines, and of bringing coal to market by the new navigation."97 Another $55,000 was subscribed to this Company, on terms similar to that of the Navigation Company, except that the subscribers were to get the first 20 percent, and the profits beyond that would go to the managers, "they conveying the lease of the coal mine company's land, and also several other tracts of land which they had purchased, to trustees for the benefit of the association."98

Work by the Coal Company proceeded rapidly, and they finished a passable road to the mines by 1819. But work on the river navigation proved more difficult than expected, when it turned out that the water fell in the river during the dry season to a point twelve inches lower than the promoters had expected to be the seasonally lowest point. The Navigation Company had to construct a series of locks to ensure that the river could be passable at all seasons of the year,99 and more money had to be raised. A "difficulty arose" among the managers, the History notes, and White and Hazard agreed to buy out Hauto's interest in the Company.100 Then in the Spring of 1820, the managers arranged to "amalgamate" the two companies to form the Lehigh Navigation and Coal Company, provided they could raise another $20,000.101 Once the extra funds were raised, the remaining work was completed on the river, and the Company brought 365 tons of coal to Philadelphia. Unfortunately, the market in Philadelphia could not, at that time, absorb that much anthracite coal, prices collapsed, and the Company failed to make any money.102

By this time, existing subscribers were losing faith, but one of the managers loaned the company some funds to keep it going, and the company was reorganized one more time, as The Lehigh Coal and Navigation Company. The capital stock was increased again through new subscriptions, and, to encourage the new investors, White and Hazard agreed to release to the company all "their

96. Id. at 9.
97. Id.
98. Id. It is not clear from the History what was meant by the expressions "profits up to twenty-five percent," or "profits above twenty per cent." It seems unrealistic to imagine that the investors expected to make an annual return on invested capital of at least 20 percent or 25 percent.
99. These locks utilized a unique sluice gate design created by White, according to the History. Id. at 10.
100. Id. at 11.
101. Id.
102. Id.
reserved exclusive rights and privileges, and residuary profits, and convey to trustees, for the use of the company, all their right to the water-power of the river Lehigh, and come in as simple stockholders.\textsuperscript{103} New subscribers, moreover, were given a preference in any dividend payments up to 3 percent semiannually, original stockholders were then to get payments up to 3 percent semiannually, and "finally, any excess profit beyond these was to go to the stock allotted to J. White and E. Hazard" until they had received a 3 percent semiannual dividend.\textsuperscript{104} Once those levels were met, "all discrimination in the stock was to cease, and all the owners to come in for an equal share of the profits in the proportion of shares of stock held by them."\textsuperscript{105} Finally, the History tells us that in this last reorganization, Hazard and White created something like a board of managers who would jointly control the enterprise, to consist of five individuals.\textsuperscript{106}

The history of this particular unincorporated joint stock company provides a rich insight into all the hazards of a team production project. Before the partners could raise any outside money, they had to get a feasibility opinion from trusted third parties. Then some aspects of the venture went according to plan, while others did not. Initial agreements had to be reworked as the project proceeded. At each point, there were undoubtedly opportunities for various participants to disagree, and/or to behave opportunistically. We hear the story from the board of managers of the company that ultimately survived, so presumably it is a version favoring White and Hazard. But it seems likely that the first round of subscribers were upset by the fact that the job could not be completed according to the original plan, and that they therefore had to give the next round of subscribers a preference in any subsequent dividend payments to entice them in.

It is also interesting that White and Hazard had to buy out Hauto, illustrating one of the potential problems with this modified partnership form: Any partner could withdraw at will and either force dissolution, or compel the remaining partners to buy out his interest. We don't know from the undoubtedly glossed-over history produced by the board of managers two decades later whether there were lawsuits and recriminations associated with these rough periods, but it is easy to imagine that there might have been. In any case, we can see that White and Hazard had a difficult time getting enough investment capital, and keeping it in the enterprise.

\textsuperscript{103} Id. at 12.
\textsuperscript{104} Id.
\textsuperscript{105} Id. at 12–13.
\textsuperscript{106} Id. at 13. It is unclear from the record in the official company History whether Hazard and White were among the five members of the managing board, but it seems likely from other details that they probably were.
It is also probably significant that in the final reorganization, White and Hazard had to turn over control of all the relevant rights and properties to a trust, and create a board of managers, on which they could be outvoted, to oversee the operations of the enterprise. Lynn Stout and I have argued that the delegation of control rights to a board may help to solve the team production problem because it helps to convince all the parties that none of them can unilaterally make decisions that enrich themselves at the expense of others, and that decisionmaking is more likely to be "fair." 107 White and Hazard could by this device, for example, more credibly promise investors that decisions would be carefully considered by at least three other managers (assuming White and Hazard were themselves on the board).

Legal historians tell us that the articles of association of firms like the Lehigh associations became increasingly sophisticated during the period from 1760 until the states began, slowly at first, passing general incorporation acts after about 1810. 108 As such, these associations began to assume more of the structural and governance characteristics of modern corporations. But legal historians also tell us that these "proto-corporations" were regarded by courts as a species of partnership. 109 That probably meant, among other things, that members or "shareholders" in these organizations would not be granted limited liability. It also meant that investors in these "companies" were deemed to hold pro rata interests in the property of the business—the "companies" were not regarded as separate legal entities for the purpose of holding property. 110

107. Blair & Stout, supra note 20, at 276 (discussing the formation of a corporation and a board of directors as instituting a "decision-making procedure in place that all believe will be fair").

108. See, e.g., Sowards & Mofsky, supra note 91, at 481. These authors claim that the provisions of the earliest general incorporation acts by state legislatures were very similar to the provisions of some of the more sophisticated articles of association of unincorporated joint stock companies. Massachusetts passed an act making it easier for textile mills to incorporate in 1809; and New York passed an act extending the privilege of easy incorporation to a number of different manufacturing businesses in 1811. See Seavy, supra note 4, at 65; see also Lawrence M. Friedman, A History of American Law 195 (2d ed. 1985). See the discussion of the emergence of corporate law, infra Part III.

109. See Warren, supra note 69, at 327–28 (noting that joint stock companies were a "species of partnership"); see also Seavy, supra note 4, at 47 (referring to joint stock companies as "expanded partnerships"); Gary M. Anderson & Robert D. Tollison, The Myth of the Corporation as a Creation of the State, 3 INT'L REV. L. ECON. 107, 110 (1983) ("The unincorporated joint-stock firm was a 'step-child of the law,' leaving 'serious legal difficulties to surmount.' Technically, they were subject to partnership law..."). (quoting A. Dubois, The English Business Company After the Bubble Act, 1720–1800, at 217 (1971))); Mahoney, supra note 87, at 888 ("By the time of the Bubble Act's repeal in 1825, judges, having had nothing to do with unincorporated joint stock companies for a century, were determined to fit them into an existing legal category (for example, partnership) rather than see them as a different form of contract altogether.").

110. See Paddy Ireland, Capitalism Without the Capitalist: The Joint Stock Company Share and the Emergence of the Modern Doctrine of Separate Corporate Personality, 17 LEGAL HIST. 41, 44 n.13 (1996) (citing William Watson, A Treatise of the Law of Partnership 3–5 (2d ed. 1807)). Paddy Ireland traces the history of court cases in England, demonstrating that prior to about 1837, courts consistently found that
This legal treatment created complications when a member died and tried to will his shares to his heirs, as I discuss at greater length below.

The Lehigh Coal and Navigation Company was concerned with issues such as these as it attempted to raise one more round of financing in 1821. Indeed, White and Hazard went back to the Pennsylvania legislature to ask that it pass an act of incorporation, to transform the unincorporated enterprise into a corporation. The firm was incorporated by a special act of the Pennsylvania Legislature on February 13, 1822.

Such requests were sometimes politically controversial; a public debate about a similar request to incorporate a coal mining company took place just one year later. In a pamphlet published in 1823 by seven business people attempting to organize the Schuylkill Coal Company, the promoters listed three reasons why they wanted to be incorporated, rather than attempt to operate as a partnership, or as an unincorporated joint stock company:

1. To have the real estate of the Company, consisting of the coal lands which they hold, and such limited additional quantity as they may be allowed to acquire, with the necessary and appropriate improvements for the working of the mines, exempted from the laws of succession or inheritance, which govern the cases of natural persons or individuals. 2d. That the Company should be exempted from the ordinary laws of partnership, so far as they subject the estates of the several individuals who compose the Company to all the liabilities of the Association. 3d. To be recognized in law by a corporate name, and to be perpetuated, notwithstanding the

shareholders in joint stock companies, whether incorporated or not, had a direct property interest in the assets of the firm. Id. at 49–50. Ireland states:

In House v. Chapman, for example, decided in 1799, a share in the incorporated Bath Navigation Company was held to be real estate and within the Statute of Mortmain because the property belonging to the Company was itself in part realty.... That this was also the prevailing view of shares in unincorporated joint stock companies is clear from cases such as Buckridge v. Ingram (1795), which concerned the unincorporated Avon Navigation.

Id.

111. AN ACT TO INCORPORATE THE LEHIGH COAL AND NAVIGATION COMPANY, reprinted in ACTS OF THE GENERAL ASSEMBLY OF PENNSYLVANIA CONCERNING THE LEHIGH COAL AND NAVIGATION COMPANY 20 (1837) [hereinafter ACTS OF THE GENERAL ASSEMBLY] (noting that one of the reasons the company wanted to incorporate was that “this company is desirous of completing as speedily as possible the improvement of the navigation of the river Lehigh... but require[s] additional funds, and experience[s] great difficulty in procuring the necessary subscriptions to their stock on account of the unincorporated character of the association”).

112. Id. at 29.

113. A number of the pamphlets from several subsequent debates about incorporation of other coal companies, as well as one about whether the Lehigh company was overcharging for access to the river, are in the collection at the Hagley Library. It is from these that the following account is constructed.

114. MANUEL EYRE ET AL., REMARKS AND OBSERVATIONS SHOWING THE JUSTICE AND POLICY OF INCORPORATING “THE SCHUYLKILL COAL COMPANY” 1–8 (Philadelphia 1823). This pamphlet is in the collection of the Hagley Library.
demise or change of the members who may at any given time compose the Company. 115

In other words, the group wanted the benefits of limited liability along with the convenience of being able to operate under a corporate name. But their first concern was that if a court treated the association as a partnership, it could prove impossible to keep the assets of the enterprise together for use in the enterprise, including protecting them from being broken up by the heirs of the partners. 116

“If one of the partners die,” the pamphlet says, “his undivided interest will descend by inheritance, or pass by devise to his heirs, who may consist of numerous children, in infancy, or numerous collateral relations, widely spread, and difficult of recognition.”117 If this happened:

The operations of the Company must, on this event, immediately cease, and the joint estate be sold for division, or be otherwise divided between the survivors and the heirs of the deceased member, according to the decree of a proper legal tribunal, perhaps after a tedious suit, involving intricate questions of partnership claims, accounts, and settlements.118

These promoters were clearly aware that they could use trust law to protect the assets of the enterprise from creditors, heirs, or partners wanting to withdraw. But they were not confident that organization as an unincorporated joint stock company, and the use of the business trust, would provide adequate protection:

Some of these difficulties may indeed be avoided by complicated trusts, covenants, and stipulations; but these, plain men of business cannot themselves frame, nor without difficulty understand; and when framed under the advice of the best legal abilities, they are subject nevertheless, to various constructions, and end but too frequently in vexatious and injurious controversies, which prudent men will anxiously avoid.119

The group’s concerns were probably not unfounded. James Kent, in his Commentaries on American Law published in 1826, includes a lengthy discussion of corporations,120 and a separate lengthy discussion of partnerships.121 Within the partnership section, he makes passing reference to partnerships that

