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**Bank Chartering and Political Corruption in Antebellum New York:  
The Iron Glove Falls from the Invisible Hand**

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*Abstract:* This paper relates the economic consequences of corruption, rent seeking, and political patronage surrounding bank chartering in three antebellum states to modern studies of corruption. As the social costs of corruption increased, reformers lobbied for alternative, less costly regulatory systems less susceptible to bribery. Free banking emerged when it did due to a confluence of events, including the appearance of the Antimasonic Party and Jacksonian populism. Firm scale was increasing in the 1830s, a trend that troubled contemporary populists concerned with the connection between political and economic privilege. Consistent with Glaeser and Shleifer's (2002) model of reform, free banking was attractive because it simultaneously raised the costs of corruption and reduced firm scale.

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# Bank Chartering and Political Corruption in Antebellum New York:

## The Iron Glove Falls from the Invisible Hand

“He saw in the system what he thought a most dangerous political engine, which might in the hands of bad men be used for bad purposes.”  
– Luther Bradish, New York State Assembly<sup>1</sup>

### 1. Introduction

Frye and Shleifer (1997) posit three types of government policies toward business. Adam Smith’s ‘invisible hand’ policy is one in which the state is well-organized, largely uncorrupt, and restricts itself to the provision of basic infrastructure and other public goods, such as law enforcement. Most allocation decisions are left to private agents. The second type is the ‘iron hand,’ found principally in Southeast Asia. States are closely involved in economic activity. They pursue interventionist industrial policies, supporting some firms or industries and repressing others. Bureaucrats are corrupt, but the corruption is limited and rent seeking transfers represent a small enough share of aggregate economic output that it does not significantly impede growth (Murphy, Shleifer and Vishny 1993; Mauro 1995). The third type is the ‘grabbing hand,’ commonly associated with post-Soviet Russia and parts of Africa. The state consists of a large number of reasonably independent bureaucracies, each pursuing its own agenda. Each bureaucracy imposes predatory regulations and is highly corrupt. Private corruption undermines growth, in part, because the state loses the moral authority to maintain order and adjudicate disputes. Dispute resolution devolves to private parties who pursue inefficient, often violent, enforcement mechanisms.

Just as capitalism and socialism are idealized types of mixed economies, the invisible hand, the iron hand, and the grabbing hand are idealized types of mixed bureaucratic regimes. Antebellum America, for

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<sup>1</sup> Quoted in *Albany Evening Journal* (19 January 1837).

example, is probably best viewed as an invisible hand regime with more than a few scattered pockets of iron hand policies. Iron-gloved rather than iron-handed, perhaps, is a better metaphor for early American government developmental policies. States did not pursue well-defined industrial policies, but at different times pursued policies supportive of one sector or one enterprise at the expense of others. It was not unusual for states to build a competitive firewall around a favored enterprise, encouraging its growth but only by sacrificing the benefits of competition and innovation. Nowhere was this more evident than in early banking policies. Legislatures reserved the right to incorporate some banks and prohibit others. New York, for example, closely guarded its regulatory privilege when it prohibited all types of unincorporated private banking in 1804, a law it strictly enforced. Other states, such as Virginia, heavily subsidized a few large banks (Starnes 1931). They bought shares, sat directors, influenced lending practices, and took their share of the dividends.

Thus, early Americans tolerated, even invited, interventionist and regulatory policies that historians have variously labeled the 'governmental habit' (Hughes 1991) and the 'commonwealth ideal' (Handlin and Handlin 1969). States intervened with appeals to the public good, extolling the virtues of economic growth and development. Agriculture was subsidized, manufacturing was encouraged, public credit was loaned to private entrepreneurial projects, and corporate privileges were extended to selected organizations. Such actions were the manifestations of a notion that government owed its citizens a duty to assist them in their efforts to improve their material and moral condition.<sup>2</sup>

Federalism, of the sort extolled by Alexander Hamilton, was constructed on an ideological foundation of a paternal, mercantilist state. Mercantilism accepted that the state could legitimately exercise its power in any manner consistent with increasing wealth and prosperity. It was an ideology based on an "elitist, paternalistic, antidemocratic concept of the Good Society in which all forms of enterprise, not only agriculture, flourished" Benson (1961, p. 88). It was not contradictory to Federalists that, within the

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<sup>2</sup> Scheiber (1972) reviews a large literature in this tradition.

boundaries of representative democracy, decisions about how a strong central government intervened in economic matters resided in the hands of a political and economic elite. What was best for Federalism was best for society.

By the 1810s, Federalism was in decline, Republicanism was ascendent, and the public less readily accepted decisions handed down by a privileged few. Public dissatisfaction with government intervention emerged in the 1820s, matured in the 1830s, and fully asserted itself in the 1840s. The changing relationship between polity and economy grew out of what Gunn (1988) labels a 'crisis of legitimacy.' Certainly by the mid-1830s, if not before, a more inclusive, more participatory electorate was less willing to accept the legitimacy of the state's preeminence in determining economic outcomes. True to Adam Smith's beliefs, Americans grew increasingly determined to decide for themselves what was best for them. The state was stripped of the privilege of defining, implementing, and protecting the commonweal. State involvement diminished, mercantilist statutes and regulations were struck from the books and, after 1840, a number of states revised their constitutions, sharply restricting government support of private enterprise. Several reasons for this change have been given, including a newly ascendent *laissez-faire* attitude consistent with Jacksonian egalitarianism; the extension of the franchise, which undermined the elite's ability to manipulate the political process to their own narrow economic interests;<sup>3</sup> and, a backlash against massive state debts accumulated during the canal and banking boom of the mid-1830s, which impaired public and private credit and required an increase in taxes and user fees to service these debts (Grinath, Wallis and Sylla 1997; Wallis 2001). Regardless of the reason, the iron glove slipped from a Hamiltonian government's hand, revealing a Jacksonian invisible-handed republicanism.

According to the historiography the transition from iron-gloved Federalism to a more, though certainly not pure, *laissez-faire* capitalism was nowhere more readily apparent than in changes in banking

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<sup>3</sup> The recurrent refrain of Federalist 'aristocracy' is indicative of this attitude. But once one party, whether Republican, Democrat, or Whig, controlled the state house for an extended period, they too became associated with the distribution of patronage and privilege.

policy. Bank chartering was high stakes politics, and the money to be made incited corruption. Nearly every new legislature convened facing dozens even scores of charter petitions, only a few of which were likely to succeed. Given the money to be made from the ownership of a valuable franchise, hopeful petitioners spent freely in their campaigns to obtain one. Corruption and log-rolling, instead of the applicant's merit, ultimately determined the allocation of bank charters. Once the costs grew large enough, the electorate demanded reform and legislatures responded. Dowd's (1992, p. 207) description is typical:

New York had a particularly controversial charter system. The legislature had long been accustomed to grant charters 'as patronage to political favorites,' and the corruption surrounding the chartering process was widely recognized as scandalous. As early as 1825, a report to the State Senate recommended opening entry to the banking industry by repealing the laws against non-chartered banks. If noteholder safety was a major concern, the report suggested that the law could require that non-chartered banks deposit approved bonds with the state authorities, and these bonds could then be used to repay noteholders of any banks that failed. These two features – free entry and a bond-deposit condition – were to become the distinguishing characteristic of the 'free banking' laws .... The charter system meanwhile had become 'so shameless and corrupt that it could be endured no longer' and a 'free banking' act finally became law in April 1838.

The traditional tale spanning all of the work on New York's general banking act is some variant of Dowd's story. Corrupt practices stymied the development of deep, broad, and efficient financial sector, which had far-reaching ramifications for economic growth in New York and other states that copied the New York model.

Despite an outpouring of work on free banking in recent years, neither of these assertions -- that New York's charter system systematically slowed financial development, and that this, in turn, slowed the rate of economic growth -- has been subjected to serious empirical scrutiny. They have been repeated so often as to have become part of the lexicon of American banking historiography and are accepted as truth without

corroboration. Additionally, the traditional story tells of an ascendent disgust among the electorate with corruption, a disgust that grows so powerful that, under threat of political backlash, bank chartering is replaced by general incorporation. While the traditional tale is not inaccurate, the economic literature lacks a rich historical context and the historical literature lacks a solid empirical foundation. The push for free banking did not emerge spontaneously in the mid-1830s. Nor was it, as Redlich (1968) would have us believe, the culmination of a libertarian impulse completely run amok. Its history is more complex. This article tackles both issues. After discussing the iron-glove policies of New York's politicians and providing an economic analysis of its corrupt practices, this paper subjects to empirical scrutiny the hypothesis that corrupt chartering systems slowed the pace of financial development, the extent to which political factors influenced chartering decisions, and the consequences of free banking. It then provides an account of the historical forces behind the reform impulse that led to free banking, and how free banking paved the way for further reforms.

## **2. Bank Chartering and a Legacy of Corruption in New York, 1803-1837**

### **2.1 Early Chartering Practices**

Between 1790 and 1810, corporate privileges were reserved for a select few organizations, mostly nonprofit associations. Religious congregations, schools, academies and colleges, medical societies, libraries, and benevolent societies, among others, received more corporate charters than any other type of association. As the number of these organizations increased, the demand for acts of incorporation consumed a growing proportion of legislative time and energy and, between 1784 and 1811, New York enacted a number of general laws for the incorporation of nonprofit organizations.

