

Entity Shielding and the Limited Partnership: Evidence From New York, 1821-1858

Eric Hilt*
Wellesley College and NBER

Preliminary Draft

Abstract: Scholars have long doubted the importance of the limited partnership form in the nineteenth-century United States. Using newly collected data, the paper shows that the form was adopted by a surprising number of firms in New York City, and that it was most often utilized by successful merchants who were themselves members of ordinary partnerships. The limited partnership thus facilitated simultaneous investments in multiple partnership firms—something that would have been quite perilous in the absence of the form—by creating a measure of entity shielding. The results suggest that the introduction of the limited partnership facilitated investments that could not have occurred in the absence of the form.

*Email: ehilt@wellesley.edu.

1 Introduction

In the early nineteenth century United States, the partnership was the dominant organizational form for multi-owner firms, and in some economic sectors its use was nearly universal. The partnership lacked both entity shielding and limited liability—these firms scarcely existed as entities distinct from their members.¹ This was in many respects desirable, since personal responsibility was perceived to be vital to the commercial credit networks of the time.² But unlimited liability also foreclosed the possibility of partnerships raising capital by taking on passive “outside” investors, as any investor would have to become a full partner.³ Moreover, the combination of unlimited liability and the lack of entity shielding made simultaneous membership in multiple partnership firms quite perilous: in bankruptcy, the creditors of one partnership could seize the assets of a partner’s other firm(s). As a result, it was rare for an individual to act as a partner in more than one firm.⁴

In 1822, the State of New York introduced the French *société en commandite* into its laws, with a statute that named it the “limited partnership.” New York’s statute was adapted from the 1807 Napoleonic commercial code, and created a new class of partner, called a “special partner,” who was granted limited liability and was required to delegate the management of the firm to the “general partners,” who remained personally liable. New York thus became the first common-law state to authorize the form, and by 1886, limited partnerships had been authorized in all but three of the then-

¹ Extremely weak forms of both entity shielding and owner shielding (limited liability) for partnerships were recognized by English and American courts; see Hansmann, Kraakman and Squire, “Law.”

² One contemporary observer argued that “personal Responsibility...may well be called the *Magna Charta* of Sellers. This Responsibility, which every one engaged in trade is under...is necessary to enable Individuals and Partnerships to obtain that Credit without which commercial Dealings would be too circumscribed to provide for the Wants of Mankind.” Eden, *Policy*, p. 5. On the significance of unlimited liability for partnerships at common law, see Kent, *Commentaries*, vol. III.

³ Ffookes, *Partnership* (p. 9-10) states that “no prudent man can, with the present law of partnership, like the sword of Damocles suspended above his head, invest his surplus in any business that he himself can not practically superintend.” On the risks associated with forming a partnership, see Lamoreaux, “Partnership Form”; and Bodenhorn, “Hold-Up.”

⁴ One possible exception to this generalization is the unincorporated joint-stock company, a form which did achieve strong entity shielding, and found widespread adoption in Britain, mostly as a substitute for the corporation. On the significance and limitations of this form, see Harris, *Industrializing*.

existing states and territories.⁵ At the time of the adoption of these statutes, it was believed that the limited partnership was “well calculated to bring dormant capital into active and useful employment.”⁶ The legislative committee that drafted New York’s statute claimed that in Europe “young enterprising men” used the form to finance firms with “advances by rich, but retired capitalists.”⁷

But it was difficult to anticipate how the new institution would function in the United States or how widely it would be adopted. Today, very little is known about the extent to which the limited partnership was adopted in the nineteenth century United States, although some modern scholarship has concluded that the form was utilized only rarely.⁸ Perhaps more importantly, almost nothing is known about the types of firms that were organized as limited partnerships, or the contracting problems the form was or was not used to address.

This paper analyzes the use of the limited partnership in New York City in the mid-nineteenth century. After addressing the question of the extent to which the institution was used, the paper then asks: why was it used? Which elements of the limited partnership were attractive, and why? The results indicate that the form found surprisingly widespread adoption in New York City, and that the key to understanding why the form was used can be found by analyzing *who* used it. Using newly collected data from business directories, limited partnership registrations, and early credit reports, the paper shows that the form facilitated investments in partnerships by men who were themselves partners in ordinary partnerships. For these men, the limited liability conferred by stakes as special partners in limited partnership firms had a very important benefit: it shielded their own firms from the creditors of the limited partnerships. Moreover, their passive, arms-length relationship with their limited partnerships, required by law, helped mitigate any incentive conflicts that could arise from holding partnership stakes in competing firms. An investment in a limited partnership maintained a clear separation between a

⁵ Louisiana had authorized the *commandite* since its years as a French colony. The code of the State of Louisiana later named them partnerships *in commendam*. Bates, *Limited Partnership*.

⁶ Kent, *Commentaries*, vol. III p. 12.

⁷ *Journal of the Assembly*, 1822, p. 952-53.

⁸ See, for example, Howard, “Limited Partnership”; Lamoreaux and Rosenthal, “Legal Regime”; and Warren, *Corporate Advantages*.

special partner's own ordinary partnership, and his limited partnership(s), and achieved a measure of entity shielding.

The limited partnership thus facilitated a large amount of investments in New York's partnership firms that almost certainly could not have occurred in the absence of the form. During the first half of the nineteenth century, the corporate form became increasingly accessible in the United States, and the proliferation of corporations enabled investors to purchase shares in firms in a wide range of industries. But the mercantile world remained completely dominated by partnerships, and the limited partnership, which created the possibility of holding a stake as an outside investor, facilitated investments in these firms, often by members of other commercial partnerships.

Many contemporary observers and modern scholars have argued that the limited partnership suffered from several defects, which are often claimed to be nearly fatal to the form.⁹ The most common defect cited is the requirement that the special partner remain completely passive, or risk violating the terms of the statute and losing his limited liability.¹⁰ The results of this paper indicate that the limited partnership found adoption precisely among those individuals for which this defect was not a serious concern—in fact, it was likely an advantage. The passive, arms-length relationship between special partners and their limited partnerships required by law suited merchants who were themselves partners in other firms, often in the same industry, quite well.

The results of this paper contribute to several areas of historical research. First, they add to a large and growing comparative literature on businesses' choice of organizational form and the significance of the limited partnership.¹¹ In common-law contexts, there is little evidence on the use of

⁹ Indeed, the notion that the limited partnership was “never widely adopted in America in the nineteenth century” is accepted quite generally. Hansmann, Kraakman, and Squire, “Rise of the Firm,” p. 1396

¹⁰ For example, one Louisiana judge noted: “It is only to be regretted, however, that the legislative restraint in this State, which forbids the partner *in commendam* [special partner] from taking an active part in the affairs of the concern under certain onerous penalties, has not been somewhat relaxed, for persons who would have engaged their capital in an enterprise in the management of which they would have had a voice, have studiously avoided doing so, in apprehension of eventual responsibilities.” *Ulman v. Briggs*, 32 La. Ann.655 (1880).