115. Id. at 1.
116. Hansmann, Kraakman, and Squire stress the importance of entity status for protecting the assets of the enterprise from creditors of the members of the association, but the promoters of this coal-mining company do not mention any concern about the creditors of members. See Hansmann et al., supra note 5; Hansmann & Kraakman, supra note 5. Their concern is about the rights of heirs to company property if the group is organized as a partnership rather than a corporation.
117. EYRE ET AL., supra note 114, at 1.
118. Id.
119. Id. at 2.
120. 2 JAMES KENT, COMMENTARIES ON AMERICAN LAW 215-53 (Da Capo Press 1971) (1828).
121. 3 KENT, supra note 62, at 1-42.
“consist of a large unincorporated association,” 122 noting that those are usually governed by the special terms of the agreement that established them, but that, regardless of what was in their articles of association, “the established law of the land in reference to such partnerships, is the same as in ordinary cases.” 123 The cases Kent cites for support of this proposition are all British cases. 124

To the extent that U.S. courts in the early nineteenth century were looking to Britain for precedent about the legal status of such organizations, the promoters would have had even more to worry about. In the second edition of William Watson’s treatise on partnerships, published in 1807, he emphasized the legal distinction between joint stock companies that were incorporated, and those that were not. He explained that joint stock companies “not confirmed by public authority” were mere partnerships. 125 In several English cases cited by Paddy Ireland until about 1837, 126 the courts regarded the “shareholders” of both incorporated as well as unincorporated companies as having a direct joint interest in the property of the company, rather than as owning shares in a company, which in turn owned the property. 127

In the United States, meanwhile, it appears that the distinction drawn by the courts was based on whether the company had a charter or not. Corporations were regarded as separate entities for purposes of holding property. But there was considerable uncertainty about whether U.S. courts would regard unincorporated joint stock companies as separate entities. And U.S. courts did not clearly affirm the notion that shares in unincorporated joint stock companies could be freely traded until 1827. 128

Thus the lack of clear entity status under the law for unincorporated joint stock companies made them a risky organizational form to use for accumulating

122. Id. at 4.
123. Id.
124. Id.
125. WATSON, supra note 110, at 3.
126. Ireland, supra note 110, at 49–50.
127. Id. at 49. Ireland analyzed early joint stock companies, and noted that “[t]o own ‘a share’ in a company implied ownership of a share of the totality of the company’s assets .... Shareholders were regarded as owners in equity of the company’s property and shares as an equitable right to an undivided part of the company’s assets.”
128. See Sowards & Mofsky, supra note 91, at 482 (citing Alvord v. Smith, 22 Mass. (5 Pick.) 232 (1827)). Several legal scholars have argued that, if the courts had recognized joint stock companies as separate legal entities for purposes of holding property, then it would not have been necessary for companies to be chartered by the states for business people to construct contracts that gave them the benefits we associate with incorporation. See Anderson & Tollison, supra note 109; Mahoney, supra note 87. But courts in the United States did not go in this direction. Hence charters were necessary for the full benefits of corporate status to be achieved. It is not my purpose here to debate whether corporate law should have been developed as a common law extension of contract, partnership, and trust law, with the courts affirming and supporting private business people as they developed new types of organizational contracts, or whether courts were correct not to sanction a new organizational form without legislative authorization.
large amounts of physical and organizational assets. We turn next to the history of the emergence of corporate law to see why.

III. THE UNIQUE CONTRIBUTION OF CORPORATE LAW

A. Corporations as Separate Entities

The earliest incorporated entities in the United States were either (1) chartered trading companies that had received their charter from the English king before the Revolution, (2) eleemosynary institutions, municipalities, or chartered banks and insurance companies, or (3) corporations chartered to carry out some public works project, such as to build a road or bridge or canal, or provide a supply of water to some municipality. In 1826, Kent traced the history of corporations to Roman law, noting that, under English law, corporations were either "ecclesiastical" or "lay." Ecclesiastical corporations were religious societies that incorporated in order to provide a mechanism for holding property over time, as individual members came and went. Lay corporations "were again divided into eleemosynary and civil," he observed. Eleemosynary corporations included hospitals, colleges and universities, and corporations organized to provide charitable services to the indigent. Civil corporations, he continued "were either public or private." By public corporations Kent meant entities that existed for "public political purposes, such as counties, cities, towns and villages."

In all of these categories of corporations except private corporations, the primary purpose for incorporating is to provide a mechanism for holding property for some public, charitable, educational, or religious use, so that such property would not be owned by the individuals managing the institution or making decisions about the use of the property. Because the property held by an incorporated entity was not owned by natural persons, it could not be passed to the heirs of such persons but would continue to be the property of the institution, even as its "managers" (mayors, bishops, or presidents, for example) came and

129. See LIVERMORE, supra note 4, at 9-36 (describing "precedent forms of association"); see also VOTAW, supra note 3, at 19 ("The concept of persona ficta did not begin with commercial associations but with religious, educational, and municipal associations."). Seavoy notes that Blackstone did not clearly distinguish "between municipal corporations, benevolent public service corporations, and business corporations" in his eighteenth century treatise on English law. SEAVOY, supra note 4, at 46; see 1 WILLIAM BLACKSTONE, COMMENTARIES 468.

130. 2 KENT, supra note 120, at 217 ("The principles of law applicable to corporations under [English law] were borrowed chiefly from the Roman law.").

131. Id. at 221-22.

132. Id. at 222.

133. Id.

134. Id.
went. It is conceptually easy to understand how and why the law would have regarded such institutions as legally separate from whoever managed them at any time, or whoever contributed the funding to acquire their assets. And it is with respect to these types of corporations that the law developed the concept of a separate legal "person" or entity.

The final category of corporations that Kent recognized were private corporations. Of Kent’s categories, private corporations were the only ones that might engage in strictly commercial activity, although in the late eighteenth century even corporations in this category were expected to provide some needed service. After the American Revolution, the new American states tentatively began granting corporate charters to business promoters to establish banks, build turnpikes, or provide other needed services. Such businesses usually required a charter to create the separate legal entity and associated governance structure, along with some special privilege or power from the state to carry out their business, such as the right to issue notes that could serve as currency, or the right-of-way through public lands. Because of the special nature of the businesses that were granted corporate status, it was important that the business property be held separately from the personal property of the individual business promoters, and that the business property be protected from subdivision or seizure. Hence

135. See HURST, supra note 4, at 16 ("[R]eligious or welfare institutions existed to serve indefinite constituencies.").

136. See 2 KENT, supra note 120, at 216 ("It was chiefly for the purpose of clothing bodies of men in succession, with the qualities and capacities of one single, artificial, and fictitious being, that corporations were originally invented.").

137. Michael Whincop says the notion of a corporation as an artificial "person" is obviously a metaphor, but one that was convenient legally because it helped judges to think about what rights and obligations the corporation should have in particular situations. MICHAEL J. WHINCOP, AN ECONOMIC AND JURISPRUDENTIAL GENEALOGY OF CORPORATE LAW 45-50 (2001).

138. It was considered an inappropriate use of legislative power to grant corporate status for purposes that were not regarded as in the public interest. See, e.g., Currie’s Adm’rs v. Mut. Assurance Soc’y, 14 Va. (4 Hen. & M.) 315, 347-48 (Va. 1809). The court asserted:

   It may be often convenient for a set of associated individuals, to have the privileges of a corporation bestowed upon them; but if their object is merely private or selfish; if it is detrimental to, or not promotive of, the public good, they have no adequate claim upon the legislature for the privilege.

   Id.; JOSEPH K. ANGELL & SAMUEL AMES, TREATISE ON THE LAW OF PRIVATE CORPORATIONS AGGREGATE 7 (11th ed. 1832) ("[T]he design of a corporation is to provide for some good that is useful to the public."); see also D. Gordon Smith, The Shareholder Primacy Norm, 23 J. CORP. L. 277, 292-96 (1998).

139. Hurst discusses the controversies over the legitimacy of corporations in the nineteenth century, and attributes some of the concern about corporations in general to "the contemporary failure to distinguish between the franchise to act as a corporate entity in law and franchises to engage in particular substantive lines of business or to enjoy particular privileges or immunities of substantive business action under law." HURST, supra note 4, at 22.

140. SEAVOY, supra note 4, at 4. Seavoy notes:

[T]he New York legislature readily granted incorporation to businesses that had not existed in the colonial economy. Incorporation of business enterprises... helped protect the collective
it was in the interest of the state to grant entity status for such businesses. Entity status could only be granted by individual special charter, however, so each corporation had to be created by a separate act of the relevant state legislature.\footnote{141}

Prior to 1800, only a few such special charters had been granted in each state.

Although state courts later struggled with the implications of entity status for business corporations in certain situations, and wavered about the extent to which business corporations should be understood as being similar to, or different from partnerships,\footnote{142} the separateness of the incorporated entity from its members or participants was rarely at issue. The whole point of the charter was separateness.

B. Access to Corporate Status for More Purposes

By the early nineteenth century, states began to grant corporate charters for a much wider range of business purposes. A growing number of these corporations were for activities like manufacturing. Such businesses did not receive any special franchise or monopoly privilege. In 1809, the Massachusetts legislature passed a general incorporation act for manufacturing

ownership of real property [and] facilitated the mobilization of capital . . . . The new classes of incorporated businesses were usually fairly large-scale and they often had a high risk factor.

\footnote{Id. 141. Presumably the legislatures could have granted entity status to partnerships. See the discussion of joint stock associations, supra Part II. The New York legislature passed a statute in 1822 providing for business organizers to establish "limited partnerships" partly to provide for an organizational form that could substitute for corporations in some cases. See Seavoy, supra note 4, at 97 (regarding the move as reflecting "the anti-corporation sentiment of the Convention"). From the legislative point of view, however, the requirement of special charters for individual corporations gave legislatures more control over the business activities undertaken by these organizations. This Article does not address the question of why legislatures insisted on charters, but focuses instead on why business people went to the trouble to obtain them. What did they achieve by having a special charter that they could not have achieved by contract, through the partnership form or the joint stock company form, and that was worth the extra trouble? 142. See Gregory A. Mark, Comment, The Personification of the Business Corporation in American Law, 54 U. Chi. L. Rev. 1441, 1457-65 (1989); see, e.g., Pratt v. Bacon, 27 Mass. (10 Pick.) 123, 126 (1830) (arguing that the distinction is clear "there is certainly some resemblance between a corporation and a partnership . . . [but] the difference between the relative rights and duties, the legal qualities and characteristics of the members of a manufacturing corporation, and copartners and tenants in common, is obvious and strongly marked"); see also Colleen A. Dunlavy, From Partners to Plutocrats: 19th-Century Shareholder Voting Rights and Theories of the Corporation 3 (Mar. 2, 2001) (unpublished manuscript, on file with author); Lamoreaux supra note 46, at 21. By contrast, Gray v. Portland Bank, 3 Mass. (1 Tyng) 363 (1807), analogized corporations to partnerships to decide whether one shareholder could be excluded from a right or privilege granted to the others. The court noted that, at the time of the incident in question in the case, "all the stockholders were partners." Smith, supra note 138, at 303 n.128 (quoting Gray). Later courts took the position that they might "pierce the veil" of the separate entity in order to reach through to the individual persons associated together in the entity only if "the notion of legal entity is used to defeat public convenience, justify wrong, protect fraud, or defend crime." See Presser, supra note 10, at 1-7 (quoting United States v. Milwaukee Refrigerator Transit Co., 142 F. 247, 255 (C.C.E.D. Wis. 1905)).}
companies. Then in 1811 the legislature of New York passed an act providing for

any five or more persons who shall be desirous to form a company for the
purpose of manufacturing woollen, cotton or linen goods, or for the purpose
of making glass, or for the purpose of making from ore bar-iron, anchors,
millirons, steel, nail rods, hoop-iron and ironmongery, sheet copper, sheet
lead, shot, white lead and red lead. The primary motivation for these acts was to encourage domestic production of
goods, and thereby reduce U.S. dependence on British imports. By the 1820s,
when Kent wrote his Commentaries, the demand by business people for corporate
charters was growing rapidly, and the states were responding by granting such
charters ever more freely. Pennsylvania passed a general incorporation act in
1836, and in 1837, Connecticut passed a bill permitting incorporation for
"any...lawful business." During the 1840s, six additional states passed general
incorporation statutes. By the end of the 1850s, fifteen additional states had
passed general incorporation statutes.

