NBER WORKING PAPER SERIES

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Working Paper 17147
http://www.nber.org/papers/w17147

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
June 2011

We are grateful to Lee Alston, Naomi Lamoreaux, John Majewski, Robert Wright, David Weiman and participants at the Economic History seminar at Harvard University, the New York City Economic History session at the 2011 Eastern Economic Association conference, and the Cliometrics Society conference for helpful comments and suggestions. All remaining errors are our own. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

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NBER Working Paper No. 17147
June 2011
JEL No. K22,N21,N41

ABSTRACT

This paper analyzes the early history of corporate shareholding, and its relationship with political change. In the late eighteenth century, corporations were extremely rare and were dominated by elites, but in the early nineteenth century, after American politics became significantly more democratic, corporations proliferated rapidly. Using newly collected data, this paper compares the wealth and status of New York City households who owned corporate stock to the general population there both in 1791, when there were only two corporations in the state, and in 1826, when there were hundreds. The results indicate that although corporate stock was held principally by the city's elite merchants in both periods, share ownership became more widespread over time among less affluent households. In particular, the corporations created in the 1820s were owned and managed by investors who were less wealthy than the stockholders of corporations created in earlier, less democratic periods in the state's history.

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1. Introduction

Over the course of the nineteenth century, the rapid growth and proliferation of business corporations transformed the organization of the American economy. The corporation became a familiar part or economic life, and the financial assets issued by these enterprises became popular investments among ordinary households. The very early history of the American corporation, however, was quite different. In the years following the ratification of the Constitution, business corporations were extremely rare, and their ownership was likely dominated by households who were anything but ordinary.[1] The first wave of incorporations in this era, which included the Bank of North America, the Bank of the United States, the Bank of New York, and the Society for the Establishment of Useful Manufactures, created businesses that were larger than any the country had ever known. Critics expressed fears of the power and influence of the new corporations, and argued that they undermined popular democracy and created an 'aristocracy' of wealthy stockholders endowed with exclusive legal privileges. The Federalist legislators who granted charters to these enterprises were accused of what John Wallis has termed "systematic corruption"—the abuse of political power to manipulate the structure of the economy. The political struggles over the creation of these institutions contributed in no small measure to the factional divisions that led to the emergence of the Republican Party.[2]

Yet over the first decades of the nineteenth century, the American state governments, under the control of those same Republicans, created more business corporations than the world had ever known. As the economy grew, and experienced what some historians have termed the "market revolution," the corporation was quickly adapted into new industries to capitalize on the abundant economic opportunities that became available.[3] With the vast expansion of markets, the

[1] Davis (1917: II, Appendix A) documents the seven corporations created in the colonial era.
[2] Wallis (2006); North, Wallis and Weignast (2009). The debates surrounding these enterprises are discussed in Davis (1917 II:303-309) and Bodenhorn (2011a).
[3] A synthesis of the literature on the market revolution is presented in Sellers (1991) and in Larson (2010). It is important to note that this term should not be interpreted as indicating that the economy previously

earlier dominance of a relatively small number of elite merchants and institutions was diminished. Hammond (1957: 145) puts it well: "business was becoming democratic. It was no longer a select and innumerous aristocracy—business opportunities were falling open to everyone." Likewise corporations were no longer innumerous, and many new entrants contested the markets formerly dominated by the established firms, or entered new ones.

Although state legislatures facilitated enormous numbers of incorporations, petitions for charters remained contentious, and the familiar tropes of eighteenth-century anti-corporate rhetoric found continued use. Much of this rhetoric was directed at the owners of these institutions. Bank stockholders were called "Englishmen and Foreigners," "Federalists and tories," and a "Gentry," drawn from the "unproductive part of society" or the "wealthy and aristocratic class," with the power to "corrupt and subdue republican notions."[4] To a lesser extent similar arguments were made about all corporations, which were likened to "aristocracies" and "monopolies," often controlled by "parcels of speculators."[5] Defenders of corporations argued that were owned by huge numbers of investors, including ordinary people and "widows and orphans," and that stockholding was open to anyone with the resources to purchase a share.[6] Some even argued that access to the corporate form could enable those of "small means" to "come into fair and safe competition with the skillful and wealthy."[7]

Did corporations remain dominated by elites, or were those of the "middle order of citizens" able to incorporate their enterprises, or at least purchase shares, in the era of Republican governments? As politics became more democratic, did corporate ownership become more democratic as well? The answers to these questions are central to our understanding of the

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lacked a market orientation. For example, the very early market orientation among agrarian households in Massachusetts is documented in Rothenberg (1992).

[4] *Albany Argus*, 26 March 1813; Hammond (1957: 158); New York *Republican Watch Tower*, 12 December 1806; New York *Republican Watch Tower*, 3 September 1805; Governor Daniel D. Tompkins, Annual Message of 1812, in *New York Commercial Advertiser*, 31 January 1812.

[5] Philadelphia *Aurora*, 11 January 1819; Assemblyman J. R. Van Rensselaer, objecting to the bill for incorporating the Columbia Manufacturing Company, in "Legislature of New York, House of Assembly, 17 Feb," New York *American Citizen*, 28 February 1809; New York *Columbian*, 29 January 1813.

[6] See the discussion in Hartz (1968: 74-6).

[7] David Henshaw, quoted in Maier (1993: 75). See also Davis (1917, II: 305).

development of American capital markets and businesses organizations. Moreover, historians have long appreciated the importance of anti-corporate rhetoric in American politics in the nineteenth century, but it is difficult to evaluate or interpret these sentiments without a clear understanding of who actually created and owned corporations at the time. Although an enormous literature has developed around these questions, very little evidence is available on the extent of corporate ownership, or the wealth and status of stockholders, in the early nineteenth century.

Using newly collected data from New York's corporations in 1791 and in 1826, this paper analyzes the wealth and status of early stockholders in New York City. Stockholders lists of both existing corporations in the state in 1791, and nearly half of existing corporations in 1826, were transcribed and matched to city directories, tax assessment lists, and the census. In addition, random samples of the population were taken from city directories in both periods, and also matched to tax lists and the census, in order to compare the stockholders to the general population. The paper uses these data to investigate the diffusion of shareholding within New York City, both socially and geographically, and to analyze how the ownership of corporations evolved over time. Among the many corporations in existence in 1826 there was considerable variation in the average wealth, status, and neighborhood locations of their shareholders, and we investigate econometrically the corporate characteristics that were correlated with these different ownership characteristics. Although New York's rapid growth in both population and large financial institutions may have been atypical of other cities, its central role in the development of the economy and capital markets of the United States makes it an important setting in which to study corporations and stockholding.

The results of the analysis indicate that in 1791, only 6% of New York City's households owned corporate stock, but in 1826, at least 11% did, and in some parts of the city the rate was as high as 35%. Although stock was held principally by the city's elite merchants in both 1791 and 1826, share ownership became more widespread over time among less affluent households. In particular, the corporations created in the 1820s were owned by investors who were less wealthy than the stockholders of corporations created in earlier, less democratic periods in the state's history. The main result of the paper is that democratization itself paid dividends, as a new generation of businessmen gained access to corporate charters and sold shares to increasingly 'ordinary' households. In a clear reflection of the changes in the politics of the city and state, the wealthiest stockholders in 1791 were public officials—the very men who controlled access to the corporate form—but in 1826 public officials were totally unimportant as investors in the state's corporations, and most of the prominent figures in state politics and government were not stockholders at all.

The results of this paper contribute to several areas of research. A substantial literature on the financial history of the United States has asserted that corporate stock was quite widely held throughout Wall Street's history. For example, Werner and Smith (1991) argue that "the mainstays of the early American securities market were the more numerous men of moderate means: tradespeople, merchants, and farmers."[8] There is little evidence available on this topic, however, and although this view is accepted quite generally, there are dissenters. Pessen's (1973) study of wealth and inequality argued that "the bulk of [New York's] population probably owned nothing or a miniscule portion of [incorporated] capital."[9] Miller (1962) argues that ordinary households in early nineteenth-century New York preferred the state's canal loans, whereas only wealthier households invested in bank stock (p. 87-88). Other histories point to later events, such as Jay Cooke's efforts to retail treasury bonds during the Civil War, as exposing ordinary households to securities for the first time (see for example, Geisst, 2004: 55).

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[8] p. 62. Likewise Davis (1917, II: 298) argues that a "considerable body of small savers" invested in early corporations, and Angell and Ames (1832: 35) claimed of Boston that "there is scarcely an individual of respectable character" who is not a stockholder or member in a private corporation.

[9] p. 35. Pessen qualifies this conclusion with the claim that "It is doubtless impossible to track down the individual owners of corporate wealth. Records, inadequate to begin with, have been lost" (p. 34).

In addition, several studies have used the records of corporations in specific industries to analyze the wealth and status of their shareholders or directors. Wright (1999; 2002) analyzed the stockholder lists of banks from the Mid-Atlantic states and from Maine, and Majewski (2006) analyzed the lists of subscribers to Pennsylvania bank stock. Bodenhorn (2011b) analysed a large sample of bank stockholder lists from multiple states. Each of these studies found the shares to be quite widely held. Lamoreaux and Glaisek's (1991) study of Rhode Island banks in the Jacksonian era found that the directors of newer banks there were less wealthy than their counterparts within long-established banks. Davis (1958) studied the stockholder lists of several prominent New England textile mills, and found a 'vertical' pattern of ownership in which textile merchants were the most significant owners. Majewski (1996) compared the ownership of transportation companies in Pennsylvania and Virginia, and documented the importance of urban capitalists in financing Pennsylvania's railroads. Finally, Carlos and Neal (2006) document the distribution of shares of the Bank of England in the 1720s, which serves as an interesting and valuable comparison case.

This paper builds on the approach of those studies in several ways. First, it compares the stockholders of New York's corporations to random samples of the population, in order to carefully assess how atypical stockholders were. Second, it analyzes corporate shareholding both in the earliest phase of the development of the business corporation, in 1791, and then 35 years later, in 1826, when there were hundreds of corporations in the state, in order to analyze the evolution of stockholding over time. Finally, the 1826 sample includes a large number of corporations in a variety of industries, and thus allows for unparalleled investigation across many economic sectors. Moreover, those 1826 corporations were created over a long time period that spans enormous political and economic changes. As a result, they varied substantially in their size, charter provisions, and locations, and the effects of these differences on their ownership can be investigated.