But New York, like most other states, refused to relinquish control over business incorporation. Although Gunn (1988, p. 49) contends that, between 1780 and 1820, the corporation evolved into "a modern, essentially private, instrument of economic organization," the evolution was slow and often fitful. Before

1800, New York chartered just 28 business corporations, including 13 turnpikes, 4 banks, and 3 canals. In the next decade, it chartered 179 corporations, mostly turnpike, bridge, and water companies (Evans 1948, p. 17). It was only in the period surrounding the War of 1812 (1810-1816) that the number of new manufacturing incorporations (153) exceeded the number of newly incorporated public utilities (134). Banking and insurance incorporations never represented more than a small fraction of the total number of incorporations. Twenty-five insurance companies were chartered between 1800 and 1820; a total of 28 banks received charters in the same period.

Bank chartering was embroiled in the seamier side of New York politics from its beginning. Early banks, whether in New York or elsewhere, were popularly identified by their founders' political affiliations. New York's first banks were Federalist and Hamiltonian. Although Republicans typically distrusted economic privilege and financial operations, they set aside their concerns when they observed how banks advanced political agendas (Alexander 1906, p. 187). As dispensers of credit, banks advantaged those to whom they loaned and, if controlled by a political party, a bank could insure that party supporters became the economically advantaged. Banks linked economic outcomes to party affiliation.

Because the legislature limited the number of bank charters, a charter was valuable and prospective bankers were willing to pay for the privilege. Allegations of bribery first surfaced around the chartering of the Merchants' Bank of New York City in 1804, when it was disclosed that one state senator had promised shares to two others, along with a guarantee that they could sell the shares after the charter passed at a substantial premium (Knox 1903, p. 397).

The connection between bank chartering and bribery did not become fixed in the public mind until 1812. A charter for the Bank of America in New York City was crafted, with a proposed capital of \$6 million, or six times the size of the then largest bank in the city. Although the petitioners were Federalists, they hired David Thomas of Washington, D.C. and Solomon Southwick of Albany, both prominent Republicans (though Southwick later became a leading Antimason), to visit members of the legislature to

enlist support (Alexander 1906, p. 194). Thomas was crafty, unscrupulous, and ambitious. Southwick was handsome, personable, and charming. They complemented each other and were effective lobbyists, but when the petitioners hired several other lobbyists events soon spun out of control.

A number of charter requests had been laid before the legislature in the opening days of the 1812 session and, in his annual address to the legislature in January, Governor Tompkins advised the legislature to beware of bank promoters who used “intrigue and hollow pretences” to “corrupt and subdue republican notions”(Lincoln 1909, p. 697). By March, Governor Tompkins felt compelled to prorogue (suspend) the Assembly and Senate for sixty days. In his message dismissing the legislators from their duties, he alluded to improper means used in soliciting a bank charter in the previous legislative session and accused four Federalist members of the Assembly and one state Senator of accepting bribes from the Bank of America’s lobbyists (Cole 1984, pp. 27-28). He told the legislators to return home, consult with their constituents, and reflect on the enormity of their actions (Lincoln 1909, p. 711). He also asked the attorney general to investigate. Several agents hired by the petitioners were indicted for bribery, among them a former clergyman who was eventually sentenced to the state penitentiary. Thomas was accused of spreading the petitioners’ money liberally on both sides of the aisle and both Thomas and Southwick were eventually indicted and tried for bribery. Both were acquitted when the star witnesses, a state senator and the speaker of the Assembly, refused to testify. The scandal derailed neither Thomas’ or Southwick’s political careers, nor did it seemingly sour Rouse’s or Sheldon’s opinions of them, as each later voted to affirm Thomas as state treasurer and Southwick as regent of the state university. Ultimately, Governor Tompkins’ decision to prorogue the legislature had no effect. Shortly after it reconvened, both houses approved the Bank of America’s chartering act. Charges of bribery surfaced during the remainder of the 1810s, but none rose to the level of the Bank of America scandal.

## **2.2 The Albany Regency, the Safety Fund System, and Chartering as Party Discipline**

New York politics between 1810 and 1820 is a tangled tale of a dying Federalist Party and a Democrat-Republican Party divided into as many as a half-dozen factions, each claiming to represent the true Jeffersonian faith (Countryman 2001, p. 300). Although there were minor ideological squabbles, the party fractured down sectional lines (Kass 1965, p. 110). Even at the time it was recognized that the dominant faction would be the one that provided a leader capable of aligning divisive voices, blunting sectional rivalries, and guiding members to a common purpose. Although De Witt Clinton was a charismatic visionary who rallied support for specific projects, such as the Erie Canal, he was unable to organize supporters into a unified political party. Where Clinton failed, Martin Van Buren excelled. Van Buren's great strength was his ability to transform a loose coalition of sometimes cooperative, often competing factions, into a powerful and stable political machine.

Van Buren entered the state senate in the 1813 with what a number of historians and biographers generously describe as a pragmatic approach to politics (Cole 1984, pp. 39-51). He rose to prominence in 1817 when, sensing a strong and growing public support for the project, he reversed his outspoken opposition to the Erie Canal and delivered a powerful speech in support. From this experience, Van Buren learned the value of being on the popular side of an issue and built a formidable coalition of Republicans called Bucktails by their friends (so named because each wore a buck's tail on his hat at party conventions) or the Albany Regency by their detractors.

By 1819, Van Buren's Bucktails were already powerful enough to openly challenge Governor Clinton's nominations to the New York Council of Appointment.<sup>4</sup> Van Buren briefly aligned his Bucktails with the Federalists and, though he lost this battle, he had an ally appointed to the Canal Commission. In his autobiography, Van Buren reveals that he soon realized that he had actually beaten Clinton. His Bucktails

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<sup>4</sup> Under New York's 1777 constitution, the Council of Appointment was composed of the governor and four senators that, by 1821, appointed nearly 15,000 local and state administrative positions, including sheriffs, county clerks, city mayors, justices of the peace, and all state officers except the treasurer who was appointed by the legislature.

“derived more advantage from the patronage and influence attached to [the canal commission than] the Governor derived from the Council of Appointment”(Cole 1984, p. 55) This lesson later influenced Van Buren’s banking policy.

The Bucktails dominated the 1820 legislative elections. Clinton was reelected governor, but he was surrounded by Bucktails, who controlled the Council of Appointment and swept the state’s appointive offices of Clinton supporters, replacing them with Bucktail men. Van Buren favored young men on the rise, and his political appointees formed the nucleus of New York’s Republican Party through the 1830s. In 1821, Van Buren’s Bucktails took control of the constitutional convention and, though they were forced to make several unfavorable concessions, they limited changes that would have undermined their emerging patronage machine. Thus, by 1823 the Regency was a well-entrenched, well-organized, smoothly operating political machine; the pride of its supporters, the envy of its rivals, and the prototypical machine for the next century (Cole 1984, p. 86).

Policy was developed by a small group of men who argued among themselves privately, but never squabbled publicly. Orders from the leadership were transmitted to the legislative party caucus in Albany and disseminated through the hinterlands by the party press, including the highly influential *Albany Argus*, and by appointed judges as they rode their circuits (Cole 1984, pp. 86-87; Countryman 2001, pp. 300-2). At the grassroots level, the Regency controlled the appointment of thousands of justices of the peace, county judges, and examiners of chancery, who were all expected to further the party’s agenda. Failure to do so resulted in the individual’s dismissal from his patronage office. Although its control was never absolute, the Regency was so effective that contemporaries commented on the “the perfection of Mr. Van Buren’s party discipline”(Cole 1984, p. 155)

Charges of corruption swirled around nearly every bank charter introduced between 1813 and 1821. In an attempt to mitigate corruption, the state constitution of 1821 required a two-thirds majority of both houses to incorporate a bank. It was thought that only truly meritorious bankers would receive corporate

privileges (Seavoy 1982, p. 128). Critics charged that it raised the stakes. Whatever its effect on bribery, the constitutional requirement's effect on the growth of the banking industry was clear. Only 12 new banks were chartered between 1821 and 1828, with no new banks chartered in 1822, 1826, 1827 or 1828. At the end of 1828, crisis loomed for the state's banking system. With just less than \$9 in bank capital per capita, New York was less financially developed than Massachusetts (about \$28 per capita) or Pennsylvania (about \$12 per capita) and of the 40 then operating banks, the charters of 30 were due to expire in the next five years (Root 1895, p. 288). If these banks' charters expired and were wound up without new ones to replace them, the Republicans would have failed their obligation to promote the commonweal.

The newly elected governor, Martin Van Buren, called for and received a sweeping revision of the banking laws. The Safety Fund Act of 1829 required that all subsequently chartered banks, whether *de novo* or renewal, contribute over a six-year period an amount equal to three percent of their paid-in capital to a fund that would reimburse the noteholders and depositors of any failing member bank. The act also laid down common charter conditions and established one of the first oversight bureaucracies in the nation. Three bank commissioners visited and inspected each member bank at least three times per year and tendered an annual report to the legislature.