Historians have explored the political pressure on state legislatures to pass
general incorporation statutes as arising out of the growing fear and resentment of
a situation in which legislatures could use incorporation rights for political pur-
poses, granting special privileges to some, while withholding them from others. But historians have devoted little attention to the question of why business
organizers were so eager to have a charter, especially considering that the charter

143. See Sowards & Mofsky, supra note 91, at 483 (citing the Massachusetts Manufacturing
Corporation Act of 1809).
145. Susan Pace Hamill, From Special Privilege to General Utility: A Continuation of Willard Hurst's
general incorporation act); see also SEAVOY, supra note 4, at 63-68 (providing more historical detail about
the circumstances leading to the act).
146. Kent expressed dismay at the growth in demand for corporate charters, and what he regarded as
the rather promiscuous granting of them by the New York state legislature, which granted thirty-nine new
corporate charters in 1823. See 2 KENT, supra note 120, at 219-20 ("The demand for acts of incorporation
is continually increasing, and the propensity is the more striking, as it appears to be incurable; and we have
no moral means to resist it .... ").
149. Ohio, New Jersey, and Michigan did so in 1846, Iowa in 1847, Louisiana in 1848, and
Wisconsin in 1849. Hamill, supra note 145, at 101-02 n.85.
150. Id. at 102.
151. See, e.g., HURST, supra note 4, at 109-13 (discussing the evolving nineteenth-century consen-
sus leading to the enactment of general incorporation statutes).
did not come with any special franchise or privilege. This Article suggests that, as business people tried to expand their operations beyond what a few individuals could fund, manage, and carry out, they discovered that incorporating and investing through a separate entity made it easier for them to make credible commitments to each other, and eventually to elicit ongoing investment of human capital by specialized managers, along with committed financial capital from financial investors. The corporate form therefore provided a more reliable basis for building organizational capital than did either an individual proprietorship or a partnership. To build sustainable organizations, individuals with sufficient talent and experience to run a business operation had to be induced to give up their own entrepreneurial aspirations in order to work in a business in which they would not be independent and might not share directly in the potential business profits. The corporate form gave stability to the business enterprise which helped ensure these professional managers that their firm-specific investments would be protected, along with the dedicated physical and financial capital, and that they would have substantial input in how the business would be run.

In the next part, I review the various aspects of early corporate law that supported the commitment of resources to the enterprise, and thereby facilitated the development of organizational capital.

C. “Asset Partitioning” Under the Law

As we have seen, the legal treatment of incorporated businesses as separate legal entities was necessary for full partitioning of assets—both protecting the investors in the business from claims by creditors of the business, and protecting the assets of the business from premature dissolution and distribution. For corporations that were serving some sort of public purpose, in which the contribution

152. Lamoreaux, supra note 46, at 11 (noting that “the vast majority of enterprises that took out corporate charters were small and medium-sized firms”).

153. Chandler hints that incorporation was important for a business to be managed by salaried managers rather than by owners. Visible Hand, supra note 16, at 29-30.

154. Hurst says that “continuity was important to effective organization,” and that incorporation gave the business “considerable assurance of tenure.” Hurst, supra note 4, at 25. But he does not go deeper to explain why continuity was important. See also Visible Hand, supra note 16, at 10 (noting that “the continuing existence of their enterprises” was “essential” to the lifetime careers of individuals who became salaried managers).

155. Thomas C. Cochran, The American Business System: A Historical Perspective 1900-1955, at 5 (1957) (arguing that Americans were a particularly entrepreneurial crowd). Zunz is the only historian of the period I have found who directly addresses the question of why previously independent business people and professionals, who apparently valued their independence, were willing to become employees of corporations in the latter half of the nineteenth century. Zunz, supra note 26, at 39; discussion infra notes 256-257 and accompanying text.
of capital was made for charitable or civic responsibility reasons and without expectation of return, this partitioning was needed to ensure that the assets stayed committed to the purpose for which the corporation was chartered.\textsuperscript{156}

The distinction between these early civic, religious, and charitable corporations and some of the earliest business corporations may not have been obvious. Many early business corporations were very capital intensive, such as canals and turnpikes, and/or were generally of a type that required substantial financial capital such as banks and insurance companies. Both types were also intended to serve a broad, quasi-public purpose. An economist today might say that these businesses provided significant positive externalities. In fact, many of these businesses might more appropriately be regarded as public works projects, which the states did not want to have to use their taxing authority to finance.\textsuperscript{157} Often they were highly risky enterprises, which not infrequently failed to earn any profits at all.\textsuperscript{158} And even when the businesses were able to earn a profit, it was not uncommon that the assets of the business, including the special franchise they had, would revert to the government after some specified period of time. The investors were allowed to earn fees or collect tolls during the time they controlled the assets, but were not to receive their initial capital back.\textsuperscript{159} In the case of the Lehigh River navigation project, for example, the State of Pennsylvania granted White, Hauto, and Hazard the right to collect tolls on boats passing down the Lehigh for thirty-six years. After that time, the State of Pennsylvania would have the option of buying back the rights to control the Lehigh River from White, Hauto, and Hazard, at a price to be determined by taking the average of the tolls collected during the most recent six years, and capitalizing that income flow using a discount rate of 6 percent per annum.\textsuperscript{160}

In exchange for the privilege of operating such businesses, which might occasionally prove highly profitable, the promoters were required to raise and

\textsuperscript{156} The other legal rule that was needed was a rule of fiduciary duty preventing managers of those religious, eleemosynary, or public corporations from appropriating the corporation's assets for themselves.

\textsuperscript{157} Hurst has noted that many of the ventures undertaken by the earliest business corporations were "public utility-type enterprises." \textit{Hurst}, \textit{supra} note 4, at 35.

\textsuperscript{158} Dodd cites the judge in \textit{Essex Turnpike Corp. v. Collins}, 8 Mass. 292, 296 (1811), as noting: It is well known that in this country enterprises of this description have not been productive of profit to those who have engaged in them; nor is this generally a primary object of consideration with the subscribers. They are well aware that the community is benefited by them and they agree to take a share of the burden.

\textit{Dodd}, \textit{supra} note 13, at 79 n.27.

\textsuperscript{159} Smith cites sources noting that toll roads and bridges built and operated by early corporations often reverted to public ownership after a term of a specified number of years, so that the initial subscribers could recover only the tolls and fees they could collect (net of operating costs) during the life of the agreement. \textit{Smith}, \textit{supra} note 138, at 301 n.115.

\textsuperscript{160} See \textit{AN ACT TO IMPROVE THE NAVIGATION OF THE RIVER LEBIUGH § 19}, \textit{reprinted in ACTS OF THE GENERAL ASSEMBLY}, \textit{supra} note 111, at 16.
commit substantial amounts of capital. In some cases, if organizers were unable to raise the amount promised, they forfeited the corporate charter, or the special franchise or privilege that had come with incorporation.

As charters were issued for more purposes, and without special franchises, presumably the organizers were hoping to earn some kind of return on their investments. Thus rules were needed that would lock in a sufficient body of assets in the business while still permitting investors to extract some funds from the corporations when surpluses were generated. One way this was achieved was the designation of a “par value” for each share of stock, which represented

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161. The charter of the Farmers' and Mechanics' Bank of Philadelphia was originally organized in 1807 as a joint stock association, with initial investors committing to invest $700,000, to be paid in installments over the first ten months of its existence. The CHARTERS AND BY-LAWS OF THE FARMERS' AND MECHANICS' BANK 5 (Philadelphia, J.B. Lippincott & Co. 1849). Two years later, a new corporate charter granted to the organizers by the State of Pennsylvania provided that the “joint stock, and all the goods, chattels, moneys, debts and other property, real or personal” of the predecessor association would be transferred to and vested in the incorporated entity. See also the charter of Dartmouth College, at issue in Trustees of Dartmouth College v. Woodward. 17 U.S. (4 Wheat.) 517, 685 (1819) (stating that “Dr. Wheelock had founded a charity-school at his own expense, on his own estate; that divers contributions had been made in the colonies, by others, for its support; [and] that new contributions had been made, and were making, in England for this purpose”). Legislatures also often imposed upper limits on capitalization too, apparently because of the general fear of concentrations of financial power. According to Seavoy, for example, the general incorporation statute for manufacturers passed by the New York legislature in 1811 was an “aggregate of generalized provisions from the charters passed during the preceding three years,” and it limited capitalization to $100,000. SEAVOY, supra note 4, at 65.

162. “Some incorporation acts of the period—particularly those relating to such public utilities as turnpikes—made the subscription to a certain number of shares a condition precedent to incorporation . . . .” DODD, supra note 13, at 80. The states had a special interest in being sure that subscriptions for incorporated banks were paid before the bank could do business. See id. at 211–12. Dodd notes: In chartering banks, a matter of paramount public concern is the protection of depositors and noteholders, and the [Massachusetts] act of 1829 contained a number of provisions designed to accomplish this object. No bank could legally do business until commissioners appointed by the governor should have ascertained that it had in its vaults gold and silver equal to one-half its capital and should have received from the directors a sworn statement that there were no strings attached to this money. No shareholder could legally borrow from the bank until his subscription had been paid in full, and no shares could be transferred until the entire capital was paid in. Id.

163. Concepts such as “return on capital” had not been developed formally as of the early nineteenth century, so investors might not have thought explicitly in terms of demanding a return on capital. Chandler says that it wasn’t until the 1870s that managers of railroads began to regularly set aside funding out of month-to-month revenues for anticipated repair and maintenance (an accounting precursor to depreciation allowances). VISIBLE HAND, supra note 16, at 112. But clearly investors were aware at some level of the opportunity cost of capital, and expected to be paid at least as much as they might earn in alternative investments. See EXTRACTS FROM THE CONSTITUTION AND ARTICLES OF ASSOCIATION OF THE LEHIGH COAL AND NAVIGATION COMPANY, article VI (1821), reprinted in ACTS OF THE GENERAL ASSEMBLY, supra note 111, at 32 (requiring that investors get dividends of 3 percent semiannually).

164. Early corporate charters were often issued for specific periods of time, such as ten or fifteen years, although they could be renewed. Delaware’s 1831 Constitution, for example, provided that no act of incorporation should continue in effect for more than twenty years, unless renewed by the legislature. See DEL. CONST. of 1831, art. II § 17.
the dollar amount the shareholder was committed to putting into the enterprise per share. The initial shares might often be issued to subscribers for a fraction of par value, and the corporation would then begin its business with the money raised from these initial installments. But when this approach was used, charters always provided that the corporation could go back to the subscribers at any time in the future and require them to pay the rest of the promised commitment. Case law established fairly early on that shareholders were potentially liable for corporate debts at least up to the amount they had pledged in their initial subscription. Thus, from the time of the earliest corporations, financial investors who wanted to participate in a business organized as a corporation had to make substantial financial commitments, and these commitments were considered part of the corporation’s permanent capital.