2. New York's Corporations in 1791

In 1791, aristocratic landowners and merchants dominated New York City and State politics. Members of the families that owned the manorial estates along the Hudson had held nearly all political offices in the colony of New York, and continued to exert overwhelming influence in the state's government in the early national period.[10] The state's conservative 1777 constitution was designed to maintain their position: it imposed significant property qualifications for voting; created a "Council of Appointment" that selected many important officials such as the Mayor of New York City; and created a "Council of Revision" within the state government that checked the power of the elected legislature.[11] New York's elite families also benefited from cultural norms that held that ordinary people should show respect and deference toward their betters, not just in social interactions but also in politics.[12]

The social status and authority of New York's aristocratic officeholders entitled them to pursue private gain while in office. Their interests were the state's interests, and if they occupied positions that enabled them to profit personally from their political office, it was not a source of serious concern, for they were assumed to be "responsible and wise."[13] For example, New York City's (appointed) Mayor was not paid a salary, but was instead permitted to personally collect most of the licenses and fees paid to the city, an extremely lucrative source of income.[14] Other political figures undertook major business investments while in office, and even received the support of the state in their efforts. New York's Chancellor, Robert R Livingston, was granted a twenty year monopoly on the manufacture and operation of steamboats in New York in 1798, a

[10] Kim (1978) presents the history of New York's manors; Mark (1940) documents patterns of officeholdings among the major landowning families in the colonial era. Jaher (1982) presents an analysis of the continued influence of these families in the state's politics. As Engerman and Sokoloff (2002:14) note, the system of large manorial farms ultimately failed, but this was not until the mid-nineteenth century.
[11] Gunn (1988) summarizes the powers of these institutions.
[12] On the culture of deference towards elites, see Bailyn (1967) and Fischer (1965). Fox (1965) and Bruegel (2002) illustrate the extent of aristocratic dominance in eighteenth century New York politics.
[13] Bailyn (1967: 303).
[14] For the five years Mayor James Duane held office (1784-1789), his annual income was determined to have been approximately £800 ($2,000), although of course no formal accounts were kept. During those years, Duane was also a member of the New York Senate. Pomerantz (1938: 39).

year in which he also ran for Governor of the state.[15] In the 1790s, partisan divisions among New York's elites became quite pronounced and political factions with different visions of the appropriate role of government emerged. But each of these factions was led, at least initially, by members of New York's traditional elite.

By 1791, this political system had produced only two business corporations, both located within New York City: The Bank of New York, and the New York Society for the Establishment of Manufactures ("New York Manufacturing Society").[16] The two enterprises were typical of early American business corporations generally, in that they both served quasi-public purposes, and were typical of other corporations in their industries, in that the bank was successful and the manufacturing company was not.[17]

The Bank of New York opened as an unincorporated company in April 1784, just a few months after the British ended their occupation of the city, and was immediately profitable.[18] The bank was founded by Federalist merchants and closely associated with Alexander Hamilton, who drafted its charter. Strong demand for its services from within New York's merchant community, coupled with the fact that it faced little competition, contributed to its immediate profitability. But accusations that the bank favored Federalist borrowers and interfered in elections on behalf of Federalist candidates stirred virulent opposition to the bank's efforts to obtain a charter. As one critic of the bank wrote,

> The present company which compose that body, are a combination of wealthy men, odious to the people, and formidable to the State…it is an institution formed for private emolument, injurious to the public welfare…and derogatory to the dignity of government.[19]

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[15] The monopoly is granted in *Laws of New York*, 27 March 1798, Ch. 55. The U.S. Supreme Court later held that this monopoly interfered in interstate commerce and was unconstitutional in its 1824 *Gibbons v. Ogden* decision.
[16] Other unincorporated but corporate-like institutions existed in the city; see the Data Appendix.
[17] Davis (1917) presents a comprehensive history of 18th century American corporations.
[18] The founders of the bank sought a charter in 1784, but were thwarted by supporters of a rival bank. See Davis (1917). Nevins (1934) documents the early profitability of the bank.
[19] "Censor," in *New York Packet*, 21 January 1790.

At the time when the bank finally received its charter, in 1791, it had $318,250 in paid-in capital, divided into 636.5 shares of $500 each, a very high sum that was typical of the earliest banks. (Median assessed wealth in New York City at the time was $570). Its charter granted the bank the right to expand its capital stock to $900,000, and subsequent revisions increased it to more than $1 million. Typical of the earliest American banks it played a semi-official role in public finance in the state, and also typical of the earliest banks it enjoyed great longevity, and in fact continues to exist today.

The New York Manufacturing Society, chartered in 1790, was one of the earliest manufacturing corporations in the United States. Like many early manufacturing corporations, it was founded with the dual purpose of promoting manufacturing industries, and actually engaging in manufacturing. Also typical of early manufacturing corporations, it received financial support from the state government, which subscribed to 100 of its $25 shares, whose low par value was intended to make the shares affordable to artisans. The Manufacturing Society built a large brick factory on Vesey Street in New York's West Ward (see figure 1 below), and produced cotton textiles using spinning jennies.[20] Although the firm did manage to produce cotton textiles for several years, at one point having 150 employees and more than $11,000 in total assets, it never achieved profitability and was shut down by 1793.[21] Its unsuccessful struggle to achieve profitability was quite representative of early manufacturing corporations.

Who owned these firms? The stockholder lists for each were transcribed, and the New York City stockholders were matched to the Federal Census of 1790, the city directory for 1791, and the city's 1789 tax assessment list (additional details on sources and data are presented in the

[20] The Society hired Samuel Slater when he arrived in New York from England, and hoped that Slater would help them improve their operations. But Slater found their equipment "not worth using" and also found the water power sources in the area inadequate and so moved to Rhode Island to work with Almy & Brown. White (1836: 72). With Almy & Brown, Slater of course established the first successful water-powered textile mill in the United States.

[21] The company was required in its charter to submit financial statements to the New York State Treasurer, and a balance sheet from 1791 survives listing £4,546 in total assets. (Records of the Comptroller's Office, New York State Archives, Albany NY.) The operations of the company and the number of employees are described in Peskin (2003).

Table 1:
New York City Stockholders vs. Population: Wealth and Occupations, 1791

	Occupation		Assessed wealth (means)	
	Population, %	Stockholders, %	Population	Stockholders
Artisan	39	17	735	2,093
Merchant	18	59	2,803	3,505
Professional	2	2	1,388	1,125
Public Official	2	8	1,924	5,828
Retail	11	13	1,288	2,494
Services	23	1	377	--
Other	5	0	659	--
All (mean)			1,287	3,247
All (median)			569	1,875

Note: Mean assessed wealth is the mean value of taxable (real and personal) recorded on assessment lists. Population statistics calculated from a 15% sample, taken from the 1791 directory.

Data Appendix). For purposes of comparison, a 15% sample of household heads was taken from the 1791 New York City directory, and those names were also matched to the census and tax list.

These comparisons are presented in Table 1. The rows of the table present the broad occupational categories into which the directory listings were grouped. Not surprisingly, the occupations of stockholders tended to be quite concentrated within the category with the highest average level of assessed wealth, "merchants"—the elite of the world of commerce. Stockholders were also much less likely than the population as a whole to be artisans, service providers (for example, tavern keepers, hairdressers and cartmen), or fall into the "other" category (mostly maritime), all occupational groups with low average levels of assessed wealth. For all the occupational categories except "professionals," which includes attorneys and doctors, the stockholders were far wealthier than the population average: there were, for example, artisan stockholders, but those artisans were clearly much wealthier than their peers. The average assessed wealth of stockholders was about 2.5 times larger than that of the population.

Slavery was legal and relatively common in New York City in the 1790s.[22] From the census, the number of slaves in each household was recorded, as an independent measure of wealth and status. Stockholders were much more likely to own slaves, with about 66% of stockholding households reporting the presence of at least one slave in their household in the census, compared to about 22% for all households in the city. The strong correlation between slaveholding and stockholding was clearly driven by the fact that both occurred principally at higher levels of wealth, but the connection may have been somewhat deeper. Slaves were an important investment for New York households, and wills commonly specified that slaves would take care of the owner's family (or be rented out and produce an income for the family) if the owner died. To the extent that the shares of New York's earliest corporations also represented an asset that could generate income for future generations, one would expect to see some households attracted to both investments.

A striking feature of the data in table 1 is that the wealthiest stockholders *by far* were the public officials—their average assessed wealth, $5,828, was more than 50% higher than that of merchants. Some of these individuals are worth noting. They include Governor George Clinton (taxed at $2,500; 8 slaves); U.S. Senator Aaron Burr ($7,500; 5 slaves); U.S. Senator Rufus King, who was also a director of the Bank of New York ($1,500; no slaves); Chief Justice of the U.S. Supreme Court John Jay ($8,700; 5 slaves); Mayor Richard Varick ($2,425; 1 slave), former mayor and current U.S. District Court judge James Duane ($8,125, 1 slave), New York State Senator Isaac Roosevelt, who was President of the Bank of New York ($29,050; no slaves); and U.S. Treasury Secretary Alexander Hamilton ($3,000; no slaves).[23] That Burr and Hamilton were both stockholders in the Bank of New York is also worth noting; although the Bank of New York was strongly associated with the Federalist Party, there were prominent Republicans among

[22] For a quantitative analysis of New York City slaveholding, see White (1991). Goldin (1976) analyses urban slavery in the South.
[23] In 1791, New York City was the capital of both the State of New York and of the United States, although within that year, the Federal government moved to Philadelphia, and in 1799 the state capital was moved to Albany.

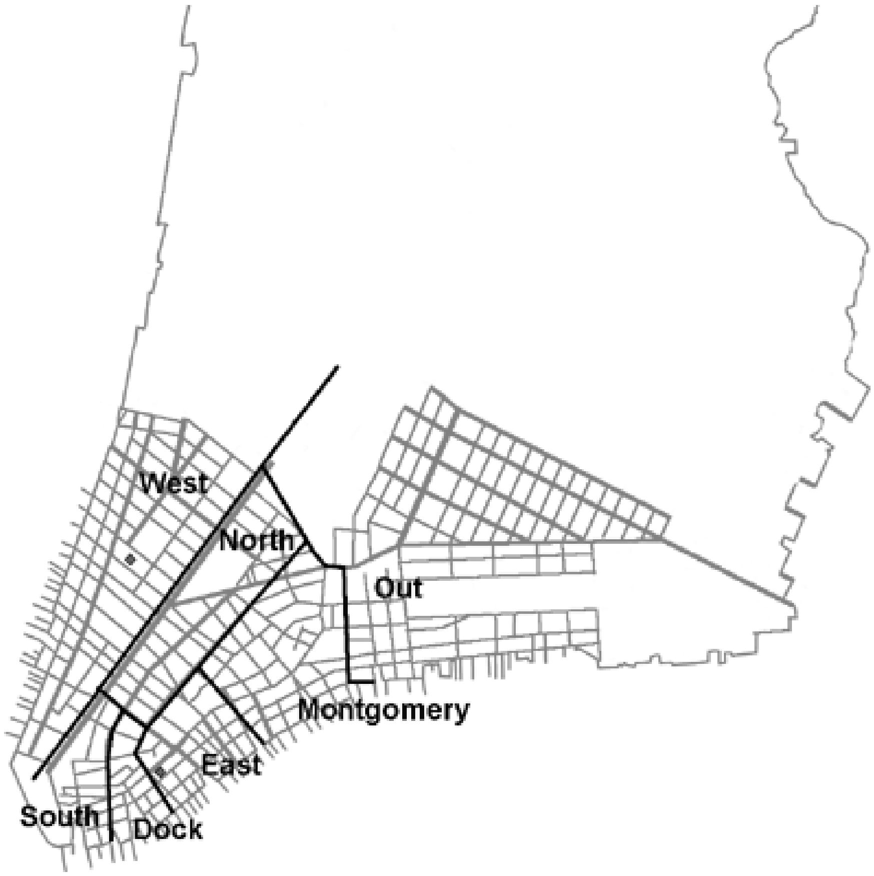

Figure 1: New York City, c. 1791

The boundaries of the city's wards, and the location of the two business corporations, are marked on the Map. In 1791, the city redefined its ward boundaries and gave them new names in the form of numbers; in the figure, the ward boundaries are consistent with those used in the 1790 census. The Manufacturing Society's factory was on Vesey Street in the West Ward, and the Bank of New York was located in Hanover Square in the East Ward. The streets depicted in the map mark the extent of the densely populated area of lower Manhattan.

its shareholders. The New York Manufacturing Society had both Republican and Federalist shareholders as well.

