(Very Preliminary—Comments Welcome)

Corporate Ownership and Governance in the Early Nineteenth Century

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Abstract: This paper analyzes the ownership structure and governance institutions of the business corporations of New York State in the 1820s. Using a new dataset collected from the returns from New York's capital tax, and from the charters of New York's corporations, I document the extent of the separation of ownership from control in these enterprises, and the governance institutions that gave rise to this separation. Strong evidence is found for a relationship between governance institutions and ownership structure: the voting rights of shareholders, and the requirement of annual accounting statements, when included in corporate charters, facilitated more diffuse ownership.

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> It has now been two years since the Hope Insurance Company ceased to pay any Dividends... *What is now the state of this stock?* It is not worth in the market 60 per Cent [of its par value]...and the feelings of the unfortunate stockholder who is obliged to sell are aggravated by the refusal of the President & Directors to make a statement of the situation of the company...The only remedy left to save the miserable wrecks of your property is a total change of the Directors & Officers of the Institution at the approaching Election, & the Election in their place of men *deeply & pecuniarily* interested in its safety & prosperity...men who will not continue to do business which *they acknowledge to be ruinous,* in order to keep up an expensive Establishment & afford a pretence for paying high salaries to a President, Assistant, Secretary & Clerks.[1]

Were it not for the antiquated language, this address, delivered in 1825, could have been given by a contemporary activist shareholder. For the Hope Insurance Company of New York City, ownership and control were meaningfully separate: with paid-in capital of $300,000, the firm was owned by 130 different shareholders, many from other states, but managed by a board and officers who were not significant owners.[2] The address illustrates the conflicts that can arise when ownership and control become separate, in terms all to familiar to the contemporary reader.

But the speech also reveals many of the governance institutions of the era—some much stronger than those of present-day corporate law, some weaker—employed to address these conflicts. Like those of most corporations of its time, for example, the entire board of directors of the Hope Insurance Corporation was subject to annual elections by the shareholders, in what is known today as a unitary board, and if the speaker managed to persuade the owners of a majority of the shares to vote for a new ticket, all of the directors could have been replaced in the upcoming election. In contrast, most contemporary firms have staggered boards, where only a third of the directors are subject to election each year.[3] On the other hand, the charter of Hope Insurance did not obligate its board to furnish the shareholders with financial statements of any kind, making the corporation's performance difficult to assess by its shareholders.[4]

How representative was this episode? How separate was ownership from from control in

[1]Manuscript address, "To the Stockholders of the Hope Insurance Company" (1825: pgs. 1 and 2), in John Michael O'Connor Mss, New-York Historical Society Library. Emphasis in original.

[2]Shareholder information collected from manuscript "List of Names of the several Stockholders of the Hope Insurance Company" (1826), Comptroller's Office Records, New York State Archives.

[3]On the effects of staggered boards on the value of contemporary firms, see Bebchuck and Cohen (2005).

[4]New York *Laws*, 1810, ch. 20, and 1821, ch. 20.

the early nineteenth century, and what governance institutions were employed to facilitate that separation? This paper addresses these questions, using a newly-collected dataset constructed from the surviving records of New York State's capital tax of 1825-28. New York's tax required all corporations to submit a list of their owners to the state's comptroller, and these ownership records, most of which survive in the state archives, have been matched to the charters of the corporations, providing a unique window into the ownership structure and governance institutions of the corporations of one of the largest and most economically developed states. The tax returns also provide a means of understanding which of the many charters granted actually resulted in the creation of an operating corporation, and the dataset includes all 266 corporations operating in New York State in 1827.

Although the history and evolution of the corporate form in the United States has received much scholarly attention, the ownership and governance of early corporations is not completely understood, and has aroused some controversy.[5] Several prominent contributions to the literature, for example, have claimed that the business corporations of the early nineteenth century were fundamentally different from modern enterprises, in that they were closely held, governed through the active participation of shareholders, and entailed little separation of ownership and control. Berle and Means (1932), for example, argue that the large textile corporations of early-nineteenth-century Massachusetts were unusual, and that for most corporations prior to 1835 "the number of shareholders was few; they could and did attend meetings; they were business-men; and their vote meant something."[6] Similarly, in a well known passage from his analysis of the rise managerial capitalism, Chandler (1977) states of the railroads of the 1840s and 1850s, "The men who managed these enterprises became the first group of modern business administrators...ownership and management soon separated" (p. 87). More recent scholarship has rejected this characterization of early corporations, and claimed instead that ownership and control were indeed separate, and exhibited many of the conflicts of interests and agency costs familiar from modern-day enterprises (see Bainbridge, 1995, for a summary.) The problem faced by these and other

[5]On the history and evolution of the corporation in the United States, see Cadman (1949), Creighton (1990), Davis (1917), Dodd (1954), Lamoreaux and Rosenthal (2004), and Seavoy (1982).

[6]Pg. 135 in footnote 14. The discussion of the textile corporations of Lowell, Massachusetts, and the claim that they "stood alone" is from pg. 12.

contributions to the literature has been one of insufficient data: very little systematic information is available on the organization and governance of early corporations, beyond what can be gleaned from the case law, or the records of particular firms or industries.

Most research on early corporate ownership or governance focuses on particular industries, or particular governance provisions. For example, Dunlavy (2004) has shown that early corporate charters often specified a distribution of voting rights that she characterizes as "democratic"—with limits on the voting power granted to large shareholders. But the implications of this distribution of voting rights for firms' ownership structures, or the determinants of its use, are still unknown. Likewise, Davis (1958) has documented the ownership structures of several early textile corporations, but the representativeness of those firms for other industries, manufacturing or otherwise, is unclear. The results of this paper build on these important contributions, and place their findings in a broader context.

The picture that develops from the present analysis of New York's corporations of the 1820s is one of widespread separation of ownership from control, but significant variation across industries in both ownership structure and governance provisions. The main analytical contribution of the paper is to investigate the connections between the governance provisions of firms' charters, and their ownership structures. The results provide a strong indication that particular governance institutions, such as the requirement of annual accounting statements, did indeed help facilitate greater breadth of ownership, both in the sense of a greater number of individuals owning stakes, and also in the sense of a greater geographical dispersion of ownership.

1 Business Incorporations in Early-19th Century New York

The first quarter of the nineteenth century was a period of dramatic change in New York; the population of both the city and the state increased threefold between 1790 and 1820, and with the completion of the Erie canal in 1825, continued growth and prosperity were anticipated.[7] With the development and expansion of many industries, demand for charters of incorporation for businesses increased, and in general the state legislature obliged these

[7] For a discussion of New York's economy during this era, see, for example, Miller (1962).

requests.