¹¹ See, for example, Lamoreaux and Rosenthal, “Legal Regime”; Guinnane et. al., “Corporation”; Gómez-Galvarriato and Musacchio, “Larger Menus”; and Abramitzky, Frank, and Mahajan, “Black Box.”

the limited partnership, and much of it has indicated that the form was unimportant.¹² In contrast, the results of this paper suggest that the limited partnership facilitated a large number of investments in New York City firms, even though the corporate form was widely available at the time.¹³ A second literature to which this paper contributes analyzes the evolution of American law, and its role in economic development.¹⁴ Limited-partnership statutes in particular represented an important legal innovation, since they grafted a civil-law institution into the common law. These statutes, and the case law that developed in response, have therefore attracted considerable scholarly attention.¹⁵ Finally, this paper presents some of the first systematic evidence on the composition, finances and industries of New York City's partnership firms, which is of independent interest.

2 The Limited Partnership and New York's 1822 Statute

The concept of the limited partnership dates at least as far back as twelfth-century Italy, where it was known as the *accomandita*.¹⁶ In France, the *société en commandite* was recognized in its first commercial code, Colbert's Ordinance of 1673, and a more precise specification of the form was included in its 1807 commercial code, which received significant attention in the United States and Britain.¹⁷ The *commandite* was quite successful in France, and over the nineteenth century repeated attempts were made

¹² For example, Stanley Howard's search of the records of five New Jersey counties from 1837 to 1931 turned up only 142 limited partnerships, and Lamoreaux and Rosenthal's sample of over 160 Boston partnerships from the 1840s and 1850s contained only two limited partnerships. Howard, "Limited Partnership"; Lamoreaux and Rosenthal, "Legal Regime."

¹³ New York adopted general incorporation acts for manufacturing firms in 1811, banks in 1838, and firms in numerous other sectors beginning in 1847. See Seavoy, *Origins*. For industries not covered by a general incorporation act, the state government was often quite liberal in granting charters by special act; on New York's early-nineteenth century corporations, see Hilt, "Ownership."

¹⁴ Important works in this literature include Friedman, *History*; Handlin and Handlin, *Commonwealth*; Horwitz, *Transformation*; Hurst, *Law*; and Nelson, *Americanization*.

¹⁵ See, for example, Bates, *Law*; Begbie, *Partnership*; Howard, "Limited Partnership"; Troubat, *Commandatary*; and Kessler, "Limited Liability."

¹⁶ Troubat, *Commandatary*. Weber, *Commercial Partnerships*, analyzes the early antecedents the modern limited partnership.

¹⁷ See Cook, *Codification*. The first English language translation of the 1807 commercial code appeared in 1814, in Rodman's *Commercial Code of France*, printed in New York.

to introduce it into England.¹⁸ Yet opponents of this innovation argued the form was “contrary to the whole genius and spirit of the English law,” and successfully resisted its introduction there until the twentieth century.¹⁹ American legislators, however, were often more willing to innovate than their counterparts in England, and introduced it into their laws in the early nineteenth century.

New York’s 1822 statute was an adaptation of the 1807 code’s terms relative to the *commandite*. The initial bill, proposed by Assemblyman Philip Brasher of New York City, was in fact little more than a transcription of passages from the 1807 code.²⁰ The bill also made the first official use of the term “limited partnership” to denote the organizational form.²¹

In the New York Assembly’s Committee of Ways and Means the granting of limited liability to members of partnership firms aroused concerns about fraud, an issue frequently raised by opponents of corporations.²² In response, the committee inserted a provision imposing a fine of one thousand dollars for fraud, and the requirement that each special partner’s name and amount invested be included in the registration certificate for the firm.²³ The New York statute of 1822 authorized the formation of limited partnerships in virtually any industry other than banking or insurance once a registration certificate was filed with the clerk of the county in which the business would operate.²⁴ The partners were required to then publish the contents of their registration certificate for at least six weeks in two newspapers, and

¹⁸ On the history and usage of the *commandite* in France, see Freedeman, *Joint-Stock*. On the debates over the introduction of the *commandite* in England, see Saville, “Sleeping Partnership.” The form was adopted in Ireland in 1782. Levi, “Appendix.”

¹⁹ Lord Brougham, *Hansard’s Parliamentary Debates*, 1838 v. 44 cc. 840.

²⁰ The initial bill contains long passages taken verbatim from Rodman’s 1814 translation of the 1807 code, which account for more than half of its text. New York *Legislative Documents*, 1822, no. 102; Rodman, *Commercial Code of France*. Assemblyman Brasher was an attorney prominent in New York City’s political and economic affairs.

²¹ This term seems to have been first applied to the organizational form by Rodman in his translation of the commercial code of France. Previously, the term “limited partnership” had denoted partnerships where the scope of the firm’s activities and debts was restricted. In Louisiana, the form was known as the partnership *in commendam*.

²² *Journal of the Assembly*, p. 952-53. New York’s 1821 constitutional convention debated imposing personal liability on financial corporations, but instead adopted a provision requiring a two-thirds vote to approve new corporate charters. Seavoy, *Origins*, p. 95. The evolution of the states’ policies toward corporations is analyzed in Wallis, “Market-Augmenting.”

²³ New York *Legislative Documents*, 1822, no. 172. This fine was included in the 1822 law, but was subsequently replaced with language making anyone committing fraud “liable to an indictment for a misdemeanor” in New York’s *Revised Statutes* of 1829 (vol. 1 p. 766). Kessler, “Limited Liability,” analyzes the significance of the anonymity granted to special partners in the French code.

²⁴ *Laws of New York*, 1822, ch. 244.

dissolutions could be effected only by similar publication. Subsequent modifications to the law required still more detail in the registration certificates, including a statement of the industry in which the firm would operate.²⁵ But as with ordinary partnerships at common law, the terms of any partnership contract that the members of the limited partnership executed were not published or included in the certificate.

In many states, the proponents of limited partnerships argued for their adoption as a substitute for the corporation, and in some cases radical Jacksonian Democrats proposed authorizing limited partnerships as a way to undermine the special privileges of corporations.²⁶ In the realm of politics, the limited partnership was therefore closely tied to the corporation, and the introduction of the form can be interpreted as a step in the progression towards granting broad access to the powers normally reserved for incorporated entities.²⁷ In a practical sense, however, the limited partnership was quite different from the corporation. Of the many essential attributes of corporations it retained only limited liability, and the limitation on liability was partial because there were still general partners who were personally liable for the firm's debts. Moreover, a limited partnership had no legal identity separate from that of the individual partners and could not own property or act in law; if a partner left or died, the partnership would dissolve; and the stake of the special partner was totally illiquid—it could not be sold or transferred without dissolving the firm.²⁸ A corporation, in contrast, was a distinct legal entity; its shares were tradable; and

²⁵ New York *Revised Statutes*, 1829, vol. 1 p. 764.