Historians and economists have provided detailed studies of the Safety Fund, with most focusing on its shortcomings as an insurance scheme (Root 1895; Chaddock 1910; Golembe 1960; Calomiris 1989; Bodenhorn 2003). It underpriced premiums, its oversight mechanisms were ineffective, and it was legally and judicially hamstrung when six failures in 1839 bankrupted it. But in 1829, these problems lay far in the future. The act engendered broad support because it overcame legislative reluctance to charter banks. While economists have focused on the system's shortcomings, contemporaries saw it as a way to dislodge the chartering logjam. Questions about the capabilities of prospective bankers who received charters less for their business acumen than for their ability to bribe and corrupt the system led many legislators to vote against all charters afraid that they might unleash a bad bank on an unsuspecting public. By making the banks mutually

responsible for one another's debts, the act relieved concerns about the capabilities or actions of any single banker. Under the co-insurance scheme, the costs of bad banking would fall primarily on the banking system. With fewer concerns about quality, legislators could focus on quantity. In short, the insurance guarantee calmed legislators' fears and they would be willing to charter banks more banks. And charter banks they did. Between 1813 and 1828, New York chartered just 24 commercial banks. In the next six years, 93 banks were chartered or rechartered (Root 1895, pp. 290-91).

The Safety Fund did not, however, eliminate corruption. One contemporary contended that "lobby men" still engaged in their "mercenary employment[s]," and *The Albany Evening Journal (AEJ)*, an anti-Regency newspaper, published numerous allegations of legislative bribery (Johnson 1850, p. 611). On 13 April 1831, for example, the *AEJ* reported that the Chemical Bank's charter passed after a long delay and "with the loss of the reputation of a Senator." In March 1833 the *AEJ* named names. Alvah Bebee was indicted for bribing state assemblyman John De Mott. During a legislative hearing, Bebee's attorney argued that his client was being unfairly singled out. He had knowledge of comparable cases in which "members of the Legislature had received stock in banks, for charters on which they had voted, and there had been no concealment in those cases – no sense of impropriety" (*AEJ*, 21 February 1831). Indeed, Erastus Root, who served in the state assembly between 1798 and 1830, claimed that "no one would hesitate, from motives of delicacy, to offer a member shares in a bank" (Alexander 1906, p. 190). After a brief debate, the House reprimanded Bebee in a "forcible and solemn manner," and sent him on his way.

Bebee's comment about members receiving shares in bank on whose charters they had voted stand in contrast to the *Journal's* recurring complaints about legislators purposely excusing themselves from votes on some bank charters. Excusing one's self from a vote was an odd strategy for a legislator with a personal stake in the outcome, but there was a law prohibiting lawmakers from voting on incorporation acts in which they had a personal interest. Legislators who had been given or promised shares were under a legal obligation to excuse themselves. Of course, it does not mean that they did not influence the outcome through vote

trading or other forms of logrolling.

Under the Regency the nature, rather than the extent, of corruption changed. Van Buren and the Regency's other leaders understood two things: first, that patronage and privilege could be harnessed to the party's benefit; and, second, that tying party regularity to economic outcomes – just as Federalists had – cultivated party loyalty. The Regency's continuing power, as Cole (1984, p. 95) notes, was based on the spoils system. Its leaders realized that political machinery was fueled with money and jobs and they distributed both to their friends. The Regency aligned banks and party through the distribution of stock in newly chartered banks.

Beginning in 1811, every incorporation act appointed commissioners charged with distributing shares in the new bank. The issue of how shares were allocated gained popular attention in 1825, with the distribution of the Commercial Bank of Albany's initial public offering. The men appointed to distribute the stock allocated most of the shares to themselves and a handful of friends. Political opponents contended that the commissioners "had converted a matter of general interest into an affair of individual profit and speculation" (Chaddock 1910, p. 252). During debate on the charter of the Bank of Herkimer County, Isaac Van Duzer offered an amendment reducing the number of shares that the commissioners could subscribe from 200 to 50. The amendment was soundly defeated, at which time Van Duzer exclaimed that the "Regency manifested no disposition to surrender the source of 'Spoils'" (*AEJ*, 4 February 1833).

It was 1837 before these distribution practices were changed. Twelve banks were chartered in 1836, and the distribution of stock in these banks was so partisan that even the pro-Regency Safety Fund commissioners criticized the abuses. The commissioners detailed the distribution of shares in the Jefferson County Bank. Nine appointed commissioners kept the subscription books open for two days, receiving 500 individual subscriptions for varying numbers of shares. Because the offering was oversubscribed, as nearly all new bank offerings were, the commission had to develop a distribution scheme. Although the commission was bipartisan, the Bucktails held a 5 to 4 majority and their distribution plan was adopted. Through proxies

and powers of attorney, the bank's 12,000 shares were effectively divided between the nine commissioners, who each took the legal limit of 250 shares, and seven other men who between them took 7,695 shares. At the time of the investigation, all 12,000 shares were held by just 36 men when 500 had subscribed. The case was typical and represented one of the many ways the Bucktails encouraged and rewarded party loyalty. "Whatever else may be said of the Regency under Van Buren's aegis," wrote Benson (1961, p.70), "it always remained true to its first principle – to reward men for faithful service to the cause."

By 1837 politics, especially the politics of bank chartering, had changed. The electorate was no longer willing to tolerate a government that so flagrantly abused its ability to dispense economic favors. Post-Revolutionary Federalists, and even most early Republicans, accepted the legitimacy of the state's distributional prerogatives, even when they were openly partisan, elitist, inequitable. Such practices offended the sensibilities of Jacksonian-era Democrats and Whigs alike. The brewing crisis of legitimacy finally boiled over. Such flagrantly inequitable practices had fallen from favor and the legislature corrected them. An 1837 act dictated that shares were to be sold at public auction, with no individual allowed to buy more than five shares on the first day of the auction, nor more than ten on the second or thereafter. In an effort to guarantee local ownership, buyers had to be residents of the county in which the bank was located. To head off speculation, shares could not be sold until three months after the entire capital had been raised. All transfers within the first year had to be accompanied by an oath that the seller was the bona fide owner and had not contracted to sell the shares prior to the initial auction. Ultimately, however, this law was a dead letter because New York's legislature never issued another bank charter.

After a decade of debate, New York passed the Free Banking Act of 1838. In 1838, the state senate authorized a special committee to study the appropriateness of such a law. It reported that the time had arrived to abandon the current system, which was "utterly at war with equal rights and free government" (New York Senate 1838, p. 4). By 1837 appeals to equal rights were commonplace, and all state-sanctioned economic advantages were attacked as a usurpation of the true spirit of representative democracy. "Like a

leprosy,” wrote the senate committee (p.6), “the monopoly system, from a single spot, has increased and spread itself over the whole body politic.” Free banking, as we will see, represented neither the inception nor the culmination of electorate’s backlash against state-supported economic privilege. Before turning to a discussion of the ideological origins of free banking, however, we will consider the economics of bank chartering and empirically assess the consequences of New York’s corrupt practices.

### **3. The Economics of Bank Chartering**

Following Shleifer and Vishny (1998), the implications of three different chartering regimes are analyzed using techniques developed in the industrial organization literature. Assume that the government provides a good, in this case a corporate charter, needed by personal businesses in order to operate and that a demand exists for this good. The state, or its agents, provide charters until the marginal cost of provision exceeds the marginal revenue. Suppose further that there are three different governmental regimes: no corruption or a benevolent monopolist regime; official corruption or centralized rent seeking; and personal corruption or personal rent seeking.

#### **3.1. The Benevolent Monopolist**

Consider first the benevolent monopolist who is not concerned with maximizing revenue from the chartering of banks. Rather, the state acts as a gatekeeper, providing operating licenses so long as aspiring bankers meet some predetermined qualifications and can demonstrate a need for their services. The state recognizes the effect of its actions on competition in the regulated industry, but engages in no specific action to alter the short-term competitive balance. Instead, it may periodically amend entry requirements to alter the long-run competitive nature of the regulated industry. In banking, for example, reserve or capital ratios could be changed, as could the minimum capital requirement to speed or slow the rate of entry. Otherwise, the regulatory bureau charges a fee such that it covers its administrative costs; that is, it sets price=marginal cost

(or, perhaps, average cost).<sup>5</sup>

Define this regime as free banking. Whether it takes the form of bond-secured note issue as in post-1838 New York, or as liberal legislative chartering as in Massachusetts or Rhode Island is immaterial. What matters is that licensing is an administrative rather than a political function, and one where opportunities for personal gain are few and not especially lucrative.

Free banking in New York, and the other 17 states that adopted it after 1838, represents the ultimate form of the benevolent monopolist. In order to establish a bank, an individual or group of individuals had only to register with the appropriate regulatory authority, deposit collateral security, and pay the costs of engraving and printing banknotes. From there the state typically required little more than quarterly or annual statements of condition attested to by the corporation's officers. Compared to the intrusiveness of the chartering process described earlier, free banking was a highly egalitarian, deregulated structure.

Although special acts of incorporation were open to corruption, the system did not necessarily have to become corrupt. In New England, especially Rhode Island and Massachusetts, legislative chartering approximated free banking in that the distribution of charters was very nearly a purely administrative function (Sylla 1985). Indeed, between 1851 and 1860 Massachusetts provided aspiring bankers alternative licensing regimes: legislative incorporation and free banking. No more than a handful of free banks opened even though not every charter petition was successful. In 1853, for example, the legislature received 16 charter petitions and chartered only 12 banks. None of those denied a charter associated as a free bank.<sup>6</sup> The

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<sup>5</sup> After 1838 New York's bank supervisors charged all free banks an annual fee to defray supervisory and administrative costs. Other states imposed taxes on capital or dividends, partly to create revenue for the state and partly to defray supervisory costs.