In 1791, New York City was divided into seven wards. Figure 1 depicts the boundaries of the city's wards on map, which also displays the extent of the city's streets in 1791. The locations of the city's two business corporations are also marked on the map. By investigating wealth, occupations and stockholding rates within New York's different wards, further insight into the social context of stock ownership can be obtained.

Table 2:
Stockholding, Wealth, and Occupations by New York City Ward, 1791

Ward	Mean Assessed Wealth ($)	Percent of Directory Entries	Percent of Assessed Wealth	Percent Stockholders (Estimated)	Percent Slave-holding	Occupation, Percent		
						Artisan	Merchant	Retail
East	2,500	9	25	25	39	20	47	17
Montgomery	1,602	28	37	5	18	40	18	11
Dock	1,241	5	6	14	48	27	41	14
South	1,180	6	6	5	17	16	27	9
North	1,005	10	8	5	19	48	8	4
Out	848	17	8	2	17	50	6	11
West	556	24	9	4	13	41	10	11
All	1,286	100	100	6	22	39	18	11

Note: Mean assessed wealth is the mean value of taxable (real and personal) wealth recorded on assessment lists for household heads whose primary residence is listed in each ward, and may include real estate located in other wards. Percent of directory entries indicates the share of total individuals and businesses (usually household heads and partnerships) in each ward. Percent of assessed wealth is the share of taxable wealth of all sampled households. The percent of households that owned stock is estimated by apportioning the stockholders that could not be uniquely identified in the directory into wards at the same rate as the stockholding households listed in the directory; see data appendix for details. Percent slaveholding is calculated from the 1790 Federal census.

These comparisons are presented in Table 2.[24] The highest average levels of wealth were found in New York's East and Montgomery wards, where a relatively large portion of households were headed by merchants, and slaveholding was relatively common. Households in the western and northern part of Manhattan, the Out and West wards, had far lower levels of wealth and were often headed by artisans. Rates of stock ownership can be calculated from these data; overall it was quite low, and reached its maximum in the wealthy East ward, and its minimum in the Out ward, although there were at least a few stockholders in every ward. Overall the rate of households owning stock was 6%.

Taken together, the data in tables 1 and 2 indicate that the city's stockholders were quite atypical of the population. They lived in exclusive neighborhoods; they were quite wealthy, and likely to own slaves; and they were unlikely to be artisans or hold other modest occupations. They were often elite merchants, with ties to the state's aristocratic landowning families. The city was an extraordinarily unequal and economically segregated place, and the individuals who

[24] Using his 100% sample from the 1789 tax list, White (1991:xxvii) finds the wealth share of the top 10% was 55.6%. In our sample of 15% of households, it is 50.8%.

invested in stock were drawn from the very top ranks of the wealth distribution. Given the initially uncertain prospects of these firms, this may have represented an efficient allocation of risks, and was all but inevitable.

But the elites who owned these firms also controlled the government of the state and of the city. A corporation could only be formed by a special act of the state legislature, which meant that these shareholder-politicians could protect their firms from competition and enrich themselves by simply refusing to grant potential competitors a corporate charter. And this is exactly what they did: the next bank to be created in New York, the Bank of the Manhattan Company, was not incorporated until 1799, and was granted a charter only because its Republican founders deceived the legislature about their intentions.[25] But a process of significant economic and political change was well underway by the early nineteenth century, which made broader use of the corporate form inevitable.

3. New York's Corporations in 1826

The 35 years that elapsed after 1791 witnessed a transformation of the economy of New York. Transportation networks expanded and developed, with steamboats traveling the Hudson river and the Erie Canal opening a waterway to the west; the port of New York City emerged as the nation's largest center for trade; successful, large-scale manufacturing enterprises emerged, and began to replace household production of goods such as textiles; financial markets deepened; and increasingly specialized producers and distributors transacted in a market that was becoming far more integrated. The population of New York City grew from 33,131 in 1790 to more than 166,036 in 1825, as it surpassed Philadelphia to become the nation's largest. Economic opportunity abounded in the city, and its population became more prosperous.

[25] The charter for the Manhattan Company authorized the creation of a firm to supply Manhattan with water, but included a clause granting it the power to employ any "surplus capital" in "monied transactions," which its founders immediately exploited to open a bank. *New York Laws*, 1799, ch. 84. Hammond (1957) tells the story well.

Table 3:
Ownership, 1826 Corporations

		Percent
Individual		80.2
Male	94.9	
Female	5.1	
Partnership		9.0
Corporation		6.6
Trust or Estate		3.5
Government		0.4
Non-profit		0.2

Over these years, the state government used the law creatively and aggressively to promote economic development.[26] In particular, this meant granting ever greater numbers of charters to businesses in many industries. In some sectors, particularly banking, incumbent firms successfully limited access to the corporate form, but enormous numbers of charters were granted in other industries.[27] From 1790 to 1825, 812 corporations were created, and in 1826, there were approximately 282 corporations in existence in the state, of which about 73 were located in New York City. Turnpike roads, bridge companies, water companies, gas companies, trading firms, steamboat lines, insurance companies, and many other types of firms were incorporated. In manufacturing, the state even enacted a general incorporation act in 1811, facilitating essentially open access to the corporate form in several manufacturing industries.[28] Over time, access to incorporation expanded significantly, and a broad range of individuals and interests formed new firms.

Shareholder lists for 133 of these 282 corporations were located and transcribed. Table 3 presents summary statistics for the ownership of the 133 corporations in the sample. The corporations were owned overwhelmingly by individuals and partnerships, and it is these owners

[26] This generally true of the states; see Hurst (1956). A detailed study of these efforts in Massachusetts is presented in Handlin and Handlin (1969).
[27] On bank chartering, see Bodenhorn (2006).
[28] Kessler (1940) presents a detailed study of this statute and the rate at which it was utilized.

Table 4: Industry averages, 1826 Corporations

	Total capital ($)	Firm age (yrs)	Par value of shares ($)	Total shareholders	Percent of stock held in NYC	Value of Investment ($)
Bank	911,050	7	56	249	81	3,659
Insurance	352,954	6	49	132	86	2,676
Manufacturing	73,285	9	268	19	47	3,957
Transportation	42,392	16	39	60	22	2,430
Other	199,576	11	99	82	37	901
All	182,059	10	126	74	55	2,569

who will be the focus of the analysis.[29] But a substantial portion of some corporations' shares were owned by trusts or estates, and it is important to note that the wealth and status of the ultimate beneficiaries of those shares cannot be identified, as the stockholder lists normally provided the names of the trustees or executors, rather than the beneficiaries.

The average size and ownership structures of the corporations varied widely across industries. Table 4 presents summary statistics for the industrial categories into which the firms were grouped. The data in the table indicate that banks were substantially larger than firms in other industries. In many respects, though, the manufacturing firms were the most unusual: they had the highest par value for their shares, the lowest number of shareholders by far, and the largest average value of investment per shareholder ('Value of Investment' in the table). The banks and insurance companies both had very large average numbers of shareholders, reflecting their greater size, and reasonably low par values, which likely improved the liquidity of the shares.[30] The shares of nearly all of the banks and insurance companies in the sample were traded on the New York Stock & Exchange Board (NYSE).

For the 133 corporations in the sample, the addresses and occupations of all stockholders residing in New York City who could be found in the city directory were recorded. Their names

[29] Partnerships where none of the individual partners were also shareholders were treated as if they were individuals, with their taxable wealth and industry or occupation recorded in the data. The wealth of partnerships where the partners also owned stock under their own names was added to the individual partners' wealth and eliminated from the sample.

[30] The significance of par values for the liquidity of corporate shares in the nineteenth century is analyzed in Rousseau (2009).

and addresses were then used to obtain measures of their wealth from the city's tax assessment rolls. The assessments list real and personal wealth separately, and exclude corporate wealth, which under the state's 1823-28 tax law was assessed on the corporations themselves, which would then pay the tax on their own real and personal property.[31] Although assessors were sworn to record accurate property values, their assessments likely understated the true values.[32] As with the analysis for 1791, a random sample of households was taken from the 1826 city directory, to serve as a basis of comparison to the stockholders. This sample was equivalent in size to 10% of the population of directory entries.

About 3,000 New York City households owned shares of stock in 1826, a tenfold increase from 1791.[33] Table 5 presents average assessed wealth and occupations of the population and the stockholders of New York City in the same format as the 1791 data in table 1. Interestingly, the occupational structure of the population remained quite similar in 1826, with the only significant changes being a decline in the share engaged in the provision of services, and a small increase in the share of those listed as merchants. In a sense, the population of 1826 was a vastly scaled-up version of the 1791 population. But average wealth grew nearly threefold from 1791, a clear sign of rising prosperity in the city, and the rising property values that accompanied that prosperity.[34] The average taxable wealth of stockholders also grew by the same proportion,

[31] The items included in personal property were enumerated in a subsequent law: government bonds, bank notes, bank deposits, furniture, and loans such as mortgages made to solvent borrowers. *Revised Statutes* (1829), Vol. I ch. III. The exclusion of corporate wealth from tax assessments was made in order to facilitate more effective collection of taxes on corporate stock, since shares in private hands could easily be concealed from assessors. *New York Laws*, 1823, ch. 262.
[32] The tax law of 1823 stipulates that "real and personal property shall be valued by the assessors for the purpose of taxation at the value they would appraise such estate in payment of a bona fide debt due from a solvent debtor." *New York Laws*, 1823, ch. 262. However, contemporary observers and modern scholars both argue that assessments substantially understated true wealth. For example, Hilt and O'Banion's (2009) analysis of New York merchants in the 1850s found assessed values of wealth to be equal to about 36% of estimated net worth as recoded by the R.G. Dun & Company agents. See also Pessen (1973) and the sources cited therein.
[33] It should be noted that this is almost certainly an undercount, since the stockholder lists of many corporations could not be found.
[34] All data are presented in nominal terms. According to the David-Solar-based CPI for this period, the total increase in the price level from 1791 to 1826 was 5.31%.