The response of the legislature to petitions for incorporation, however, varied somewhat by industry. At one extreme was manufacturing. In the first decades of the nineteenth century, New York supported manufacturing industries vigorously, offering credit to entrepreneurs and firms,[8] subsidies and prizes for products of high quality,[9] and other forms of encouragement. After granting 24 charters of incorporation to manufacturing businesses between 1808 and 1810, New York enacted a general incorporation act for manufacturing firms in 1811, the first of its kind in the United States. The law provided that five or more people to wishing to form a corporation in any of a broad range of manufacturing industries could simply file a certificate with the office of the secretary of state listing their corporate name and a few characteristics of their organization, and they would be deemed incorporated. The law specified most of the provisions of the charters of the businesses incorporated through this process; it required that their capital stock could not exceed $100,000; it granted limited liability; it specified that the stockholders would have one vote per share in the election of directors, and the right to vote by proxy; and it stipulated that the firm could have at most nine directors.[10] Between 1811 and 1830, 196 firms were incorporated through this general act, whereas 58 manufacturing firms were incorporated through special acts of the legislature.

At the other extreme were banks. Private banking enterprises were prohibited from operating in the state in 1804, meaning that a charter was required to enter the industry.[11] Petitions for incorporation in banking were the subject of intense legislative contests, as they faced intense opposition organized by the stockholders of existing banks, who sought to protect the value of their franchise.[12] In an era of partisan patronage systems in the

[8]Loans made to particular firms of individuals by acts of the legislature include, for example, *New York Laws,* 1808, ch. 148; 1812, ch. 66; and 1814, ch. 132. Much more general programs offering mortgages to businesses and individuals were offered at various times; see New York *Assembly Journal*, 3 March 1829, p. 592-628; and *Senate Documents*, 1824, no. 32, for lists of recipients and amounts.

[9]In 1808 the legislature offered a prize of $150 for "the best specimen of woollen cloth" produced in the state; second prize was $75. (*New York Laws,* 1808, ch. 186). Similar prizes were offered again in 1810 (ch. 160), and the program was expanded in 1812 (ch. 230). The state also offered a $50 award to anyone who brought a full-blooded Merino ram into a New York county where there was none of that breed (1808, ch. 187).

[10]*New York Laws*, 1811, ch. 67. The industries within which businesses could be incorporated by the act initially included glass, textiles, and metals, although other industries were added subsequently.

[11]*New York Laws*, 1804, ch. 117.

[12]On the politics of bank chartering, see Bodenhorn (2004), Hammond (1957), and Alexander (1906).

state government, this led inevitably to some rather corrupt practices, and the state was able to capture some of the value of the charters for itself as well.[13] Between 1790 and 1830, 56 petitions for charters of incorporation for banks survived this process and were granted, and another five "Lombard Associations," or loan companies, which did not have the power to issue notes, and whose shareholders faced unlimited liability, were chartered as well. In a further indication of the political complexities of the bank chartering process, and the tremendous value of obtaining banking privileges in an environment with limited chartering, a few of these banks were actually businesses in industries such as chemical manufacturing, ship manufacturing and repair, and water works, who either had their charters revised by the legislature to grant them banking powers, or who obtained banking powers as part of their original charters.[14] These charters probably represent just a fraction of the petitions for incorporation for banks submitted during those years.[15] Businesses in other industries, such as insurance, did not encounter the same resistance to their petitions to incorporate, and it is likely that a larger fraction of their petitions for charters were approved.

A final category of business whose incorporation process warrants some discussion is franchise corporations, such as turnpike roads, bridges, and canals. With the settlement and growth of many cities in the northern and western part of the state, there was a significant need for improved transportation infrastructure in those areas. Most of this infrastructure was financed by private corporations: between 1800 and 1830, New York chartered 208 turnpike road companies, 66 bridge companies, and 30 canals.[16] As the charters of these enterprises often contained lengthy and detailed specifications of how land would be acquired, the tolls that could be charged, the precise dimensions of the roadway

[13]On corruption in chartering, see Bodenhorn (2004) on banks, and Wallis (2003) on the general problem and the process of reform which followed. The state frequently extracted a share of the value of a new bank charter by reserving a fraction of the bank's stock for itself, sometimes paying for the shares, and sometimes not. In other cases the bank was obligated to loan, or give, the state a substantial sum. See, for example, *New York Laws*, 1805, ch. 43; 1812, ch. 78; or 1812, ch. 175. Sylla, Legler, and Wallis (1987) document the importance of banks for early state revenues.

[14]These include the Manhattan Company, a water works firm, which became Manhattan Bank; the New York Manufacturing Company, which became Phoenix Bank; the Catskill Aqueduct Association, which became Greene County Bank; the New York Chemical Manufacturing Company, which became Chemical Bank; the Delaware and Hudson Canal Company; and the New York Dry Dock Company; and . *New York Laws,* 1799 ch. 84; 1812, ch. 167; 1818, ch. 237; 1823, ch. 46; 1823, ch. 238; and 1825, ch. 124.

[15]See Bodenhorn (2004, pg. 36) for data on the annual number of petitions for bank charters beginning in 1830.

[16]This did not include the Erie canal, which was financed with public money. For a discussion of the politics of the canal-building process, see Engerman and Sokoloff (2004).

or bridge that would be constructed, and other minutiae, in 1807 the state enacted a law standardizing turnpike charters, which listed the provisions that would be common to all charters. Most of the provisions of this act simply codified the provisions that were entered into most of the turnpike charters that came before it, but importantly, this law mandated several governance provisions that would be included in all turnpike company charters, including the voting rights of shareholders, and the size and responsibility of the board.

Between 1790 and 1830, New York chartered 1016 businesses, in all manner of industries. Was this an unusually large number? Scaled by population, this rate of incorporation was roughly similar to that of other northeastern states; New York had about 1,900 people per incorporation granted, which was about the same as New Jersey (1,700), more than Massachusetts (950), and less than Pennsylvania (3,200).[17]

The next section of the paper describes the dataset collected to analyze the ownership and governance of these New York corporations, and the tax law that created the records used to construct the data.

