Choosing the Partnership: English Business Organization Law During the Industrial Revolution

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I. INTRODUCTION

For most of the period associated with the Industrial Revolution in Britain, English law restricted access to incorporation and the Bubble Act explicitly outlawed the formation of unincorporated joint stock companies with transferable shares. Furthermore, firms in the manufacturing industries most closely associated with the Industrial Revolution were overwhelmingly partnerships. These two facts have led some scholars to posit that the antiquated business organization law was a constraint on the structural transformation and growth that characterized the British economy during the period. For example, Professor Ron Harris argues that the limitation on the joint stock form was “less than satisfactory in terms of overall social costs, efficient allocation of resources, and eventually the rate of growth of the English economy.”

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1 RON HARRIS, INDUSTRIALIZING ENGLISH LAW: ENTREPRENEURSHIP AND BUSINESS ORGANIZATION, 1720–1844, at 167 (2000). There are numerous other examples of this and related arguments in the literature. While acknowledging that, to a large extent, restrictions on the joint stock form could be overcome by alternative arrangements, Nick Crafts nonetheless argues that “institutional weaknesses relating to . . . company legislation . . . must have had some inhibiting effects both on savers and on business investment.” Nick Crafts, The Industrial Revolution, in 1 THE ECONOMIC HISTORY OF BRITAIN SINCE 1700, at 44, 52 (Roderick Floud & Donald N. McCloskey eds., 1994). Peter Mathias argues that “[t]here was almost no incorporation allowed for manufacturing industry or limitations of liability for investors in industry— with no appeal possible for public subscriptions for transferable shares.” Peter Mathias, Financing the Industrial Revolution, in THE FIRST INDUSTRIAL REVOLUTIONS 69, 73 (Peter Mathias & John A. Davis eds., 1990). Herbert A. Shannon asserts that “the general movement [to joint stock enterprise] could not take place until certain economic and legal changes had been effected . . . . The legal change was the substitution of the law of corporations for the law of partnership . . . . But before the legal changes of 1844 and 1855, English law virtually prohibited joint-stock enterprise for ordinary trading and manufacturing.
The primary mechanism by which the restrictions on access to the joint stock form could have influenced Britain’s economic performance is by hindering capital accumulation, which was a substantial source of economic growth during the Industrial Revolution. While the growth of Britain’s capital stock was not as rapid as once thought, the modern consensus is that there was a gradual increase in the share of expenditure devoted to investment, with the investment rate roughly doubling between 1760 and 1830. In addition to an increase in the overall investment rate, a gradual structural change took place with industry receiving an increasing share of capital investment. Capital accumulation and growth were most dramatic in the “modern sector,” which included cotton textiles, iron smelting and refining, engineering, chemicals, mining, transportation, pottery, and paper. From the 1760s onward, the output of the cotton textile and iron industries in particular accelerated dramatically.

Importantly, however, the vast majority of manufacturing firms in the modern sector were partnerships. An easy explanation for the predominance of partnerships is that the legal restrictions on access to the joint stock form gave entrepreneurs no other choice of legal vehicle for their collective enterprises. It is not a large leap to then argue that these restrictions inhibited the development of the English economy. Those who make this argument implicitly envision a counterfactual in which legal restrictions on the joint stock form were absent, firms in the modern sector used the joint stock form to access external sources of funds to finance investment, and consequently capital accumulation and output accelerated more rapidly in the modern sector.

purposes.” Herbert A. Shannon, Coming of General Limited Liability, 2 ECON. HIST. 267, 267 (1931). Bishop C. Hunt argues that because of the Bubble Act, “there seems to be no doubt that for upwards of a hundred years, industry was deprived of capital which in other circumstances would have been available.” BISHOP C. HUNT, THE DEVELOPMENT OF THE BUSINESS CORPORATION IN ENGLAND 1800–1867, at 9 (1936).


3. Id. at 122–25.


5. See Crafts, supra note 1, at 48–49.

6. See P. L. COTTRELL, INDUSTRIAL FINANCE 1830–1914: THE FINANCE AND ORGANIZATION OF ENGLISH MANUFACTURING INDUSTRY 19 (1980); M. M. Postan, Recent Trends in the Accumulation of Capital, 6 ECON. HIST. REV. 1, 4 (1935). While the partnership form was predominant, the joint stock form was used occasionally, and was used extensively in the woolen textile industry.

7. Harris explicitly hypothesizes such a counterfactual. See HARRIS, supra note 1, at 292.
The goal of this Essay is to challenge this view and to point towards other possible explanations for industrial entrepreneurs’ use of the partnership form. In short, the restrictions on access to the joint stock form lacked bite. While firms did not have general access to incorporation until 1844, creative businessmen and lawyers crafted an alternative legal form—the unincorporated joint stock company—that served as a functional replacement for the business corporation. Restrictions on unincorporated joint stock companies were unenforced and largely ignored. Thus, the use of the partnership by entrepreneurs in the modern sector must be understood as a choice; the law did not dictate their firms’ legal form.

Understanding that the unincorporated joint stock company was an option leaves a puzzle that has largely gone untreated in the literature: Why were most manufacturing firms in the modern sector partnerships? Legal characteristics of the partnership form made it difficult for partnerships to attract outside equity investment from impersonal, formal capital markets and thereby may have limited the amount of capital that could be aggregated in a single firm. In particular, joint and several liability of partners for the obligations of the partnership surely gave outside investors pause in taking an equity position in a partnership. Partnership interests lacked the liquidity of transferable joint stock shares with an active secondary market. Furthermore, partnerships did not have the default liquidation protection of joint stock firms; partners’ personal creditors could force partial liquidation of the firm’s assets. With all of these deficiencies, why then were manufacturing firms in the modern sector overwhelmingly organized as partnerships?

I propose a resolution of this puzzle based on the pecking order theory of corporate finance. For the vast majority of firms in the modern sector it was optimal to use only debt, not equity, for any external financing. Industrial entrepreneurs chose the partnership form because it minimized the costs of debt financing. The unlimited liability of partners gave firm creditors additional collateral and provided better incentives against opportunism by partners, thereby lowering the cost of credit to the firm. Furthermore, the tighter nexus between control and residual financial claims in the partnership form resulted in better incentives for the owner-managers to exert effort and make efficient decisions in running the firm.