<sup>6</sup> Free banking was not without its costs, and under certain circumstances receiving a charter absent corruption would have been less costly in the long run than operating under the regulatory constraints imposed by free banking. Bond-secured note issue, for example, constrained free bank portfolios and reduced a bank's ability to expand and contract banknote issues, hence loans, in response to seasonal and cyclical economic rhythms. Although the constraint was rarely binding, Massachusetts' chartered banks were legally allowed note issues equal to 125 percent of paid-up capital; its free banks were constrained to 100 percent, or less depending on the bonds tendered as security. This may explain why aspiring bankers in Massachusetts continued to pursue acts of incorporation rather

state senate's standing committee on banks filed a report explaining the criteria used in determining which proposals deserved a chartering act (Massachusetts, Senate 1853). Its decision typically hinged on three issues: Were the petitioners likely to be capable bankers? Was the proposed location in need of additional banking facilities? And, will the bank be able to attract sufficient capital? According to the senate report, and an accompanying report to the Massachusetts House (1853), when the committee was satisfied with the answers to these questions, they made a recommendation. Thus, banks were chartered in Massachusetts in response to demographic and economic, rather than *purely* political, considerations. The evidence does not preclude the possibility that politics mattered, but the historiography of incorporation in Massachusetts is fundamentally different than that of New York, and elsewhere.

### **3.2 Official Corruption**

The second regime is a public rent-seeking regime. Under this regime the state fully understands how its actions affect competition in the industry. Monopolies, public and private, are valuable because they generate rents. Recognizing this, the state uses its position as a monopoly seller of operating licenses to restrict entry into geographically distinct markets. It then auctions the right to supply one or more of these markets. Licenses are sold only to high bidders and the state captures most of the available rents generated in the monopolistic production of the private good for itself.

This aspect of this regime lends itself to an analysis using the tools of industrial organization. The state is producing a durable good with a resale market. When resales are possible, the price buyers are willing to pay depends on the value of services generated during the current period as well as the resale value at the end of the period. Typically, the price will be determined by buyers' expectations about the monopolist's future production.

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than taking advantage of the state's general incorporation statute. For a discussion of these issues, see Bodenhorn and Haupt (1995, 1996) and Bodenhorn (2003, pp. 208-16)

Ronald Coase (1972) argues that because a durable-goods monopolist cannot credibly commit to limit production in future periods, its best strategy is to sell units in subsequent periods at as high a price as it can get. If the periods are collapsed into arbitrarily small increments, the durable-goods monopolist approaches perfect competition as price approaches marginal cost. Coase's explanation is consistent with the free banking regime outlined above. That is, free banking may arise only after the state has lost its ability to extract rents because it cannot or will not credibly commit to restrict the number of licenses.

What happens when the monopolist can credibly commit to its promise to limit future production? It depends whether the monopolist is a seller or a renter of the goods. There are no expectations or time-consistency problems with a monopoly renter because the solution to its maximization problem is equivalent to that of a monopoly seller of a nondurable asset because the multi-period monopoly renter is, in effect, selling the nondurable services of the good. If the monopolist rents, the costs of any second-period overproduction is internalized by the producer because the rental price in the second period falls below the optimal price consistent with first period production (Bulow 1982; Carlton and Perloff 1990).

Some states were renters of bank charters in that they limited the term of the charter, requiring the bank to return to the legislature at regular intervals to renew its license. If the state chartered a competing bank in the interim, the value of the original charter was diminished and the state received a lower rental payment at recharter. Indeed, most early charters followed the federal charter of the First Bank of the United States, which provided a twenty-year life. Charter lengths varied by state, but ranged from five to thirty years.

If the state sells rather than rents charters, second-period overproduction losses are suffered by first-period purchasers. The state does not internalize the loss, and it overproduces relative to renting. Smart buyers recognize the state's time-consistency problem, buying in the first period only if the state offers a first-period price consistent with expectations of second-period overproduction, and second-period prices will necessarily be lower than first-period rental prices. Figure 1 demonstrates the state's first- and second-period choices. Following Bulow (1982), assume that marginal costs are zero, that interest rates are zero, that

production occurs in discrete periods of time (legislative sessions), and that production occurs only at the beginning of each period.<sup>7</sup> The diagram compares the optimal solution for the monopoly renter and the monopoly seller. Because the model assumes that the good does not depreciate, the monopolist who rents will produce all the output ( $q_{1s}$ ) in the first period and none in the second. The rental prices are identical in both periods ( $P_{1R} = P_{2R}$ ), because the output is perfectly durable, and the discounted value of profits is maximized.

If the state opts to sell rather than rent corporate charters, buyers recognize that the seller has no interest in maintaining the value of output produced in the first period. Smart buyers will, therefore, observe first period production to form expectations of second period prices, which will be determined by the residual second-period demand curve (defined as the line segment  $xb$ ) and the corresponding marginal revenue curve ( $xy$ ). The seller produces additional units, driving the expected second-period price down to  $P_{2s}$ . Profits are lower for the seller who cannot credibly commit to restrict second-period production and, as Bulow notes, the deadweight losses may be higher when the monopolist sells rather than rents.

This regime is consistent with Pennsylvania's early bank chartering experience, which acted more like a renter than a seller, even though it chartered new banks for cities experiencing population growth and economic change (Schwartz 1947; Daniels 1976). In 1793 Pennsylvania chartered the Bank of Pennsylvania of Philadelphia, to compete with the Bank of North America previously chartered by the Continental Congress. The Bank of Pennsylvania's charter specified a \$3 million capital and a 25-year renewable charter, among other features. In 1793 the state did not extract an up-front payment in return for its charter (such payments were commonly called 'bonuses'). Instead, the state exchanged heavily depreciated U.S. bonds for a one-half equity stake in the bank. In return the Bank of Pennsylvania was designated the state's fiscal agent. Public moneys were held at the bank in exchange for an open line of credit.

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<sup>7</sup> The first two assumptions do not limit the generality of the model, they simply make the graphical representation more tractable. The critical assumptions are that there are a finite number of periods so that the mathematical model can be solved recursively.

Within a decade the demand for banking services outstripped the existing banks' supply capabilities. A new bank was organized and its promoters sought a state charter. That the petition was taken seriously by the legislature surprised the directors of the Bank of Pennsylvania, who considered the state's commitment to the current duopoly a near contractual guarantee. To overcome the legislature's qualms about disrupting the duopoly, the organizers of the Philadelphia Bank promised the treasury a one-time payment in addition to an open line of credit. The Bank of Pennsylvania countered with a comparable offer, including a hefty bonus payment, which was ultimately rejected in favor of the Philadelphia Bank's offer of an initial payment of \$135,000 plus an equity position worth \$523,000 of the bank's \$1 million capital. Although it appears that the state had become a seller rather than a lessor, it was actually leasing rights to incremental increases in demand. While the state extracted smaller bonuses in return for each additional charter issued after 1804, its actions are consistent with actions of a durable-goods monopolist renter in a dynamic setting with expanding demand. Indeed, the relatively high and consistent dividends paid by Philadelphia's banks suggests that the entry of additional banks did not significantly reduce profitability.

### **3.3 Personal Corruption**

The third regime is a private rent seeking regime and one consistent with Shleifer and Vishny's (1998) definition of corruption: the sale of public property by agents of the state for the personal benefit of the agents. This regime is characterized by legislators or bureaucrats, who jointly exercise a monopoly in the granting of operating permits, but each acts semi-autonomously. In the simplest case, each of several bureaucrats is given the authority to issue a license, which gives each the opportunity to extract some rent from the applicant. If rent seeking under this regime were legal or socially acceptable, the bureaucrats could collude and maximize profits by acting as a joint monopolist. But corruption is typically illegal and rent-seeking frowned upon. Although each bureaucrat suspects all the others of engaging in rent seeking, he or she is forced to set his or her price and quantity independently of the actions of others. The industrial

organization literature suggests either a Cournot or a Bertrand equilibrium. If each bureaucrat takes the quantity of licenses produced by all other bureaucrats as given, the Cournot outcome prevails. Thus, the ability of corrupt bureaucrats to extract rents will be reduced by increasing the number of people with the authority to issue licenses. Indeed, as the number increases, the more closely the outcome will resemble the first (competitive) regime. Similarly, Bertrand competition, even with a small number of competitors, tends to drive the price toward the competitive level.

There are a number of complications with extending this story to bank chartering in early America. First, legislators, not bureaucrats, controlled the issuance of licenses. Second, given state constitutions, it was not feasible to increase the number of legislators to achieve a near-competitive Cournot-style solution. Third, charters like all other legislation passed through an elaborate committee structure, implying that a small number of prominent legislators may have controlled licensing. In this case, because corruption is either illegal or frowned upon, the committee members are forced to act independently, but Stigler (1964) argued and Grether and Plott (1984) demonstrated experimentally that tacit collusion among a small number of oligopolists can approximate joint monopoly. Further, Stigler argued that collusion (tacit or otherwise) will be more effective and more stable when price cutting is more easily detected and can be more harshly punished. In the case of corruption, the parallel is that joint maximization can be easily enforced when a member accepts too-many or too-large a bribe (Shleifer and Vishny 1998, p. 101). By keeping the committee small, excessive bribe taking can be easily detected (the committee member supports too many charter applicants or, perhaps, is excessively adamant in his support of a few applicants) and punished (threatening to expose their corruption or to change committee membership).