2 New York's Capital Tax of 1823

In the first quarter of the nineteenth century, the largest sources of tax revenue of the state government included various indirect taxes and, after 1814, a general property tax. In principle, the latter applied to holdings of stock in incorporated firms, but in practice, these holdings were rarely reported to tax assessors. In 1823, the legislature passed a new tax law which exempted individuals' stock holdings from taxation, and instead levied a tax on the paid-in capital of incorporated companies, payable by the corporations themselves.[18] The new law generated considerable confusion, and was revised in 1824 and again in 1825 in response to difficulties encountered in its implementation.[19]

The provision of the law that proved so difficult and confusing to enact—and which created the detailed records on shareholdings utilized here—related to the distribution of

[17]Figures calculated from Kessler (1948) Evans (1948) and *Abstract of the Returns of the Fifth Census,* 1832. Incorporations used in constructing these ratios are for 1800-1830.

[18]*New York Laws*, 1823, Ch. 262, sections 10 and 14.

[19]*New York Laws*, 1824, Ch. 22; and 1825, Ch. 254. The evolution of these laws, and the difficulties encountered in their implementation, are explained in the report of the Comptroller on the taxation of incorporated companies, *New York Assembly Journal,* 1827, p. 538-549.

its proceeds. The corporations were to make their state and local tax payments to the treasurer of their county, who would then forward the funds to the state treasury. The state treasurer would retain the state-tax component of these payments, and then redistribute the local-tax component to the counties in which the corporations' shareholders resided, in proportion to their shareholdings.[20] In order to calculate the distribution to each county, the law required that each corporation submit a list of the names, places of residence, and numbers of shares owned, for each stockholder, to the state comptroller.

Compliance was initially only sporadic. In 1823, only 152 corporations made the required return to the comptroller's office, listing their shareholders.[21] In response, the comptroller's office created a list of all incorporations where no return had been received, and diligently attempted to contact each one, to ascertain whether the corporation was in operation. The comptroller then annotated his list with the information obtained about each corporation. In the majority of cases, they found that the corporation "Never Existed," meaning that it never obtained the paid-in capital required to commence operations, or that it was "dissolved."[22] However, through this process they were able to achieve compliance from substantially all of the corporations in operation by 1827. The law remained in effect until 1828, when it was replaced with a simpler capital tax on corporations, which did not provide for revenue redistribution on the basis of local shareholdings.[23]

The comptroller's ledger of corporations, shareholdings, and tax payments, along with the statements submitted by most corporations used to compute the entries in the ledger, survive in the state archives of New York, and form the basis for the dataset of this paper.

3 New York's Corporations

Of the 827 companies granted charters of incorporation in New York in 1826 or before, the comptroller's office found that only 266 were in operation in 1827.[24] Despite this apparent

[20] *New York Laws*, 1823, Ch. 262, section 16.

[21] Report of the Comptroller, 11 January 1825, *New York Senate Journal*.

[22] Manuscript "List of Incorporated Companies, Which Have Neglected to Make an Annual Return to the Comptroller in 1825," (n.d.) Comptroller's Office Records, New York State Archives.

[23] New York *Revised Statutes*, 1828, chapter 13, title 4.

[24] Of these 266, 40 actually paid no tax, either because they had not yet commenced operations, or because their operations were resulting in losses, which exempted them from paying tax. These 40 did submit their required returns to the comptroller, however.

Table 1:
New York Business Corporations in Operation, 1827
Industrial Composition, Location, and Capitalization

	Firms	Avg. Capital	Total Capital	Avg. par value/share
Panel A: Industrial Composition				
Manufacturing and Mining				
Coal Mining	2	$ 257,150	$ 514,300	$ 50
Dying or Bleaching	2	33,000	66,000	525
Glass	3	56,833	170,500	267
Lumber	1	25,250	25,250	50
Metals	12	94,571	1,134,850	778
Salt	2	53,000	106,000	550
Sugar Refining	1	98,050	98,050	200
Textiles	41	47,655	1,953,865	547
Finance				
Bank	37	463,088	17,134,240	109
Commodity & Stock Exchange	1	162,000	162,000	100
Insurance: Fire	39	346,799	13,525,168	53
Insurance: Marine	9	377,778	3,400,000	47
Mfg. or Canal w/ Banking Powers	4	856,250	3,425,000	63
Loan Company	3	166,667	500,000	75
Trade Company	1	300,000	300,000	500
Public Utilities				
Aqueduct or Water Works	3	34,214	102,641	48
Bridge	36	11,091	399,293	32
Gas Light	2	262,500	525,000	38
Lock Navigation	2	63,063	126,125	25
Steamboat or Ferry	8	56,247	449,975	73
Turnpike	57	34,024	1,939,350	28
All Firms	266	174,573	46,057,608	176
Panel B: Location				
New York City	70	469,525	32,800,000	93
Albany	19	146,369	2,781,013	74
Oneida County	21	89,869	1,871,934	153
Rensselaer County	22	59,185	1,302,081	884
Ontario County	8	155,618	1,244,950	79
Brooklyn (Kings County)	9	73,778	664,000	152
Hudson River Valley Counties	38	52,115	1,980,367	186
All Other Counties	77	42,682	3,140,043	95
All Counties	266	174,573	46,057,608	176

low rate of survival, New York's corporations had collectively raised an enormous amount of capital, in a broad range of industries. Table 1 presents their industries, capitalization, and location. In total, the paid-in capital of all corporations was about $46 million, of which $21 million (46%) was invested in the state's 44 banks, loan companies, and other corporations with banking powers. Another $16.9 million (37%) was invested in the state's 48 insurance companies. There were 62 manufacturing firms, whose total capitalization was about $3.5 million, and 57 turnpikes, 36 bridges, and small numbers of firms in other industries such as gas lighting, steamboats, and water works.

The data in the table indicate that there was significant variation in the average sizes of the corporations across industries, with the largest companies in banking and finance, and the manufacturing corporations and turnpikes and bridges much smaller. One indication of the importance of small investors for these firms is given in the final column of the table, which lists the average par value of the shares of each industry. This is not a market value; rather, this is the size of the increments into which the book value of a firm's capital stock was divided as shares, and thus, the minimum possible investment when shares were issued.[25] In general, the finance companies had shares whose par value is $100 or less, whereas the public utilities' shares had even lower par values—usually less than $50. In contrast, in some manufacturing industries the average par value of the shares was well in excess of $500.

Turning to the lower panel of the table, of these 266 corporations, 70 (26%) were located in New York City, and they had a total paid-in capital of $32.8 million, or 71% of all corporations' capital—a consequence of the fact that most of New York City's firms were large banks and insurance companies. The average amount of paid-in capital of New York City's firms, about $470,000, was about seven times the size of the average firm in the rest of the state. In general, the remaining counties with significant numbers of corporations were located either along the Hudson river (Albany, Rensselaer, and the counties grouped as "Hudson river valley"), or in the counties in the central part of the state touched by the Erie Canal (Oneida and Ontario.)