Once committed, the capital paid into a corporation by its initial investors could be very difficult to recover. Early charters and statutes typically specified that shareholders, or “members” as they were likely to be called, could not withdraw their capital unless the enterprise was formally dissolved. But these charters and statutes did provide that investors could receive dividends out of operating profits, though not out of the permanent capital of the corporation. Restrictions on dividends in early corporate charters were implicit: Directors or officers of the incorporated companies were authorized to pay dividends out of the “clear profits and income” of the firm, according to one

165. O’KELLEY & THOMPSON, supra note 78, at 568 (“The early corporation codes [typically] required each corporation to specify (in its article of incorporation) a par value for its stock, and defined a corporation’s legal capital as an amount equal to the product obtained by multiplying the number of outstanding shares times the par value of such shares.”). Seavoy enumerates twenty-eight incorporation statutes (covering different types of organizations and businesses) passed by the State of New York from 1847 through 1854 and notes that, under these laws, “investors almost always retained double liability until shares were fully paid-in.” SEAVOY, supra note 4, at 191–92.

166. See DODD, supra note 13, at 74–75; discussion supra, note 10. Handlin and Handlin claim that prior to the nineteenth century, corporate charters commonly did not specify a par value for their shares, and in such cases there was no legal limit to the assessments that could be made against shareholders. Oscar Handlin & Mary F. Handlin, Origins of the American Business Corporation, 5 J. ECON. Hist. 1, 13 (1945) (“As first organized, therefore, corporations could replenish their coffers by drawing without limit on the resources of all their members.”). In such firms, potential shareholder liability was not limited. See also the discussion of limited liability, infra Part III.E.

167. See, e.g., Slee v. Bloom, 19 Johns. Ch. 456 (N.Y. Ch. 1822) (finding that the only difference between partnerships and corporations is that in the latter, any responsibility beyond the amount of individual subscriptions is exonerated). Initial shareholders might be held liable even beyond their pledges in some instances. The question of whether shareholders should have full liability or limited liability was hotly debated during the convention that ultimately passed the New York Constitution of 1846, for example, and the final document provided for proportional liability. See SEAVOY, supra note 4, at 185–86.

168. No distinction was made in primitive accounting between operating profits and net profits.

169. See, e.g., O’KELLEY & THOMPSON, supra note 78, at 568 (“The typical statute permitted corporations to make periodic distributions to shareholders out of profits or surplus, but prohibited distributions to shareholders out of a corporation’s permanent or legal capital.”).
1798 charter, or out of the “profits, premiums and interests of the Bank,” according to a 1795 charter, or out of “monies arising from the profits of the said manufactury,” according to a 1794 charter establishing a woolen manufacturing plant. The charters did not authorize payment of dividends out of the permanent capital of the firms, however, and later charters tended to emphasize that the officers and directors did not even have to pay all of the profits out as dividends, but only as much as they deemed prudent. Moreover, shareholders did not have a legal right to receive any dividend at all unless it was declared by directors. Also, early case law emphasized that the resources that had been invested in corporations no longer belonged to the shareholders, but rather, remained the property of the corporation unless and until paid out in the form of dividends.

Predictably, business organizers did not always completely succeed at locking in capital through the use of the corporate form. In 1813, for example, Francis Cabot Lowell and eleven associates were granted a charter of incorporation from the Commonwealth of Massachusetts to form the Boston Manufacturing Company, capitalized at $300,000—a huge sum at the time. Lowell built the first integrated textile factory in the United States, with both spinning and weaving machinery under the same roof. The venture introduced many technical and managerial innovations. By 1817, the company was so profitable that it paid a dividend of 17 percent on invested capital. Francis Lowell died that year, however, and from that point on, the voice of restraint in paying out capital was lost. In 1820, the firm declared a $50,000 dividend, and decided to issue new shares to finance any further expansion rather than retain earnings. Moreover, they decided to pay another dividend of $90,000 out of funds raised from selling new stock! In 1822, the firm sold its machine shop, and treated the proceeds of the sale as profit, declaring another $100,000 in dividends, as well as a 25 percent (on invested capital)

173. See Smith, supra note 138, at 297 n.97. A number of the examples used in this part are taken from Smith.
174. Id. at 298 n.98 (citing Minot v. Paine, 99 Mass. 101, 111 (1868)) (“The money in the hands of the directors may be income to the corporation; but it is not so to a stockholder till a dividend is made . . .”).
175. See, e.g., Brightwell v. Mallory, 18 Tenn. (1 Yet.) 196, 197–98 (1836) (“The money in the [corporation] is the property of the institution, and to the ownership of which the stockholder has no more claim than a person has who is not at all connected with the [corporation].”).
177. Id. at 115–16 (describing the structure of relationships among the board of directors, the treasurer, and the factory agent, as well as the use of young, unmarried women to operate the machines).
178. Id. at 116.
dividend in 1823, a 25 percent dividend in 1824, and a 35 percent dividend in 
1825. Historian Robert Spaldings observes that the sale of the machine 
shop appears to have been a carefully engineered transaction designed to drive up 
the price of Boston Manufacturing Company shares, noting that three of the 
largest shareholders disposed of the major portion of their shares during the 
months after the sales, as high dividends were being paid out. The value of 
Boston Manufacturing Company stock fell steadily after 1825, Spalding notes, 
bottoming out in 1829, and after that "its performance was undistinguished." The value of 

Thus, the corporate form, by itself, did not prevent asset stripping, but it gave 
directors and managers the legal tool to prevent asset stripping if they chose to do 
so.

A final feature of corporate law in the nineteenth century supports the idea 
that the corporate form was a mechanism for securing bonding assets: This is the 
development of the "trust fund" doctrine. The modern trust fund doctrine holds 
that, in an insolvent corporation, the directors have fiduciary duties running to 
creditors because corporate assets are held in trust to satisfy creditors first. The 
doctrine developed in a number of earlier cases, but Justice Story clearly articu-
lated it in an 1824 case, Wood v. Dummer. This case involved an incorporated 
bank that dissolved and distributed its remaining capital to its shareholders while 
there were bank notes still outstanding. The holders of the notes then filed suit 
against certain of the stockholders seeking to be paid for their notes out of the 
distributed assets. Justice Story's answer leaves no question about the function 
of paid-in capital:

It appears to me very clear upon general principles, as well as the legislative 
intention, that the capital stock of banks is to be deemed a pledge or trust 
fund for the payment of the debts contracted by the bank. The public, as 
well as the legislature, have always supposed this to be a fund appropriated 
for such a purpose. The individual stockholders are not liable for the debts 
of the bank in their private capacities. The charter relieves them from 
personal responsibility, and substitutes the capital stock in its stead. Credit 
is universally given to this found [sic] by the public, and as the only means 
of repayment. During the existence of the corporation it is the sole 
property of the corporation, and can be applied only according to its

179. Id. at 116–17.
180. TUCKER, supra note 176, at 116 (citing Robert Vanum Spalding, The Boston Mercantile 
Community and the Promotion of the Textile Industry in New England, 1813–1860, at 41 (1963) (unpub-
lished Ph.D. dissertation, Yale University)).
181. Id. at 116 n.75.
182. In re MortgageAmerica Corp., 714 F.2d 1266, 1269 (5th Cir. 1983) (explaining that when a 
corporation becomes insolvent, the equitable interest of the stockholders in the property, together with 
their conditional liability to the creditors, places the property in a condition of trust, first for the creditors and 
then for the stockholders).
183. 30 F. Cas. 435 (C.C.D. Me. 1824).
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charter, that is, as a fund for payment of its debts, upon the security of which it may discount and circulate notes. Why, otherwise, is any capital stock required by our charters? If the stock may, the next day after it is paid in, be withdrawn by the stockholders without payment of the debts of the corporation, why is its amount so studiously provided for, and its payment by the stockholders so diligently required? To me this point appears so plain upon principles of law, as well as common sense, that I cannot be brought into any doubt that the charters of our banks make the capital stock a trust fund for the payment of all the debts of the corporation. . . . [The rights of stockholders] are not to the capital stock, but to the residuum after all demands on it are paid. 184

The case involved the capital stock of a bank, but the notion was broadly applied to corporations of all types. 185 Investors in shares as well as creditors, employees, and suppliers could thus all enter into long-term relationships with a corporation with greater assurance that a pool of assets would remain in the business to help keep the business going forward. 186

D. Boards of Directors and Restrictions on Shareholder Control

This Article argues that the “separation of ownership from control,” far from being an infirmity of the corporate form, was actually one of the most important benefits of the corporate form. Early articles of association of joint stock companies, as well as most corporate charters, provided that decision-making authority for the company would be delegated to a group that was legally distinct from the contributors of financial capital (though this group often included major investors). 187 In unincorporated joint stock companies, this

184. Id. at 436.

185. See DODD, supra note 13, at 29 (citing Kent’s 1848 edition, and noting that “capital and debts of banking and other moneyed corporations constitute a trust fund and pledge for payments of creditors and stockholders”).

186. Both paid-in-capital rules, and rules restricting payment of dividends out of capital have been substantially relaxed since the middle of the twentieth century. But corporate law generally requires that dividends or other distributions cannot be made if doing so would jeopardize the ability of the corporation to pay debts as they come due. See, for example, MODEL BUS. CORP. ACT § 6.40(c) (2002), which states: No distribution may be made if, after giving it effect: (1) the corporation would not be able to pay its debts as they become due in the usual course of business; or (2) the corporation’s total assets would be less than the sum of its total liabilities plus (unless the articles of incorporation permit otherwise) the amount that would be needed, if the corporation were to be dissolved at the time of the distribution, to satisfy the preferential rights upon dissolution of shareholders whose preferential rights are superior to those receiving the distribution.

187. Members, or subscribers (as shareholder in early corporations were often called) may have been able sometimes to elect corporate officers directly, without electing a board of directors to act for them in choosing officers. But boards of directors or similar institutional arrangements, though they may not have
delegation of decisionmaking authority was necessary to get around the default rule of partnerships that major decisions must be made by unanimous decision of the partners.\textsuperscript{188} A requirement of unanimous decisionmaking, we have seen, gives every partner the power to compel dissolution, or hold up the other partners in an effort to extract more of the wealth being created by the joint enterprise. Delegation of authority to a small decisionmaking body streamlines decisionmaking in large organizations with many investors and participants, and numerous other scholars have noted that the resulting "centralization" of control is one of the benefits of incorporation.\textsuperscript{189}

In corporations, because the law recognizes the corporation as a separate legal entity, the law also insists that some designated group of human persons be made responsible and accountable for the activities of the participants in the business, at least insofar as those activities relate to the carrying out of the business for which the firm was incorporated.