²⁶ See, for example, the discussion in Cadman, *New Jersey*; and Troubat, *Commandatary*. It is significant that New York authorized the form following its 1821 constitutional convention, which discussed many anti-corporate proposals. See Seavoy, *Origins*.

²⁷ On the significance of this progression towards open access to the corporate form, see North, Wallis, and Weingast, "Conceptual Framework."

²⁸ The rule that initially prevailed in New York (as in other states) was that any alteration to the business as stated on its certificate, including the identities of the partners or the operations or capitalization of the business, would result in its dissolution. In 1838, Pennsylvania modified its limited-partnership statute to make the stakes of the special partners transferable, although the consent of the other partners was required. A number of other states, including New York, eventually followed. See the discussion in Troubat, *Commandatary*, and Gilmore, *Handbook*. In contrast, in France, a modified version of the limited partnership with fully transferable shares developed, known as the *société en commandite par action*, but this form was not explicitly authorized in the original 1807 code. Freedeman, *Joint-Stock*.

its shareholders all had voting rights over the management of the firm and limited liability, except in very special circumstances.²⁹ The limited partnership, above all else, was a partnership.

3 New York City and the Adoption of the Limited Partnership

In the early nineteenth century, New York City emerged as the most important commercial center in the United States, and in particular became the nation's largest port for international trade, the largest market for banking and finance, and a crucial point in the distribution of manufactured goods and primary commodities.³⁰ With the exception of banks and insurance companies, which were required by statute to incorporate, nearly all of the multi-owner firms engaged in these economic activities were organized as partnerships. Did many of them utilize the limited partnership once it became available?

As a first step towards understanding the use of the form, all of the limited-partnership certificates filed in the county clerk's office in New York City from 1822 until 1858 were collected and coded. The certificates indicate that New York's businessmen did not begin taking advantage of the limited-partnership option immediately upon authorization of the form. The first registration was filed on December 16, 1822, but only six limited partnerships were formed before 1827. Figure 1 shows the number of limited partnerships created each year from 1822 to 1858 (a total of 1,098 limited partnerships were formed during this period). It was not until the 1830s that the new partnership form began to catch on.

Several developments may have played a role in its increasing popularity in the 1830s. New York's landmark *Revised Statutes*, published in 1829, compiled and organized the state's most important laws (including its limited-partnership statute) into an accessible format, and were accompanied by efforts to publicize and explain their contents.³¹ Other publications that may have raised awareness of the

²⁹ For example, New York's 1828 *Revised Statutes* introduced provisions making directors and stockholders in corporations personally liable in cases of fraud (vol. I, 588-599).

³⁰ See, for example, Porter and Livesay, *Merchants*; Albion, *Rise*; and, on cotton merchants, Chandler, *Visible Hand*.

³¹ New York *Revised Statutes*, 1829. One of the revisers, John C. Spencer, published a long series of articles detailing and explaining the contents of the Revised Statutes in the *Ontario Messenger*, which were later compiled into a book. Spencer, *Notes*.

availability of the form and made it more accessible were collections of template legal documents intended for laymen, which contained examples of limited-partnership contracts.³²

Business conditions certainly played an important role in determining the rate of creation of limited partnerships. The sharp rise and fall in the number of new limited partnerships in the mid-1830s coincided with the speculative boom preceding the Panic of 1837 and the depression that followed. There did not appear to be any major developments in the case law relating to these firms that could plausibly have contributed to changes in the use of the form. In New York, the first reported case relative to one of these firms did not arise until 1836.³³ In that decision and in the case law that developed subsequently, New York's judges do not appear to have been overly conservative in their interpretation of the statute.³⁴ The New York Supreme Court, for example, rejected an attempt by a creditor to strip a special partner of his limited liability because of an error in the spelling of the special partner's name in the publication of the firm's certificate.³⁵

There was a general trend of increasing use of the limited partnership over time, and the number of limited partnerships formed per year within the sample period was highest in the 1850s. The volumes containing the registration certificates also contain the certificates of dissolution and renewal, and from these the

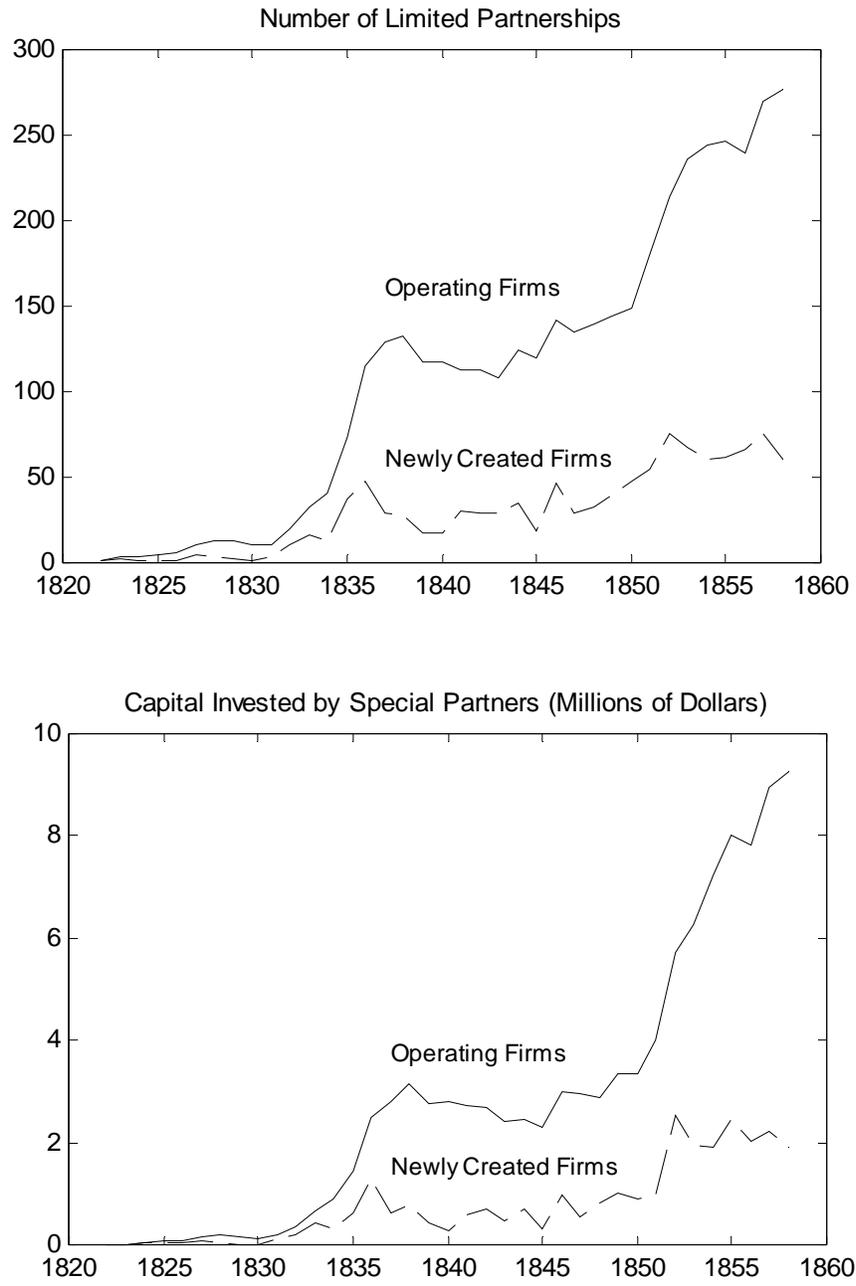
³² See, for example, Potter, *Every Man*, p. 25.