[25] Market prices at the time were quoted as a percent of this par value, much like contemporary fixed income instruments.

Table 2:
Ownership Structure, All Firms

	Mean	Std. Dev.	Min.	Max	N
Distribution among Individual Shareholders					
Number of shareholders	72.4	76.67	3	440	120
Stake held by largest shareholder, %	24.7	21.0	2.5	96.2	120
Minimum number of shareholders for majority control	10.4	12.1	1	63	120
Geographical Distribution of Shareholdings					
Number of NY counties in which stock is held	4.8	3.4	1	20	240
Share of stock held in corporation's county, %	67.1	28.1	0	100	240
Share of stock held in New York City, %:					
All firms	34.3	37.0	0	100	240
New York City firms	82.0	13.8	44.6	100	69
Firms located elsewhere	15.1	23.6	0	100	171
Share of stock held outside New York State, %	10.0	13.1	0	79.8	240

4 Ownership and Governance of New York's Corporations

4.1 Ownership

How widely held were these corporations? Was ownership concentrated among just a few insiders, or did small investors hold shares? And to what extent was ownership geographically dispersed? We can begin to address these questions using the records collected by New York's comptroller. For 120 corporations, the complete list of their shareholders was found, and for 240, the geographical distribution of their shares aggregated by county was found.[26]

Some summary statistics of these data are presented in table 2. The data indicate that, on average, the corporations had about 72 shareholders, which implies that at least some small stakes were commonly held. However, on average the largest shareholder held nearly 25% of the shares. Moreover, the stakes of the ten largest investors were sufficient for majority control of the shares. This suggests that many of these firms were dominated by a few very large shareholders, and the distribution of shareholdings was quite unequal.

[26]All corporations in operation were required to submit a list of shareholders to the comptroller, even if they were exempt from paying tax. There were 266 operating corporations in New York in 1827, and 40 of them did not pay any tax. For the 226 that did pay tax, their distribution of shareholdings by county was obtained from the ledger of tax distributions to New York's counties. For 14 of the 40 corporations that did not pay tax, the county-level geographical distribution of their shareholders was calculated from the individual returns they submitted to the comptroller. (There were an additional 24 firms where no statement of shareholdings was found, and that also did not pay tax.)

Table 3:
Ownership Structures: Industry Averages

		Owners, $N = 120$			% of	Georgaphical Distribution, $N = 240$		
		Share-	Min. for	Largest	firms	Num. of	% in Firm's	% out of
	Capital	holders	Majority	Stake, %	in NYC	Counties	County	State
Banks	478,619	112	16	22	39	8	65	15
Bridges	11,091	65	7	26	8	3	67	9
Insurance Co's	352,608	135	21	13	77	5	79	11
Mfg Co's	57,490	17	3	34	23	3	64	7
Turnpikes	34,024	55	7	25	12	5	60	9
All Others	117,610	61	8	33	49	4	69	9

The lower part of the table, however, indicates that there was some geographical dispersion of ownership. On average each corporation had shareholders in 5 counties, and several had shareholders in 15 or more. In addition, ten percent of the shares on average were owned out of the state. Although about two-thirds of the shares were typically owned within the corporation's county, this implies that there were many shareholders who lived far away from the businesses in which they were investors, and very likely had no contact with or involvement in their day-to-day operations. These distant shareholders were almost certainly passive investors, who delegated control of the firm to its directors and officers.

The data in table 2 also indicate the importance of New York City investors for the state's capital market. For firms located outside of the city, on average 15% of their shares were owned in New York City. Thus even within the relatively primitive state of development of the state's financial markets, significant amounts of capital were allocated from the vast pools of wealth within the city into firms located elsewhere. Moreover, New York City investors were the largest holders of the securities issued by the (often enormous) banks and insurance companies located there; on average 82% of the shares of New York city firms were held locally.

One way to begin to understand the determinants of the firms' ownership structures is to compare them across industries. Table 3 presents ownership statistics for firms aggregated into the five principal industries in the sample, plus a sixth encompassing all the rest of the industries. The data in the table indicate, as might be expected, that banks and insurance companies, the largest firms in the sample, have the greatest number and broadest

Table 4:
Survival Rates: Industry Averages

	Total Charters Granted, 1790-1826	Total Operating Corporations, 1827	Industry Survival Rate, %
Banks	48	44	92
Bridges	91	36	40
Insurance Co's	68	48	71
Mfg Co's	237	62	26
Turnpikes	309	57	18
All Others	50	19	38

distribution of shareholders, both in the sense of ownership stakes (with large numbers required for a majority of the shares, and the lowest amounts in percentage terms held by the largest shareholder), and in geographical distribution, with their stock held in the largest number of counties, and the largest percentage of their stock held out of state. It may at first appear puzzling that insurance companies have the greatest geographical concentration of ownership, in the sense of the largest share held within their own counties, but this is probably due to the fact that insurance companies were far more likely to be located in New York City (77% of them were there) than all other industries, and, as we saw above, New York City firms tended to be owned mostly in New York City.

The data in the table also indicate that firm size is not the only determinant of the industries' ownership structures. For example, bridge companies and turnpike companies were, on average, substantially smaller than manufacturing companies, and yet they had much larger numbers of owners, smaller stakes held by their largest shareholders, and larger numbers of shareholders needed for majority control. Manufacturing companies, in fact, had by far the fewest owners, the smallest numbers of investors required for majority control, and the greatest fraction held by their largest investor.

Another characteristic of these industries that likely influenced their ownership structures is their likelihood of offering a rate of return commensurate with their risks, or more generally, their likelihood of surviving at all. Some evidence on this latter point is presented in table 4, which lists the number of charters granted prior to 1827, and the number of companies actually in operation in 1827, so that a simplistic assessment of the likelihood

of survival of firms in each industry can be made. Of course, this measures "survival" only if one accepts the grant of a charter as the inception of the enterprise; many enterprises never obtained sufficient capital to commence operations, and so might be thought of as never having existed.