Legislative partisanship complicates the analogy, however. As Shleifer and Vishny note, highly centralized, typically one-party, political machines are conducive to exposing excessive bribe taking. Moreover, bribe taking is easier to observe when the ruling elite is small, when the rulers are a closely-knit group, and when society is homogenous. Rule by an oligarchy is thus conducive to corruption. On the other

hand, the less power wielded by a single party, the fewer are personal and familial connections, and the more heterogeneous a society, the less susceptible it is to corruption. Thus, a legitimate two-party system would lead to less corruption. Although party leaders would be unable to exclude elected legislators who engage in excessive bribe-taking in the short run because the election cycle determines committee membership, competition from within and without the party works against those who fail to follow party norms in the long run. Moreover, adamant support for a given charter request or broad support for a large number of requests may reflect partisan maneuvering rather than corruption.

The politics of bank chartering during New York's Regency era demonstrates the pull of opposing forces. On the one hand, the Regency was an oligarchy in that it had a small ruling elite bound by personal and professional ties. Thus, excessive bribe taking should have been easily detected. And, indeed, none of the principal Regency leaders grew wealthy during their public service. On the other hand, what seemingly motivated the Regency was not short-term, personal financial gain, but the establishment of a dominant party that would keep them in power over the long term. This is not to say, of course, that the Regency's motives were wholly without a financial component. I will follow the historiography, however, which contends that pecuniary emolument was neither the sole nor, perhaps, even the principal motive. Under the Regency, then, bank charters were not handed out to those capable of offering the largest dollar payments. Instead, they were handed out to reward those who had previously delivered votes or to those capable of securing Democratic votes in upcoming elections. To the extent that the Regency could act unilaterally during its heyday (circa 1820-1837), it could limit private rent seeking and direct it to its own advantage.

Shleifer and Vishny (1998, p. 104) recognize that, under a single state monopolist (regime two) or a coordinated joint-monopolist, corruption resembles taxation. In either case, the state establishes the revenue maximizing bribe, making it difficult to distinguish between bribery and taxation. Indeed, when the state is the rent-seeking monopolist, the bribes flow into the state treasury and bribes and taxes are one and the same. In this case, bribery is no more distortionary than taxes. But because private corruption is illegal, even when

done in the pursuit of party, it must be done in secret or, at least, in such a way that it is not always apparent to outside observers.

Thus, corrupt legislators demand side-payments, which can be easily hidden and are difficult to trace. Corrupt officials direct government-supplied favors to political cronies rather than capable entrepreneurs. Both acts have substantial long-term consequences. The public rent-seeking regime represents Mancur Olson's stationary bandit, one that imposes potentially distortionary taxes, but one whose actions are aboveboard, consistent, predictable. Although the distortions may slow economic growth, they are not inherently inimical to it. The private rent-seeking regime is even less conducive to development because new firm output may be more corruption-elastic than that of established producers (Murphy, Shleifer and Vishny 1998, p. 88). This is so because: (1) new producers tend to be outsiders and, thus, more vulnerable to expropriation; (2) new producers are credit-constrained and are less able to pay bribes; (3) new firms may be more innovative, exposing themselves to opposition from existing firms; and (4) new firms may be more risky so that corruption shifts more of the risks onto the innovator. If the corrupt officials are willing to accept bribes in the form of equity, credit constraints become less binding, rent seekers accept some of the risks, and incentives for continuing expropriation are diminished.

This proposition partly explains two features of bank chartering. By altering the nature of corruption, the Albany Regency lifted both the legislative and economic logjams slowing the rate of growth in the banking sector. The Regency frowned on the direct bribery of legislators, preferring instead that legislators appropriated a share of the returns from equity positions. It also explains why private rent-seeking in New York became a public scandal, but public rent-seeking in Pennsylvania did not. In Pennsylvania, the state formalized the rent-seeking system by forcing newly chartered banks to tender a proportion of their shares to the state in return for a license. This made the state and the banks partners, thereby reducing the incentives to excessive, continuing rent seeking. The state was able to set revenue-maximizing prices and generated a credible commitment to protect each firm's preferred status, which actually offset taxes that would have

otherwise been paid by the electorate. In New York, on the other hand, the state did not take ownership positions in its banks. Rather, the Regency sought to consolidate power through a preferential distributional policy. Thus, New Yorkers grew more deeply suspicious of government activism, and more quickly rejected public policies that benefitted the few at the expense of the many.

#### **4. Empirical Hypothesis and Evidence**

This section provides a simple model of bank entry and capital formation. It then stands this model up against the available empirical evidence to determine whether corruption substantially slowed growth in the industry. We will also test whether free banking improved the allocation of banks and bank capital. Finally, we will determine the extent to which bank chartering in New York responded to purely political factors.

##### **4.1. A Model of Bank Entry and Capital Formation**

Following Peltzman (1965), Dwyer (1981), and Economopoulos and O'Neill (1995), assume that the desired stock supply of bank capital in county  $j$  at time  $t$  ( $C_{jt}^{S*}$ ) is a function of the expected profitability of banking and the expected return to the next-best alternative investment. We can write a highly stylized supply function as:

$$(1) \quad C_{jt}^{S*} = f(R_{bt}, R_{at})$$

where  $R_{bt}$  represents the expected, risk-adjusted returns to banking and  $R_{at}$  represents the expected risk-adjusted returns to the alternative investment. Thus, capital will flow into banking should the risks or costs of banking increase for a given expected rate of return in the industry. Differences in chartering regimes, including corruption, can influence entry by altering the ongoing, operating costs of banking or by changing the risks, for given expected rates of return constant.

The desired demand stock of bank capital depends inversely on the banks' expected cost of capital ( $R_{bt}$ ), and positively on the expected transaction or monetary services (liquidity, divisibility, storage) and

expected intermediary services (loans) provided by banks:

$$(2) \quad C_{jt}^{D*} = F(R_{bv}, TS_t, IS_j)$$

where TS represents transaction services and IS represents intermediary services. Capital is an input in the production of these services. It serves as a buffer against loss for noteholders and depositors in the event the bank fails. The greater aggregate bank capital, then, the greater the flow of liquidity and transaction services the sector provides.

Setting equations (1) and (2) equal and solving for the optimal level of bank capital yields a reduced-form equation:

$$(3) \quad C_{jt}^* = G(R_{bv}, R_{av}, LS_t, TS_j)$$

And entry (or exit) will occur when the current capital stock deviates from the desired stock of capital.

Changes in capital in time t for county j can be expressed as:

$$(4) \quad C_{jt} - C_{jt-1} = L[C_{jt}^* - C_{jt-1}]$$

where L is the coefficient of adjustment between the desired and actual capital stock. Assuming that the actual change in capital responds to desired changes, and substituting equation (3) into equation (4) yields:

$$(5) \quad C_{jt} - C_{jt-1} = L[G(R_{bv}, R_{av}, LS_t, TS_j) - C_{jt-1}]$$

Equation (5) is a stylized reduced-form equation for incremental changes in capital, and assumes that changes can take place either through the entry or exit of new banks or incremental additions to or deletions from the capital of existing banks. Under legislative chartering, increases or decreases in capital were had only by petitioning the legislature for an amendment to the bank's existing charter. Such exercises were as prone to corruption as starting a new bank, and, based on its actions, New York was reluctant to amend a charter, once enacted. State legislators preferred, instead, to charter new banks once there was a demonstrated demand for additional equal to the minimum bank capital. Pennsylvania, on the other hand, protected previously chartered banks from competition. Its legislators tended to meet changes in the desired stock of bank capital by amending charters, authorizing banks to augment their existing capital. We can, therefore,

write a variant of equation (5) as:

$$(6) \quad E_{jt} = l [g(R_{bt}, R_{at}, LS_t, TS_t) - C_{j,t-1}]$$

where  $E_{jt}$  represents new bank entry and  $l$  is the coefficient of adjustment. Different regimes will generate different estimates of the coefficients of adjustment, depending on whether they prefer to incorporate new banks or augment the capital of existing banks.

Unfortunately, none of the variables of interest ( $R_{bt}$ ,  $R_{at}$ ,  $LS$ , and  $TS$ ) are observable to the economic historian, and any estimates of them at the county level would be subject to large error. But there are some available proxies that may have influenced the supply and demand of banking services. Holding the expected returns to banking and alternative investments constant, we would expect potential bankers to find larger, more rapidly growing markets more attractive. Similarly, a more urbanized, wealthier county, with a larger percentage of the work force engaged in nonagricultural employments was likely to generate a larger demand for liquidity and intermediary services. While entrepreneurial decisions to enter surely depended on potentially more sophisticated, if unarticulated, criteria than these, there is evidence that these were the objective criteria on which legislators based their decisions.

Massachusetts's Senate (1853) committee on banks and banking provided a list of petitions for increased bank capital and new banks, followed by a discussion how the legislature might choose between them. The committee argued that the legislature should respond to the legitimate needs of business, but recognizing the difficulty of quantifying that, turned to a discussion of local population, population growth, assessed or taxable wealth, and current bank capital. Similarly, a New York legislator argued in 1837 that banking services should expand as "population, wealth, and business increase" (*AEJ*, 8 February 1837). Comparable statements can be found in legislative debates in other states (Pennsylvania, House 1832/33). An empirical model that explicitly considers those factors deemed important by legislators making chartering decisions should be capable of uncovering how and how well allocation decisions were made.

#### **4.2.1. The Determinants of Bank Entry under Alternative Chartering Regimes**

In this section we investigate whether and the extent to which chartering practices differed across three states. Although we cannot test the hypothesis directly, the analysis should reflect how corruption, and the distrust it fueled among legislators, affected changes in bank capital or bank entry.