³³ *Phillips v. Stewart*, Ant. N.P. Cas. (2d ed.) 337 (N.Y. Sup. Ct. 1837). In this case, the creditor of a limited partnership named the special partner of the firm in a suit for payment of the firm's debts; the court sided with the defendants, and told the plaintiff, "You must bring your action against the general partner." The obvious error in bringing suit against the special partner suggests that the plaintiff was either unfamiliar with the law, or sought to test its validity in court.

³⁴ *Madison County Bank v. Gould*, 5 Hill 309 (N.Y. Sup. Ct. 1843) discusses which violations are sufficient to render the special partners liable, and which are not.

³⁵ *Bowen v. Argall*, 24 Wend. 496 (N.Y. Sup. Ct. 1840). The court also held that publication of the certificate within one week of the firm's registration was sufficient to comply with the statute's requirement that the certificate be published "immediately."

Figure 1: Limited Partnerships in New York City, 1822–1858



SOURCE: Limited-partnership registrations, dissolutions, and renewals, New York County Clerk's Office.

annual number of operating limited partnerships can be calculated. Again, the number of operating firms rose over time, reaching a peak at the end of the sample period in 1858, when 277 limited partnerships existed. Because ordinary partnerships did not need to file registration certificates, there is no equivalent official source for the number of ordinary partnerships. However, from business directories it can be conservatively estimated that the limited partnerships were equal in number to about 4-5% of operating ordinary partnerships in the 1850s.³⁶

Although limited partnerships were uncommon relative to ordinary partnerships, they may have held a disproportionately large share of the total capital of all partnerships. The lower part of Figure 1 displays the total amount of capital invested by special partners in newly created limited partnerships, and operating limited partnerships, for each year over the sample. In the peak year of the sample (1858), more than nine million dollars had been invested by special partners in the operating limited partnerships; the total amount invested between 1822 and 1858 was more than \$28.2 million.³⁷

The composition of New York's limited partnerships, as recorded on their certificates, is presented in Table 1. On average, the limited partnerships had a total of three partners, with two general partners and one special partner, who contributed about \$21,500. There were 1,013 unique individuals who held stakes as special partners during this period; on average, each invested in 1.32 limited partnerships. In general, the large sums invested in these firms indicate that the limited partnership was utilized by elite merchants. And indeed many prominent individuals and firms appeared on the registration certificates, including the dry goods retailers Lord & Taylor; Howland & Aspinwall, the shipping firm that played a dominant role in trade between New York and the Pacific; Junius S. Morgan,

³⁶ For example, *Doggett's New-York City Partnership Directory* lists 3,846 ordinary partnerships operating in the city in 1850; in that year there were 149 limited partnerships in operation. It should be noted that the number of operating limited partnerships rose rapidly in the following years; if the number of ordinary partnerships did not keep pace, the relative fraction of limited partnerships must have grown. As there is no reliable way to obtain data on newly created ordinary partnerships, it is not possible to obtain data directly comparable to Lamoreaux and Rosenthal's data for France or Gómez-Galvarriato and Musacchio's for Mexico City, which are based on newly registered firms, rather than operating firms. Lamoreaux and Rosenthal, "Legal Regime;" Gómez-Galvarriato and Musacchio, "Larger Menus."

³⁷ It is important to note that this figure does not include the investments of general partners in these firms, which were not stated on the registration certificates. For the firms in the 1853 sample below, the general partners on average contributed 47 percent of each firm's capital.

**Table 1: Limited Partnerships:
Finances, Industries and Partner Data, 1822-1858**

| | Mean | SD | Min. | Max. |
|---|--------|--------|------|---------|
| <u>Firm Averages:</u> | | | | |
| <i>Number of partners:</i> | | | | |
| Total number of partners | 3.12 | 1.12 | 2 | 20 |
| Number of general partners | 1.90 | 0.81 | 1 | 5 |
| Number of special partners | 1.22 | 0.71 | 1 | 17 |
| <i>Firm finances (\$):</i> | | | | |
| Total capital contributed by special partners | 25,722 | 34,167 | 50 | 360,000 |
| Average capital contributed by each special partner | 21,578 | 26,059 | 50 | 360,000 |
| <u>Special Partner Averages:</u> | | | | |
| Total number of special partner stakes held | 1.32 | 0.79 | 1 | 8 |
| Total value of investments (\$) | 27,883 | 49,352 | 50 | 555,000 |

SOURCE: Limited-partnership registrations, dissolutions, and renewals, New York County Clerk's Office.
NOTE: The data for the residences of the partners is calculated as the average of the percentage of partners residing in each place across firms. For the data on firms, $N=1,098$. There were a total of 1,013 unique individuals who held special partner stakes in these firms; this is the number of observations for the data on special partners at the bottom of the table.

father of J.P. Morgan; and two German banks, which made enormous investments as special partners with New York City firms.³⁸

An indication of the elite status of the limited partnerships and their special partners is found in Table 2, which presents comparisons of the industries of the limited partnerships existing in 1853, and a random 8% sample of ordinary partnerships existing in that year.³⁹ Information on the partners and finances of these firms was then sought in the credit reports of R.G. Dun & Co.⁴⁰ The data in the table indicate that the distributions of the two types of firms across industries were quite different. About 44 percent of the ordinary partnerships were mercantile businesses, compared to 76 percent of the limited

³⁸In 1854 the Bank for Commerce and Industry of Darmstadt invested \$500,000 with a limited partnership that acted as bankers and commission merchants, and in 1857 the Credit Institution of Industry & Commerce of Dessau invested \$365,000 with a commission-merchant limited partnership.

³⁹The ordinary partnerships were sampled from a New York City business directory for 1852-53 (*Wilson's Business Directory of New-York City*) by selecting the first entry on each page corresponding to a partnership (thus excluding sole proprietorships and corporations).

⁴⁰The R.G. Dun & Co. credit reports are in the Historical Collections of Baker Library, Harvard Business School. The Dun & Co. correspondents sent their reports at least twice a year to the clerks in the New York office, who copied them into ledgers, which were gradually split apart as they filled up, with each portion receiving new pages and forming a new ledger. Beginning from approximately 21 volumes, the firm ended up with 281 volumes containing information on New York City businesses (1841-1892), which are not organized chronologically.