Notwithstanding this limitation, the data are striking: prior to 1827, 48 charters were granted to banks, and in 1827, 44, or 92% of these corporations were in operation.[27] Similarly, 71% of the insurance companies were in operation in 1827.[28] In contrast, 237 manufacturing charters were granted, whereas only 62, or 26%, of these resulted in an operating corporation in 1827. This extraordinarily high rate of failure is likely an important influence on the degree of concentration of the ownership structure of these firms. With success—or even just survival—apparently so difficult to achieve, manufacturing firms were closely-held by large shareholders, who would have strong incentives to monitor management and possibly contribute their expertise to the enterprise. To an outside investor with no expertise in manufacturing, the equity of these firms would likely not have been an attractive investment.[29] In contrast, the banks and insurance companies were much safer businesses, with many paying regular dividends. The equities of many of these firms were regularly traded at the institution then known as the "New-York Stock and Exchange Board," providing some measure of liquidity as well.[30]

Like manufacturing firms, turnpike and bridge companies had low rates of survival, but this was likely due at least in part to the difficulties encountered in obtaining the land necessary to construct the roadway, which frequently resulted in protracted litigation.[31] More-

[27]The 48 charters include 5 loan companies. Two of these loan companies never commenced operations, and two banks, the Bank of Niagra and the Bank of Hudson, failed. Several banks would later fail in 1827-28, but they were all operating at the time their returns were made to the comptroller in 1827. A complete list of bank failures prior to 1830 is provided in the report of the comptroller in response to a resolution of the New York Assembly, *Assembly Documents* 1836, no. 102.

[28]Unlike banks, insurance companies faced competition from outside the state, and the difficult competitive environment in the aftermath of the war of 1812 resulted in substantial losses. See Huebner (1905).

[29]Davis (1958) documents the importance of merchants involved in manufacturing as investors in the textile corporations of New England.

[30]In 1825, the *New-York Shipping and Commercial List* printed regular price quotations for the stocks of 40 New York insurance companies, and 20 banks; these numbers remained about the same in 1830, and then grew dramatically over the 1830s. One manufacturing firm, the Sterling Co. of New York City, was listed, although only rarely traded, in 1830.

[31]Among the many examples are *Cayuga Bridge Co. v. Magee* 6 Wend 85 New York (1830); *Rogers v. Bradshaw* 20 Johns 735 New York (1823); *People* ex rel *Macey* 2 Johns 190 New York (1807); and *Gilbert v. Columbia Turnpike Co* 3 Johns 107 New York (1802).

over, although these enterprises, when successfully brought into operation, rarely yielded significant profits, local residents, and especially land owners, would have benefitted from the new infrastructure created, and had a strong incentive to invest.[32] The relationship between survival rate and ownership structure for these corporations are probably not directly comparable to those of the other businesses.

How were these firms governed? What rights did the shareholders have, and what role did they play? The next section addresses these questions.

4.2 Governance

By the 1820s, with so many corporations chartered, and significant separation between ownership and control in many of them, New York inevitably experienced corporate scandals and frauds, and introduced regulatory statutes applying to all corporations to protect shareholders. The most important of these measures was the bankruptcy law of 1825, which required that dividends could only be paid out of firms' profits; limited the indebtedness (relative to paid-in capital) that any firm could take on, and made directors personally liable for any indebtedness in excess of this amount; and required that the stock transfer books (which list the shareholders eligible to vote in elections of directors) be open to inspection during business hours.[33] In addition, a substantial body of case law relating to corporate governance had developed, arising especially from fraudulent practices in elections of directors.[34]

The governance provisions of the individual enterprises, however, was specified in their charters. In order to investigate these provisions, and how they varied across firms and

[32]Dodd (1954) claims that "No Massachusetts turnpike corporation proved to be a profitable enterprise," (p. 246) and Seavoy points out that the provisions in nearly all turnpike charters for the state to take possession of the roads once they had paid a certain rate of return were never exercised, assumably because the turnpikes never yielded sufficient profits (p. 42).

[33]Other provisions of the law included many specific regulations of banks, penalties for violating the terms of the charter, and prohibitions against purchasing shares from shareholders (and so reducing the value of the capital stock). *New York Laws*, 1825, ch. 325.

[34]Among such practices that the courts took up were directors attempting to use pledged shares to vote (Ex parte *Willcocks* 7 Cow 402 New York (1827)) using shares for which they were only trustees to vote (Ex parte *Holmes* 5 Cow 426 New York (Sup Ct 1826)), and using treasury shares to vote (Ex parte *Desdoity* 1 Wend 98 New York (1828)). In one case, a banks directors disenfranchised proxy voters by passing bylaws at the last minute to shorten the amount of time for balloting, and enabling challenges to proxy votes that would take much longer than the allowed time to resolve (*People v. Kip* US Law Jour 286 (1822).) A contemporary copy of much of the proceedings of the latter case is held within the collection of the New-York Historical Society Library, (Misc-North River Mss).

industries, the charters of 259 of the 266 operating corporations were found in New York's session laws, for those incorporated by special acts of the legislature, and in the records of the state comptroller's office, for incorporations by general act.[35] These early charters contained many provisions that regulated the conduct of the businesses, which varied by industry—bank charters, for example, included provisions restricting the interest rate that could be charged on loans; bridge company charters dictated rates of toll; and manufacturing charters listed the types of products the corporation was permitted to produce. The charters also listed the corporate powers available to the new entity (the right to sue or be sued, for example), specified the size of the capital stock and the par value of the shares; the duration of the corporation's existence; and nearly always included specific language prohibiting the firm from speculating in securities, holding real estate in excess of some maximum amount, or engaging in banking activities.[36]

Most of the rest of the content of the charters prescribed the governance institutions of the firm. Every corporation was to be managed by an elected board of directors, who would, in turn, elect a president, and also possibly appoint a secretary or treasurer, from among their members.[37] The board would have the authority, by majority rule, to write the corporation's by-laws, hire employees, and otherwise run the firm.[38] Although these charters sometimes refer to salaried agents, clerks, secretaries, and others who would be hired by the directors and might have assumed some managerial responsibilities, in general the management of these enterprises probably had very few hierarchical levels, with the board often overseeing much of the operations of the firm directly.[39]

[35]Five of the seven firms where the charters have not been found were bridge companies, which were sometimes created in obscure pieces of legislation focussed mainly on other firms, for example in amendments to charters of turnpike road companies.

[36]Many authors have ascribed particular importance to these limits imposed on the scope of the enterprise in early charters, and to the ability of the state legislatures to "safeguard" shareholders by dictating the terms of charters. See, for example, Berle and Means (1932, p. 131 and 134.) In a related and important work, Roe (1994) argues that regulations prohibiting banks and insurance companies from holding securities, motivated by populist politics, prevented them from becoming powerful blockholders, and thus playing a more effective role in the governance of nonfinancial corporations.