Table 1 provides some preliminary evidence on per capita bank capital in Massachusetts, New York and Pennsylvania at five year intervals between 1800 and 1860. The pre-1820 estimates for New York and Pennsylvania are subject to wide error because most early charters did not require banks to generate or publish annual reports. Indeed, many of the earliest banks resisted publishing the information long after other banks did so as a matter of course. Nevertheless, the estimates generated by several students of the period accord with expectations. Even a cursory study of the table reveals the consequences of the three chartering regimes discussed previously.

In Massachusetts, where bank chartering lost its political character early and became a largely administrative function, per capita bank capital doubled between 1800 and 1820, then doubled again by 1840. Comparable growth occurred in New York and Pennsylvania between 1800 and 1820, when per capita bank capital doubled. But, unlike Massachusetts, growth stagnated in these two states in the next twenty years. Interestingly, even the passage of free banking in New York in 1838 did little to accelerate growth in bank capital until 1850, when it began to grow at a more rapid pace. The depression had a lasting impact on Pennsylvania's banking sector. The commonwealth's per capita bank capital had not recovered its pre-depression levels even by 1860.

Figure 2, which charts the cumulative number of bank charters in the three states between 1800 and 1860, tells a similar tale. Between 1800 and 1810, all three chartered few banks, not surprising given contemporary unfamiliarity with and distrust of financial operations. In the mid-1810s, however, practices in the three states diverged. Pennsylvania chartered 41 banks at one stroke with the Omnibus Banking Act of 1814 (Daniels 1976). About a dozen had been operating extralegally before 1814. The act gave these

banks legal standing. The remaining 30 or so banks received de novo charters. After 1814, Pennsylvania only grudgingly chartered new banks as it protected existing banks from competition. Chartering practices in Massachusetts and New York follow parallel trajectories between the mid-1810s and the mid-1830s, but with many fewer inhabitants, per capita bank capital grew much more rapidly in Massachusetts. The consequences of free banking shows up dramatically in incorporations after 1838, even if it is less obvious in the per capita figures.

Turning to the formal empirical analysis, Table 2 provides summary statistics of the variables thought to be the relevant determinants of bank entry. The dependent variable in the regression analysis is either the number of charters received by a particular county or the change in per capita bank capital by county between 1830 and 1837. Legislators, in Massachusetts and elsewhere, repeatedly said that the needs of business drove their decisions to charter a bank for a given county. Given that we cannot quantify the 'needs of business' in any meaningful way, we turn to a number of proxies. Such proxies include county-level population in 1830, the growth in the county's population in the previous decade (1820-1830), the proportion of county population engaged in nonagricultural employments in 1830,<sup>8</sup> and the proportion of a county's inhabitants living in an urban area (defined as any minor civil division with more than 2,500 inhabitants). Finally, we include a dummy variable if a canal passes through the county. Sokoloff (1988) finds that proximity to a canal had a significant influence on inventive activity, a measure of economic modernization, so it is likely that a county through which a canal passed had a higher demand for financial services.

Table 3 reports the results of six regressions. Because the percentage of the county population engaged in nonagricultural employment and urbanization were highly correlated, they are included as regressors in separate specifications to avoid multicollinearity. Table 3 also reports results with the value of

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<sup>8</sup> The published censuses of 1820 and 1840 reported the number of persons employed in agriculture, commerce, manufacturing, and professional employments for counties and smaller civil divisions. The 1830 figure was calculated as the arithmetic average of these two values.

per capita bank capital in 1830 as a separate regressor (which was also correlated with nonagricultural employment and urbanization) to determine if there was a path-dependent effect; namely, whether places with an existing bank were more attractive places for subsequent banks.

Equations (1) through (3) present the results of ordered probit models with the number of charters per county as the dependent variable. As Massachusetts' legislators explained, counties with larger, more rapidly growing populations were more likely to receive a new bank charter. Counties situated on a canal were also significantly more likely to receive a charter. Although nonagricultural employment did not have a statistically significant effect on the likelihood of receiving a charter, urbanization and the presence of an existing bank did. Finally, equations (1) through (3) included dummy variables for New York and Pennsylvania. All three show that, holding all else constant, these states were significantly less likely to charter new banks.

Equations (4) through (6) report the results of ordinary least squares estimates, corrected for heteroskedasticity, with the change in per capita bank capital between 1830 and 1837 as the dependent variable. These regressions perform somewhat less well than the chartering regressions, but the signs are generally consistent with prior expectations and with the results of the ordered probit specifications. Calculated at the sample means, the increases in bank capital were highly elastic with respect to population ( $\eta = 5.35$ ). Changes in bank capital were also responsive to the rate of population growth, with an elasticity equal to 1.61. Unlike new charters, additions to per capita bank capital did not respond significantly to proximity to a canal. Neither the sectoral composition of employment, urbanization, nor initial per capita bank capital had a significant influence on incremental investment in banking. Although the estimated coefficients on the New York and Pennsylvania dummy variables are large, only one is significant at standard levels.

Tables 4 and 5 investigate the possibility that interstate differences in chartering regimes manifested themselves in more complex ways than a simple intercept shift term. In these specifications, the New York

and Pennsylvania state dummy variables are interacted with the relevant regressors, including population, population growth, canal, nonagricultural employment, urbanization, and initial per capita bank capital.<sup>9</sup> Greene (1990, pp. 248-251) shows that including interaction terms is equivalent to running separate regressions and contends that separate regressions are preferable if the error variances are not equal. Due to the relatively small number of observations in the present sample, it is preferable to combine the data and control for heteroskedasticity.<sup>10</sup>

The results of the ordered probit regressions reported in Table 4 suggest that chartering decisions in New York and Pennsylvania differed markedly from Massachusetts. In the first regression, more populated counties were more likely to receive a charter. A one percent increase in log population increased the probability of receiving a charter between 0.5 and 0.9 percent.<sup>11</sup> But note that the interaction terms for New York and Pennsylvania and log population are large and statistically significant. Indeed, the negative marginal effect in each state almost fully offsets the positive full sample effect. Compared to Massachusetts, New York and Pennsylvania's legislatures' chartering policies were less responsive to changes in the demand for financial services. Similarly, New York and Pennsylvania's bank chartering was less responsive to differences in urbanization, nonagricultural employment, and initial per capita bank capital.<sup>12</sup> They were, however, somewhat more likely to charter banks in counties situated on a canal.

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<sup>9</sup> The City variable is not interacted with the state terms because City equals 1 for New York City, Boston, and Philadelphia. An interaction term would generate a dummy variable with a 1 in only one cell, which in least squares has the effect of deleting that observation from computations (Greene 1990, p. 197).

<sup>10</sup> After controlling for heteroskedasticity, likelihood ratio tests failed to reject the hypothesis that the eight interaction terms were jointly zero at the 99% level for two specifications or at the 95% level for the third.

<sup>11</sup> The marginal effects reported in Table 4 are the marginal effects associated with  $\Pr(\text{Charter}=1)$  only. In an ordered probit regression, there is a marginal effect for each potential outcome [i.e., Charter = 2; Charter = 3, etc.], but Charter = 1 was the most common nonzero realization of the eight observed realizations so the marginal effects are reported for that result only. They are provided to facilitate interpretation of the coefficients on continuous variables.

<sup>12</sup> This is consistent with Seavoy's (1982, p. 138) contention that New York's bank chartering policies did not "facilitate the orderly expansion of credit where it was needed."

Table 5 reveals real differences in the practices used to provide appropriate levels of financial services to the electorate. Whereas chartering responded most strongly to population, changes in bank capital responded most strongly to population growth. Note again that, holding all else constant, New York and Pennsylvania were less responsive than Massachusetts to changes in population growth. New York increased per capita bank capital in counties situated on a canal by \$13 to \$18. Pennsylvania increased it by \$12 to \$17 per county. Table 5 highlights Pennsylvania's different chartering practices. While it was less likely to charter a new bank in a county with greater nonagricultural employment, a more urbanized population, or with more initial per capita bank capital (see Table 4), it was more willing than other states to increase per capita bank capital in response to all three factors. Evaluated at the sample means, the elasticity of changes in bank capital to nonagricultural employment in Pennsylvania was 1.3, compared to just 0.4 in New York. The elasticity of changes in bank capital to initial bank capital in Pennsylvania was 0.14, compared to just 0.01 in New York. But the elasticity of bank capital to urbanization was just 0.03 in Pennsylvania compared to 0.32 in New York. Even compared to New York, which was relatively stingy in handing out charters, Pennsylvania's was a case where the rich became richer and is consistent with our model of Pennsylvania's chartering regime. The state not only protected existing firms from competition, it enhanced their competitive position (or entrenched their monopolies, depending on one's point of view), which maximized the value of bank charters and, thus, the state's ability to realize large rental revenues from their lease.

The empirical results provided in Tables 3 through 5 are consistent with the model of chartering outlined in section 3 above. In Massachusetts chartering was depoliticized and became a largely administrative function early in the nineteenth century. New charters and additions to bank capital was responsive to changes in demographic and economic shifts that should proxy for changes in demand. New York and Pennsylvania stand in marked contrast. New York was significantly less responsive to changes in underlying demand, increasing neither the number of banks nor per capita bank capital as quickly as in Massachusetts. Pennsylvania, on the other hand, was reluctant to increase the number of banks, but gave

existing banks the power to increase their capital in response to changes in demand. A priori it is difficult to untangle the consequences of each policy on subsequent economic growth. New York's policy of preferring new banks to increasing the size of older ones may have facilitated a more optimal distribution of banks in response to underlying geographic population shifts. It may, however, have forced existing banks to operate at suboptimal scales. Pennsylvania, in contrast, allowed banks to grow and, apparently, capture scale economies, but by protecting the position of existing banks it may have had a highly concentrated and suboptimal regional allocation of bank capital.