Table 5:
Stockholders vs. Population: Wealth and Occupations, 1826

	Occupations		Assessed wealth (means)	
	Population, %	Stockholders, %	Population	Stockholders
Artisan	36	14	1,713	4,651
Merchant	26	56	6,491	11,849
Professional	4	11	3,289	7,133
Public Official	1	2	1,807	7,670
Retail	15	13	3,174	6,990
Services	14	3	2,163	6,650
Other	4	2	1,430	4,153
All (mean)			3,532	9,429
All (median)			1,683	5,500

Note: Occupation data is for household heads listed in the directory. Assessed wealth includes both real and personal wealth, but does not include corporate wealth. Population data is calculated from a 10% sample of directory entries.

and the ratio of the stockholders' wealth to the population's wealth remained essentially constant between the two periods, at about 2.5.

Among the stockholders, the occupational distribution was also similar to the 1791 values, with two important exceptions. First, the share of professionals increased substantially. This group included many individuals whose livelihoods depended on corporations either directly (such as bank cashiers) or indirectly (such as attorneys), and the large size of this group potentially indicates a growing effect of corporations on employment patterns in the city. Secondly, public officials were no longer important stockholders.[35] And although the public officials who owned stock were quite wealthy, they were no longer the wealthiest category of stockholders. More importantly, neither the governor, DeWitt Clinton, nor U.S. Senator Martin Van Buren, the most powerful figure in the state's Republican Party, were stockholders in any New York corporation.[36] As in 1791, within every occupational category, the stockholders were

[35] A potential concern is that many 1826 corporations were considerably older than the corporations observed in 1791. This age difference may account for some of the differences in the occupational distributions of shareholders, if, say, share were initially allocated to public officials, who then sold the shares over time. However, the occupations of the shareholders of the newest 1826 corporations—those created in 1824 and 1825—are also quite different from the 1791 stockholders' and in fact only 1.5% are public officials. Data on stockholder wealth by year of incorporation are presented below.
[36] In New York City politics, however, the picture was different. The Mayor in 1826 was William Paulding, Jr., a shareholder in two insurance corporations taxed at $18,500.

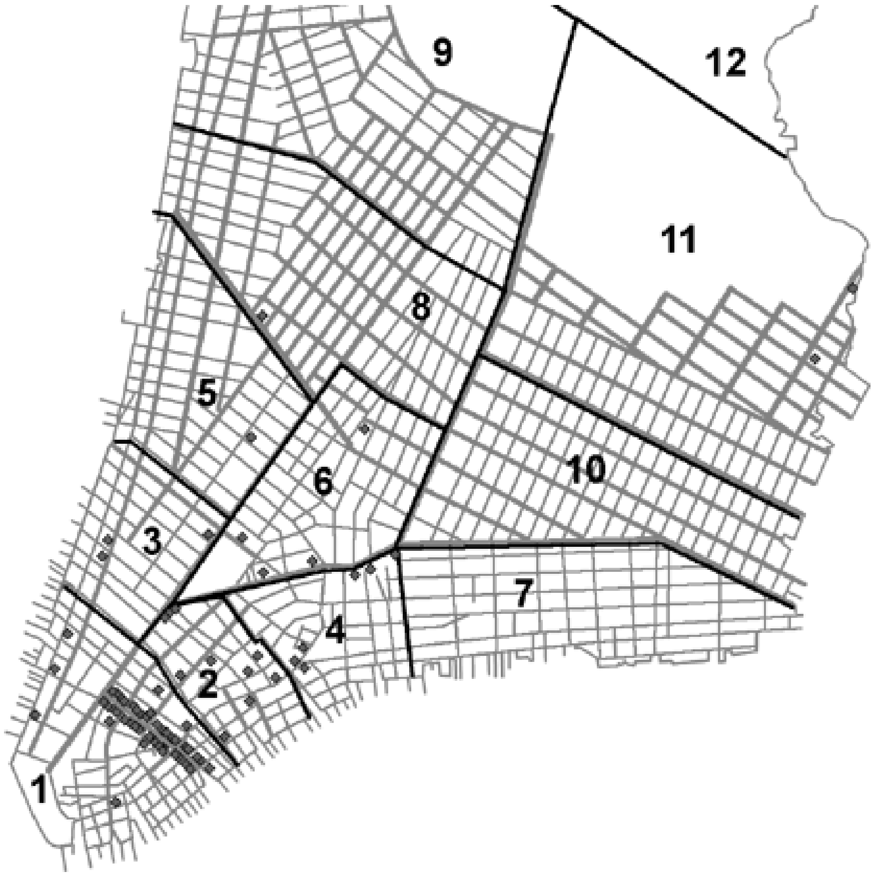

Figure 2: New York City, 1826

The boundaries of the city's wards, and the location of the city's 73 business corporations, are marked on the Map. The streets depicted in the map mark the extent of the inhabited area of lower Manhattan.

wealthier than the general population: artisans and retailers did own stock, but they were the more successful or wealthy members of those groups.

In 1826, we can once again examine the social context of shareholding in greater depth by looking at the geographical distribution of the corporations themselves, and their shareholders. As New York's population grew and shifted uptown over time, the city's wards were reconfigured repeatedly, and by 1826 the ward boundaries had almost no relationship with those of 1790-91. Figure 2 presents a map of the city with the ward boundaries in place in 1826, and the location of each operating business corporation marked. The majority of corporations were located in the First Ward, and nearly all of those were headquartered on Wall Street, which is clearly evident on the map. Many of these Wall Street firms were banks and insurance

Table 6:
Stockholding, Wealth, and Occupations by Ward, 1826

Ward	Mean Assessed Wealth ($)	Percent of Directory Entries	Percent of Assessed Wealth	Percent of Corporate Wealth	Percent Stockholders (Estimated)	Occupation, Percent		
						Artisan	Merchant	Retail
1	8,153	11	37	47	35	19	50	12
2	6,217	10	26	15	17	24	38	19
3	4,397	6	6	8	15	33	26	18
4	3,750	7	10	5	11	28	24	23
5	1,785	9	4	5	10	35	29	13
6	1,510	10	5	4	6	38	21	19
7	2,371	7	3	2	6	43	15	19
8	1,301	14	4	9	4	43	22	12
9	1,331	6	1	2	5	44	12	8
10	854	14	3	2	4	43	19	12
11	1,102	5	1	1	2	49	15	7
All	3,532	100	100	100	11	36	26	15

Note: Mean assessed wealth is the mean value of taxable (real and personal) wealth recorded on assessment lists for household heads whose primary residence is listed in each ward, and may include real estate located in other wards. Percent of directory entries indicates the share of total individuals and businesses (usually household heads and partnerships) in each ward. Percent of assessed wealth is the share of taxable wealth held in each ward. Percent of corporate wealth is the total stock owned by households or businesses located in each ward as a share of total stock owned by all individuals and businesses where an address could be found. The percent of households that owned stock is estimated by apportioning the stockholders who could not be identified uniquely in the directory into wards at the same rate as stockholding households listed in the directory; see data appendix for details.

companies whose shares were traded on the NYSE, but they also included some manufacturing and mining firms. Nonetheless, a substantial minority of New York's corporations were located in the city's upper wards.

Table 6 presents data on wealth, occupations and stockholding by ward. The data indicate that the proportion of households that owned stock had nearly doubled, from about 6% in 1791 to 11%, and in the richest (First) ward the rate was 35%. But the data also indicate that there was greater inequality across wards in 1826, with households in the First Ward having an average level of taxable wealth that was nearly ten-fold higher than that of the poorest ward. Following the rows down the table, and thus moving toward the "mechanic" wards uptown, one sees the proportion of artisans increase, the average level of wealth decrease, and the rate of stock ownership also decreases. But wealth and stockholding were imperfectly correlated, and even in some of the wards where average household wealth was relatively low, the rate of stock ownership was as high as 10%.

Table 7:
Occupations and Taxable Wealth of New York City Stockholders by Industry

	Percent of stock held in:					
	All corps	Banks	Insurance	Mfg and mining	Trans-portation	Other
Artisan	6	6	7	10	1	2
Merchant	68	71	64	69	70	87
Professional	16	9	18	15	22	7
Public Official	2	2	2	2	0	0
Retail	6	11	7	3	3	2
Services	1	0	1	0	0	0
Other	1	1	1	0	1	0
All	100	100	100	100	100	100

Note: Values calculated based on total holdings of all households whose occupation could be identified.

The data in the table also provide an indication of the degree of inequality of the distribution of assessed wealth, and corporate wealth, across wards. The overall Gini coefficient for the distribution of assessed wealth was .65, which was essentially unchanged from its 1791 value of .66. And the First Ward, which accounted for only about 11% of directory entries, held about 37% of assessed wealth. However, a much greater share of corporate stock, 47%, was held there, indicating that the ownership of corporate wealth was even more concentrated than that of taxable wealth.

Did the composition of stockholders vary by industry? Perhaps the shares of companies in specific industries were attractive to particular types of investors. One might imagine, for example, that large publicly traded banks and insurance companies would be attractive to passive investors from middle-income households, whereas shares in manufacturing companies, which were highly illiquid, would have been more attractive to individuals with some knowledge of or connection to the firm, as Davis (1956) has shown of New England's textile companies.

Table 7 presents a breakdown of the occupations of shareholders by industry.[37] The occupational distributions of the stockholders across industries were generally similar, with those

[37] Note that the table presents the *percentages of shares* owned in each industry, rather than the *percentage of shareholders*, as in tables 1 and 5.

of bank and insurance being nearly identical. In manufacturing firms, artisans owned shares at a substantially higher rate than they did in other industries. It is worth noting that the transportation companies, which included turnpike roads, bridges, canals, and steamboat companies, were mostly located outside of New York City, and it was probably wealthy merchants who owned land in the areas where the companies were located who bought shares in those firms—their local shareholders may have had a somewhat different occupational distribution.[38] In any case, the investors in transportation companies and companies grouped into the residual "other" category (which included a water company, a trading company, a gas company, etc.) were highly concentrated in the elite categories of merchants and professionals, and received very little investments from almost any other occupational group.