[37]The charters of firms in some industries specify an important role for the president; for example in insurance firms, the president was required to authorize every policy written by the firm. See, for example, the charter of the Neptune Insurance Company, section IX, (*New York Laws,* 1825, ch.113.)

[38]The directors' decision-making rules specified in the firms' bylaws often had important implications for the firms' performance. For example, Meissner (2005) found that the voting rules governing loan approval in early banks had significant effects on the rates of return earned by the banks' shareholders.

[39]On the development of managerial systems and hierarchies in early corporations, see Chandler (1977).

Table 5:
Governance Provisions, All Firms

	% of Firms
Election of Directors	
Directors subject to annual election	83.0
Voting by proxy guaranteed	79.9
Voting Rights:	
One vote/share	61.8
Graduated voting rights/share	31.7
No voting right specified, or one vote/person	6.5
Actions Required of the Board	
Mandatory dividend of all profits	23.2
Financial statements:	
Annual reports required	40.2
Books open to inspection	1.5
Composition of the Board	
Local Residency Requirement	8.5
Shareholding Requirement	93.8

With control of the operations of the firm delegated to the board, the election of directors was the principal means for the shareholders to ensure that the management of the firm acted in their interests. The charters of these corporations prescribed the conduct of these elections in some detail. Many of the provisions relating to directors and their elections are summarized in table 5. As indicated in the table, in 83% of the charters, every director was subject to election annually. The only firms whose charters did not specify that elections of all directors would be held annually were the manufacturing firms incorporated under the 1811 general incorporation statute, which did not directly specify annual elections. For 79% of the firms, the right to vote by proxy in the election of directors was guaranteed in the charter. Many of these firms probably permitted proxy voting in their bylaws, however.[40]

The votes to which the shareholders were entitled were usually also specified in the charters. For 62% of the firms, each share was entitled to one vote, irrespective of the number of shares held.[41] For 32% of the firms, the voting rights of the shares were a

[40]New York's courts later held that the right to vote by proxy could only be granted in a charter (*Philips v. Wickham,* 1 Paige 590 New York (1829)). Prior to this decision in 1829, the rights of shareholders with respect to proxy voting, when it was granted by a firm's bylaws rather than its charter, were uncertain. Dodd (1954), for example, mentions that the Connecticut courts held in 1812 that bylaws that permitted proxy voting were valid.

[41]This is far higher than the 35% of one-vote-per share firms in Dulavy's (2004) sample, which includes several different states. Two comments are in order. First, the sample under analysis here consists of *operating corporations,* rather than all charters granted, and if corporations with severely curtailed voting

function of the number of shares held: there was usually one vote per share up to some amount of shares, then fewer than one vote per share beyond that point. Among these firms with "graduated" voting rights per share, 34% of them imposed a maximum number of votes to which any shareholder could be entitled. Finally, for 6.5% of the firms, the votes of shares were not specified at all, or, in one case, one vote per shareholder was imposed. With no guarantee of voting rights for the shares in the charter, some corporations may have specified some rights in their bylaws, but the common-law default was one vote per person. Although New Jersey's courts later held that bylaws could not override the common law rule, New York's courts do not seem to have taken up the issue, and the voting rights of shareholders in practice were probably regarded as somewhat uncertain.[42] The intentions behind these provisions, and their consequences, will be investigated below.

The charters sometimes contained other provisions relating to the directors of the firm. In an attempt to align the interests of the directors with those of the shareholders, the directors were nearly always (93% of the time) required to own stock in the firm, although for only 17 (6.5%) of the firms was some minimum number of shares specified, and for those firms, the number was, on average, only 25 shares. More rarely (8.5% of the time), the charters included a specific local residency requirement for some or all of the directors, and for 3 of the firms (1.1%), an occupational requirement for some of the directors was added.[43] Finally, some charters required boards to perform specific actions each year. About 23% of the firms' boards were required to pay all profits out as dividends, leaving no discretion over retaining earnings.[44] And finally, 40% of the charters required the management of the firm to make accounting statements available, either at the shareholders' annual meeting, or in a filing to the comptroller, and 1.5% required that the firm's books be open to inspection.

rights had difficulties raising sufficient capital to commence operations, or were shut down with greater frequency, this could explain part of the difference. Second, the industrial composition of many of the states included in Dunlavy's sample—especially the southern states—was likely quite different from that of New York, and, as Dodd (1954) has argued, voting rights granted varied in many states by industry. See also table 6 below.

[42] The New Jersey case, *Taylor v. Griswold*, 14 N.J.L. 222 (Sup. Ct. 1834) also held that bylaws could not supersede the common-law default of no right to vote by proxy.

[43] These were all banks intended to provide credit to particular sectors of the economy. For example, the charter of the Mechanics Bank required that four of its seven directors "actually follow a mechanical profession." *New York Laws,* 1810, ch 87.

[44] For another 32% of the firms, their charter stated that it "shall be the duty" of the directors to pay dividends, but the directors are given total discretion over the amount.

Table 6:
Governance Provisions, Industry Averages

	Annual Director Elect'ns (%)	% Proxy Vote Grntd	Voting Rights: % 1 Share = 1 Vote	Voting Rights: % Grad. Votes	Board Size	% w/ Mand. Dividend	Acct'g Stmts: Annual Report	Acct'g Stmts: Open Books
Banks	100	100	59	30	13	0	45	0
Bridges	100	13	45	45	5	10	25	3
Insurance Co's	100	100	96	2	23	0	38	0
Mfg Co's	37	98	93	0	5	0	6	5
Turnpikes	100	70	4	91	9	96	96	0
All Others	100	65	83	11	9	6	5	0

The governance provisions of these early firms, and the intentions behind them can be better understood by comparing those of different industries, as in table 6. As the table makes clear, there was often significant variation across industries, especially in the voting rights of shareholders. Manufacturing and insurance corporations, for example, almost always granted their investors one vote per share.[45] But to a some extent, the banks, and to a much greater extent, the turnpikes and bridge companies, limited the voting rights of large shareholders. One might imagine that the legislature regarded the control of these enterprises, and in particular the potential for large shareholders to abuse that control, as a matter of public concern: the route of a turnpike road, the placement of a bridge, and of course the loans or notes issued by a bank, all might have created opportunities for private gain by a dominant shareholder at the expense of small investors, or the community, in a way that was far less likely to be true of manufacturing firms.