But in addition, I would suggest that the benefits of assigning decisionmaking authority to a board of managers, or board of directors, are not just that it streamlines decisionmaking (relative to unanimous approval by numerous partners), and identifies accountable human persons to act for the entity. Instead, the benefit is that assigning decisionmaking to a board restricts the control that various individual participants, such as the president, or a major financial investor, might otherwise have. Decisionmaking by a designated small group thereby helps assure all participants that financial investors will not be able to easily pull assets out of the firm once other participants have made investments that are committed to the enterprise, and that active managers will not be allowed to use the assets of the firm for their own personal benefit. Thus, when decisionmaking authority is allocated to a board of directors, individual team members relinquish some of the ability they might otherwise have had to hold up other members. This makes their commitments to engage with the others in a cooperative way more credible.

\begin{footnotes}
\footnotetext{188}{Decisionmaking authority was usually granted to the trustees of the trust created to hold the joint assets of the company.}
\footnotetext{189}{See, e.g., O'KELLEY & THOMPSON, supra note 78, at 95 (noting that under the Uniform Partnership Act, "each partner has equal rights in the management and conduct of partnership business"); id. at 154 (noting that "the corporate form provides a hierarchical form for decisionmaking"); HURST, supra note 4, at 24 ("The corporation met the need to develop organization as a major economic asset by legitimating a combination of strong central direction and limited commitments.").}
\end{footnotes}
There is substantial evidence that boards of managers or directors were a common feature of the earliest corporations. The board of directors was legally recognized as an independent body, and boards were required to act collectively. The company's charter had to specify generally how directors were to be chosen. In the early and mid-nineteenth century, the selection process was often by a majority or two-thirds vote of shareholders, with each shareholder receiving one vote. By the late nineteenth century, one vote per share became more common. The charter of the Lehigh Coal and Navigation Company used a complex formula that allocated one vote to any shareholder who held ten or fewer shares; one vote for every ten shares for each shareholder who held more than ten, but not more than 100 shares; and one vote for every twenty shares above 100 for each shareholder holding more than 100 but not more than 500 shares, in addition to the number of votes allowed on the first 100; finally, holders of more than 500 shares were to receive the same number of votes as holders of 500 shares, plus three votes for each additional 100 shares they hold. Shareholders were not entitled to vote at all unless they had held their shares for at least six months. This declining voting power arrangement gave small investors disproportionate voting rights, presumably to help protect them from

190. Sowards & Mofsky, supra note 91, at 482–83 (citing Bagnall, supra note 91, at 406–09, and Caroline F. Ware, The Early New England Cotton Manufacture 21 (1931)). According to Sowards and Mofsky:

Two business histories dealing with this area describe delegation of authority to boards of directors or managers in early textile firms in a manner generally associated with modern corporations. Such delegation existed in joint stock associations before the promoters of textile firms first made extensive use of the corporate form. A third study also describes several mining companies which were formed as joint stock associations around 1790.

Id. at 482 (citing Livermore, supra note 4, at 240). They cite provisions of the articles of association of the Lehigh Coal Mining Company (the predecessor to the company later organized by White, Hazard, and Hauto, described supra Part I) by which shareholders are to elect a president, eight "managers," and a treasurer, with the president and managers "vested with complete authority over the property of the business."

191. Directors were not "agents" of shareholders, as has been commonly claimed in recent decades.

192. Generally charters provided for approval by a majority, or perhaps two-thirds, of board members. See also Stephen M. Bainbridge, Why a Board? Group Decisionmaking in Corporate Governance, 55 Vand. L. Rev. 1 (2002) (discussing why certain kinds of decisions are improved by group decisionmaking).

193. See, e.g., Colleen A. Dunlavy, Corporate Governance in Late 19th-Century Europe and the U.S. The Case of Shareholder Voting Rights, in Comparative Corporate Governance 5 (Klaus J. Hopf et al. eds., 1998).

194. This, of course, gave large investors more power in the selection of directors, and raised problems by the early twentieth century of large investors attempting to squeeze out or "oppress" small investors. These latter problems have been addressed by legislatures and courts through "minority oppression" rules. Sowards and Mofsky note that the corporate law standards that were developed in the early nineteenth century were appropriate for the publicly held corporations and in many respects inappropriate for the close corporation." Sowards & Mofsky, supra note 91, at 491; see also Henry G. Manne, Our Two Corporation Systems: Law and Economics, 53 Va. L. Rev. 259 (1967).

abuses by large investors. In any case, selection of directors almost never required
the unanimous vote of members (shareholders), which meant that no individual
participant in corporations had veto power over the choice of directors or over
the other major decisions participants wanted to make.

Directors of nineteenth century corporations were typically chosen from
among stockholders. Nonetheless, legally their role as directors was distinct from
the role any one of them could play as a contributor of financial or human
capital. Thus putting in place a board of directors institutes a mechanism
that can help to mediate among competing interests in a corporation, as well as
to represent the corporation to outsiders. For example, it seems likely that dis-
agreements over the use of corporate resources between active shareholders
(whose livelihoods and personal goals are also tied up in the business) and pas-
sive shareholders, or among other subsets of the team members, would have
been common. How much of the revenues should be paid out in dividends, for
example, and how much should be reinvested to expand the business? In

196. Some early charters and statutes appear to have required that directors be stockholders. See
Smith, supra note 138, and cases cited therein. The charter of the Farmers' and Mechanics' Bank of
Philadelphia (incorporated in 1809), however, required that "a majority of the directors . . . be farmers,
mechanics, or manufacturers actually employed in their respective professions . . . ." An Act to Incorporate
the Farmers' and Mechanics' Bank, § 4, art. II, 1809 Pa. Laws 973-74. This requirement suggests that
the directors were expected to play a role in representing the interests of the borrowers from the bank,
as well as the interests of investors in the capital stock of the bank. As other scholars have noted, it is
common today among venture capital firms for several directors to be named who are neither members
of management, nor representatives of the venture capitalists. See, for example, Whincop, supra note
24, at 84-85, who notes that venture capital firms "require the presence of at least one non-executive
director, often more," and that standard explanations for the role of the board in representing
shareholders' interests do not explain this phenomenon because "venture capitalists have all the inen-
tive and power they need to keep management in line . . . ." Hence he argues that one of the purposes
of outside directors is to help foster "trust between, and mediating RPNs [relationship preserving norms]
applicable to, the entrepreneur and the investor . . . ." The board's essentially collegial, collective decision-
making [transforms] the entrepreneur-investor relation from [a] bilaterally bargained, adversarial
context . . . ." Id. at 85. These "outsiders" often control the swing vote in corporate decisions. A board
of seven directors in a typical venture capital firm, for example, is likely to include two from manage-
ment, two representatives of the venture capitalist, and three respected individuals from the community
of people with whom the firm will work (such as executives or investors in other firms in related indus-
tries). See, e.g., Julia Porter Liebeskind, Ownership, Incentives, and Control in New Biotechnology Firms, in
THE NEW RELATIONSHIP, supra note 51, at 299, 322. Whincop speculates that such outside directors
may also play a key role in facilitating relationships with other corporate participants. Whincop, supra note
24, at 86 ("While the [outside] director will be appointed for the welfare of the business, and thus its share-
holders, the agent analogy is inaccurate, the focus is outward not inward, and the director's identification
with other social groups may be quite as strong as that with the investors."). Whincop's observations refer
to contemporary venture capital firms, but the analogy to early corporations seems probable. So far, how-
ever, I have tracked down very little direct evidence of who directors of nineteenth century corporations
were and what role they played.

197. This was a common source of dispute between managers and more passive investors. VISIBLE
HAND, supra note 16, at 145-46 (discussing conflicts between career managers and top executives and
board members in railroad companies over reinvestment strategies).
forming a corporation, all of the team members agree in advance that such decisions will be the responsibility of the board of directors. This mediating role probably became more important over time, as the number of people engaging with the corporation grew past the point where all of the participants could be expected to know each other personally.

E. What About Limited Liability?

Numerous legal and business historians have proposed that the attraction of the corporate form to organizers of large-scale business in the nineteenth century was the fact that the form offered the protection of limited liability.198 "Limited liability" means that investors will (normally) not be held personally liable for debts and other obligations of the business. If a corporation is granted limited liability at the time it is formed,199 the personal assets of organizers and investors that have not already been committed to the enterprise would henceforth be protected from claims against the business.200

Although limited liability became one of the defining characteristics of the corporate form in the early and mid-twentieth century, many early corporations were organized under charters that did not grant limited liability. Stockholders in early chartered banks, for example, often did not have limited liability.201 The first general incorporation act for manufacturers in Massachusetts, passed in 1809, specifically provided for unlimited liability for shareholders.202 In fact,

198. See, e.g., FRIEDMAN, supra note 108, at 201 ("The overriding need was for an efficient, trouble-free device to aggregate capital and manage it in business, with limited liability and transferable shares."); see also Mahoney, supra note 87, at 875 ("In the standard story of the growth of the corporate form, the innovation of limited liability takes primacy."). Nicholas Murray Butler, the president of Columbia University in 1912, called "the limited liability corporation" the "greatest single discovery of modern times." MAURICE WORMSER, DISREGARD OF THE CORPORATE FICTION AND ALLIED CORPORATION PROBLEMS (1927) (quoting NICHOLAS MURRAY BUTLER, WHY SHOULD WE CHANGE OUR FORM OF GOVERNMENT 82 (1912)).

199. Today, the process of incorporation ensures the protection of limited liability for corporate shareholders and other participants, unless the corporate charter specifies otherwise, but in the first half of the nineteenth century, limited liability could not be assumed, and a number of early incorporation statutes explicitly provided otherwise. See the discussion infra notes 201–206 and accompanying text.

200. Even if a corporation were granted limited liability, shareholders could be held liable for corporate obligations at least up to the par value of their stock, if the shareholder had not paid in full for the stock at the time the stock was issued. In some early corporations, especially banks, shareholders were potentially subject to double liability. See the discussion supra notes 165–166 and accompanying text.

201. FRIEDMAN, supra note 108, at 191 ("Limited liability—now considered one of the main objects of incorporation—was not universally available in the 19th century. Bank stock did not possess this great boon in New York, for example."); see also Mark I. Weinstein, Share Price Changes and the Arrival of Limited Liability in California, 32 J. LEGAL STUD. 1, 2 (2003) ("The last major jurisdiction to adopt limited liability [was] California, which did not adopt limited liability for corporations until 1931.").

Oscar and Mary Handlin claim that during the first thirty years after independence, no charter granted in Massachusetts provided for limited liability.\footnote{203}{See Handlin & Handlin, supra note 166, at 10. The California corporate law provided for unlimited proportionate liability as the default rule for corporations until well into the twentieth century. See Weinstein, supra note 201, at 5 ("The California Constitution of 1879 mandated pro rata unlimited liability for firms incorporated in California . . .").}

A New York general incorporation statute of 1811 for textile manufacturers provided that if a corporation was dissolved, then at that time, "persons then composing such a company shall be individually responsible to the extent of their respective shares of stock in said company and no further."\footnote{204}{DODD, supra note 13, at 64 (citing Act of Mar. 22, 1811, ch. 67, 1811 N.Y. Laws 111, 113).} Liability was limited for the organizers of these mills to provide special financial incentives to business people who would finance textile manufacturing.\footnote{205}{It is not at all clear, however, that total financing costs would be cheaper for textile firms that had limited liability because, presumably, creditors of such firms would have to charge a higher rate of interest to compensate them for the higher risk they were bearing, or would require organizers to co-sign notes, thereby making them personally liable for debts of the enterprise.} The reason was that the British had cut off supplies of textiles to the states leading up to the War of 1812, and therefore investments in manufacturing textiles were considered to be in the public interest.\footnote{206}{SEAVOY, supra note 4, at 64-66.} The clear language of the statute limited the liability of members of corporations formed under the Act, but it was not clear whether liability was meant to be limited only to the par value of the stock, or whether, upon dissolution, stockholders might be assessable a second time up to the limit of the par value of the stock (thereby imposing double liability on stockholders). In either case, of course, liability was limited, and this established an important exception to the general rule. But the question of how the limit was to be interpreted became important a few years later when, after the war was over, the British flooded the U.S. market with textiles, and a number of the mills established under the 1811 Act went into bankruptcy.