4. Stockholding and Political and Economic Change

In the 35-year interval between 1791 and 1826, New York's politics changed considerably. Popular participation in politics expanded, and the old aristocracy saw its influence in the state's politics gradually diminish.[39] Progress was made toward the elimination of slavery through a gradual manumission act in 1799, which was then strengthened in 1817.[40] Political "societies" and voluntary organizations emerged, mobilizing political participation and creating the foundations for the Second Party System of the Jacksonian Era.[41] A relatively new species of political figure, the professional politician, emerged. Beliefs in "inherent, irradicable differences among men" which formed the basis of the hierarchical order of society with aristocratic elites at

[38] In general, the breakdowns for the occupations of manufacturing firms' stockholders are consistent with the findings of Davis (1956), and those of the banks are roughly consistent with the findings of Majewski (2006) for Pennsylvania bank stockholders from around 1814, although those banks seemed to attract more numerous small investments from artisans.
[39] The story of this process is told in Fox (1965).
[40] *Laws of New York*, 1817, ch. 137. By the 1817 act, all slaves born before July 4, 1799 were to be free on July 4, 1827, whereas those born after that date were to be free at a certain age, depending on their gender. The Federal Census lists 518 slaves in New York City in 1820 and 17 in 1830.
[41] See McCormick (1966).

the top were rejected.[42] To be sure, many aristocratic landowners and merchants remained important figures in the state's politics, but individuals of more modest levels of wealth demanded much greater influence. And in 1821, this process of democratization culminated in a new constitution that abolished the Councils of Appointment and Revision, and effectively eliminated property qualifications for voting by adult white males.[43]

Did this political transformation expand access to the corporate form, or change the character of the corporations that were created? Certainly the names chosen by incorporators for their enterprises began to change. Whereas early New York charters were granted to the Bank of New York, Merchants Bank (inc. 1805), and New York Insurance (1798), later incorporations included the Mechanics Bank (1810), Farmers Fire Insurance and Loan (1822), Tradesmen's Bank (1823), and Tradesmen's Insurance (1825), a tradition that would ultimately continue with institutions such as the Butcher's and Drover's Bank (1830) and the Leather Manufacturers' Bank (1832). Likewise, petitions and memorials seeking corporate charters claimed that they would operate in the uptown "mechanic" wards of Manhattan—neighborhoods that had attracted few investments from "persons owning large quantities of property"—and argued that the profits from providing services in those neighborhoods should be earned by a company in which "those who have to pay the money have an interest."[44] But whether these newer corporations were actually owned or managed by groups previously excluded from access to the corporate form, or whether these were merely cynical gestures intended to win political support for a charter, is unclear.

If the process of democratization of the state's politics actually did allocate corporate charters to previously excluded groups, or create corporations owned by households that were less wealthy than their predecessors, then the aggregate statistics for the ownership of all corporations in 1826 presented in table 5 above likely concealed this pattern of change. In order

[42] Appleby (1984:74).
[43] For black voters, property qualifications were maintained. Gunn (1988) details political change in New York over this period.
[44] New York *Senate Documents*, 12 February 1822; New York *Assembly Documents*, 9 April 1823.

to investigate the effects of democratization on incorporations, the ownership of corporations of different 'vintages' in 1826 will be compared. The hypothesis to be investigated is that newer corporations—those created in more democratic eras—would have been owned by less wealthy or prominent shareholders. As the New York City stockholders that are the focus of this paper frequently constituted a small minority of the total shareholders of upstate corporations, the analysis will focus on to the 53 corporations located within the city for which an ownership list could be found for 1826.

Before examining the data, it is worth noting that any initial differences in the ownership of corporations created in different eras likely dissipated over time. One might expect, for example, that the ownership of new corporations would be quite concentrated in the hands of the founders, but would gradually diffuse as the founders sold off their stakes and other investors purchased the shares.[45] Moreover, if newer companies' prospects were less certain, one would expect their shares to be held by specialized investors who would be best able to gauge and perhaps hedge their risks. This would imply that older corporations would tend to have more diffuse ownership and larger numbers of small investors than they had initially, thus obscuring any differences between those corporations and their successors created in a more democratic era.

Figure 4 presents the ownership of New York City's corporations in 1826, by charter year. (The corporations are grouped into three-year periods because in some years there were few incorporations.) Panels (a) and (b) plot the ownership rates of artisans and merchants, both in terms of the percentage of the stock held, and the percentage of the stockholders. Although the rate of ownership by artisans generally remained low, newer corporations tended to be owned at a higher rate by these men, and the rate of ownership of merchants was generally declining over time. Newer corporations attracted investments from less-elite households at higher rates—and these households were less elite not only in terms of their occupations, but also in their level of

[45] This is certainly the case with modern corporations. See, for example, Helwege, Pirinksy, and Stulz (2007).

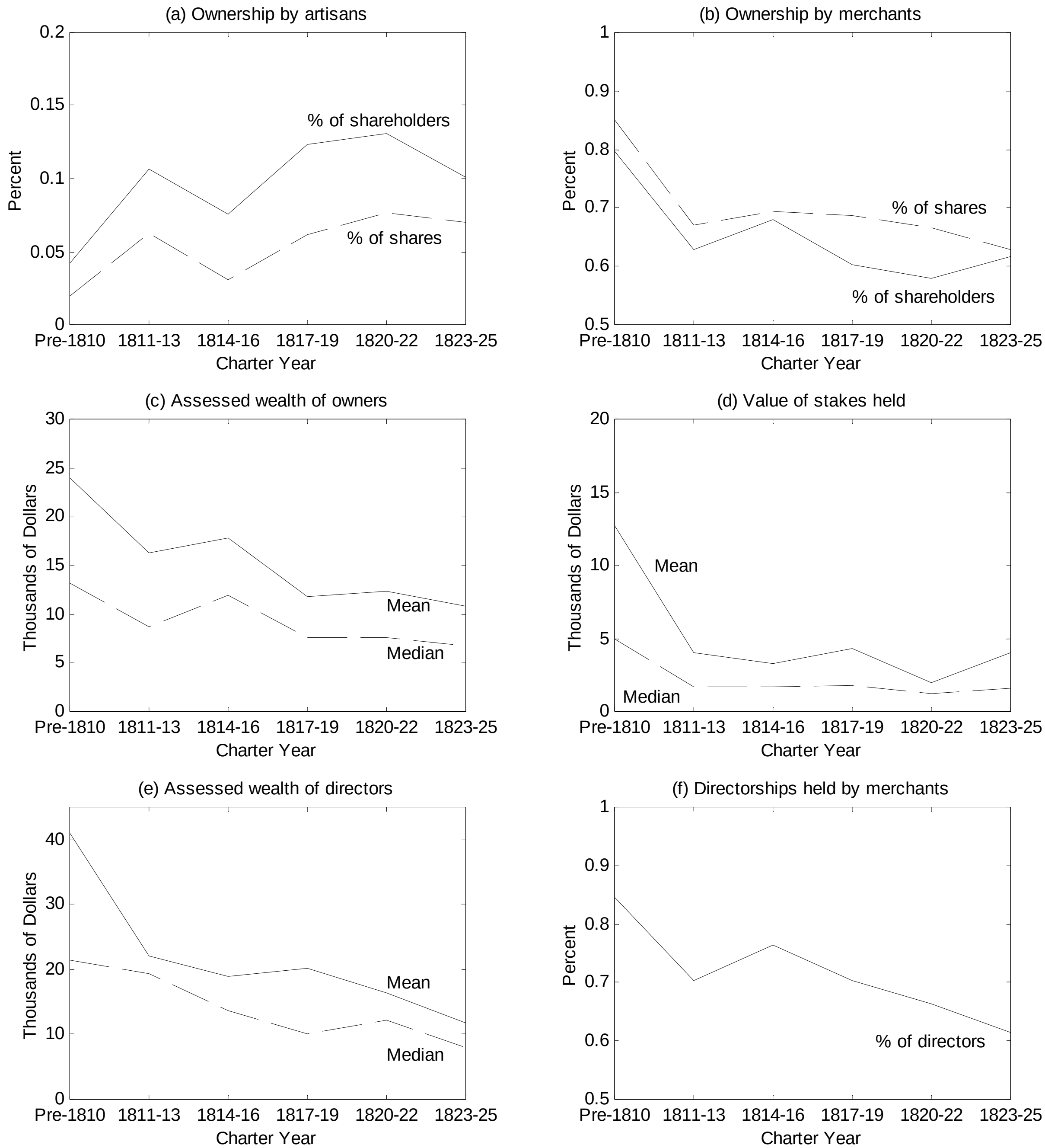

Figure 4: 1826 stockholders' characteristics, by charter year of corporation
New York City corporations only

wealth. Panel (c) plots the mean and median assessed wealth of stockholders, which was generally decreasing with the year of incorporation. In fact the average wealth of investors of corporations chartered prior to 1810 was nearly 2.5 times as high as that of the investors in corporations chartered in 1823 or later—a difference of the same magnitude as that between stockholders and all households. Panel (d) plots the size of the blocks in which the shares of corporations were held; this was also generally falling over time, although most of this change occurred in the earliest periods. Although the ownership of corporate stock was still relatively uncommon and median household wealth ($1,683) was quite low relative to the cost of a single share (usually $50), share ownership was clearly becoming more common among less elite segments of society. Thus despite the tendency of the shares of older firms to become widely held, persistent differences in the wealth and status of owners among corporations created in different eras were clearly observable in the stockholder lists of 1826.

If the stockholders of newer corporations were less wealthy, what about the men who actually controlled the enterprises, and were best able to profit from their operations? Perhaps the directors of the newer firms were drawn from the same parts of society as their counterparts in the older ones, and simply acted to attract investments from more ordinary households. This possibility is investigated in panel (e) of the figure, which compares the wealth and status of the directors of corporations of different vintages, for the 44 corporations for which both a list of directors and a stockholder list could be found. As the panel makes clear, the contrast in the level of wealth of directors of newer and older corporations was even more dramatic than the contrast in the level of wealth of the shareholders. Older corporations were managed by *much* wealthier directors than new ones. And as panel (f) makes clear, the directors of new corporations were much less likely to be drawn from the city's elite merchants.[46]

[46] Other tabulations, not shown, indicate that the directors of newer corporations were also more likely to be artisans and less likely to be public officials.