I begin in Part II with a short overview of the early history of the joint stock form in England. I then turn in Part III to the legal framework for business organization during the Industrial Revolution and explain that the supposed restrictions on organizing as a joint stock company were not binding. Part IV develops an explanation based on the pecking
order theory of corporate finance for why industrial entrepreneurs nonetheless organized their businesses as partnerships.

II. EARLY HISTORY OF THE JOINT STOCK FORM IN ENGLAND

Before describing the restrictions on access to the joint stock form during the period of interest, it is helpful first to recount briefly the preceding history of the joint stock form and the development of early capital market institutions in England.8

Until 1844, corporations could only be formed by an act of Parliament or a charter granted by the Crown. In the sixteenth and seventeenth centuries, the Crown typically granted incorporation in combination with exclusive rights over trade in a particular region or over a particular industry.9 This practice served as a revenue generating mechanism for the state.10 In this manner, many of the great trading companies of the era were formed, such as the Hudson’s Bay Company, the East India Company, and the Russia Company.11 The practice of granting monopoly rights with incorporation declined over the course of the seventeenth century, but the association of incorporation with monopoly remained strong among the general public. After the 1680s, as the relative power of Parliament rose, the route to incorporation became increasingly by an act of Parliament.12

In the period roughly between 1690 and 1725, the first key ingredients of a modern capital market developed in England. First and foremost among these was the development of a market for government securities. Under William of Orange, the government began issuing perpetual annuities made free of risk of default.13 Three chartered business corporations rose to ascendancy in this period: the East India Company, the Bank of England, and the South Sea Company.14 These so-called “moneyed companies” played a unique role in facilitating the financing of the government debt, and their success was associated with legal privileges that granted them exclusive rights and restricted entry into their markets. The success of these financial innovations facilitated the development of the first stock market institutions in London, including a stock exchange,

8. The account that follows draws on HARRIS, supra note 1, at 40–59.
9. Id. at 40–41.
10. See COLIN COOKE, CORPORATION TRUST AND COMPANY 54–56 (1950).
11. HARRIS, supra note 1, at 43–49.
12. Id. at 53.
14. HARRIS, supra note 1, at 53.
financial press, and securities brokers, which primarily focused on government obligations.

In turn, the development of primitive capital market institutions led to a boom in joint stock company formation. By 1695, some 150 joint stock companies were in existence. However, with the important exception of the moneyed companies, most of these companies were short-lived, and by 1717, only three companies other than the moneyed companies were listed on the Course of the Exchange, an early financial publication.

This development of the first capital market institutions in England, known as the “Financial Revolution,” was primarily focused on public finance rather than the finance of business. On the eve of the Industrial Revolution, the London stock exchange still played little role in funneling savings into private capital investment.

III. RESTRICTIONS ON THE JOINT STOCK FORM DURING THE INDUSTRIAL REVOLUTION

During the eighteenth and nineteenth centuries there were two main basic legal forms for collective business enterprise in England: the corporation and the partnership. It is clear that both Parliament and the Crown refused to grant many petitions for incorporation, thereby restricting access to the corporate form. In contrast, partnerships could be formed among private parties by simple agreement and were thus freely available. A third legal form was developed, the unincorporated joint stock company, which used the basic partnership form supplemented by trust law to create an organization with legal features that could support transferable equity interests without incorporation. The debate over the impact of legal restrictions on the joint stock form largely revolves around these firms. While some doubt the effectiveness of the unincorporated joint stock company as a substitute for incorporation, its alleged inadequacies were not substantial enough to prevent its expanding use throughout the period.

A. Restrictions on Access to the Corporate Form

It is uncontroversial that access to the corporate form was restricted during most of the Industrial Revolution. Entrepreneurs sought incorporation in various industries but met with limited success. Royal officials

15. Id. at 57.
16. Id. at 58.
17. See Cooke, supra note 10, at 92.
and Parliament considered petitions for incorporation using “public policy” as their criterion. But potential competitors of petitioners often raised objections to the petitions, framed in public interest language but certainly aimed to further the interests of the objectors, and petitions were frequently rejected. Incorporation was sought with particular frequency in the insurance sector, for which the limitation on liability of shareholders ensured by incorporation was of particular importance. For example, in 1757, Equitable Assurance petitioned for a charter and, after four years of hearings and reports, was denied. The recommendation of denial made by the law officers explicitly stated the motive as in part to prevent competition with existing firms in the insurance market. In manufacturing, too, incorporation was occasionally sought and typically denied. In 1783, the Albion Steam Flour Mill petitioned for incorporation but was denied after lobbying by nearby millers.

Firms that were successful in obtaining a charter were often in industries that required large lump sum capital and additional legal privileges in order to succeed. In particular, the petitions of canal companies often met with success. These firms typically sought incorporation both to enable them to issue transferable shares to raise the substantial sum of capital required to finance river improvements and to secure the important right of eminent domain from the government. Harris offers a sensible explanation for the success of canal companies in obtaining charters: canal companies generally were local natural monopolies and thus had few competitors to lobby against them.

B. Unincorporated Joint Stock Company as a Substitute for Incorporation

Faced with difficulty in obtaining incorporation from the Crown or Parliament, many entrepreneurs used the unincorporated joint stock company to obtain the legal characteristics necessary to issue transferable equity interests and raise additional capital. To understand the prob-

18. Harris, supra note 1, at 102–03.
19. The law officers wrote:
The business of insuring lives is carried on, not only by [the three existing companies] but such policies are duly underwritten by numbers of private persons. Therefore, the law officers could not advise the Crown to trench upon the rights given to the three existing companies on the bare request of any set of men, without a clearer and more certain prospect of public good.
Hunt, supra note 1, at 11–12.
21. Harris, supra note 1, at 90–100.
22. Id. at 108–09.
lems that this more complex legal form solved, it is helpful first to understand the difficulties inherent in gathering a large capital stock from many equity investors using the partnership form.

1. Problems with the Partnership

Unlike corporations, partnerships were not conceptualized as “legal persons.”\(^\text{23}\) Lacking this metaphorical attribute resulted in several practical problems in expanding the size of the partnership and its capital stock, principally with respect to transferability of shares, the liability of partners, liquidation protection, centralized governance, and the ability to litigate in its own name.