The case of \textit{Slee v. Bloom}\footnote{207}{19 Johns. Ch. 456 (N.Y. Ch. 1822).} grew out of the bankruptcy of the Dutchess Cotton Manufactury, organized in 1814 under the 1811 Act.\footnote{208}{SEAVOY, supra note 4, at 68.} By 1815, the business needed more capital and stockholders were assessed for further contributions. Most of the stockholders ignored the calls, and the business was discontinued in October 1816. The accumulated debts of the corporation were large, but were mostly owed to one person, Samuel Slee, who had been the owner of a mill sold to the company two years earlier. Slee had sold the mill for stock and cash, but had never received the cash. So Slee sued to collect the unpaid cash from the other stockholders, who had never fully paid on their stock subscriptions.
The Court of Chancery had to first consider whether a corporation having no assets should be considered dissolved, so that a creditor could go after members for at least what they should have paid in for their shares. On this matter, the court agreed that a corporation was dissolved if it was without assets, so that a judicial remedy could be applied to go after the corporation's shareholders on behalf of the creditors. The judgment made it clear that the court could go after shareholders for at least the par value of their stock. In the opinion, Chief Justice Spencer seems to interpret this language to mean only their initial pledge: "The only advantages of an incorporation under the statute over partnerships...consists in a capacity to manage the affairs of the institution by a few agents, and by an exonerated from responsibility beyond the amount of the individual subscriptions."

Sometime during the next few decades, limited liability came to be seen as the default rule in most states. By the time that Joseph Angell and Samuel Ames published their treatise on corporate law in 1832, limited liability was seen as one of the primary motivating factors encouraging the use of the corporate form.

Limited liability helps solve some of the contracting problems for participants in a large and complex business. The business can grow, new obligations can be incurred, and new investors, officers, directors, and managers can be brought in without changing the maximum potential losses of the existing participants. Each one has her potential liability capped. Also, none of the participants (neither the original members of the team, nor new ones brought in later) need to worry about whether their fellow participants can contribute their share to cover any future business debts or losses. Although these advantages of corporate form do not, by themselves, reduce the total business risk involved in making specialized investments, they do reduce the risks that arise from the possibility that other investors in the business might engage in opportunistic behavior—or just experience bad luck. Recall that in a partnership, by contrast, if any partner spends, loses, transfers, or otherwise disposes of her personal, nonbusiness related assets, the vulnerability of other partners to...
business losses would be increased. This is because business claimants seeking recovery from the personal assets of partners might find that some of the partners cannot pay. The burden would then fall more heavily on the remaining partners, who are jointly responsible. Thus limited liability eliminates the need that team members might otherwise have to monitor each other's personal business, outside the context of the enterprise they are jointly engaged in.\footnote{212. Easterbrook & Fischel, supra note 211.}

Limited liability also allows for individuals with limited wealth to invest in small amounts, without subjecting themselves to potentially catastrophic liabilities. As White and Hazard went out to raise their third and fourth round of capital, they were probably approaching potential investors who had some modest funds to invest, but were not wealthy. They probably also approached wealthy investors who had not previously known White and Hazard, and did not have reassurances through their personal relationship with them that they would eventually make the business profitable. Without the benefit of limited liability, these new investors had no way of knowing their maximum downside risk.

Limited liability is hence a virtual necessity for the development of markets in which shares can be traded—undoubtedly extremely important in the long run development of modern corporations. Yet limited liability cannot fully explain why business people began seeking out incorporation in the nineteenth century, because early corporations were not always granted limited liability.\footnote{213. PRESSER, supra note 10, at § 1.03[1]. Presser notes that limited liability may not have been the prime inducement for early incorporators. Instead, “other aspects of ‘corporateness,’ such as the ability to have a centralized management, to hold property in the name of the corporation, and to possess more extended or perpetual life than was possible in the sole proprietorship, joint venture, or partnership form” may have been the primary attractions. Presser notes that legislators in some states, notably Massachusetts, in fact made a point of imposing unlimited liability early in the nineteenth century as part of a deliberate policy of protecting creditors. Id.; see also Hamill, supra note 145, at 91 n.42 (“The most recognized corporate legal benefit in the twentieth century, limited liability protection to all shareholders, was not the principal reason for seeking a corporate charter in the late eighteenth and early nineteenth centuries.”); Mahoney, supra note 87, at 890 (noting that merchants in England in the late eighteenth and early nineteenth centuries “did not clamor for limited liability,” and that in the United States as late as the 1840s “merchants for the most part opposed limited liability,” arguing that “owner liability was necessary for creditworthiness”).} It appears that business people began seeking out and using the corporate form in the nineteenth century even in situations when it did not automatically provide limited liability.

Finally, it is worth noting that, even if a business did incorporate and the terms of the charter limited the liability of the stockholders for business debts, creditors would commonly insist that the business organizers pledge their personal assets to back debt incurred by the corporations. Thus, in the early years at least, the benefits of limited liability may not have exceeded its costs. Limited
liability was, at best, one part of what business people were trying to achieve by incorporating.

IV. BUILDING ORGANIZATIONAL CAPITAL

This part will review some largely anecdotal evidence that the use of the corporate form for business enterprises grew hand-in-hand with the building of hierarchical management structures, the emergence of a class of middle managers and technical specialists with long-term careers as company employees, and the branding of products headed for broad consumer markets. The evidence does not definitively prove that one caused the other, nor even that the corporate form was necessary to build and accumulate such organizational assets. But it is clear that by the early twentieth century, incorporated entities had become the most important repositories of organizational and reputational assets, in addition to physical capital, in the private sector. Despite the fact that individual proprietorships and partnerships have always vastly outnumbered corporate entities, few of them have managed to achieve the scale of modern incorporated entities.\footnote{14} Chandler has extensively documented the rise of large, multi-unit business organizations in the United States after about 1840. He argues that these organizations began to appear when there began to be significant economic benefits from the coordination of economic activity through administrative structures rather than through markets, and that these organizations required managerial hierarchies.\footnote{15} These hierarchies, in turn, added to the stability and permanence of the organizations.\footnote{16} Chandler observed, “Men came and went. The institution and its offices remained.”\footnote{17}

I will not attempt to repeat or review what Chandler has already accomplished, except to highlight the role played by incorporation of the business enterprise. The brief first part of Chandler’s great work, The Visible Hand, reviews the nature of small businesses that prevailed in the late eighteenth and early nineteenth century, and observes that as firms began to take on larger more complicated tasks (especially finance and transportation), they were more likely to be incorporated and “in these firms one or two full-time salaried managers, rather than the owners, came to administer the enterprise.”\footnote{18} Chandler notes:

At first, the board of directors, consisting of local merchants and manufacturers, made decisions in consultation with [the salaried

\footnote{14}{The main exceptions appear to be family firms. See generally SCALE AND SCOPE, supra note 17; Smith & Dyer, supra note 17, at 28–73; discussion infra notes 269–276 and accompanying text.}
\footnote{15}{VISIBLE HAND, supra note 16, at 6–7.}
\footnote{16}{Id. at 6–8.}
\footnote{17}{Id. at 8.}
\footnote{18}{Id. at 41.}
managers], on those matters which required business judgment and discretion... [But] because board members were busy with their own affairs, these decisions were soon turned over to committees of the board which met weekly or often only once a month. 219

Soon, however, the full-time managers took over most of the day-to-day decisionmaking, with the boards and their committees “becoming little more than ratifying bodies.” 220 But Chandler does not explore what it was about the corporate structure, other than the ability to amass larger amounts of capital, that made it more suitable to organizing larger business ventures.

A. Why I. M. Singer & Company Had to Incorporate

Chandler’s first example of organizations that developed hierarchical structures and sophisticated internal information and control techniques were the railroads. 221 It seems obvious that the corporate form was a near necessity for building a railroad, because, just as Hazard and White came to realize that they needed to utilize the corporate form to amass enough capital and lock it in to the river navigation project, railroad promoters would also need to use an organizational form that would enable them to raise capital that could be irrevocably committed to the enterprise. So, while Chandler provides rich detail about the organizational innovations developed by the railroads, this example does not prove that one of the great benefits of using the corporate form was that it supported the development of organizational capital, because this benefit cannot be separated from the benefit of committed financial capital to support extensive and highly specialized physical capital.

But the story of the rise of the Singer Sewing Machine Company provides an example in which the corporate form was used—not to raise financial capital, nor to achieve the benefits of limited liability—but to lock in existing capital, to provide a mechanism for settling any subsequent disputes among the leading participants in the firm, and ultimately to support the development of a massive marketing organization. The I. M. Singer & Company began in 1851, when Isaac Merritt Singer got his first patent on a machine that would make a continuous series of stitches. 222 Singer was not an engineer or mechanic by training—indeed, he had spent most of his early adulthood attempting to be an actor. 223 But while he never achieved much success as an actor, during one spell of unemployment, in 1839, he had taken a job as a laborer in Chicago,

219. Id.
220. Id.
221. Id. at 79–121.
223. Id. at 16–32.
Locking in Capital

apparently working on construction of the Lockport and Illinois Canal. In that capacity, he invented and patented a machine for drilling rock. While he continued for many years to attempt to make a living as an actor, his knack for mechanical invention proved more remunerative, and in 1844 he began working on a machine to carve wooden type for printers. For the next six years, Singer formed brief partnerships with a few investors, and borrowed money wherever he could to work on his type-carving machine (which he had completed and patented by 1849) and to attempt to sell it.

Despite his efforts, there seemed to be little interest in Singer’s type-carving machine. So Singer, encouraged by his partners at the time, Orson Phelps, who owned a machine shop in Boston where Singer was working on his design, and George Zeiber, who was providing financing for the type-carving effort, shifted his attention to the idea of developing a sewing machine. In 1845, Elias Howe had invented a machine that would sew stitches, but it was clumsy and difficult to use for a number of reasons. By 1850, a number of other inventors had also developed crude sewing machines, but all were clumsy and none worked particularly well. Phelps showed Singer one of the early machines and urged him to attempt to improve upon it. Singer immediately envisioned a machine in which a straight needle carrying one thread moved up and down, and a shuttle working below the needle would move a second thread back and forth. Zeiber put up additional financial capital, and by late 1850, Singer had a working model, the basic design of which would eventually become the basis for all modern sewing machines. The partnership agreement among the three men called for the resulting patent to be the “equal property of the three partners.”

During the next year, the three partners attempted to work out problems in the design that caused the early machines to break down frequently, to develop a method of manufacturing the machines in quantity, and to build a market for them. Using his well-developed skills as a dramatist, Singer went on the road to show the machine at fairs and exhibits. Meanwhile, the partners were perpetually low on money, borrowing from friends and family to buy materials and to pay the wages of workmen in the machine shop building models.

224. Id. at 24.
225. Id. at 25.
226. Id. at 36-48.
227. Id. at 43-44.
228. Id. at 62.
229. Id. at 44.
230. Id. at 47. The partnership operated under the name of “Singer and Phelps,” however, and Singer apparently bullied both Phelps and Zeiber into letting him apply for the patent in only his own name. Id. at 74. Singer’s first sewing machine patent was obtained in 1851. Id. at 85.
231. Id. at 73.
232. Id. at 76.
also had to fight continuous legal battles over patent rights. And they feuded among themselves. After obtaining the first significant order (for thirty machines at $100 each), Singer took the proceeds and pushed through a deal with Zeiber to buy out Phelps' one-third interest in the business for $4000. Phelps was immediately replaced by another partner, Barzillan Ransom, who put $10,000 into the business in exchange for a one-third interest. Ransom too proved to be an inappropriate partner, and within a year, Singer had bullied him out of his share in exchange for forty sewing machines. Singer was subsequently to squeeze Zeiber out of his share of the business too through his blatantly bullying behavior. Hence we see Singer engaging in exactly the kind of hold-up behavior that the team production theory predicts can plague working relationships in complex production activities. In every instance, although his partners had contributed financing, mechanical know-how, manufacturing space, equipment, and sales and general business capabilities, Singer provided two critical inputs—the patent rights and the inventors' ability—and used his control over those inputs repeatedly to hold up his partners and squeeze them out of agreed-upon shares of the proceeds of the business.