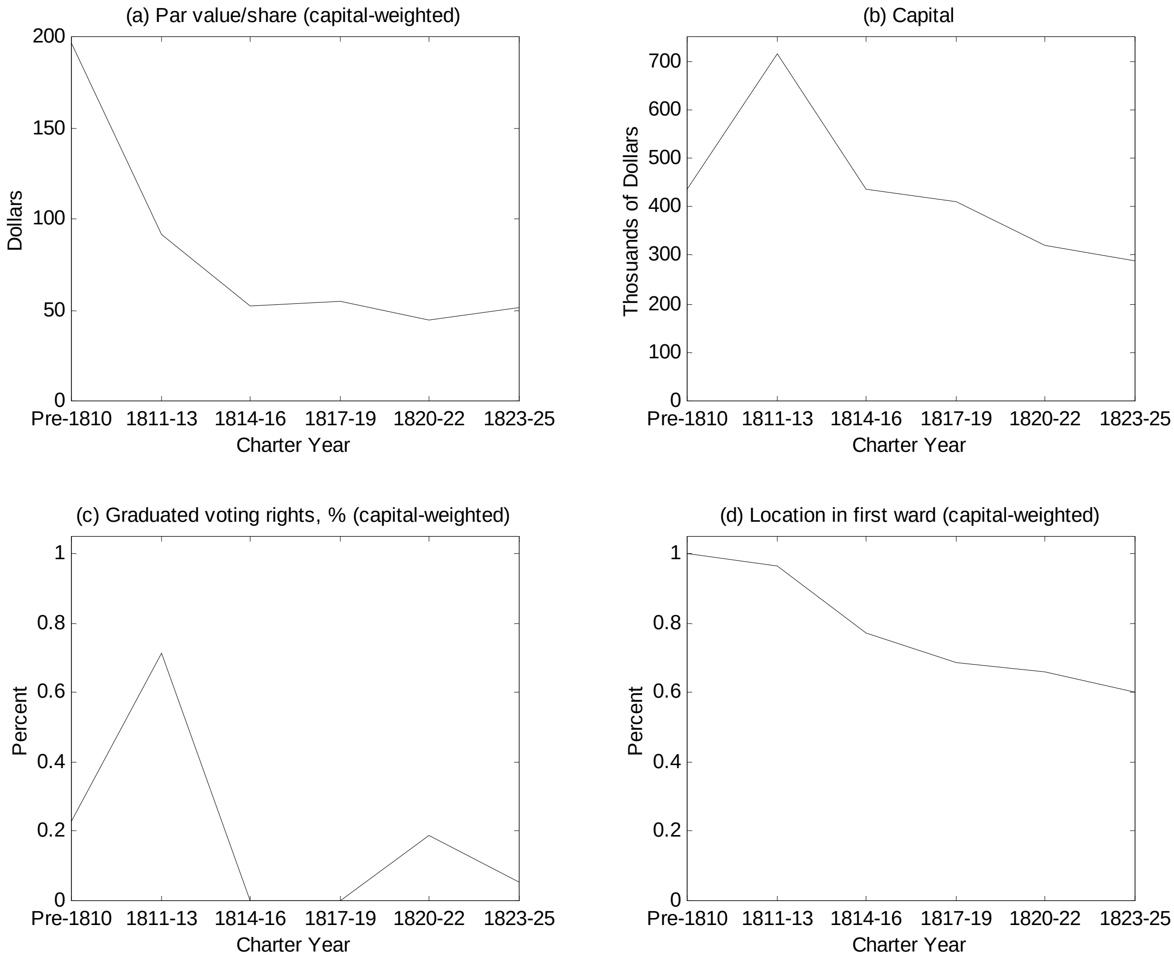

Figure 5: 1826 corporations' characteristics, by charter year
New York City corporations only

Did the charters of the newer corporations contain provisions that made an investment in their shares more attractive to small investors? Figure 5 plots several firm characteristics by year of incorporation. Panel (a) presents the average par value of the shares of corporations. This falls dramatically, from about $200 to about $50 by 1814-16, and remains roughly constant subsequently. Although lower par values would likely have made the shares more liquid, and thus more attractive to any investor, this effect would probably be greatest for an investor making a small investment. Thus it probably made the shares more accessible and appealing to investors of limited wealth. Larger firms seeking to raise significant amounts of capital from subscribers might have been forced appeal to small shareholders, and panel (b) plots the average capital per corporation over the period. This is actually decreasing, with brief increase in the 1811-13 period when the state chartered several enormous banks in the aftermath of the expiration of the charter of the First Bank of the United States. Panel (d) plots the location of the corporations, measured as the percentage (weighted by capital) located in New York's First Ward. This is gradually decreasing over time, as newer corporations increasingly located in the city's upper wards. Finally, panel (c) plots the percentage of corporations whose charters imposed a "graduated voting rights" scheme, in which the votes per share to which an investor was entitled was a decreasing function of the number of shares that investor held (see Hilt, 2008 for a detailed discussion.) These measures were commonly imposed in early corporations, as a mechanism for protecting small investors. They became increasingly uncommon over time, however.[47]

In sum, in 1826 the investors and directors in the city's newest corporations were quite different than those of the city's older corporations. This could have been due to efforts to configure newer corporations' charters in a way that made them appealing to non-elite stockholders, to efforts market the shares to ordinary households, or simply to the persistence of elite ownership among the older firms. On the other hand, this may have been due to the subtly changing industrial composition of the firms over time. Moreover, it is not clear to what extent the changes were due to changes in the characteristics of the firms, such as the decreases in the par values, or to other factors such as the political orientation of the government that authorized the charter.

[47] On the consequences of these measures, see Bodenhorn (2011) for U.S. banks, and Musacchio (2009) for nineteenth century Brazilian corporations.

4.1 Regression results

We investigate these issues in greater depth by collapsing the above data down to the firm level, and performing regressions to analyze the correlates of individual firms' ownership structures. In order to understand the extent to which the changing characteristics of firms over time explains differences in their ownership structure, we include data on firm locations, par values, board sizes (sometimes used to expand shareholder representation), capital, and indicators for whether or not the firm's shares were traded on the NYSE, whether or not its charter specified graduated voting rights for its shareholders, and industry fixed effects. With a time trend also included in the regressions, these specifications will enable us to investigate the extent to which the changing characteristics of firms can account for their changing ownership structures over time. It is important to note that many of these firm characteristics were endogenously chosen by incorporators, or as in the case of listing on the NYSE, may even have been influenced by the ownership structure itself. Therefore, the estimated correlations can not be interpreted as causal. Nonetheless, they do shed some light on which characteristics of corporations were correlated with their changing ownership structures.

Table 8 presents the results of the first of these regressions, for three different measures of ownership structure: the percentage of the stock held by artisans, the percentage held by merchants, and the mean assessed wealth of stockholders.[48] The results for all three convey essentially the same result, which is that the owners of later corporations were lower status, and less wealthy. In each of the specifications, the age variable exerts a powerful and statistically significant effect, even with the corporate characteristics added into the regression as covariates, indicating that these characteristics can only partly account for the change in ownership over time.

[48] Results for specifications based on the percentage of stockholders (rather than stock held) in those occupations are substantially similar.

Table 8:
Regressions: Ownership Structure in 1826
New York City Corporations

	Percent owned by Artisans		Percent owned by Merchants		Mean assessed wealth of owners	
	Mean .07, SD .08		Mean .65, SD .20		Mean 12,646 SD 7,048	
Years since incorporation	-0.004**	-0.004*	0.010**	0.009^{+}	577.7**	346.7**
	(0.001)	(0.001)	(0.003)	(0.005)	(139.9)	(126.6)
Located in first ward		-0.051^{+}		0.135*		4356.3**
		(0.028)		(0.057)		(1433.8)
Par value per share		0.000*		-0.000		17.01
		(0.000)		(0.000)		(22.52)
Capital (thousands)		-0.000		0.000		1.480
		(0.000)		(0.000)		(4.122)
Listed on NYSE		-0.007		0.103^{+}		3069.8
		(0.036)		(0.057)		(3868.5)
Board size		-0.000		0.001		27.81
		(0.001)		(0.001)		(44.63)
Graduated voting rights		0.014		-0.030		4138.9*
		(0.039)		(0.046)		(1743.3)
Industry fixed effects:						
Bank	-0.021	-0.016	0.039	0.051	1283.4	-891.8
	(0.027)	(0.033)	(0.086)	(0.111)	(1393.8)	(3171.7)
Transportation and other	-0.057**	-0.101*	0.243**	0.387**	8250.6	9900.4*
	(0.019)	(0.039)	(0.038)	(0.088)	(5321.7)	(4376.4)
Manufacturing	-0.020	-0.042	0.073	0.172**	423.5	2315.9
	(0.020)	(0.035)	(0.070)	(0.061)	(3206.9)	(4853.4)
R-squared	0.12	0.26	0.21	0.35	0.36	0.50
N	53	53	53	53	53	53

Note: **, *, and $^{+}$ denote significance at 1%, 5% and 10%, respectively. Robust standard errors in parentheses. The excluded industry category is insurance.

With each ownership variable, the corporation's location clearly matters. Location in the First Ward was correlated with an increase in the assessed wealth of owners, and in the percentage ownership of merchants, equivalent to more than half of a standard deviation in those variables. This may be an indication that corporations located in upper wards actually attracted investments from the less wealthy residents of those wards, or that corporations chose to locate in the First Ward in order to attract investments from the wealthy merchants residing there. Interestingly, companies whose shares were traded on the NYSE were not owned by artisans or wealthier individuals at a differential rate that could be estimated precisely, but the rate at which merchants owned the firms was higher—the effect is about the same as the effect of location in the first ward. This is likely due to the fact that the shares of firms that traded on the NYSE were

Table 9:
Regressions: Ownership Structure in 1826
New York City Corporations

	Percent owned in Wards 2-12		Mean value of stake held		Mean assessed wealth of directors	
	Mean .56, SD .21		Mean 4410, SD 6204		Mean 16288, SD 14235	
Years since incorporation	0.000	-0.002	272.5	-75.91	1292.6**	1074.2**
	(0.004)	(0.005)	(201.9)	(90.86)	(351.9)	(310.4)
Located in first ward		-0.116+		1545.4		8747.9*
		(0.062)		(990.1)		(3242.9)
Par value per share		0.001+		54.51*		-218.2+
		(0.001)		(24.94)		(115.2)
Capital (thousands)		0.000		0.353		-0.734
		(0.000)		(1.795)		(7.183)
Listed on NYSE		0.207		3435.7		10105.3
		(0.184)		(2314.7)		(9337.2)
Board size		0.002		-76.55		80.9
		(0.002)		(34.92)		(102.3)
Graduated voting rights		-0.062		-1206.8		13785.4**
		(0.055)		(1157.6)		(3679.5)
Industry fixed effects:						
Bank	0.148*	0.115	592.8	-1107.9	9560.6	9900.7
	(0.070)	(0.116)	(1182.8)	(2173.7)	(7583.3)	(10897.7)
Transportation	-0.013	0.023	10042.9	5124.6	2645.2	10443.0**
	(0.203)	(0.182)	(8781.6)	(4092.1)	(1786.6)	(2791.2)
Manufacturing	-0.068	0.051	1394.7	-769.9	6930.6	12752.2
	(0.091)	(0.148)	(1205.9)	(2593.5)	(7329.4)	(11101.4)
R-squared	0.04	0.26	0.26	0.61	0.30	0.50
N	53	53	53	53	44	44

Note: **, *, and + denote significance at 1%, 5% and 10%, respectively. Robust standard errors in parentheses. The excluded industry category is insurance.

often held by brokers and speculators, who were classified as merchants. Another interesting correlation is that of graduated voting rights, which do not seem to have much of a relationship with the occupational distribution of shareholders, but seem to attract wealthier shareholders. This effect is also about the same in size as that of location in the First Ward. Finally, across all specifications, industry clearly matters; transportation and "other industry" firms had much wealthier and higher-status investors, even controlling for age and other firm characteristics. Likewise, manufacturing firms seemed to attract merchants at a higher rate.