(a). Transferability

Since partnerships were formed by agreement of the partners, any change in the identity of the partners required a new agreement between all partners.\(^\text{24}\) Partnerships incurred substantial transaction costs in reorganizing the firm upon transfer of partnership interests.

(b). Limited Liability

A further difficulty was that equity owners in partnerships were jointly and severally liable for the debts of the partnership, meaning that firm creditors could sue any individual partner for the full amount of the firm’s debt.\(^\text{25}\) This meant that any partner, no matter how small their share in the firm, faced potentially large personal liability if the firm failed. The lack of limited liability for partners clearly made it difficult to attract impersonal equity investment in the partnership.\(^\text{26}\)

(c). Liquidation Protection

Unlike corporations, assets in partnerships were potentially available to the personal creditors of a bankrupt partner. Furthermore, absent restrictions in the partnership agreement, a partnership was generally “at will,” and an individual partner could withdraw from the partnership and

\(^{23}\) Id. at 21.

\(^{24}\) See id. at 142; COTTRELL, supra note 6, at 39.

\(^{25}\) TOM HADDEN, COMPANY LAW AND CAPITALISM 28 (1972).

\(^{26}\) See HUNT, supra note 1, at 81–82. The limited partnership form, in which some “sleeping” partners had limited liability but could not share in control of the firm and which played an important role in this period on the Continent, was not available in England until 1907. Naomi R. Lamoreaux & Jean-Laurent Rosenthal, Legal Regime and Contract Flexibility: A Comparison of Business’s Organizational Choices in France and the United States during the Era of Industrialization, 7 AM. L. & ECON. REV. 28, 55 (2005).
take his share of the assets of the firm. Thus, partners’ personal creditors, and potentially the partners themselves, could force a partial liquidation of the firm, threatening the firm’s going concern value.\footnote{27} Partnerships ran the risk that the value of firm-specific investment, including human and physical capital, might be lost due to premature liquidation of the firm.\footnote{28}
The severity of this problem scaled with the number of partners.

(d). Centralized Governance

Partnerships also had difficulty establishing a centralized governance structure. The common law rule was that each partner could serve as an agent of the partnership and thus could bind the partnership to contracts and dispose of firm assets.\footnote{29} This posed a difficulty in raising capital by selling a large number of partnership interests; each partner could potentially act as a firm agent, binding the firm. Intrapartnership monitoring became more costly as the number of partners increased. While these powers could be restricted in the partnership agreement, such restrictions would only serve to give the partners a cause of action against a partner who violated them, and the firm generally would still be bound to a contract made by a partner on behalf of the partnership in violation of such a restriction.

(e). Litigation in Its Own Name

In legal proceedings initiated by and against the partnership, every partner had to be joined as a party.\footnote{30} The inability to litigate in its own name made it difficult for creditors to bring actions enforcing their rights and thereby drove up the cost of credit for large partnerships. Again, this cost scaled with the size of the partnership.

These problems made it difficult for a secondary market in shares of a partnership to form, thus making partnership interests illiquid. Partnerships could economize on these costs by remaining small and keeping the partnership among a group of close associates. These problems put a limit on the ability of partnerships to aggregate equity capital and thus made the partnership unworkable for enterprises that required large

\footnotetext{27}{Henry Hansmann & Renier Kraakman, The Essential Role of Organizational Law, 110 YALE L.J. 387, 403 (2000). Hansmann and Kraakman use the term “weak form entity shielding” to describe organizational forms that give priority to firm creditors over personal creditors of owners but do not provide liquidation protection. Id.}
\footnotetext{29}{HARRIS, supra note 1, at 144.}
\footnotetext{30}{HUNT, supra note 1, at 82.}
lump-sum fixed capital investments, such as railroad and canal companies.

2. Legal Innovations of the Unincorporated Joint Stock Company

Faced with the problems of the partnership form and general unavailability of incorporation by the Crown or act of Parliament, entrepreneurs and their lawyers devised an alternative set of legal arrangements—the unincorporated joint stock company—that enabled the issuance of transferable equity interests and facilitated the aggregation of larger sums of capital. A typical unincorporated joint stock company was formed by the initial shareholders executing a deed of settlement that contained the firm’s articles of association and established an equitable trust. The assets of the firm were placed in the trust, and the deed of settlement contained covenants that bound the shareholders and set forth the governance structure of the company. Each shareholder’s stock in the firm was also held by the trust. The trust device was used to overcome the simple partnership’s lack of legal personality. Just as the corporation was considered the owner of its own assets held for the benefit of shareholders, so the trust held the firm’s assets, with the shareholders owning an equitable interest in the assets as beneficiaries of the trust.

While some scholars dispute the efficacy of this legal structure in addressing the deficiencies of the partnership form, the weight of the evidence suggests that the unincorporated joint stock company was an effective substitute for incorporation.

(a). Transferability

The deed of settlement typically allowed for the free transferability of shares and included a provision that every person to whom a share was transferred would execute a contract binding him to the terms of the deed of settlement and would assign the share to the trust. The trustees of the firm would effect the transaction; approval of the other shareholders was not required.

31. For a general description of the typical legal structure of an unincorporated joint stock company, see Cooke, supra note 10, at 85–88; Anderson & Tollison, supra note 20, at 109–11.
32. 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, 49 (1996). Indeed, Ireland argues that the reified conception of the company arose through the emergence of an understanding of the nature of the joint stock company share as an autonomous form of property. Id. at 48–50.
33. Anderson & Tollison, supra note 20, at 110.
(b). Limited Liability

Many such companies also included a provision limiting the liability of each shareholder for the debts of the firm to the extent of his own share in the capital stock.34 The company then included terms in its contracts with third parties that made only the assets of the trust, and not the assets of shareholders, available to secure the firm’s obligations.35 Some included the term “limited” in the firm’s name and stated the shareholders’ limited liability on the firm’s letterhead to give further notice to third parties and increase the likelihood of enforcement of the limitation of liability by courts.36 This practice was rare in the eighteenth century, but increasingly common by the early nineteenth century.37

(c). Liquidation Protection

The trust device also gave the firm liquidation protection: a creditor of an individual shareholder could not obtain the shareholder’s share in the firm’s assets until all shareholders had agreed to dissolution of the firm.38

(d). Centralized Governance

The deed of settlement established a centralized governance structure, typically providing for a committee of management that was authorized to manage the firm and an assembly of shareholders that selected the committee of management and voted on major decisions of the firm.39 Shareholders had no right to bind the firm or dispose of its assets, as the assets were held by the trust.