Turning to the other charter provisions, mandatory dividend payments seem to have been imposed only on corporations where managerial discretion over earnings had no value, such as turnpikes and bridges. And mandatory accounting statements seem only to have been the norm for turnpike companies, because the 1807 regulatory act required them. Surprisingly, for firms in most other industries, these were included in the charters of less than half of the firms. Possibly because the shareholders were assumed to all be insiders anyway, requirements of accounting statements of any kind were extremely rare in manufacturing

[45] This is different from the case of Massachusetts' insurance firms, which usually had graduated voting rights for shares; see Dodd (1954, p. 225).

charters.

5 Ownership and Governance: Empirical Analysis

Which governance provisions helped facilitate the separation of ownership and control? Did governance matter at all? In order to address these questions, this section presents an empirical investigation of the relationship between firm governance and ownership structure. Many characteristics of the firms, in addition to their governance characteristics, likley influenced their ownership structures. As we have seen above, a firm's industry influenced its ownership structure, and its size, as measured by its capital, certainly also would have been important. But there are other firm characteristics that should be accounted for as well.

In particular, the number of years a firm had existed would likely influence its ownership. Over time, one might expect that the founders of the firm, and other early investors, would gradually sell shares to new investors.[46] But this rate of change in a firm's ownership over time—if any—would likely depend on its industry: banks and insurance company shares, for example, were often traded in an exchange, facilitating significant changes in ownership, whereas the shares of closely-held manufacturing firms probably changed hands much more rarely.

Another potentially important determinant both of the ownership structure of the firms, and of their governance provisions, was the year in which they received their charter. As the state legislature's approach to chartering firms probably varied over time, and as capital market conditions varied as well, the year of inception of a firm may have influenced its ownership structure independently of its age. (It should be noted that in the dataset, age is measured as the number of years between a firm's charter, and the year in which its filing with the comptroller used to record the data was submitted—the point at which its ownership structure is observed.—which varied from 1823 to 1829.)

With these issues in mind, the relationship between charter provisions and ownership structure will be investigated with the following empirical specification: for firm i in industry

[46] Field and Hanka (2001), for example, document this phenomenon among the managers of modern firms that go public.

j, which received its charter in year t, I estimate the determinants of ownership measure s_{ijt} as

$$s_{ijt} = \mathbf{x}_{ijt}\beta + \sum_j \alpha_j \text{industry}_j + \gamma \text{age}_{ijt} + \sum_j \pi_j \text{industry}_j \times \text{age}_{ijt} + \delta_t + u_{ijt},$$

where $\mathbf{x}_{ijt}$ is a vector of governance provisions, and other firm characteristics; industry_j is a series of indicator variable for each of twelve industries in the dataset; and age_{ijt} is the age of the firm, again measured as the number of years between its charter and the year in which its ownership structure was observed. The interaction terms $\text{industry}_j \times \text{age}_{ijt}$ allow the relationship between the firms' age and ownership to depend on their industries.

The results for the ownership structures of the firms are presented in table 7, which includes results for regressions with three different measures of ownership concentration as dependent variables. The results indicate that many, but certainly not all, of the governance provisions of the charters seem to matter for the firms' ownership. For example, in each regression, one of the provisions for accounting requirements seems to have a large effect. Introducing the requirement of an annual report, for example, increases the number of shareholders by an amount equivalent to a third of a standard deviation of that variable, and increases the the minimum number of shareholders required for majority control by more than half of a standard deviation (compared to the excluded category of no accounting requirements in the charter). The requirement that the firms' books remain open to inspection, an accounting requirement chosen most frequently in manufacturing firms, tended to decrease the size of the holdings of the largest shareholder. Larger boards, which were probably regarded as friendly to small investors, because they empowered a relatively larger number of investors, tended also to be strongly associated with larger numbers of shareholders, and larger numbers required for majorities.

The voting rights of shareholders also had important effects on firms' ownership structures. Charters that provided for one vote per share (compared to the excluded category of no voting rights specified in the charter) increased the holdings of the largest shareholder by an amount equivalent to half of a standard deviation of that variable, although they had no real effect on the number of shareholders, or the number for a majority. But somewhat

Table 7:
Regressions: Ownership Structure

	Dependent Variable:		
	Minimum Number for Majority	Amt. of Largest Shareholder	Total Number of Shareholders
	(1)	(2)	(3)
Proxy vote guaranteed	-1.041	0.134	-23.295
	(3.056)	(0.123)	(25.816)
Voting rights: one share-one vote	3.498	0.117***	-3.187
	(2.699)	(0.032)	(5.631)
Voting rights: graduated	-6.552**	0.123	-34.129
	(2.617)	(0.076)	(22.476)
Mandatory dividend	5.975	0.118	19.320
	(5.646)	(0.085)	(29.080)
Accounting: mandatory annual report	8.180***	-0.047	25.815**
	(2.363)	(0.079)	(10.411)
Accounting: open books	1.316	-0.297**	13.980
	(1.079)	(0.110)	(19.086)
Number on board	0.216***	-0.003	0.937***
	(0.034)	(0.002)	(0.264)
Par value / share	-0.001	-0.000***	-0.011***
	(0.001)	(0.000)	(0.002)
log(capital)	1.603	-0.028	20.721
	(1.536)	(0.021)	(19.394)
Firm age	1.012	-0.015	10.990
	(0.709)	(0.031)	(8.283)
Industry Effects	Y	Y	Y
Industry-Age Interactions	Y	Y	Y
Charter Year Effects	Y	Y	Y
R^2	0.631	0.553	0.784
Observations	116	116	116

Note: Robust standard errors, adjusted for clustering on industries, in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively. In the case of voting rights, the excluded category is no specification of voting rights for shares in the charter, or one vote per person. In the case of accounting, the excluded category is no mention of accounting statements in the charter. A constant term is also included.

puzzlingly, firms that adopted graduated voting rights had somewhat more concentrated ownership, as measured by the minimum number of shareholders required for a majority.

The results also indicate that the imposition of a mandatory dividend of all of the firm's profits had no effect on its ownership structure, which was probably a consequence of the fact that this measure was imposed only in industries such as turnpikes or bridges, where the charter requirement probably just codified the usual practice. And as expected, lower share values tended to be friendly to small investors and facilitate less concentration of shareholdings. Although the relationship is imprecisely estimated, an increase in the size of a firm, as measured by its capital stock, tends to result in more dispersed shareholdings.