In 1851, Singer again took on another partner, this time one who was his equal in shrewdness, and who could stand up to his bullying behavior. Edward Clark was a lawyer, and was granted a one-third share in the business in exchange for supplying legal services, especially in the ongoing patent battles. Clark pushed through Singer's patent application, and once granted, arranged for the rights to the patent to be divided equally between himself and Singer. Clark and Singer then bought out Zeiber's interest in the firm for $6000. Clark and Singer became the only partners in I. M. Singer & Company. During the next ten years, the market for sewing machines grew, slowly at first. Building a market for sewing machines was difficult because the machines represented a very substantial investment relative to typical levels of household wealth and income. Moreover the product was at first seen as something that had no purpose other than to save time for women, women were viewed as unlikely to be able to operate such a mechanical device, and in any case,
"respectable" women would probably not choose to use a complex mechanical device. Moreover, the legal feuding among holders of various sewing machine patents became increasingly intense, costing I. M. Singer & Company most of their profits, and virtually all of Clark's time and energies during the years from 1851 to 1856. In the fall of that year, the three leading manufacturers, together with Elias Howe, who among them held dozens of patents on sewing machines and their various improvements—including all of the most important patents—agreed to form the first "patent pool." The parties contributed all of their relevant patents to a single pool, and agreed that, for a fee of $15 per sewing machine sold, they could all use each others' patents. Part of this fee was set aside for fighting future patent infringement battles against any other manufacturers who might attempt to use the devices covered by patents in the pool, and the rest would be divided among the three manufacturing firms in the pool. An additional fee of $5 per machine was to go to Howe, who held that key early patent and had won a series of court battles defending his claim.

With the patent wars settled, I. M. Singer & Company manufactured and sold 2564 machines in 1856, and by 1860, production and sales reached 13,000 machines. Singer and Clark were rapidly becoming wealthy, and though still organized as a conventional partnership, were beginning to build a substantial manufacturing, distribution, and sales organization. They had established sales offices in many major U.S. cities, as well as in Paris, Glasgow, and Rio de Janeiro, and were even thinking about establishing manufacturing operations overseas. Singer and Clark, though they didn't particularly like or trust each other, had managed to establish a reasonably successful working relationship.

Meanwhile, however, Singer was thoroughly enjoying his new wealth, and was living an unusually flamboyant life. In 1860, a series of incidents brought public attention to the fact that Singer had domestic relationships with, and numerous children by, four different women, only one of whom he was legally married to. To escape the wrath of the woman with whom he had been living the longest and the most openly, who called herself Mrs. Isaac Singer, and with whom he had fathered eight children, Singer fled to England.
he promptly became involved with a fifth woman, whom he eventually did marry once his divorce from his first wife was finalized.  

Apart from the unseemliness and notoriety of this lifestyle (which might have had a negative impact on the ability of the firm to market Singer machines to "respectable" households) why did this matter to Clark? The problem, Clark could easily foresee, was that if the firm were still organized as a partnership at the point at which Singer died, the valuable business that the two of them had built over the previous years would be destroyed in the legal battles over claims to Singer's estate. Singer's heirs, however many of them there might be, would all have some legal claim to some share of the business, and it would probably require years of court battles to establish who was to get what. Clark feared that without liquidating much of the firm, he would not be able to come up with enough cash to prevent catastrophe by buying out Singer's share from the heirs. 

Clark realized that the solution to this problem was to incorporate the business and to ease Singer out of active management. By the 1860s, the corporate form was becoming much more widely used by manufacturing firms, so Clark would understand that once incorporated, the business assets would no longer be the joint property of Clark and Singer, but would belong to the corporation. Equity shares would be issued to Clark and Singer, each of which would provide a pro rata claim on any distributions from the business. But any such distribution would be at the discretion of a board of directors of the company, and could not be compelled by either former partner, nor by the executor of the estate, nor would it likely be compelled by any court of law handling the proceedings. Heirs could be given equity shares in the business out of Singer's estate without disturbing or breaking up the assets and governance structure of the business.

By this time, the company had no need to raise additional capital, as it was generating cash faster than it could reinvest it. Nor were there any particular concerns about limiting the liability of shareholders: The firm had little or no debt (except perhaps small amounts of trade credit from materials suppliers), and class action lawsuits for fingers injured by sewing machine thread guides and presser feet had not yet been invented. The only function that incorporation served was to ensure that the substantial organizational capital that had been accumulated by the firm could not be torn apart, nor could its reputation be easily destroyed, as a result of the messy personal affairs of one of the partners.

251. Id. at 174–75.
252. Id. at 177.
253. Id. at 178.
254. Hamill, supra note 145, at 101–02 nn.85–86 (identifying twenty-three states that passed general incorporation statutes between 1836 and 1859).
According to Singer’s biographer, it took three more years for Clark to get Singer to agree to incorporation of the business, but in August of 1863, I. M. Singer & Company was dissolved, and the business was reorganized as the Singer Manufacturing Company. The firm by then had twenty-two patents and capital assets of $550,000. Within four years after incorporation, it had established manufacturing and sales operations overseas, becoming the first American firm to produce and market extensively in Europe. According to Chandler, Singer was also the first manufacturing company to establish a sales force of its own salaried employees, rather than relying on sales agents. The Singer organization that developed in the 1860s and 1870s included retail branch offices in virtually every community in the United States of at least 5000 in population (as well as in many communities in Europe and South America). Each branch office included, at a minimum, a general salesman, an instructor (often a female employee hired to teach other women how to use the machines), a mechanic (to assure customers that machines could be promptly repaired if they broke down), and a bookkeeper.

One other detail of the transition from partnership to corporation suggests that the governance structure established in the newly organized corporation was designed to serve a mediating function, as the team production theory suggests, rather than to act as an agent of shareholders, as the standard principal-agent theory of the corporation argues. Ruth Brandon writes:

Singer had only agreed to the end of the partnership [in which he knew he would lose his ability to “hold up” the other participants] under certain conditions, the principal one being that neither of the partners would be president of the new company while the other was alive, and that both would ‘retire from active participation in the management of the business.’ In other words, . . . if Singer was to become a non-executive director, then so must Clark. If he [Clark] was so determined to dissociate Singer from the business, this was the price he had to pay.

The agreement they ultimately reached was that Singer and Clark would each take 40 percent of the shares of the new company in exchange for their interests in the partnership, with the rest to be subscribed to by four senior officers of the firm (who were each required to buy 175 shares at $200 per share), and twelve other employees of the company who were offered the opportunity to buy shares. A young manager, Mr. Inslee Hopper, was

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255. BRANDON, supra note 222, at 179.
257. VISIBLE HAND, supra note 16, at 303–04.
258. Id. at 403.
259. BRANDON, supra note 222, at 179.
260. Id. at 180, 182.
named president. The initial board of trustees would include Singer, Clark, Hopper, George Ross McKenzie (a trusted agent of the firm for a number of years), William Proctor, and Alexander Sterling.

While Singer retired from active involvement in the company after that, Clark did not, becoming president after Singer died in 1875. Chandler gives Clark and McKenzie credit for building an integrated organizational structure that became a model for many other large manufacturing and distribution companies in the late nineteenth and early twentieth centuries.

Although the anecdotal evidence provided by this story does not prove that the corporate form was necessary for creating such an organization, it lends considerable support to the idea. Once the firm was incorporated, it could make more credible commitments to outsiders and to new participants as the firm drew them into the business. The corporation itself could become the repository of "reputational" assets—the intangible qualities that third parties rely on in choosing to deal with any business in which long-term commitments or nonobvious quality issues might be important. Reputational assets of a corporation are much less dependent on the ability of any individual participant to deliver personally on his or her implicit or explicit promises than comparable assets of a partnership would be. Thus the existence of an established corporation may reassure anyone who might consider engaging in a short- or long-term productive relationship with members of the team. If the manager of the company factory tries to arrange a long-term supply contract with an iron and steel mill owner, for example, the mill owner can be reassured that the assets of the whole business are backing the commitments made under the contract. Similarly, if a sales agent promises customers that Singer will provide ongoing service for the machines it sells, the customers can be reassured that, if

261. Id. at 180.
262. Minutes of First Meeting of Board of Trustees of Singer Manufacturing Co. (June 6, 1863) (on file with the Wisconsin Historical Society).
263. BRANDON, supra note 222, at 193; VISIBLE HAND, supra note 16, at 403.
265. Nicholas S. Argyres & Julia Porter Liebeskind, Contractual Commitments, Bargaining Power, and Governance Inseparability: Incorporating History into Transaction Cost Theory of the Firm 8 (Nov. 1997) (unpublished manuscript, on file with author) (noting that the corporate form, unlike other business forms available historically, bound shareholders as a group to the corporation, making it nearly impossible for them to withdraw their capital, and that "[t]his in turn protected the interests of buyers and suppliers who otherwise would be unwilling to enter into long-lived relationships with the firm that might put their own wealth at risk").
266. Singer was among the first small machine companies to promise customers ongoing after-sales service (as well as some initial training in using the machines), and to establish a network of sales and service branch offices to carry out these activities.
something happens to that agent, someone else in the company will fulfill these promises.\footnote{267}

For similar reasons, corporate status may have been critical for the successful marketing of branded consumer products. It appears, for example, that Procter & Gamble—founded as a partnership in 1837 to make and sell soaps and candles—converted from a partnership to a corporation in the early 1880s, very shortly after it invented and began advertising and selling Ivory soap, one of the first soap products to be branded and marketed nationally.\footnote{268} A business that operates through the corporate form may hence be able to reduce the perceived risks involved for outsiders who might have to make idiosyncratic investments to deal with the business. Ordinary business risks do not disappear (although the larger the corporation becomes, the more it might be able to withstand some fluctuations in business activity), but risks that a customer would be harmed by the opportunistic behavior of one participant in the enterprise are probably greatly mitigated.

B. But Was Incorporation Really Necessary?

While numerous manufacturing, transportation, distribution, and marketing firms were incorporated in the 1850s, 1860s, and 1870s, there are also notable examples of firms that grew to be very large and powerful in the nineteenth century without incorporation. If incorporation was so important to accumulating organizational assets, how was it that such firms could grow so large without incorporation? E. I. Du Pont de Nemours & Company, for example, operated for nearly a century, from its beginnings as a small gunpowder manufacturer on the banks of the Brandywine River to one of the world’s largest manufacturers of explosives in the 1890s. It managed to do this because a succession of talented sons, nephews, and grandsons of E. I. du Pont were able to keep the business going. The du Pont family kept their wealth invested in the business, the family name served as the repository of reputational capital, and relationships among the participants in the business were governed by familial ties that made trust possible.