(e). Litigation in Its Own Name

The deed of settlement often allowed litigation concerning the firm to be held in the name of the trustees or the secretary of the company.40

34. MARK FREEMAN ET AL., SHAREHOLDER DEMOCRACIES? CORPORATE GOVERNANCE IN BRITAIN AND IRELAND BEFORE 1850, at 190–92 (2011). See also Anderson & Tollison, supra note 20, at 114.
35. Absent provision of notice to third parties, clauses in the articles of association that purported to limit the liability of shareholders were probably ineffective. See ARMAND BUDINGTON DU BOIS, THE ENGLISH BUSINESS COMPANY AFTER THE BUBBLE ACT 1720–1800, at 258 (1938).
37. DU BOIS, supra note 35, at 222–23.
38. COTTRELL, supra note 6, at 40–41. See also Hansmann, Kraakman & Squire, supra note 28, at 1384–85.
40. Id. at 218.
The unincorporated company could then conduct legal proceedings in Chancery, which allowed, subject to the discretion of the Chancellor, companies to litigate in the name of designated officers. \(^{41}\) Furthermore, unincorporated joint stock companies made extensive use of private arbitration, both in resolving disputes among shareholders and with creditors. \(^{42}\)

### 3. Problems with the Unincorporated Joint Stock Company

The unincorporated joint stock company was not without its own problems and costs. But, as we shall see, these problems were not major hurdles to its expanding use in the eighteenth and nineteenth centuries and cannot alone explain the use of the partnership in the manufacturing industry.

**(a). The Bubble Act**

The infamous Bubble Act has been thought by some to have effected the outright ban on these companies contained in its words. In 1720, Parliament passed “An Act to Restrain the Extravagant and Unwarrantable Practice of Raising Money by Voluntary Subscriptions for Carrying on Projects Dangerous to the Trade and Subjects of this Kingdom,” later known as the Bubble Act, which provided that “the raising or pretending to raise transferable Stock or Stocks, the transferring or pretending to transfer or assign any Share or Shares in such Stock or Stocks without Legal Authority, either by Act of Parliament or by any Charter from the Crown to warrant such acting as a Body Corporate . . . shall for ever be deemed to be illegal and void.” \(^{43}\) Furthermore, the Act made violation of its proscriptions a criminal offense. \(^{44}\)

However, the Act was mostly sound and fury and had little long-term significance or effect on the practices of the business community. In 1722, the first prosecution was brought under the Act against a Francis Caywood, who was fined five pounds and sentenced to remain in prison “during the King’s pleasure” for promoting a joint stock scheme for trade in the North Seas. \(^{35}\) But after that first prosecution, the Act remained dormant for some eighty-five years. By mid-century, entrepreneurs were increasingly ignoring the provisions of the Act and forming unincorporated joint stock companies, sometimes adding the proviso in their arti-

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\(^{42}\) DUBoIS, *supra* note 35, at 221.
\(^{43}\) Id. at 2–3.
\(^{44}\) Id. at 3.
\(^{45}\) Id. at 10–11.
cles of association that “nothing therein shall be construed an Undertak-

ing against 6th George I [the Bubble Act].” Thus, the modern consen-
sus among scholars is that, by the period associated with the Industrial
Revolution, the Bubble Act was a dead letter.

In 1807, the Crown initiated the first prosecution under the Act
since the Caywood case. While the court refused to allow the case to
proceed given the lack of enforcement by the government for so many
years, the court ominously concluded that “the parties concerned should
forbear to carry into execution this mischievous project, or any other
speculative project founded on joint-stock or transferable shares.” But
rather than signaling a revival of the Act, the case set in motion events
that would lead to its demise, and in 1825 the Bubble Act was repealed.

(b). Transaction Costs

As effective as it was, the complex institutional structure of the un-
incorporated joint stock company did not come for free. Deeds of settle-
ment had to be drafted, trustees sought, and care taken to limit the liabil-
ity of shareholders through clauses in each contract of the firm. There
were certainly transaction costs attendant with the use of the unincorpo-
rated joint stock company. But it is hard to believe that these costs were
substantially more than the costs of establishing and running a corpora-
tion. In the words of DuBois, “[t]he substitute employed might be a
trifle more cumbersome or unwieldy, but it was nearly always effec-
tive.”

(c). Problems with the Use of the Trust

Harris puts particular emphasis on difficulties with using the trust
device for business enterprise. He argues that it was difficult to recruit
trustees, who faced potential liability for losses in the business due to
their mismanagement. Furthermore, in the traditional law of trusts, trus-
tees were restricted from investing trust funds in risky assets, which
would presumably have included the assets typical of business enterpris-

46. COTTRELL, supra note 6, at 8.
47. See BRIAN R. CHEFFINS, CORPORATE OWNERSHIP AND CONTROL: BRITISH BUSINESS
TRANSFORMED 149 (2008); HARRIS, supra note 1, at 78–81; Paul G. Mahoney, Contract or Conces-
48. HUNT, supra note 1, at 17.
49. DUBOIS, supra note 35, at 39.
50. See Anderson & Tollison, supra note 20, at 112.
51. DUBOIS, supra note 35, at 216.
52. See HARRIS, supra note 1, at 154. See also DUBOIS, supra note 35, at 222.
Companies that used the trust device were also restricted to using the Court of Chancery for litigation, which was prone to long delays.\footnote{HARRIS, supra note 1, at 152–53.} While these problems with the trust may have made the unincorporated joint stock company imperfect, they do not seem as severe as Harris suggests. In particular, provisions indemnifying the trustees against liabilities incurred on account of acts done on behalf of the company were commonly included in the deed of settlement.\footnote{Id. at 162–64.} A database of company constitutions from the period, collected by Professor Robin Pearson, gives a quantitative sense of the frequency with which companies indemnified their trustees. Of the 209 unincorporated joint stock companies in the sample that used the trust device, 168 (or 80%) provided indemnity for trustees.\footnote{See DUBOIS, supra note 35, at 218; FREEMAN ET AL., supra note 34, 189–90.} As a result, trustees for unincorporated joint stock companies were probably no harder to recruit than partners in a partnership or directors of a corporation. Moreover, the traditional rules restricting the types of assets that could be held by a trust were clearly disregarded by the many businesses that used the trust device, and so must not have been binding. Finally, private arbitration served as an effective substitute for the Court of Chancery for dispute resolution.\footnote{DUBOIS, supra note 35, at 221.} By the 1810s, it had become standard practice to include a provision in an unincorporated joint stock company’s constitution providing for arbitration of shareholder disputes.\footnote{FREEMAN ET AL., supra note 34, at 61.}