The results for regressions estimating the relationship between governance provisions and measures of the geographical dispersion of ownership are presented in table 8. The specification used to estimate these relationships was essentially the same, only county fixed effects were added to account for the likely differences in the ability of corporations across the different counties to attract investments from large numbers of owners. In general, the estimates imply that governance provisions mattered far less for these measures of ownership diffusion. The most surprising finding is that the guarantee of the right to vote by proxy did not matter at all. This suggests that shareholders were usually granted that right in the firms' bylaws, even if it was not guaranteed in the charter. Increases in the size of the board seemed to increase the number of counties in which a firm's equity was held, although this may simply have been due to the requirement, sometimes imposed in large corporations, that a certain number of directors live in different counties. The one provision that does seem to matter is the requirement of open accounting records, which increases geographical dispersion in all three measures. It should be noted, however, that this was imposed mainly in manufacturing firms, and the more commonly used accounting requirement, annual reports to the shareholders, had no effect.

Although these results suggest a relationship, sometimes quite strong, between governance and ownership, they may not have a causal interpretation. The provisions of the firms' charters were chosen, at least in part, by their incorporators. There are at least two alternative interpretations of the results based on the selection effects that might result from this choice. The first is that entrepreneurs of a particular type might be more

Table 8:
Regressions: Geographic Distribution of Ownership

	Dependent Variable:		
	% Owned in County of Corp.	Number of Counties holding shares	% Owned out of State
	(1)	(2)	(3)
Proxy vote guaranteed	0.126	0.230	-0.051
	(0.094)	(1.508)	(0.051)
Voting rights: one share-one vote	0.111	0.647	-0.076
	(0.104)	(1.295)	(0.058)
Voting rights: graduated	0.077	0.824	-0.084
	(0.123)	(0.606)	(0.064)
Mandatory dividend	0.152	-0.749	-0.021
	(0.118)	(1.162)	(0.046)
Accounting: mandatory annual report	0.004	0.499	0.004
	(0.070)	(1.118)	(0.045)
Accounting: open books	-0.305**	1.389**	0.225**
	(0.121)	(0.607)	(0.085)
Number on board	0.000	0.050***	-0.000
	(0.001)	(0.006)	(0.000)
Par value / share	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)
log(capital)	-0.105***	1.330***	0.028
	(0.018)	(0.263)	(0.017)
Firm age	0.017	-0.653***	0.009
	(0.035)	(0.103)	(0.006)
Industry Effects	Y	Y	Y
Industry-Age Interactions	Y	Y	Y
Charter Year Effects	Y	Y	Y
County Effects	Y	Y	Y
R^2	0.607	0.685	0.522
Observations	233	233	233

Note: Robust standard errors, adjusted for clustering on industries, in parentheses. ***, **, and * denote significance at 1%, 5%, and 10%, respectively. In the case of voting rights, the excluded category is no specification of voting rights for shares in the charter, or one vote per person. In the case of accounting, the excluded category is no mention of accounting statements in the charter. A constant term is also included.

likely to select a particular set of governance features. With some governance provisions, such as voting rights, the optimal choice for a 'bad' entrepreneur wishing to retain control is not obvious, as it would depend on his ownership stake: if he holds a large share, he would want the maximum voting rights for those shares, but if he wishes to retain control with only a minority stake, he may want to limit the power of large shareholders. But certainly the type of entrepreneur who would be willing to include a requirement of annual accounting statements in his firm's charter might differ from the type who would elect not to. If the variation in charter provisions was due to variation in entrepreneurs' types, then investors' decisions, and the ownership structures they produced, might have responded to the incorporators' types, rather than the charters themselves.

A second possible mechanism by which selection could be driving the results is that ownership structure may directly influence governance provisions, if it is determined before the charter is granted. Although this was unlikely to be the case with large firms, or any firm that intended to use a charter to attract investors, if ownership structure were determined before the charter was written, the owners would then have selected the charter provisions that best suited their needs—ownership would cause governance. In this case the observed association would still be interesting, but the direction of causation would be the opposite of what was offered above. Of course, to the extent that the content of corporate charters was imposed by by the legislature, and not chosen by the incorporators, the problem of selection is less likely to be a concern. However, it is extremely difficult to obtain much information regarding the negotiations over the contents of charters.[47]

In a few cases, though, changes in legislation or legislative behavior with respect to the governance provisions of corporate charters present sources of exogenous variation in governance provisions. One clear example is New York's 1807 turnpike incorporations act, which standardized the governance provisions of all turnpike company charters. Further research will attempt to exploit such changes in legislation.

[47]The difficulty of obtaining information with respect to the individuals actually responsible for the content of charters is mentioned by Dodd (1954, p. 199).

6 Discussion and Conclusion

The business corporation found widespread adoption in the first three decades of the nineteenth century. This paper has used data from New York's capital tax of the 1820s to document the ownership and governance of these early firms. In contrast to some earlier research, the results indicate that there was extensive separation of ownership and control in the early 1820s.

The governance of New York's corporations during the period varied significantly both between and within industries. The voting rights of shareholders in the election of directors, for example, ranged from one vote per person to one vote per share, and the financial reporting requirements of the directors ranged from none at all, to annual statements that were to be given to the shareholders and the state government. The results of this paper have shown that these governance institutions mattered: stronger protections for investors, for example in the form of some kind of financial reporting requirement, were associated with more diffuse ownership, and to a lesser extent, with broader geographical distribution of owners. Although a clear causal relationship between governance and ownership is difficult to establish conclusively, some quasi-experimental evidence based on changes in legislative behavior and institutions after New York's constitutional convention of 1821, provided a strong indication of causation.

One conclusion that can be drawn from the results presented here is that the early evolution of the corporation was not a single process, but several processes occurring in parallel. Banks and insurance companies, for example, from as early as the late eighteenth century attracted large amounts of capital from a broad and diffuse base of investors, and governance arrangements configured to facilitate this arrangement. Manufacturing companies, on the other hand, were quite closely held, with a relatively small number of local investors making large investments. One of the reasons for this difference is that, whereas banks, and to a lesser extent insurance companies, were often successful and durable enterprises, manufacturing firms were not: only 26% of the charters granted in New York between 1790 and 1826 in manufacturing resulted in an operating company in 1827. The governance of these firms was focussed on survival, not on protecting small shareholders.

Perhaps the development of manufacturing firms with governance institutions more friendly to diffuse ownership bases and complete separation of ownership from control awaited the emergence of manufacturing technologies (or other developments such as market integration) which would improve the prospects of firms' success, and make the equity of these firms more attractive to outsiders.

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