These results are explored further in table 9, which presents regressions for alternative measures of firm ownership. In the first two columns, regressions analyzing the determinants of the percentage of each corporation's stock held in New York's upper wards are presented. Once again, the location of the corporation clearly matters. Corporations in the First Ward had fewer shareholders from the upper wards, relative to corporations that were actually located in those wards. This result may be consistent with the behavior of modern investors, who have been shown to prefer shares in companies that are familiar (see, for example, Huberman 2001). Or it could simply be that the local customers of these firms were also their investors. But interestingly, there is no overall time trend in this variable, and firms with higher par values seemed to attract more investors from the upper wards, something which is difficult to explain, unless the ownership stakes held in the upper wards were often in single shares or small blocks of shares, in which case a higher par value of the shares could marginally increase the amount held.[49] The mean value of the stake held in the corporations is analyzed in the next two columns. This is clearly increasing in the par value per share, which would almost have a mechanical relationship with this variable. But none of the other corporate characteristics seem to help explain much of the variation in this variable. Finally, the determinants of the assessed wealth of the directors are investigated in the final two columns. This is significantly higher for corporations located in the First Ward and for corporations with graduated voting rights. But even controlling for the different corporate characteristics, the time trend has a very large effect, indicating that older corporations had much wealthier directors.

Taken together, these results indicate that only some of the variation in the ownership structure of corporations of different ages can be explained by the changing characteristics of the companies themselves. The corporations of the 1820s were created in a more democratic economy, by a more democratic government, and their ownership responded in ways that can not be fully explained by the provisions written into their charters, and the other characteristics of the corporations included in the regressions. Perhaps other characteristics much more difficult to measure, such as the efforts to promote the purchase of shares to particular segments of the

[49] This effect is, of course, ambiguous; a larger par value could easily cause a small investor to hold less.

population, or the reputations of the founders, may also have influenced the ownership of the firms.

4.2 Discussion of the results

It is important to note that these results do not in fact indicate that as New York became more democratic, potential incorporators from throughout society were able to obtain corporate charters as frequently as they wanted, or on the terms they wanted. Powerful incumbent interests may have dictated the terms under which newer corporate charters were granted, and imposed conditions on new entrants that prevented them from competing too directly, either for capital or in markets for goods and services, with existing firms. The decision to operate in uptown wards, or to make the shares attractive to small investors, may have been imposed on the new firms as a condition on their existence. Indeed, claims that new corporations would operate in neighborhoods "remote from the vicinity"[50] of Wall Street may have been intended as a pledge not to compete with the incumbent firms located there; the requirement to adhere to this pledge was sometimes written into law.[51]

But the results clearly do indicate that New York granted access to corporate charters to increasingly less wealthy and lower-status individuals. In light of these data, what are we to make of the virulent anti-corporate rhetoric of the 1820s and 1830s, in particular when it was aimed at stockholders? In a sense, charges of "aristocracy" may have helped produce the broader ownership of New York's newer corporations in the 1820s, perhaps by pushing legislators to grant broader access to charters, or to configure charters in ways intended to appeal to less wealthy investors. As Maier (1993) has noted, the agenda behind anti-corporate agitators may have been to influence the design of corporations that got created, rather than to block the

[50] New York *Senate Documents*, 6 February 1822.
[51] For example, Tradesmen's Bank, incorporated in 1823, stipulates that "the banking house of the said incorporation, shall be located in Chatham Square, in the said city, or its immediate vicinity, and not to the westward of James-street." (*Laws of New York*, 20 March 1823, ch. 93.) Chatham Square is at the intersection of the Fourth and Sixth Wards.

creation of corporations, and the data in this paper has shown that they were at least partially victorious.

Other, more conservative critics of corporations witnessed the developments documented in this paper with alarm. Jurist James Kent referred to New York's profligate grants of charters as "improvident" and "evil," and legislator John King, at New York's 1821 Constitutional Convention, argued they had produced "great public mischief."[52] Both fundamentally respected the vested rights of incumbent corporations, and opposed Republican governments' openness to petitions for charters from the 'less respectable' orders of society, for fear that the rights of existing corporations would be eroded. Many of the incorporators criticized by Kent and King were keenly aware of the erosion of vested privileges created by widespread use of the corporate form, and thus offered critiques of corporate powers in order to justify granting broader access to charters.[53]

5. Conclusion

The proliferation of business corporations in the early nineteenth century exemplifies the zeal of early state governments to use the law to promote economic development. Access to the corporate form was expanded over time, and the corporation became a familiar part of economic life. But this paper has shown that within the 35 years between 1791 and 1826, the ownership of corporations changed as well. Whereas in 1791, aristocratic landowners and merchants controlled both the state government and the corporations it created, by 1826, political figures were no longer important stockholders, and a much broader segment of society participated in the creation and ownership of corporations. Charters were granted for business that operated even in the "mechanic" wards of uptown Manhattan, and ownership of shares of stock spread into those

[52] Kent (1827 II: 219), and New York (1821: 446). Both men were stockholders, and in fact Kent was a stockholder in one of the very institutions he criticized the legislature for incorporating, Chemical Bank.
[53] Arguing for a bank charter, one incorporator wrote "In proportion as the legislature extends a privilege, in that proportion the monopoly which grows out of its exclusive enjoyment is diminished." New York *Senate Documents*, 6 February 1822.

neighborhoods as well. To be sure, the elite merchants who dominated commerce in New York also held the majority of corporate stock; when measured as a percentage of total capital, the stockholdings of artisans and those of modest wealth were relatively small. But at least some of the new enterprises incorporated in the 1820s were created to be owned, and managed, by men who lacked the pedigree and wealth of the prominent merchants who controlled the older, better-established corporations in the city. Engerman and Sokoloff (2002) have argued that the rapid economic growth of the period was associated with an institutional evolution that facilitated broader access to economic opportunity; the results presented here represent a noteworthy example of this process.

The liberal use of the corporate form in the 1820s was not the same as free or open access to incorporation. Petitions for charters in some industries remained highly contentious, and often failed, as incumbent firms and their allies worked against the creation of firms that threatened their interests. In the legislature, intense lobbying, "log-rolling" strategies, and even bribery were all part of the politics of chartering. The dramatic change marked by the era of broader participation in politics was that political figures supported by mechanics and tradesmen were able to successfully compete within this legislative environment, and managed to create corporations that were quite different from those of earlier generations. There was certainly a fair measure of cynicism in these efforts, and the creation of the "Tradesmen's Bank" should not be confused with an altruistic effort to benefit tradesmen. Nonetheless, the results of this paper have shown that the corporations created in the 1820s were in fact managed and owned by men of less wealth and lower status than those created in earlier eras.

Data Appendix

1791 Sources and Data: The names of the shareholders for the two 1791 corporations, the Bank of New York and the New York Manufacturing Society, have been published. The list of stockholder for the Bank of New York in 1791 is in Nevins (1934), and the list of stockholders of the New York Manufacturing Society is printed in the New York *Daily Advertiser*, 17 March 1789. The Manufacturing Society list unfortunately does not include the number of shares held by each investor. These names were then matched to the Federal Census of 1790 to obtain information on slave holdings, and to the city's 1789 tax assessment list. The names were also matched to the 1791 *New York Directory and Register*, which provided addresses and occupations. In 1791 there were 343 unique shareholders. The Bank of New York had 190 stockholders and the New York Manufacturing Society had 186; 33 individuals owned both. Of the 343 shareholders, 300 likely resided in New York City, and of these, 262 could be uniquely identified in the directory. A random sample of approximately 15% of households was taken from the 1791 directory, by recording all of the entries on every sixth page, which yielded 776 out of 4,752 total entries, or 16.33%. These were then also matched to the 1790 Federal Census, and to the 1789 tax assessment list. In order to calculate stockholding rates in individual wards, the 38 New York City stockholders who could not be uniquely identified in the directory (usually because there was more than one entry with the same name) were allocated to the different wards at the same rates as the stockholders who could be identified.

In addition to the two corporations, the 1791 New York City directory lists an unincorporated joint-stock insurance company in operation, the Mutual Assurance Society, which would become incorporated in 1798. No list of investors from this period survives, but eleven of the twelve directors of the Society were stockholders in one or both of New York's corporations, and four of the twelve were directors in one of the corporations. It is quite likely that the ownership of this third enterprise was substantially the same as the two incorporated firms. Also Davis (1917 II: 260) mentions an unincorporated New York City iron company that received some corporate privileges from the state in 1786, but probably never went into operation.

1826 Sources and Data: The stockholder lists for the 1826 corporations are held mostly in the New York State Archives in various record groups associated with the comptroller's office, including A0833, A0829, and A0847. These lists were submitted to the comptroller pursuant to the New York State tax of 1823-28, which exempted individuals' stock holdings from personal taxation, instead collecting taxes on paid-in capital from the corporations themselves. Under this tax, corporations were required to submit the name, place of residence, and number of shares owned by each stockholder to the state comptroller so the revenues could be distributed to county governments. Of the 242 corporations in operation in New York State in 1826, these lists survive for 133. This sample includes \$26.3 million of the \$48 million total paid-in capital in the state and \$19.1 million of the \$34.8 million incorporated capital held in New York City. All available information was transcribed for each shareholder from all these lists.

The 1826 shareholders' names were matched to entries in *Longworth's American Almanac, New-York Register, and City Directory* (1826) to determine the address and occupation of shareholders who lived in New York City. The directory includes "the names, occupations, and place of residence of all heads of families, firms, and those doing business in this City." Household heads with no occupation listed, which included many prominent figures such as John Jacob Astor and Nathaniel Prime, were classified as merchants. We then located the addresses on contemporary maps, particularly W. Hooker's *Plan of the City of New York* (1825) and S. Marks' *A New Map of the City of New York, Comprising all the Late Improvements* (1827), in order to identify the ward within which the stockholder resided. Most stockholders had only one address listed, but some had two addresses. The tabulations in the paper are based on primary business addresses.

With the address we were able to look up each shareholder within the city's tax assessment records, which survive in the New York Municipal Archives, to determine the assessed value of real and personal wealth, which were combined to calculate total assessed wealth. Real and personal property assessed at primary and secondary addresses were recorded, but any real estate holdings not corresponding to a listed address could not be included: there is no index to the assessment lists. Stockholdings were not included in these assessments, because the 1823-28 tax law required the corporation, rather than the stockholders, to pay the tax.

The 133 corporations from 1826 for which stockholder lists survive had a total of 6,534 unique stockholders, 6,019 of which were individuals or partnerships and 2,999 of those were listed as residing in New York City, of which 1,743 could be uniquely identified in the city directory.