**Table 2: Industry Comparisons:
New York City Partnerships, 1853**

| Industry | Firm capital, all partnerships Mean (\$) | Frequency: | | $P > t $ |
|-----------------------------------|--|--|---|-----------|
| | | Limited partnerships Mean (percent) | Ordinary partnerships Mean (percent) | |
| <i>Broad Industry Categories:</i> | | | | |
| Professional | 30,333 | 0.46 | 7.12 | 0.000 |
| Personal services | 26,375 | 0.00 | 9.34 | 0.000 |
| Mercantile | 79,063 | 75.58 | 43.75 | 0.000 |
| Manufacturing | 35,769 | 23.96 | 39.69 | 0.000 |

SOURCE: Limited-partnership registrations, New York County Clerk's Office; R.G. Dun & Co. ledgers, New York City. NOTE: $P > |t|$ denotes the significance level of a two-sided test of differences in means. For firm capital, $N=235$; for the industry category variables, $N=517$.

partnerships, and essentially none of the limited partnerships were in the professions or in personal services. Perhaps unsurprisingly, the limited partnership was adopted in industries with higher average capital. The form was clearly used by merchants in contexts where a relatively large amount of capital was needed.

Table 3 presents tests of differences in means for firm capital across the two firm types, and, because the distribution of capital for these firms contains some enormous outliers, the medians are also compared. It should be noted that these data represent estimates provided by the R.G. Dun & Co. agents, and are likely quite imprecise and noisy.⁴¹ In terms of means, the limited partnerships had about 15 percent more capital, with about 47 percent of the capital supplied by the general partners, and the balance by the special partners. The difference in average capital across firm types is not statistically significant, but the median capital of the limited partnerships (\$40,000) was twice as large as the median level of capital for the ordinary partnerships (\$20,000), and this difference is statistically significant. The limited partnerships did, however, have one more partner than the ordinary partnerships. The bottom row in the table compares median capital per partner for the two types of firms, and the data indicate that the

⁴¹ For example, the estimates tend to cluster on round numbers: there were 17 firms whose capital was estimated to be equal to exactly \$50,000, but there were none with any amount between \$45,000 and \$50,000, and none between \$50,000 and \$55,000. Similarly there were 13 firms whose capital was reported as \$100,000, with none between \$90,000 and \$100,000, and only one between \$100,000 and \$110,000.

**Table 3: Capital Comparisons:
New York City Partnerships, 1853**

| | Limited partnerships | Ordinary partnerships | <i>p-value of difference</i> |
|--|-------------------------|--------------------------|----------------------------------|
| <i>Mean:</i> | | | |
| Total capital (\$) | 68,953 | 60,954 | 0.559 |
| General partners' contribution to firm's capital (percent) | 46.60 | 100.00 | 0.000 |
| <i>Median:</i> | | | |
| Total capital (\$) | 40,000 | 20,000 | 0.000 |
| Capital per general partner (\$) | 20,500 | 10,000 | 0.000 |
| Capital per partner (\$) | 12,667 | 10,000 | 0.070 |

SOURCE: R.G. Dun & Co. ledgers, New York City. NOTE: For the limited partnerships, capital per partner is calculated as total capital divided by the number of general partners plus special partners. In some cases the Dun reports state the “net worth” of a firm, rather than its capital; this is true for 42 ordinary partnerships and five limited partnerships. For these firms, the net worth is used in lieu of capital. If these data are excluded from the comparisons, the results are substantially the same. The p-values reported are for a two-sided t-test of differences in means, or for the tests of differences in medians, the significance level of the Pearson chi-squared test statistic is reported.

limited partnerships had about 27 percent more capital per partner, even including the special partners in the total number of partners.

The last and perhaps most interesting characteristic of the firms to compare is the personal connections among the partners. When evaluating the creditworthiness of a firm, the R.G. Dun & Co. agents frequently commented on the background of the partners themselves, including whether or not they had worked together in a prior firm (and if so, in what capacity), and whether or not they were related. Table 4 presents summary statistics for data describing the personal connections among the partners in the firms of the sample. The binary variables in the table are coded as equal to one if any two partners had the personal connection described, and for the limited partnerships, they include the special partners. These variables are not mutually exclusive, and in theory could all be equal to one for a given firm.⁴²

⁴² As the Dun agents almost never recorded such information in the negative (“these partners are not related”), the question of which entries to code as zero arises. The approach taken was as follows: if the Dun agents provided any information relative to any aspect of the background of the partners, the variables for the relationships not mentioned were coded as zero. The implicit assumption imposed was that if the Dun agents commented on any aspects of the background of the partners, they were fully informed about all aspects of the partners’ backgrounds and relationships. This almost certainly overstates the number of zeros in the dataset, and therefore understates the rates reported in the table. The use of a stricter standard for coding the zeros among these variables results in

**Table 4: Firm Origins:
New York City Partnerships, 1853**

| | Limited partnerships Mean (percent) | Ordinary partnerships Mean (percent) | $P > t $ |
|--|---|--|-----------|
| At least two partners have the following relationship: | | | |
| Partners together in prior firm | 44.69 | 10.91 | 0.000 |
| Employees together or employer and employee | 21.23 | 18.18 | 0.532 |
| Related (by marriage or consanguinity) | 29.61 | 53.64 | 0.000 |

SOURCE: R.G. Dun & Co. ledgers, New York City. NOTE: For the limited partnerships, the calculations include connections between the special partners and the general partners, between different general partners, and between different special partners. $N = 289$. $P > |t|$ denotes the significance level of a two-sided test of differences in means.

The personal connections forming the origins of the partnerships in the sample clearly differed by firm type. The limited partnerships were much more likely to have partners who had been in business together in prior firms, either as partners or as employers and employees, compared to the ordinary partnerships. More importantly, the ordinary partnerships were significantly more likely to have partners who were related to one another, compared to the limited partnerships (53.6 percent vs. 29.6 percent). The data on the relationships among the members of limited partnerships presented in the table include all the partners, both special and general. If we consider only the general partners within the limited partnerships, they were related to one another 12.0 percent of the time. The special partners were related to the general partners 21.2 percent of the time.⁴³

4 Special Partners and Their Firms

Clearly, limited partnerships were different from ordinary partnerships. The results presented so far indicate that limited partnerships had more capital than ordinary partnerships, and that they tended to operate in industries and sectors where average firm capital was relatively high. This is perhaps

substantially higher means for all of the variables, but none of the relative comparisons across firm types change in important ways.

⁴³ These two numbers do not add up to the number in the table (29.6 percent) because for about 3 percent of firms, the general partners were related to one another, and the special partners were related to the general partners.

unsurprising, since the limited partnership facilitated a new contract by which a partnership could raise capital, that of the “special partner” who enjoyed limited liability.