In the end, the proof is, as they say, in the pudding. The prevalence of the unincorporated joint stock company is strong evidence of its efficacy as a substitute for incorporation.\footnote{Thus, Robin Pearson notes the “dilemma inherent in Harris’s portrayal of unincorporated joint-stock enterprises at once as proliferating, economically important, and inefficient . . . .” Robin Pearson & Ron Harris, Industrializing English Law: Entrepreneurship and Business Organization, 1720–1844, 54 ECON. HIST. REV. 555, 555 (2001) (book review).} Lord Justice James, describing these companies, noted:

They were large societies on which the sun of royal or legislative favour did not shine, and as to whom the whole desire of the associates, and the aim of the ablest legal assistance they could obtain was to make them as nearly a corporation as possible, with continuous existence, with transmissible and transferable stock, but without any
individual right in any associate to bind the other associate, or to
deal with the assets of the association.60

By 1844, on the eve of the passage of the first general incorporation
law, there were some 947 joint stock companies in business in England,
employed with particular frequency in the mining and insurance indus-
tries.61 Thus, even if one accepts that use of the unincorporated joint
stock company was significantly inhibited by the legal framework—a
proposition I have tried to challenge here—explaining its use for some
enterprises but not others requires a better understanding of the choices
of entrepreneurs.

C. Evidence from Registrations Under the Joint Stock Companies Act

Several scholars have examined the response to the enactment of
the Joint Stock Companies Act62 in 1844, which provided for the creation
of joint stock companies with transferable shares by mere registration of
the company, to gauge whether the preexisting legal regime was holding
back the economy. The idea is that if the prior law was a substantial con-
straint, then we should see a boom in company formation upon passage
of the Act. For example, Professor Freeman and his coauthors assert
“there was clearly a lowering in entry barriers to the corporate economy
after 1844. By 1854, 3,677 companies had provisionally registered under
the Companies Act, and 884 of these obtained complete registration.”63

They contrast the number of complete registrations under the Act64
with their estimate of about 1,400 joint stock companies in total founded
before 1844, suggesting that in just ten years after passage of the Act the
number of joint stock companies increased by over 50%.65 Harris simi-
larly interprets the number of registrations under the 1844 Act as sup-
porting his thesis that, prior to the Act, business organization law held
back the British economy, writing:

[N]ot only did the act of 1844 transform the legal framework of
business organization, but it also led to a dramatic increase in the

60. COOKE, supra note 10, at 85.
61. HUNT, supra note 1, at 87–88. Note that not all of these firms were unincorporated joint
stock companies using the trust.
62. Joint Stock Companies Act, 1844, 7 & 8 Vict., c. 110 (Eng.).
63. FREEMAN ET AL., supra note 34, at 35.
64. The Joint Stock Companies Act required a two-step registration process: provisional regis-
tration was required before promoters could make public their plans to form the company and solicit
interest among investors, and complete registration was required upon filing of its organizing docu-
ments signed by shareholders in order to enjoy the various corporate characteristics bestowed by the
Act. See Joint Stock Companies Act, 1844, 7 & 8 Vict., c. 110 §§ IV, VII (Eng.).
65. FREEMAN ET AL., supra note 34, at 35.
number of joint-stock business corporations, evidence of the lifting of a hitherto imposed constraint, changing business practices, or both.\textsuperscript{66}

However, there are several problems with using the number of registrations under the Joint Stock Companies Act to gauge the extent to which manufacturing firms in the modern sector were significantly restricted by the preexisting legal regime. First, the Act allowed existing unincorporated joint stock companies and partnerships to register under the Act.\textsuperscript{67} Among the 884 complete registrations in the first decade of the Act cited by Freeman et al. are thus some number of existing companies. Second, the vast majority of these companies were not in manufacturing. Two industries particularly common among companies registered in the early years were gas and transportation.\textsuperscript{68}

A more relevant figure for evaluating the extent to which the preexisting legal regime held back manufacturing is the total number of new manufacturing firms registered in the first decade after the Act. Table 1 below reports the number of manufacturing firms completely registered under the Act between the years 1845 and 1854, broken down into companies I could confirm were already in existence prior to the Act and new companies. The names of the companies are provided in the table in the Appendix. The number of new manufacturing firms registered under the Act over this period was eighty-six, or an average of less than nine per year—hardly an explosion in company formation.

\textsuperscript{66} HARRIS, supra note 1, at 288.

\textsuperscript{67} All existing joint stock companies, defined to include partnerships with more than twenty-five partners or with transferrable interests, \textit{must} register under the Act. See Joint Stock Companies Act, 1844, 7 & 8 Vict., c. 110 §§ II, LVII (Eng.). Moreover, if an existing company meets the requirements stated in the Act for new joint stock companies, it can also receive a certificate of complete registration and enjoy the corporate features bestowed by the Act. \textit{Id.} § LIX.