For 1826, an approximately 10% random sample of households from the city directory was collected. The sample was taken by entering every tenth page of the directory. The 1826 sample had 2,798 out of 27,500 total entries (or 10.17%).

Charters for all New York City corporations were coded from *Laws of New York*, 1791-1825. Lists of directors for New York City corporations were found by searching contemporary newspapers, including the New York *Evening Post*, *Commercial Advertiser*, *Enquirer*, and *American*. Finally, corporations were denoted as NYSE traded if a price could be found for them in any month in 1825 or 1826 in the Sylla, Wilson and Wright (2005) dataset.

References

Angell, Joseph K., and Samuel Ames. 1832. *A Treatise on the Law of Private Corporations Aggregate*. Boston: Hilliard, Gray, Little & Wilkins.

Anonymous. 1827. *Letter on the Use and Abuse of Incorporations, Addressed to the Delegation From the City of New York in the State Legislature.* New York: G & C Carvill.

Appleby, Joyce. 1984. *Capitalism and a New Social Order: The Republican Vision of the 1790s.* New York: New York University.

Bagnall, William R. 1893. *The Textile Industries of the United States*. Cambridge: The Riverside Press.

Bailyn, Bernard. 1967. *The Ideological Origins of the American Revolution.* Cambridge: Harvard University Press.

Bodenhorn, Howard. 2004. "Free Banking and Bank Entry in Nineteenth-Century New York," *NBER Working Paper Series*, no. 10654.

______. 2006. "Bank Chartering and Political Corruption in Antebellum New York: Free Banking as Reform," in Goldin and Glaeser, eds., *Corruption and Reform: Lesson's from America's Economic History*. Chicago: University of Chicago Press.

______. 2011a. "Federal and State Commercial Banking Policy in the Federalist Era and Beyond," in Irwin and Sylla, eds., *Founding Choices: American Economic Policy in the 1790s*. Chicago: University of Chicago Press.

______. 2011b. "Voting Rights, Share Concentration and Leverage in Ninteenth-Century U.S. Banks. Draft, Clemson University.

Bruegel, Martin. 2002. *Farm, Shop, Landing: The Rise of a Market Society in the Hudson Valley, 1780-1860*. Durham: Duke University Press.

Carlos, Ann M., and Larry Neal. 2006. "The Micro-Foundations of the Early London Capital Market: Bank of England Shareholders During and After the South Sea Bubble, 1720-25," *Economic History Review*, 59, 498-538.

Davis, Joseph S. 1917. *Essays in the Earlier History of Corporations*. 2 vols. Cambridge: Harvard University Press.

Davis, Lance E. 1958. "Stock Ownership in the Early New England Textile Industry," *Business History Review*, 32, 204-222.

Dodd, Edwin M. 1954. *American Business Corporations Until 1860*. Cambridge: Harvard University Press.

Engerman, Stanley L., and Kenneth L. Sokoloff. 2002. "Factor Endowments, Inequality, and Paths of Development Among New World Economies." *NBER Working Paper*, Number 9259.

Helwege, Jean, Christo Pirinky, and Rene M. Stulz. 2007. "Why do Firms Become Widely Held? An Analysis of the Dynamics of Corporate Ownership," *Journal of Finance*, 62(2), 995-1028.

Fox, Dixon Ryan. 1919. *The Decline of Aristocracy in the Politics of New York, 1801-1840*. New York: Columbia University Press.

Geisst, Charles R. 2004. *Wall Street: A History*. New York: Oxford.

Goldin, Claudia Dale. 1976. *Urban Slavery in the American South, 1820-1860: A Quantitative History*. Chicago: University of Chicago Press.

Gunn, L. Ray. 1988. *The Decline of Authority: Public Economic Policy and Political Development in New York State, 1800-1860*. Ithaca: Cornell University Press.

Fischer, David Hackett. 1965. *The Revolution of American Conservatism: The Federalist Party in the Era of Jeffersonian Democracy*. New York: Harper and Row.

Hammond, Bray. 1957. *Banks and Politics in America From the Revolution to the Civil War*. Princeton: Princeton University Press.

Handlin, Oscar, and Mary Flug Handlin. 1969. *Commonwealth: A Study of the Role of Government in the American Economy: Massachusetts, 1774-1861*. Cambridge: Belknap Press.

Hartz, Louis. 1948. *Economic Policy and Democratic Thought: Pennsylvania, 1776-1860.* Cambridge: Harvard University Press.

Hilt, Eric. 2008. "When did Ownership Separate from Control? Corporate Governance in the Early Nineteenth Century," *Journal of Economic History*, 68(3), 645-85.

Hilt, Eric and Katharine O'Banion. 2009. "The Limited Partnership in New York, 1822-1858: Partnerships without Kinship," *Journal of Economic History*, 69(3), 615-645.

Hone, Philip. 1910 [1828-51]. *The Diary of Philip Hone, 1828-1851*, ed. Bayard Tuckerman. New York: Dodd, Mead & Co.

Huberman, Gur. 2001. "Familiarity Breeds Investment." *Review of Financial Studies,* 14(3), pp. 659-80.

Hurst, James W. 1956. *Law and the Conditions of Freedom in the Nineteenth-Century United States.* Madison: University of Wisconsin Press.

Hurst, James W. 1970. *The Legitimacy of the Business Corporation in the Law of the United States, 1780-1970.* Charlottesville: University Press of Virginia.

Jaher, Frederic Cople. 1982. *The Urban Establishment, Upper Strata in Boston, New York, Charleston, Chicago and Los Angeles.* Urbana: University of Illinois.

Kent, James. 1827. *Commentaries on American Law*, vol II. New York: O. Halstead.

Kessler, William C. 1940. "A Statistical Study of the New York General Incorporation Act of 1811," *Journal of Political Economy*, 48, 877-82.

______. 1948. "Incorporation in New England: A Statistical Study, 1800-1875," *Journal of Economic History*, 8, 43-62.

Kim, Sung Bok. 1978. *Landlord and Tenant in Colonial New York: Manorial Society, 1664-1775*. Williamsburg: Institute for Early American History and Culture.

Klein, Daniel B., and John Majewski. 1992. "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," *Law & Society Review*, 26, 469-512.

Lamoreaux, Naomi, and Christopher Glaisek. 1991. "Vehicles of Privilege or Mobility? Banks in Providence, Rhode Island during the Age of Jackson." *Business History Review*, 65, 502-27.

Lamoreaux, Naomi, and Jean-Laurent Rosenthal. 2006. "Corporate Governance and the Plight of Minority Shareholders in the United States Before the Great Depression," in Goldin and Glaeser, eds., *Corruption and Reform: Lesson's from America's Economic History*. Chicago: University of Chicago Press.

Maier, Pauline. 1993. "The Revolutionary Origins of the American Corporation," *William & Mary Quarterly*, L (1), 51-84.

Majewski, John. 1996. "Who Financed the Transportation Revolution? Regional Divergence and Internal Improvements in Antebellum Pennsylvania and Virginia," *Journal of Economic History*, 56, 763-788.

______. 2006. "Toward a Social History of the Corporation: Shareholding in Pennsylvania, 1800-1840," in Matson, ed., *The Economy of Early America: Historical Perspectives and New Directions.* Philadelphia: University of Pennsylvania.

Mark, Irving. 1940. *Agrarian Conflicts in Colonial New York, 1711-75*. New York: Columbia University Press.

McCormick, Richard P. (1966). *The Second American Party System: Party Formation in the Jacksonian Era*. Chapel Hill: University of North Carolina Press.

Miller, Nathan. 1962. *The Enterprise of a Free People: Aspects of Economic Development in New York State during the Canal Period, 1792-1838*. Ithaca, NY: Cornell University Press.

Musacchio, Aldo. 2009. *Experiments in Financial Democracy: Corporate Governance and Financial Development in Brazil, 1882-1950*. New York: Cambridge University Press.

Myers, Margaret G. 1931. *The New York Money Market*. New York: Columbia University Press.

Nevins, Alan. 1934. *History of the Bank of New York and Trust Company, 1784 to 1934*. New York: Priv. print.

New York. 1821. *Reports of the Proceedings and Debates of the Convention of 1821, Assembled for the Purpose of Amending the Constitution of the State of New-York.* Albany: E and E Hosford.

North, Douglass C., Wallis, John J., And Barry R. Weingast. 2009. *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. New York: Cambridge.

Peskin, Lawrence A. 2003. *Manufacturing Revolution: The Intellectual Origins of Early American Industry.* Baltimore: Johns Hopkins University Press.

Pessen, Edward. 1973. *Riches, Class and Power Before the Civil War*. Lexington, Mass: D.C. Heath.

Pomerantz, Sydney I. 1965. *New York: An American City, 1783-1803*. Port Washington, NY: Ira J. Friedman.

Rothenberg, Winifred Barr. 1992. *From Market-Places to a Market Economy: The Transformation of Rural Massachusetts, 1750-1850*. Chicago: University of Chicago Press.

Rousseau, Peter. 2009. "Share Liquidity, Participation, and Growth of the Boston Market for Industrial Equities, 1854-97," *Explorations in Economic History*, 46(2), pp. 203-19.

Seavoy, Ronald E. 1982. *The Origins of the American Business Corporation, 1784-1855*. Westport, CT: Greenview Press.

Sellers, Charles. 1991. *The Market Revolution: Jacksonian America, 1815-1846*. New York: Oxford University Press.

Sylla, Richard E., Wilson, Jack W., and Robert E. Wright. 2005. *Price Quotations in Early United States Securities Markets, 1790-1860.* ICPSR04053-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research, 2005-08-24.

Wallis, John. 2003. "Market-Augmenting Government? States and Corporations in Nineteenth-Century America," in Azfar and Cadwell, eds., *Market-Augmenting Government.* Ann Arbor: University of Michigan Press.

______. 2006. "The Concept of Systematic Corruption in American History," in Goldin and Glaeser, eds., *Corruption and Reform: Lesson's from America's Economic History.* Chicago: University of Chicago Press.

Werner, Walter, and Steven T. Smith. 1991. *Wall Street*. New York: Columbia University Press.

White, George S. 1836. *Memoir of Samuel Slater, the Father of American Manufactures*. Philadelphia.

White, Shane. 1991. *Somewhat More Independent: The End of Slavery in New York City, 1770-1810.* Athens: University of Georgia Press.

Wright, Robert E. 1999. "Bank Ownership and Lending Patterns in New York and Pennsylvania, 1781-1831," *Business History Review*, 73, 40-60.

______. 2002. *The Wealth of Nations Rediscovered: Integration and Expansion in American Financial Markets, 1780-1850*. New York: Cambridge University Press.

______. 2011. "Rise of the Corporation Nation," in Irwin and Sylla, eds., *Founding Choices: American Economic Policy in the 1790s*. Chicago: University of Chicago Press.