But status as a special partner was not without its problems. In exchange for limited liability, special partners were barred from participating in the management of the firm—essentially, they became completely disenfranchised equity holders. Moreover, at least until the mid-nineteenth century, the special partners had only a very limited right to withdraw their interest in the firm prior to the end of its duration as specified on its registration certificate, or to transfer their interest in the firm to someone else.⁴⁴ This created the potential for the general partners to hold up the special partners in various ways. Finally, at least in the early years of the statutes, there may have been some uncertainty relative to the courts’ stance toward the limited partnership. The form is completely alien to the common law, and creates by statute a class of partner who enjoys limited liability. But that limited liability could be revoked if the terms of the statute were not followed precisely. Any special partner faced the “lurking danger” that a conservative judge hostile to the form could strip them of their limited liability in response to some minor violation of the statute.⁴⁵

Who was willing to abide by these terms, and face these risks? In order to investigate the significance of the limited partnership form in greater depth, and to understand the implications of the limitations of the form, detailed data on the special partners of New York’s limited partnerships created from 1845 to 1853, and residing in New York or Brooklyn, was collected.⁴⁶ All partnerships (limited or ordinary) in which the special partner was a member were identified, along with their capital and industry.

⁴⁴ See the discussion in Hansman, Kraakman and Squire, “Law.”

⁴⁵ See the discussion in Warren, *Corporate Advantages*.

⁴⁶ To begin, all 247 special partners in limited partnerships created between 1845 and 1853 who lived in New York City or Brooklyn were identified from the limited-partnership certificates. The general partners were then linked to their firms using directories of partnerships from 1849-50 and 1853-54 that listed all partners’ names. These were *Doggett’s New-York City Partnership Directory, for 1849 and 1850*, and *Rode’s New York & Brooklyn Partnership Directory for 1853 & 1854*. These present alphabetical lists of firms (with no industry classifications), and include the names of every copartner of every firm. Finally, city directories and commercial directories were searched for the names of the individuals as well, to see if they operated as independent merchants, and to see if an occupation was listed for them. Of the 247 New York and Brooklyn special partners, 30 could not be found in the partnership directories, commercial directories, city directories, or the Dun reports. For another 39, their names turned up in connection to a partnership firm, but the firm could not be found in the Dun reports. Thus the sample consists of the firms of 178 individuals for which data could be found.

**Table 5: New York Special Partners, 1845-53:
Occupation and Wealth**

| | Mean |
|--------------------------------------|---------|
| <i>Primary occupation (percent):</i> | |
| Copartner in an ordinary partnership | 55.61 |
| Retired/former merchant | 17.67 |
| Independent merchant | 14.75 |
| No occupation | 5.07 |
| Officer in a corporation | 4.15 |
| Professional | 2.77 |
| <i>Wealth:</i> | |
| Net worth (\$) | 190,000 |

SOURCE: R.G. Dun & Co. ledgers, New York City; *Wilson's Business Directory of New York City*, 1849, 1852; *Doggett's New York City Directory*, 1845-52.

The net worth of the special partner, as estimated by the R.G. Dun & Co. credit rating agents, was also recorded, as were the personal ties between the special partners and their firms.

In contrast to the expectations of New York's legislators that retired merchants would invest in limited partnerships, the data in Table 5 indicate that 56 percent of the special partners were general partners in an ordinary partnership at the time of their investments. This is a clear indication that one of the most important effects of the introduction of the limited partnership was to facilitate investments by active merchants in firms other than their own. For these men, the form shielded their own firm from entanglements with their limited partnerships' creditors. And the arms-length relationship stipulated by the statute would have been a desirable feature of the form, since it would help mitigate conflicts of interest that could arise from serving as a partner in multiple firms simultaneously.⁴⁷

Most of the remaining special partners were also from New York City's mercantile community. About 18 percent of special partners were retired merchants (most of whom retired from the very firm in which they became special partners), 15 percent were independent merchants (in business alone), about 4 percent were officers of corporations, and 3 percent were professionals, mainly lawyers. Another 5

⁴⁷ The formation of additional "branches" of a partnership firm in another city or country is one circumstance in which individuals became members of several ordinary partnerships. See Albion, *Rise*, p. 264; Chandler, *Visible Hand*, p. 36.

Table 6: Special Partners and Their Firms, 1845-53

| | Limited partnerships | Ordinary Partnerships |
|---|----------------------|-----------------------|
| <i>Ties to firm: Special partner...</i> | | |
| Was a partner or employer in a prior firm with general partner (mean percent) | 46.41 | 7.95 |
| Is related to general partner (mean percent) | 18.78 | 53.93 |
| Is general partner in a firm in the same industry (mean percent) | 53.27 | -- |
| <i>Firm finances:</i> | | |
| Total firm capital (mean \$) | 66,742 | 300,854 |
| Special partner's stake in firm (mean \$) | 23,848 | 174,208 |
| Stake in firm as percent of special partner's net worth (mean) | 16.98 | 85.18 |

SOURCE: R.G. Dun & Co. ledgers, New York City. NOTE: The first column presents data for all special partner-limited partnership pairs for limited-partnership investments of New York City special partners. The second column presents means only for special partner-general partnership pairs. $N=270$, except for the last row, where $N=157$.

percent of the special partners were listed in directories as residing in New York City, but without any occupation.

The ties between the special partners and the general partners of their limited partnerships reveal that they likely knew them well. Table 6 presents data on these relationships. Nearly half of the special partners had been the partner or employer of the general partners in their limited partnerships in some prior firm. This is an indication that the special partners invested with men they knew well, and could trust not to hold them up. But if they were incorrect in their expectations of the actions of their partners and the general partners did hold them up, this would not have much impact on the special partners, since their stakes in their limited partnerships typically represented only a small fraction (17%) of their net worth. The special partners' stakes in their own ordinary partnerships clearly represented the bulk of their wealth and their primary investment. Perhaps more importantly, the average net worth of the special partners, \$190,000, was far higher than the net worth of the general partners in their limited partnerships, which was only \$25,611.⁴⁸ This is clear indication that the special partners were powerful and wealthy men, who could probably ruin the careers of any young merchants who tried to hold them up.

⁴⁸ This measure of net worth, or wealth net of debts, was estimated by the Dun agents based on their inspection of the firms' accounts and the partners' assets, and interviews with their suppliers, customers and competitors. For 60 of the special partners, their 1850 tax valuation for personal and real estate was found in Darling, *List of Persons*.

The contrast between the personal ties of the special partners and the other members of their limited partnerships, and their ties to the other members of their ordinary partnerships, is quite dramatic. The special partners were related to at least one general partner in their limited partnerships only 19 percent of the time, compared to 54 percent of the time for their ordinary partnerships.⁴⁹ The ordinary partnerships of these men—their primary firms—were formed with members of their own family, whereas they invested as special partners in firms formed by men they knew from the business world.