In 1889, however, “General” Henry du Pont, who had ruled over the gunpowder empire with an iron fist, died, leaving control to Henry’s nephew Eugene du Pont (son of Alexis du Pont), who also believed in tight control of the firm, and shared little power with the next generation. In 1899, the firm was

\footnote{267. \textsc{Visible Hand}, supra note 16, at 404 (discussing decisions made by senior Singer executives in 1879 to provide “a ‘second man’ to each of the foreign agencies ‘so that neither sickness, death, nor any other circumstances may interfere with the smooth working of the business to any great extent’”).}

\footnote{268. \textsc{Proctor & Gamble}, P&G History 1837–1889, at http://www.pg.com/about_pg/overview_facts/history.jhtml.
incorporated in the State of Delaware, but the act of incorporation appears to have been a technicality, with all the stock held by those family members who had been partners.\textsuperscript{269} Henry A. du Pont, a cousin of Eugene's, had pushed for incorporation as a mechanism to weaken the control that Henry had as president and sole executive officer of the partnership. According to Delaware law at the time, the newly formed corporation would need a set of officers, which Henry hoped would help to distribute control rights.\textsuperscript{270} But Eugene only agreed to incorporation on the grounds that he would still be president, and he continued to be unwilling to delegate authority. When Eugene died in 1902, the elder members of the clan feared that none of the younger members had the appropriate qualifications to run the company and that they might dissipate the wealth if they took over the management.\textsuperscript{271} So they decided that the best thing to do was to sell their interests in the firm to Laflin & Rand, a major competitor. But, at a shareholders' meeting called to approve a formal resolution to sell the company, three cousins, Pierre, Alfred, and Coleman stepped forward to ask if they could buy the company from the senior du Ponts.\textsuperscript{272} The junior members of the clan bought out the position of the senior members for notes worth $12 million and 28 percent of the common stock in the newly reorganized firm.\textsuperscript{273} Pierre, Alfred, and Coleman then reincorporated in 1903 in New Jersey (whose corporate law by then permitted corporations to own the stock of other corporations),\textsuperscript{274} consolidated all the various firms in the du Pont empire into a single firm,\textsuperscript{275} reorganized the company to establish an executive committee, and established a fifteen member board of directors, consisting of Pierre, Coleman, Alfred, and the four other members of the executive committee, three members of the elder generation, and five directors who were minority shareholders.\textsuperscript{276}

Andrew Carnegie also managed to build a sizeable business organization (Carnegie Steel and various related companies such as the Frick Coke Company) without the benefits of incorporation. But he did so by retaining very tight personal control over the managerial structure of the organization, choosing employees and partners carefully,\textsuperscript{277} and squeezing out partners who did not suit

\begin{itemize}
  \item \textsuperscript{269} JOSEPH FRAZIER WALL, ALFRED I. DU PONT: THE MAN AND HIS FAMILY 173-74 (1990).
  \item \textsuperscript{270} Id. at 174.
  \item \textsuperscript{271} GERARD COLBY, DU PONT DYNASTY 132 (1984).
  \item \textsuperscript{272} VISIBLE HAND, supra note 16, at 50.
  \item \textsuperscript{273} COLBY, supra note 271, at 136.
  \item \textsuperscript{274} ALFRED D. CHANDLER, JR. \& STEPHEN SALSBURY, PIERRE S. DU PONT AND THE MAKING OF THE MODERN CORPORATION 89 (1971).
  \item \textsuperscript{275} Id. at 78.
  \item \textsuperscript{276} Id. at 90.
  \item \textsuperscript{277} See, e.g., HAROLD C. LIVESAY, ANDREW CARNEGIE AND THE RISE OF BIG BUSINESS 111 (Oscar Handlin ed., 2000) (quoting Carnegie as saying "Mr. Morgan buys his partners, I raise my own"). Livesay reports that Carnegie employed a systematic analysis to evaluate his men's performance, and that
\end{itemize}
him. He also had what came to be called the “Iron Clad Agreement” consisting of three provisions in the partnership agreement: First, if a partner died, the remaining partners had a right to buy out the deceased partner's share of the business at book value, and had an extended period of time to pay for this share. Second, by a vote of partners holding two-thirds of the value of the firm, any partner could, at any time, be required to sell out his position at book value. Carnegie controlled 58 percent of the value of the firm, so he could not be expelled under this provision, and no other partner could be expelled without his consent. In practice, if he wanted somebody out, they were out. Third, a partner could retire at any time, but if he wanted to sell out, he had to accept book value for his share, and collect the amount in installments over time.

Thus Carnegie was effectively able to keep capital locked into the firm from the time he first entered the steel business, in 1872, until the late 1890s, when he got into a feud with one of his partners and senior officers, Henry Frick. Frick and another partner, Henry Phipps, decided that they wanted to cash out, but because the book value of the firm was so much lower than they believed the market value of the firm to be, they solicited a buyer for the whole business, to cash all of them out. The deal fell through, and Carnegie attempted to oust Frick under Article 2 of the Iron Clad Agreement. Frick, who was still in charge of the Coke Company part of the business, retaliated by overcharging Carnegie for coke, and suing for a revaluation of the firm's assets. The result was an ugly court battle in which the inner workings of the organization were revealed to the public. When the two finally settled, they created a new incorporated company in 1900, the Carnegie Company, to serve as a holding company controlling both Carnegie Steel and Frick Coke. Carnegie held about 54.5 percent of the stock.

So we see that partnership worked for a while, as long as all the partners were getting along well enough. But partnership is not as well suited to working out serious disputes among team members as corporations are, either because he kept detailed records on who produced the best results. Those that did were promoted. More than forty men thus rose through the ranks to become partners at one point or another. Id. at 112.

278. Id. at 165. Carnegie reportedly forced out some fifteen partners at various times before the company incorporated.

279. “Book value” of assets reflects the purchase price paid for them, minus any depreciation charges against them. In a successful going concern, the book value of the business is often much lower than the market value of the business, because the book value does not reflect any of the value of organizational assets, relationships, reputation, and other aspects of the going concern value of the business.

280. LIVESAY, supra note 277, at 189; see also 1 WILLIAM T. HOGAN, S. J., ECONOMIC HISTORY OF THE IRON AND STEEL INDUSTRY IN THE UNITED STATES 250 (1971).

281. LIVESAY, supra note 277, at 188-94.

282. Id. at 199.

283. Id. at 198-99; see also HOGAN, supra note 280, at 250.

284. LIVESAY, supra note 277, at 199.
partners can threaten to leave and take their capital with them, or they can cause trouble if they agree to lock in their capital (as the Carnegie partners did), and then find that when they become unhappy they cannot get out easily.

Finally, consider another example that at first impression seems to contradict the thesis that incorporation was necessary to lock in capital and create a governance structure that could mediate disputes among business participants to keep large productive teams together. The Baldwin Locomotive Works of Philadelphia was the largest builder of locomotives in the United States and one of the largest in the world throughout the second half of the nineteenth century. It resisted incorporation and operated as an individual proprietorship or partnership from its founding in 1831 by Matthias Baldwin, until 1909, near what turned out to be the peak period of production and profitability. 285

Business historian John Brown argues that Baldwin was able to function for so long in partnership form for a variety of reasons. First, Baldwin never mass-produced locomotives. Each machine was custom designed to meet the specific needs of the railroad that ordered it. This meant that the machines were built by skilled craftsmen using general purpose tools 286—so that there may have been less firm-specific capital at risk despite the fact that the enterprise as a whole used substantial physical capital. Matthias Baldwin and his successors organized this work force with a very flat, nonhierarchical organizational structure. Around 1850, for example, the entire firm consisted of four senior managers plus seven foremen. 287 The foremen acted as “inside contractors,” meaning that the skilled craftsmen who actually assembled the machines were the contract employees of the foreman of the particular shop where they worked (for example, the boiler, the foundry, smith shops, and the final assembly house), and workers were paid by the piece. 288

For partners, Baldwin carefully selected men who had worked in the organization and were committed to the idea that the owners should work in the business, and that layers of overseers were a waste of money. 289 Baldwin’s successors did the same. For them, the partnership form was valued “precisely

285. See JOHN K. BROWN, THE BALDWIN LOCOMOTIVE WORKS, 1831-1915, at 97 tbl.4-1 (1995) (listing the series of partnerships that controlled the business until it incorporated). Appendix B reports capitalization, workforce size, output and other information about Baldwin and its principal competitors for 1850, 1860, 1870, and 1880. Id. at 243–44. Baldwin’s output peaked in 1906 at 2,666 locomotives. Id. at 215. A recession in 1907 caused demand to fall, and from 1907 to 1917, profits fell at the nation’s railroads as a result of rate regulation under the Hepburn Act of 1906. Id. at 224. Locomotive output at Baldwin never again reached the peak it had hit in 1906. Id. at 223–33.
286. Id. at xxix. The actual processes of innovation, design, and custom building of the locomotives is discussed in detail in chapters 3 and 6.
287. Id. at 17.
288. Id.
289. Id. at 93–95.
because of the managerial continuity that private ownership allowed.\textsuperscript{290} Although the locomotive business was extremely cyclical, the firm was not vertically integrated, and thus its suppliers and employees bore much of the cyclical risk along with the firm.\textsuperscript{291} Matthias Baldwin took in a partner, Stephen Vail, in 1839, in return for an infusion of $20,000 in capital. That same year, he took in another partner (so that each had a one-third interest) in exchange solely for his management expertise, so that Baldwin himself could devote his energies to designing a new, more powerful, but more flexible locomotive.\textsuperscript{292} In 1842, he took on another partner, Asa Whitney, to buy out Vail's interest,\textsuperscript{293} and from then on, the firm was able to continuously reinvest its profits to finance expansion, and never had to take on a partner to bring in financial capital.\textsuperscript{294} After Baldwin died in 1866, his successors adopted the same philosophy. Such was the continuity, that, although at various times fourteen other men were involved, the active participation of three men as partners, Baldwin from 1831 to 1866, Matthew Baird from 1854 to 1873, and George Burnham from 1867 to 1909, spanned the seventy-eight years from the founding of the company until its incorporation.\textsuperscript{295}

The firm provided for lock-in of the capital investment by including terms in the partnership agreement that provided for continuity when a partner died.\textsuperscript{296} Noting that "the chief threat to managerial stability came in the aftermath of a partner's death, since surviving partners had to pay off his interest to his heirs,"\textsuperscript{297} Brown tells us that the partnership agreement stipulated that the interest of a deceased partner would 'be drawn out so easily and slowly that there is no hardship on the survivors [in the firm]. The payment of that estate is no more onerous than the payment of dividends would be in a corporation.'\textsuperscript{298} In other words, Brown suggests that the lock-in problem was solved by a series of agreements among successive partners that each would be bought out at death.
via a very slow payout plan. And the firm apparently managed to avoid major disputes largely by selecting a very homogeneous group of men, with common values and beliefs about the organization of work, to become partners.

CONCLUSIONS AND LESSONS

This Article argues that the popularity of corporate status as a way to organize production grew out of the unique ability of this legal form in the nineteenth century to promote and protect the interests not only of shareholders and other investors, but of a wide range of enterprise participants who made specialized investments in reliance on the continued existence and financial viability of the corporation. This ability grew out of the fact that a corporate charter created a separate legal entity, whose existence and governance were separate from any of its participants. Entity status and separate governance made it possible to do something more than engage in a series of business transactions, or relationships, or even projects. It made it possible to build lasting institutions. Investments could be made in long-lived and specialized physical assets, in information and control systems, in specialized knowledge and routines, and in reputation and relationships, all of which could be sustained even as individual participants in the enterprise came and went. And these business institutions, in turn, could accomplish more toward the improvement of the wealth and standard of living of their participants in the long run than the same individuals could by holding separate property claims on business assets and engaging in a series of separate contracts with each other.

The law supported the creation of these entities—even though by the end of the nineteenth century the power they could wield over the economy had become a matter of concern—because, according to economic historian Naomi Lamoreaux, the culture in general was moving away from the individualistic ideologies on which the country was founded to "[t]he idea that when individuals combined their skills and energies they created something that was more than the [sum] of its parts." Other mechanisms by which business organizers can commit resources to business ventures that require institution building may be available today. Corporate form may no longer seem so unique. But understanding the role that corporate law played in promoting resource commitment and institution building

299. In fact, the incident that finally convinced the partners that they needed to incorporate was the death in 1909 of William P. Henszey, who held a 20 percent interest in the firm. Although the firm could have bought out that interest, at the time, George Burnham, who was also a major partner, was 93, and John Converse was 69, so the firm was afraid that it might soon have to buy out those interests as well. BROWN, supra note 285, at 216.

300. Lamoreaux, supra note 46, at 69 n.82.
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during the early development of an industrial economy in the United States could provide insights into a number of issues of contemporary concern.