\textsuperscript{68} For example, of the fifty-seven complete registrations in 1845, twenty-seven were either gas or transportation/warehousing firms. See REPORT BY REGISTRAR OF JOINT STOCK COMPANIES TO COMMITTEE OF COUNCIL FOR TRADE 29 (1845), available at http://books.google.com/books?id=7hReAAAAQAAJ&pg=PR47&lpg=PR47&dq=Report+by+Registrar+of+Joint+Stock+Companies+to+Committee+of+Council+for+Trade+1845&source=bl&ots=tUodPaYDzv&sig=1jZkJPEfot5Ozm00jGiPVg037Fc&hl=en&sa=X&ei=aNslVKyT0cGwogSu6ICg&ved=0CDYQ6AEwBgtv#v=onepage&q=Report%20by%20Registrar%20of%20Joint%20Stock%20Companies%20to%20Committee%20of%20Council%20for%20Trade%2C%201845&f=false.
Table 1. Manufacturing Companies Completely Registered, 1845–1854

<table>
<thead>
<tr>
<th></th>
<th>1845</th>
<th>1846</th>
<th>1847</th>
<th>1848</th>
<th>1849</th>
<th>1850</th>
<th>1851</th>
<th>1852</th>
<th>1853</th>
<th>1854</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing cos.</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
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<tr>
<td>New cos.</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>14</td>
<td>12</td>
<td>9</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>13</td>
<td>16</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>14</td>
<td>12</td>
<td>9</td>
<td>94</td>
</tr>
</tbody>
</table>

Source: *Reports by the Registrar of Joint-Stock Companies*, PP 1846, 1847, 1847-48, 1849, 1850, 1851, 1852, 1853, 1854, 1854-55. Companies were identified as already in existence prior to 1844 from searches of the Parliamentary Papers and newspapers indicating that the company was active in prior years.

Finally, it is not clear what the appropriate baseline rate of company formation was to use as a comparison. Conceptually, we would want to know the rate of formation of manufacturing companies similar to these registered companies during the period prior to the Act. But without any comparable source of data in the prior period, when firms could be created with no formal registration recording their existence, this rate is simply unknown.

In sum, the registration of firms under the 1844 Joint Stock Companies Act does not in fact provide any evidence of a substantial constraint on the manufacturing sector being lifted upon passage of the Act.

IV. EXPLAINING THE CHOICE OF THE PARTNERSHIP

Given the effectiveness of the unincorporated joint stock company and the litany of failings of the partnership described above, the reasons for industrial entrepreneurs’ choice of the partnership form are not readily clear. As described above, the legal characteristics of the partnership form made it difficult for partnerships to attract equity investment from impersonal, formal capital markets through the issuance of transferable shares with limited liability. The resolution of this puzzle is, in short, that for the vast majority of firms in the modern sector it was optimal to use only debt, not equity, for any external financing, and the partnership form minimized the costs of debt financing. Moreover, the partnership form may have served to minimize agency costs among the owners of the firm as well as the agency costs between the firm’s owners and its management.

A. The Pecking Order Theory of Capital Structure

An important stylized fact in the modern literature on corporate finance is that managers generally prefer internal financing to external fi-
nancing, and when they must resort to external finance, they prefer to issue debt rather than equity. Professor Stewart Myers termed this basic pattern in firm financing behavior the “pecking order theory” of capital structure.69 Consistent with this view, the majority of firm capital expenditures are indeed financed by internally generated funds, and the overwhelming majority of external finance is in the form of debt.70

The leading explanation for this empirical reality is based on asymmetric information between the managers of the firm and outside investors.71 If managers know more about the value of the firm’s business prospects than outside investors do, this creates an adverse selection problem: the firms that decide to issue outside equity are the ones that outside investors overvalue. Issuing outside equity thus sends a bad signal about the firm’s prospects. Knowing this, outside investors are willing to pay less for equity stakes in firms. This means that successful firms prefer to rely on internally generated sources of funds rather than to sell equity. And if a firm does seek to raise outside funds, it is better to do so with a “safer” security—debt—since as a fixed claim, the pricing of debt is less sensitive to the information asymmetry.

B. Advantages of the Partnership Form

The pecking order theory provides a useful framework for understanding the financing behavior of manufacturing firms in the modern sector and the advantages of the partnership form.

1. The Sources of Capital for Industrial Firms

Early on in the Industrial Revolution, the demand of industrial entrepreneurs for fixed capital was relatively modest.72 The fixed capital equipment in the early cotton mills and iron furnaces was inexpensive,73 and there were only minimal economies of scale.74 Manufacturing firms also made extensive use of subcontracting certain aspects of production to other firms, which further lowered the need for aggregating fixed capi-

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70. Id. at 582.
72. See Mathias, supra note 1, at 78; Mokyr, supra note 4, at 101.
74. Cheffins, supra note 47, at 154.
tal in a single firm. Entrepreneurs relied primarily on personal wealth and the wealth of family and friends for initial investment capital. Trade creditors were an important source of working capital, as suppliers gave firms time to settle accounts and merchants gave cash advances. Later in the period, country banks provided short-term loans to industrial firms, further expanding access to working capital. Mortgages were used to reduce the cost of credit to firms by offering lenders more effective security interests in collateral.

As technology changed and the economy grew, the demand schedule for capital investment shifted up. Consistent with the pecking order theory, firms financed this expansion in their capital stock primarily through the plow back of profits. Firms in the industrial sector were highly profitable. Furthermore, the external finance that was raised was primarily in the form of debt. Working capital provided by trade creditors and bank loans allowed firms to devote their profits to long-term fixed capital investment. The opportunity cost to the firm of using internal earnings to finance capital investment was at least as great as the yield on the relatively risk-free government debt traded in London during the period. This rate varied through this period, increasing during the war period when government borrowing increased.

Importantly, manufacturing firms did not raise large sums of equity capital. Most partners in these firms were close associates, many with family connections. Equity was built up primarily through plow-back of profits, not by additional external equity investment. Nor did manu-


76. *COTTRELL, supra* note 6, at 22; *MATHIAS, supra* note 1, at 77.

77. Usury laws capped interest that could be legally charged on commercial loans at about 5%. This may have restricted the availability of credit, in particular when the yield on government securities rose above the 5% limit and funds moved from the private sector into government debt, causing liquidity problems for manufacturers. *COTTRELL, supra* note 6, at 8.


79. *COTTRELL, supra* note 6, at 79; Neal, *supra* note 13, at 163.

80. Pollard, *supra* note 73, at 308.

81. Carol Heim and Philip Mirowski estimate that the nominal yield on government debt ranged from 3.14% to 6.09%, with real yields considerably more volatile. Carol E. Heim & Philip Mirowski, *Interest Rates and Crowding-Out During Britain’s Industrial Revolution*, 47 *J. ECON. HIST.* 117, 120 (1987). There is some question as to whether savers in the provinces actually held public debt in their portfolios, but evidence suggests that, increasingly, the government debt became an asset held economy-wide. See A. H. John, *Insurance Investment and the London Money Market of the 18th Century*, 20 *ECONOMICA* 137, 142–43 (1953).