Statistics reported in Table 6 provide a preliminary assessment of this issue. The table separates each state into regions of roughly comparable aggregate populations. New York is divided according to the state's eight state senatorial districts (circa 1830), each with about 225,000 to 275,000 inhabitants. Districts of comparable population size, made up of groups of contiguous counties, were constructed for Pennsylvania and Massachusetts. Not surprisingly, the major city in each state received the lion's share of that state's bank capital.<sup>13</sup> In 1830, Massachusetts had the most evenly distributed per capita bank capital; New York had the least. By 1837, New York's geographical distribution had seemingly equalized more than Pennsylvania's, though overall levels were comparable. Massachusetts' geographic distribution grew less equal, but still far exceeded values in either of the other two states. Although a more thorough analysis is necessary to draw firm conclusions, New York's chartering regime -- one based on logrolling and sectional jealousies -- created a system that was slow to respond to geographic changes in the demand for banking services, but one that eventually responded. With each round of bank chartering, pressure was put on legislators to ignore requests from counties that had recently received a new charter, favoring instead, previously overlooked regions. The next section investigates the extent to which partisanship influenced chartering practice in New York State

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<sup>13</sup> The Philadelphia, New York and Boston figures do not include the capital of the Bank of the United States, whose federal charter expired in 1836 and converted to a Pennsylvania state charter, until its failure in 1841. Although excluding the BUS capital reduces the per capita bank capital for each city, the Bank's largest office was in Philadelphia.

in the 1830s.

#### **4.2.2. Politics and the Allocation of Bank Capital in New York State, 1830-1837**

To what extent were the geographic allocation of bank charters and bank capital in New York driven by political considerations? A fully satisfactory answer to this question would involve knowing the party affiliation of every legislator who voted for a given bank charter, the party affiliations of the bank committee members that reported a chartering act to the floor of the assembly, and the political affiliations of each bank's organizers. Unfortunately, this information is unavailable. All three could, with much effort be reconstructed, but with 93 banks chartered or rechartered between 1830 and 1837, that is an exercise well beyond the scope of this paper. Instead, we turn to two easily constructed measures that may have influenced the geographic allocation of new charters.

Following the results of the previous section, this section estimates the correlates of a county receiving a new charter between 1830 and 1837. Independent regressors include the natural logarithm of the population in 1830, population growth between 1820 and 1830, urbanization, whether a canal passed through the county, initial bank capital, assessed wealth, and nonagricultural employment. In addition, two political regressors are included: the percentage of each county's electorate casting a vote for the Bucktail gubernatorial candidate in the state-wide elections of 1830 or 1832; and the number of terms served by the longest-serving legislator representing a given county.

The county-level percentage of the vote received by the Bucktail candidate proxies for party strength in the county, which may have influenced the Regency's decision about how to further the party's agenda through the allocation of bank charters. On one hand, Bucktail strongholds may have been more likely to receive a charter as a reward for party regularity. On the other, the Bucktails may have held out implicit promises of future bank charters in counties with currently low levels of support in an attempt to elicit support. The length of service of the longest-serving county representative is included to capture the effects

of seniority on legislation. Given the connection between seniority, committee membership, and influence in modern legislatures, it is not unreasonable to assume that comparable mechanisms were at work in the nineteenth century. On the other hand, Gunn (1988) notes that New York's legislature was not dominated by career politicians in the 1830s. Indeed, a majority of legislators served just one or two one-year terms. But short service by the many may have given the few with long years of service inordinate influence on the timing and placement of new bank charters.

Table 7 provides the summary statistics and the results of three separate ordered probit regressions. The dependent variable takes on nonnegative integer values and equals the number of new bank charters by county for each year between 1830 and 1836. The year 1835 is excluded because no banks were chartered. Thus, there are 6 observations for each of 50 counties, yielding 300 total observations. Because some of the independent variables are time-invariant, the covariance matrix (hence, the standard errors) was corrected for the fact that observations are independent across counties, but not within counties. Initial bank capital, assessed wealth, and nonagricultural employment are highly correlated, so the equations are estimated separately to avoid multicollinearity.

While the statistical analysis of the previous section found that, compared to Massachusetts, New York was relatively unresponsive to population and population growth, considered alone, population, population growth, and proxies for current levels of commercial activity all positively influenced the allocation of new charters. Although the marginal effect on the logarithm of 1830 population in New York is just one-sixth that reported for Massachusetts in Table 4, evaluated at the sample means, chartering was highly elastic ( $\eta = 42.83$ ) with respect to population. Although the coefficients are barely significant at normal levels, with an elasticity equal to 1.10, they imply that chartering was also elastic relative to population growth. The coefficients on the proxies for current levels of business or commercial activity are all highly significant, but the marginal effects are modest. The elasticity of charters relative to initial bank capital (evaluated at the sample means) is just 0.07; the elasticity relative to wealth is 0.12; and the elasticity

relative to nonagricultural employment is 0.61. Chartering (or the legislative supply of financial services) was highly inelastic to current levels of financial activity and wealth, two measures that should be highly correlated with the demand for financial services.

Finally, the regressions suggest that political factors, at least to the extent that we can control for them, had modest effects on the distribution of new bank charters between 1830 and 1836. The coefficient on the percentage of a county's electorate voting for the Bucktail candidate is significant in only one specification, but the p-value on the coefficient in the second regression is 0.11, just outside normal levels of significance. The marginal effect of approximately 0.003 in all specifications, nevertheless, implies that legislative chartering was elastic ( $\eta = 1.33$ ) to Bucktail support at the county level. Regency bank chartering policy, then, was more responsive to political support than to the 'needs of business.' Indeed, the small, insignificant, and negative coefficients on seniority imply that chartering was not prone so much to individual corruption (though legislators undoubtedly lined their pockets) as it was to party corruption. Just as Van Buren's Regency used the state's established patronage system to enhance and extend the Regency's reach, it manipulated bank chartering to its advantage, giving counties that delivered more Democratic votes access to more banking services.

Politics and party did not fully determine the geographic distribution of bank charters in New York between 1830 and 1837. Legitimate determinants of demand had the largest influence on the location of new banks, but given the difficulties of shepherding a chartering act through the legislature, the Regency apparently worked more diligently in obtaining legislation for areas where Democratic support was strongest. This result is consistent with the historiography of bank chartering and Regency politics. It is also consistent with calls for the depoliticization of bank chartering that grew increasingly more vocal after 1825 and reached a near fever pitch in 1836/37. The result, of course, was passage of New York renowned Free Banking Act of 1838, which effectively separated politics and banking.

### 4.2.3. The Determinants of Bank Entry under Free and Chartered Banking

We now briefly turn to the determinants of bank entry and bank capital formation a decade after the Regency lost its dominance over New York politics and 12 years after New York's Free Banking Act was passed. The statistics presented in Table 1 and Figure 2 present us with a seeming paradox. Free banking made bank incorporation a purely administrative matter, stripping it of its political character. Under free banking, aspiring bankers had only to buy specified government securities (typically New York and U.S. bonds) or high grade mortgages, place them on deposit with the state comptroller as a guaranty for note holders, pay to have banknote plates engraved, rent a place of business, and hang out a shingle. In eliminating the corrupt and partisan practices followed by the Regency for nearly two decades, we would expect to see a near 'gold rush' mentality – especially in light of Hammond's (1957) oft-quoted phrase that, under free banking, it was nearly as easy to become a banker as a bricklayer.

Figure 2 shows the 'gold-rush.' Between 1838 and 1839, 92 banks incorporated. The rate of incorporation slowed during the depressed 1840s, but accelerated again in the early 1850s. Whereas Massachusetts had been the leading bank incorporator between about 1820 and 1837, New York took the lead in 1839. By 1860, New York had incorporated more than 600 banks. Massachusetts incorporated fewer than half that number, Pennsylvania about one-sixth. Yet Table 1 reveals a curious result. In spite of the rash of incorporations, New York made little headway in per capita bank capital. Indeed, it had less bank capital per inhabitant in 1850 than it had in the year before free banking was instituted. The panics of 1837 and 1839 and the depression of the early 1840s surely played a part, but even in the go-go 1850s, New York never really closed the gap with Massachusetts. Problems in funding its massive state debts wracked Pennsylvania and its banking system throughout the 1840s. Poor policy choices undermined the state's banks, policies from which the banking system only slowly recovered (see Bodenhorn 2003).

Table 8 reports results from regressions using data comparable to that used for the interstate comparisons discussed in section 4.2.1 (See Table 2 for summary statistics). Equations (1) and (2) are

ordered probit regressions where the dependent variable equals the number of bank incorporations per county between 1850 and 1857. As found earlier, bank incorporations responded positively to population, population growth, and proximity to a canal. They also responded positively to initial per capita bank capital, but urbanization had no appreciable effect on the decision to incorporate a bank in a particular county. The noteworthy result is that by making incorporation a purely administrative function, bank incorporation decisions in New York did not differ significantly from those in Massachusetts, which had operated under a de facto free banking regime from early in the century. Note that, holding all else constant, Pennsylvania still operated under a significantly different chartering regime.