In order to investigate these differences more carefully, and address the issue of selection, Table 7 presents the relationship between family connections and status as a limited partnership after controlling for individual and industry fixed effects. That is, for partner i in firm j , the relationship

$$\text{kin}_{ij} = \alpha + \beta \text{limited}_j + \sum_k \lambda_k \text{industry}_{jk} + \delta_i + e_{ij}$$

is estimated, where kin_{ij} is a binary variable equal to one if the partner has kinship ties to some other general partner in the firm; limited_j is a variable equal to one if the firm is a limited partnership; the industry variables are binary variables for each industry; and the δ_i is a fixed effect for each of the special partners in the sample. The coefficient β is estimated from the variation within each individual merchant's partnerships. The ordinary partnerships included in the dataset are those in which a special partner was a member at the same time they were invested in their limited partnership.

The results indicate that even when controlling for industry and when focusing only on the variation within each individual merchant's firms, the special partners were much more likely to form ordinary partnerships than limited partnerships with their relatives. The estimated effect in Table 7 indicates that the merchants in the dataset were about 47 percent less likely to be related to their partners

Their average tax valuation, \$68,595, was far lower than the average net worth estimated by the Dun agents. This difference may reflect ownership of assets not subject to tax, such as property outside of New York City, or shares in incorporated companies, but it also likely reflects the fact that assessors were often unable to identify many of the business assets held by taxpayers. The two measures of wealth are, however, positively correlated; the correlation coefficient between the two is 0.58.

⁴⁹ This dramatic contrast that is quite similar to the difference observed across firm types in Table 4, which compared all members of all limited partnerships with those of a sample of ordinary partnerships in 1853. In Table 4, 29.6 percent of limited partnerships are stated to have at least two related partners, when all partners are considered. When relationships between special partners and general partners only are considered, this rate falls to 21.2 percent.

**Table 7: Regressions:
Family Connections, Firm Capital**

| | Dependent variable: Kinship ties | |
|--------------------------|-------------------------------------|----------------------|
| | (1) | (2) |
| Limited partnership | -0.351*** (0.064) | -0.469*** (0.109) |
| Individual fixed effects | No | Yes |
| Industry fixed effects | No | Yes |
| Observations | 270 | 270 |
| R-squared | 0.13 | 0.73 |

NOTE: Robust standard errors, adjusted for clustering on individual merchants, reported in parentheses; ***, **, and * denote significance at the 1 percent, 5 percent, and 10 percent levels, respectively. A constant term (not reported) is also included in the regressions.

in their limited partnerships, compared to their ordinary partnerships, and this difference is highly significant. These merchants chose to form their ordinary partnerships with members of their kinship networks, and their limited partnerships with businessmen with whom they had no kinship ties.

This sharp distinction in the degree of kinship ties between the two types of firms could have been due to the perils of unlimited liability. Merchants may have formed ordinary partnerships with their kin because they believed that they knew their relatives better and could trust them more than other business associates. But these men may have had other reasons to form partnerships with their relatives that had nothing to do with trust—they may have enjoyed working with family, or brought in their younger relatives to help them learn and profit from the family business. Whatever their motives for forming family partnerships, the limited partnership enabled merchants to make additional investments in other firms, and act something like venture capitalists. Their principal business was their family partnership, but the limited partnership enabled them to simultaneously hold stakes in other partnerships, whose members were generally from outside their kinship network.

Taken together, these results imply that the introduction of the limited partnership introduced an important change in New York’s commercial world. Its many merchants, who were among the most successful and important in the United States, organized their firms as family partnerships. Because the partnership form lacked any form of entity shielding, and because of incentive conflicts that would have

arisen, these men could not join other partnership firms. Therefore, the wealthiest, most sophisticated and best informed investors—the most natural candidates to help finance other firms—were unable to invest in other commercial partnerships. The introduction of the limited partnership, by opening the possibility of holding a passive stake in a partnership firm with limited liability, removed these obstacles and facilitated an enormous amount of investments in partnership firms by these men.

5 Conclusion

The importance of the limited partnership in the nineteenth-century United States has long been doubted, and scholars have speculated on the reasons for its infrequent adoption. However, limited partnerships played an important role in the mercantile sector of antebellum New York, the leading financial and commercial city in America. A total of 1,098 limited partnerships were formed in the city in the years up to 1858, and the investments made with these firms were often quite large, in the aggregate totaling more than \$28.2 million. Over the remainder of the nineteenth century, the limited partnership found continued widespread use, and the total number of limited partnerships formed in New York City during the nineteenth century can be conservatively estimated to be at least 3,000.⁵⁰

Compared with ordinary partnerships, New York's limited partnerships were elite firms, formed by wealthy and successful merchants and given abundant resources to pursue lucrative business opportunities. The investors who provided capital to these firms often knew the general partners from previous connections in the business world, and were only rarely related to them. This was quite different from most ordinary partnerships, where the partners were often from within the same kinship network, and this difference is not simply due to selection. The special partners' own ordinary partnerships were much more likely to be formed on the basis of kinship ties. The limited partnership appeared to have facilitated investments in the businesses of talented young merchants who wealthy investors knew through their business dealings.

⁵⁰ There are no lists or tabulations to use to count these enterprises, but the number of volumes of limited-partnership registrations for the years 1822-1900 (totaling 33), coupled with a conservative estimate of limited partnerships per volume, suggests a total of more than 3,000 over the century.

The reason most of the prior scholarship has concluded that the limited partnership was not widely adopted is that the special partners were forbidden from participating in any way in the management of the firms, and faced the danger of being stripped of their limited liability if they violated this prohibition. But it is clear that quite a few wealthy businessmen, in particular those who were members of partnership firms, did not see this risk as a serious impediment to the use of the form. The benefits of the limited partnership extended beyond limited liability: the special partner's arms-length relationship with the firm and limited liability facilitated investments in multiple partnerships simultaneously, which would not have been tenable in the absence of the form.

The introduction of the limited partnership into the laws of New York, an innovation that was copied by most of the other states over the nineteenth century, is an important example of an American state shaping the law to fit its economic needs. The statute created a new class of investor—the special partner—who would hold a stake in a partnership firm as a passive, outside investor. Although the form was used in a relatively narrow set of industries, its use in New York City was nonetheless quite economically important. The question of whether the limited partnership found similar patterns of use in other environments awaits further research.