82. Postan, *supra* note 6, at 4.

83. *COTTRELL, supra* note 6, at 23, 31.
facturing firms attract credit from a distance; creditors were local, and thus had better information about the firm and its management and were more likely to engage in repeated interactions with the firm.

2. The Unrealizable Advantage of the Joint Stock Form

Consider then the implications of this pecking order financing behavior—relying almost exclusively on retained earnings and debt—for entrepreneurs’ choice of legal form. The legal characteristics of the unincorporated joint stock company would have allowed these firms to issue transferable shares and thus receive equity investment from a wider circle of investors. However, the optimal financing behavior by these firms was to rely only on debt and not on outside equity, making the primary advantage of the unincorporated joint stock company of little use.

Moreover, even for entrepreneurs that would have liked to issue equity, it seems unlikely that a primary or secondary market in industrial shares could actually have formed, given the underdevelopment of the capital market in the period. The capital markets were not yet ready to support the sort of “venture capital” investment these firms represented.

The extent to which a national, integrated capital market existed in this period has been debated in the literature. Buchinsky and Polak find that by the mid-eighteenth century, price movements of government securities were correlated with real property transactions in the provinces, suggesting that London financial markets were linked to local capital markets. But this link seems likely to have been one-way. As Cottrell notes, “Whereas by the mid-1830s a national, albeit volatile, market for credit existed, there was not a comparable group of institutions mobilizing capital, particularly capital for industry.” While government securities would have been available to savers in the industrializing region, securities issued by industrial firms would have been unlikely to attract savers from afar. The stock market in London primarily traded government securities, securities of the moneyed companies, and a small list of...
dock and canal companies. Financial intermediaries, such as insurance companies, invested their funds primarily in government debt and issues of the moneyed companies. This is consistent with the fact that the firms’ supply of capital was overwhelmingly from local sources, suggesting that information problems in funding these firms were severe. This was in part due to a geographical gap between the savings in London and agricultural regions, and the manufacturing firms in the industrializing regions. Furthermore, modern institutions requiring public disclosure of information and auditing of financial statements were not yet in place. Finally, the new technologies invested in by industrial firms had to exacerbate information asymmetries.

3. The Advantages of the Partnership

In addition, the partnership form was the optimal legal platform for a debt-financed business. In particular, the unlimited liability of partners for partnership debts would have lowered the firm’s cost of borrowing, especially from trade creditors. Each partner was jointly and severally liable for the debts of the firm, and thus the pool of collateral available to firm creditors included the personal assets of partners. In contrast, the owners of corporations enjoyed limited liability. Unincorporated joint stock companies were structured to mimic the legal characteristics of the corporate form, including limited liability. The liability of the firm’s managers and owners was typically limited through provisions in the firm’s governance documents and in its contracts with creditors. The fact that so many joint stock companies had limited liability would have made such firms, as a class, appear to be less creditworthy. While corporations and unincorporated joint stock companies could, in principle, write contracts that made the firm’s owners explicitly liable on its debts, trade creditors seem especially unlikely to have bargained for recourse to the firm’s owners’ personal assets. In contrast, the strong norm of personal liability of partners might have made creditors generally more comfortable lending to partnerships.

The unlimited liability of partners also reduced their incentive to act opportunistically vis-à-vis the firm’s creditors. Knowing that their own

89. MATHIAS, supra note 1, at 73.
90. See John, supra note 81, at 144–46.
91. MATHIAS, supra note 1, at 73; CHEFFINS, supra note 47, at 152 (“[S]ince capital markets remained primarily regional in orientation, industrialists minded to raise capital to build up their firms were generally poorly positioned to appeal to investors outside their locality.”).
92. See CHEFFINS, supra note 47, at 194.
93. See MOKYR, supra note 4, at 106.
94. See supra notes 34–37 and accompanying text.
Choosing the Partnership

assets were on the line made partners less likely to take on more debt than could be repaid or to engage in other forms of opportunism.

These advantages of the partnership form were well understood by entrepreneurs at the time. Some partnerships explicitly advertised to their creditors and customers the unlimited liability of partners.95 One Manchester manufacturer argued that if liability were limited in partnerships, failure of success would be shielded from reproach; the law would become the refuge of a trading skulk . . . . The position of our mercantile character is a treasured object, and demands of the best security we can obtain for upholding of it. On that account we cannot hesitate to prefer the security of a man who without reservation, offers to stake his whole property and the treasured estimate of his own respectability upon the result . . . as against the pretensions of another who requires to be fenced in by conditions.96

This argument does not explain, however, why firms did not make use of the unincorporated joint stock company to achieve liquidation protection. This feature would have been useful independent of the firm’s financing behavior, and it seems likely that the specificity of investment in these firms was generally increasing. Perhaps the close relationships among partners obviated the need for this additional legal protection against premature liquidation of firm-specific assets.

Moreover, there is a countervailing benefit to the ability of partners to potentially force dissolution of the partnership. Professors Naomi Lamoreaux and Jean-Laurent Rosenthal examine the American context and argue that the ability of partners to force dissolution of the partnership acted as a check against opportunism by controlling owners vis-à-vis minority owners and that this explains the continued prevalence of the partnership in manufacturing in the United States into the twentieth century.97 The greater control rights of partners over firm affairs, relative to the control rights of corporate shareholders, might have similarly helped to keep in check opportunistic behavior among partners.

Finally, in most industrial partnerships the partners were all active in managing the business.98 The individual managers in partnerships in-

95. Anderson & Tollison, supra note 20, at 115.
96. HUNT, supra note 1, at 117–18.
98. Note that this argument is about the effect of the economic relationships embodied in the typical partnership rather than about the legal characteristics of the partnership form. A close corporation could achieve the same incentive effects.
ternalized a greater proportion of the returns from their efforts than the managers of a joint stock company with widely held shares. Partners thus had better incentives to exert effort and make efficient decisions in managing the firm. Furthermore, the close relationships among partners in these firms surely resulted in greater sympathy among partners than could be achieved between the management and shareholders of a joint stock company, fiduciary duties notwithstanding. Partners were motivated not just to receive their own cut, but so that their fellow partners prospered as well.