Works Cited

- Abramitzky, Ran, Frank, Zephyr, and Aprajit Mahajan. "Inside the Black Box: Partnerships in Rio De Janeiro, 1870-1891." Working paper, Stanford University, 2007.
- Albion, Robert G. *The Rise of New York Port*. New York: Scribner's Sons, 1939.
- Bates, Clement. *The Law of Limited Partnership*. Boston: Little, Brown & Company, 1886.
- Beckert, Sven. *The Monied Metropolis: New York City and the Consolidation of the American Bourgeoisie, 1850-1896*. New York: Cambridge University Press, 2001.
- Begbie, Matthew. *Partnership "en Commandite," or Partnership with Limited Liabilities*. London: Effingham Wilson, 1848.
- Bodenhorn, Howard. "Partnership and Hold-Up in Early America." *NBER Working Paper Series*, number w8814, 2002.
- Brown, Ronald L. *The Law School Papers of Benjamin F. Butler: New York University School of Law in the 1830s*. New York: Greenwood Press, 1987.
- Cadman, John W. *The Corporation in New Jersey*. Cambridge: Harvard University Press, 1949.
- Chandler, Alfred. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Harvard University Press, 1977.
- Cook, Charles M. *The American Codification Movement: A Study of Antebellum Legal Reform*. Westport: Greenwood Press, 1981.
- Darling, William A. *List of Persons, Copartnerships, and Corporations Who Were Taxed on Seventeen Thousand Five Hundred Dollars, and Upwards, in the City of New York*. New York: John F. Whitney, 1851.
- Eden, Frederick. *On the Policy and Expediency of Granting Insurance Charters*. London: Burton, 1806.
- Ffookes, Woodforde. *Law of Partnership an Obstacle to Social Progress*. London: W.G. Benning & Co., 1854.
- Freedeman, Charles E. *Joint-Stock Enterprise in France, 1807-1867*. Chapel Hill: University of North Carolina, 1979.
- Friedman, Lawrence M. *The History of American Law*. NY: Simon & Schuster, 1985.
- Gilmore, Eugene A. *Handbook on the Law of Partnership Including Limited Partnerships*. St. Paul, MN: West Publishing Co., 1911.
- Gómez-Galvarriato, Aurora, and Aldo Musacchio. "Larger Menus and Entrepreneurial Appetite: An Empirical Investigation of Organizational Choice in Mexico, 1886–1910." Working Paper, Harvard Business School, 2008.

- Guinnane, Timothy, Harris, Ron, Lamoreaux, Naomi, and Jean-Laurent Rosenthal. "Putting the Corporation in its Place." *Enterprise and Society* 8, no. 3 (2007): 687-729.
- Handlin, Oscar, and Mary Flug Handlin. *Commonwealth—A Study of the Role of Government in the American Economy: Massachusetts, 1774-1861*. Cambridge: Belknap Press, 1969.
- Hansmann, Henry, Kraakman, Reinier, and Richard Squire. "Law and the Rise of the Firm." *Harvard Law Review* 119, no. 5 (2006): 1335-1403.
- Harris, Ron. *Industrializing English Law: Entrepreneurship and Business Organization, 1720-1844*. New York: Cambridge University Press, 2000.
- Hilt, Eric. "Incentives in Corporations: Evidence from the American Whaling Industry." *Journal of Law and Economics* 49, no. 1 (2006): 197-227.
- , "When did Ownership Separate from Control? Corporate Governance in the Early Nineteenth Century." *This JOURNAL* 68, no. 3 (2008): 645-85.
- Horwitz, Morton J. *The Transformation of American Law: 1790-1860*. Cambridge: Harvard University Press, 1977.
- Howard, Stanley E. 1934. "The Limited Partnership in New Jersey." *Journal of Business of the University of Chicago* 7, no. 4 (1934): 296-317.
- Hurst, James Willard. *Law and the Conditions of Freedom in the Nineteenth-Century United States*. Madison: University of Wisconsin Press, 1956.
- Journal of the Assembly of the State of New York at Their Forty-Fifth Session, Begun and Held at the Capitol, in the City of Albany, the First Day of January, 1822*. Albany: Cantine & Leake, 1822.
- Kent, James. *Commentaries on American Law*. New York: O. Halsted, 1826.
- Kessler, Amalia D. "Limited Liability in Context: Lessons from the French Origins of the American Limited Partnership." *Journal of Legal Studies* 32, no. 2 (2003): 511-48.
- Lamoreaux, Naomi R. "The Partnership Form of Organization: Its Popularity in Early-Nineteenth-Century Boston." In *Entrepreneurs: The Boston Business Community, 1750-1850*, ed. Conrad E. Wright and Katheryn P. Viens, 269-95. Boston: Massachusetts Historical Society, 1997.
- Lamoreaux, Naomi R., and Jean-Laurent Rosenthal. "Legal Regime and Business's Organizational Choice: A Comparison of France and the United States During the Era of Industrialization." *American Law and Economics Review* 7, no. 1 (2005): 28-61.
- Levi, Leone. "Appendix," in *First Report: Commissioners Appointed to Inquire...[On] Mercantile Laws*. London: Eyre and Spottiswoode, 1854.
- Nelson, William E. *Americanization of the Common Law: The Impact of Legal Change on Massachusetts Society, 1760-1830*. Cambridge: Harvard University Press, 1975.
- New York. *Minutes of the Common Council of the City of New York, 1784-1831*. Published by the City of New York, 1917.

- North, Douglass C, Wallis, John Joseph, and Barry R. Weingast. "A Conceptual Framework for Interpreting Recorded Human History." *NBER Working Paper Series*, number 12795, 2006.
- Porter, Glenn, and Harold C. Livesay. *Merchants and Manufacturers: Studies in the Changing Structure of Nineteenth-Century Marketing*. Baltimore: Johns Hopkins Press, 1971.
- Porter, Kenneth W. *The Jacksons and the Lees: Two Generations of Massachusetts Merchants, 1765-1844*. Cambridge: Harvard University Press, 1937.
- Potter, Paraclete. *Every Man His Own Lawyer, Or, The Clerk and Magistrate's Assistant, Adapted to the Revised Statutes and Greatly Enlarged*. Poughkeepsie: Conner & Cooke, 1834.
- Rodman, John. *The Commercial Code of France*. New York: C. Wiley, 1814.
- Saville, John. "Sleeping Partnership and Limited Liability, 1850-1856," *Economic History Review* 8, no. 3 (1956): 418-33.
- Scoville, Joseph A. *The Old Merchants of New York City*. By Walter Barrett [pseudonym]. New York: Carleton, 1863.
- Seavoy, Ronald E. *The Origins of the American Business Corporation, 1784-1855*. Westport: Greenwood Press, 1982.
- Spencer, John C. *Notes on the Revised Statutes of the State of New York*. Albany: Webster and Skinners, 1830.
- Troubat, Francis J. *The Law of Commandatary and Limited Partnerships in the United States*. Philadelphia: James Kay, Jun, & Brother, 1853.
- Wallis, John Joseph. "Market-Augmenting Government? States and Corporations in Nineteenth-Century America." In *Market-Augmenting Government: The Institutional Foundations for Prosperity*, ed. Omar Azfar and Charles A. Cadwell, 223-65. Ann Arbor: University of Michigan Press, 2003.
- Warren, Edward H. *Corporate Advantages without Incorporation*. New York: Baker, Voorhis & Co., 1929.
- Weber, Max. *The History of Commercial Partnerships in the Middle Ages*, Trans. Lutz Kaelber. Lanham: Rowman & Littlefield, 2003.