The concern that delegating control would result in mismanagement was reflected in the popular pamphlets distributed in the period. And contemporary political economists shared this view, including, perhaps most famously, Adam Smith, who wrote:

> The directors of [joint stock companies], . . . being the managers rather of other people’s money than of their own, it cannot be well expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. . . . Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company. . . . They have, accordingly, very seldom succeeded without an exclusive privilege; and frequently have not succeeded with one.  

Smith believed that the only industries in which joint stock companies could be successful without some exclusive privilege from the state were those “of which all the operations are capable of being reduced to what is called a routine, or to such a uniformity of method as admits of little or no variation.” This was echoed by The Economist some eighty years later in 1854, which argued that joint stock organization was workable only in undertakings that would admit of being carried on according to a regular systematic plan. . . . Companies were in all respects unsuited for the prosecution of ordinary industrial pursuits, whether belonging to agriculture, manufactures or commerce. None had ever succeeded without some special

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100. *Dubois*, supra note 35, at 27.


102. *Id.* at 279. Anderson and Tollison present an able defense of Smith’s ideas as an early expression of modern information economics. See Gary M. Anderson & Robert D. Tollison, *Adam Smith’s Analysis of Joint Stock Companies*, 90 J. POL. ECON. 1237 (1982).
privilege. . . . To buy in one market; to sell with profit in another; to watch over perpetually occurring variations in the prices, and in the supply and demand of commodities; to suit with dexterity and judgment the quantity and quality of goods to the wants of each market; and to conduct each operation in the best and cheapest manner, requires a degree of unremitting vigilance and attention which it would be visionary to expect from the directors or servants of a joint stock association.\textsuperscript{103}

V. CONCLUSION

The legal framework of business organization adapted well to the needs of industrial entrepreneurs in England during the Industrial Revolution. While access to incorporation was restricted, the unincorporated joint stock company stood by as an able substitute for the corporation. However, during this period the corporateness that could be achieved was not yet desirable. Stock markets and financial intermediaries had yet to catch up with the functionality offered by the legal system. Furthermore, other legal underpinnings of a modern capital market, such as a comprehensive securities regulation scheme, were not yet in place. Finally, features of the partnership made it well suited to minimize the agency costs of collective enterprise. Eventually, the economic needs and opportunities of entrepreneurs evolved, making the business corporation the dominant form of organization in modern economic life.

England was not alone in this experience; entrepreneurs in the United States similarly opted for the partnership form for most manufacturing firms, even after the passage of general incorporation statutes, providing further evidence that the widespread use of the partnership was not a function of the British legal system.\textsuperscript{104}

There were some industries during the Industrial Revolution that did make extensive use of the joint stock form, particularly in insurance and mining, but also in the woolen textiles industry. Why the wool and cotton industries opted for different legal forms is not immediately obvious; they would appear to have had similar requirements for fixed capital investment. Exploring and explaining variation across industries is an important area of future research.

\textsuperscript{103} HUNT, supra note 1, at 132.

\textsuperscript{104} As late as 1900, 67\% of all U.S. manufacturing firms owned by more than one person were organized as partnerships. Lamoreaux & Rosenthal, supra note 97, at 129.
### APPENDIX

<table>
<thead>
<tr>
<th>Year</th>
<th>New manufacturing companies completely registered</th>
<th>Existing manufacturing companies completely registered</th>
</tr>
</thead>
</table>
| 1845 | &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&n
1847
British Patent Naphtha Company
West of England Patent Refining Sugar Company
League Bread Company
Liverpool Union Mill and Bread Company
Bury Saw Mill Company
Patent Alkali Company
La Bella Raguel Company
Patent Metal Cored Railway Sleeper Company
Hemp and Flax Manufacturing Company
Poole Steam Flour Mill Company
Pembrokeshire Iron and Coal Company
Boston and Thorp Arch Bath Company
Saunders Brewery Company
Patent Tidal Wheel Company

Birmingham Union Coal and Coke Company
Price’s Patent Candle Company

1848
Torbay Steam Flour Mill and Ship Biscuit Manufacturing Company
Low’s Patent Copper Company
National Disinfected and Dry Manure Company
Devon and Cornwall Tanning and Leather Company
Albion Plate-Glass Company
1849  Coggeshall Patent Plush Manufacturing Company  
       Dalston Joint Stock Brewery Company  
       Worksop Proprietary Mill Company  
       Fire Annihilator Company  
       Combined Vapour Engine Company  
       Union Tin Smelting Company  
       Bute Dock Brick Company  
       Bromley Hill Iron and Coal Company

1850  Dartmouth Bread and Flour Company

1851  Harrington Patent Slip Company  
       Great Peat Working Company of Ireland  
       British Peat Charcoal and Manure Company  
       English and Australian Copper Company
1852  Steam Gondola Company  
      Lee Moor Porcelain Clay Company  
      Bristol Joint Stock Provision and Clothing Company  
      London and Parisian Bread Company  
      London Cork Cutting Company  
      Working Tailors’ Joint Stock Company  
      British Sporm Candle Company  
      Whit Lane Weaving Company  
      Patent Wire Type Company  
      Shale Manure and Naphtha Company  
      Patent Cooperage Company  
      National Patent Steam Fuel Company  
      Metropolitan Carriage Company  
      Paris Chocolate Company

1853  Llynvi Vale Iron Company  
      Pantagrapic Cutting, Carving, and Engraving Company  
      Patent Siliceous Stone Company  
      Groux’s Improved Soap Company  
      London and Penzance Serpentine Company  
      Patent Glass Silvering Company  
      British and Colonial Smelting and Reduction Company  
      Bonwen’s Patent Candle Company  
      Great Central Bread, Flour, and Biscuit Company  
      British Patent Cork-cutting Company  
      New Linares Mining and Smelting Company  
      Patent and Common Brick and Tile Company
1854
Crystal Palace and Suburban
Brick and Tile Company
United Kingdom Vinegar Company
Antifriction Screw propeller and Marine Carriage Company
Fortuna Company
Berdan Machine Company
Superphosphate Compost Company
London Patent Brick Company
British Sugar Refining Company
Surrey Manure Company.

Source: Reports by the Registrar of Joint-Stock Companies, PP 1846, 1847, 1847–48, 1849, 1850, 1851, 1852, 1853, 1854, 1854–55. Companies were identified as already in existence prior to 1844 from searches of the Parliamentary Papers and newspapers indicating that the company was active in prior years.