Columns (3) and (4) report the results of OLS regressions in which the change in per capita bank capital is the dependent variable. These regressions perform poorly, with virtually no statistically significant regressors. Although incorporations responded to the underlying determinants of demand, changes in bank capital did not. One intriguing result is that the statistically negative shift terms on the New York dummy variables are of similar orders of magnitude in the 1830/37 and the 1850/57 results. Free banking may have encouraged incorporation, but it did not accelerate the pace at which banking capital adjusted to changes in demand. Pennsylvania, too, was significantly slower in adjusting per capita bank capital.<sup>14</sup>

In one regard, free banking had the expected and desired effect. It freed bank incorporation from potentially corrupt and expensive practices that slowed the rate of bank formation. Given a spate of recent evidence on the connection between financial and economic development, free banking was a notable and significant development (King and Levine 1993; Levine 1997; Rousseau and Wachtel 1998; Rousseau and Sylla 1999; Bodenhorn 2000). Aspiring bankers were now free to establish a bank in any region of the state where previously the state had determined, usually through political means, when and where and even if an aspiring banker could locate. On the other hand, free banking did not significantly diminish adjustment lags

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<sup>14</sup> Regressions comparable to those reported in Tables 4 and 5 in section 4.2.1 are not reported here because virtually none of the interaction terms were individually statistically significant, and likelihood ratio tests failed to reject the hypothesis that the eight interaction parameters were jointly zero.

in per capita bank capital. In this regard, arguably the most economically developed state in the Union was not the most financially developed.

Understanding this anomaly requires more research. But there are two plausible answers. Free banking statutes, as we will see, encouraged the entry of small banks. Thus, the incorporation results are capturing the entry of a large number of small banks unable to mobilize enough capital to overcome the existing per capita gap between Massachusetts and New York. The second explanation, which is related to the first, has been studied by Bodenhorn and Hauptert (1995, 1996). They argue that free banking's bond-security condition imposed a number of costs and risks on free banks not borne by chartered banks. Bond collateral requirements meant that free banks held portfolios top-heavy with relatively low-return state and federal bonds. The requirements also exposed the banks to term-structure and holding-period risks given the maturity gap between a free bank's asset and liability portfolios. Finally, there were a number of troublesome questions concerning the constitutionality of the Free Banking Act that were not fully resolved until the 1846 constitutional revision. All of these considerations reduced the scale at which New York's free banks operated relative to chartered banks in New York and elsewhere. Although there is no evidence in the documentary record to support the claim, encouraging the entry of small banks may have been a policy choice.

### **5. Free Banking as Reform**

Writing anonymously in the Regency-controlled *Albany Argus* in December 1836, New York State Comptroller Azariah Flagg announced the party's new position. "The law as it now exists," he wrote, "abridges the fair business rights of individuals, discountenances the free use of capital, and is detrimental to trade and commerce" (quoted in Flagg 1868, p. 8). Indeed, the entire structure had created fault lines within the party. Churchill C. Cambreleng, Van Buren's trusted lieutenant in the U.S. House of Representatives, wrote Van Buren condemning the Regency's banking policy (Seavoy 1982, p. 129). How

was it that the Regency's leaders had so fundamentally changed their views? Why were they willing to abandon the Safety Fund system, often held up as one their prime legislative achievements, after just nine years? Was it, as Dowd (1992) contends, that the petty corruption involved in securing a bank charter and distributing a new bank's stock had finally grown so irksome that the entire structure was thrown over? The causes were considerably more complex. While corrupt practices in the 1830s certainly played a role, free banking's origins date back a decade or more and represent, not the culmination, but one leg of a passage wrought by changing attitudes, changes the Bucktails embraced only when they could no longer resist it and remain politically viable.

Richard Hofstadter (1948) contends that America's political parties divided according to special interests, not due to fundamental differences of opinion about an appropriate social and economic order. The major political parties, writes Hofstadter (1948, p. vii), "shared a belief in the rights of property, the philosophy of economic individualism, the value of competition; they have accepted the economic virtues of capitalist culture as necessary qualities of man." But economic and political freedom were always a matter of degree. Thus, party platforms could and did reflect real differences of opinion about how much freedom the state should grant its inhabitants. At the beginning of the nineteenth century, Federalists and Republicans had very different views about the scope of its inhabitant's economic freedoms. By mid-century, Democrats and Whigs still disagreed about the federal government's reach -- about the constitutionality of a federal bank, about discriminatory tariffs, internal improvements, and the federal lands, and many other fundamental economic issues. In the interim, public debate and party competition shaped policy.

### **5.1. Constitutional Reform in 1821**

That significant debates concerning the extent to which the state would recognize fundamental *economic freedoms* occurred between 1800 and 1840 should come as no surprise, given that the extent to which the state would extend fundamental *political privileges* were far from resolved. New York's 1777

constitution imposed high property ownership qualifications for voting; granted the Council of Revision, made up of the governor, the chancellor and the judges of the supreme court, veto power over all legislation; and established the Council of Appointment, consisting of the governor and four senators, which made appointments to most public offices in the state, from small-town justices of the peace to the mayor of New York City. Thus, an exclusive electorate had limited voice in selecting the officials of dependent local governments.

Benson (1961), Kass (1965) and Gunn (1988) all note a growing frustration with the lack of political self-determination. By 1820, no one, not even staunch conservatives, defended the system, “which had centralized the distribution of patronage into the hands of a tiny minority in Albany and which had given New York politics a reputation for personalism and corruption unsurpassed in any other state” (Gunn 1988, p. 70). In 1821, bowing to increasingly vocal calls for reform, the legislature submitted the question of a constitutional convention to the voters, who overwhelmingly approved the measure. Van Buren’s Bucktails controlled the convention and, though they labored to retain control over their patronage machine, the convention fundamentally changed New York politics. The franchise was extended to every male over 21 years of age who had resided in the state for one year and who had paid taxes, served in the militia, or worked on the highways. The convention also abolished the Councils of Revision and Appointment. The veto power was retained by the governor alone. Principal state officers, such as the state comptroller and secretary of state, were elected by the legislature. Most local offices, including sheriffs and county clerks became elective; city mayors were appointed by popularly elected common councils; and justices of the peace were selected by elected county boards of supervisors. The governor retained the right to appoint judges and a few other civil officials, but much of the patronage power – the power to appoint over 15,000 state and local offices – was taken from him (Gunn 2001, pp. 370-71). For Kass (1965, p. x) ratification of the 1821 constitution was the watershed moment in the movement toward an “equal-rights democracy.”

New Yorkers later ratified eight amendments to the 1821 constitution (Gunn 1988, pp. 171-72). One

instituted universal male suffrage. A second provided for the popular election of justices of the peace. In 1833 inhabitants of New York City were given the right to elect their own mayor; a privilege extended to all incorporated cities in 1839. An 1833 amendment lowered the salt tax; one in 1835 directed the salt tax revenues to state's general fund. In 1845, property qualifications for office holders were eliminated. In their political struggles, each faction worked to convince voters that they were the true guardians of their political rights. This rivalry, indeed, increased "the voice of the people in public affairs" (Kass 1965, p. 174). Expanding the electorate's political self-determination unleashed its desire for greater economic freedom.

Kass (1965, p. 138) contends that between 1815 and 1824 "questions of democratic reform aroused more interest than any other issue." After 1824, attention turned to concerns over economic inequality and the inequities arising from the connection between political and economic privilege. The 1821 constitution addressed economic privilege in that it required a two-thirds majority for all subsequent incorporation acts. New York attorney general Greene C. Bronson argued that the two-thirds clause was designed to check the increase in the number of charters specifically because they conferred privilege.<sup>15</sup> The two-thirds clause probably slowed the distribution of privilege, but it also incited more corruption because charters increased in value. Disgusted by the corruption, a state senate committee recommended free entry into banking as early as 1825 (Hammond 1959, p. 572). Besides ending corruption, repealing the chartering system would increase the quantity of credit. Without broad popular support, however, the recommendation was stillborn. The first real move toward general incorporation occurred in 1827, after which a number of common conditions were included in every incorporation act. The Safety Fund Act of 1829 further standardized chartering language and imposed common conditions and restrictions. These changes made charters shorter and reduced the ability of legislatures to bestow differential privileges, but did not fundamentally alter the process. Privilege was still unequally distributed, a practice inconsistent with the burgeoning 'equal-rights' sentiment.

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<sup>15</sup> Seavoy (1982, p. 127) notes that Bronson's interpretation is not fully consistent with the wording in the constitution itself, but is consistent with debates during the convention.

## 5.2. The Antimasons and Political Reform

The issue of economic privilege came to a head from an unlikely event – the disappearance on the night of 14 September 1826 of William Morgan, a stonemason of Batavia, Genesee County, New York. In the 1820s, Freemasonry was popular. From just 347 lodges and 16,000 members nationally in 1800, there were 450 lodges and more than 20,000 members in New York State alone in 1825 (Formisano and Kutolowski 1977). Disaffected and nearly broke, Morgan threatened to publish Freemasonry's secrets. Local masons, outraged by Morgan's betrayal, burned David Miller's publishing shop and had both arrested on trumped-up charges. Both were released from jail, but Morgan was kidnapped and never seen again. Rumor had it that a group of Freemasons had taken him to Fort Niagara where he was briefly detained before being drowned in Lake Erie.

Investigations into Morgan's disappearance implicated a number of prominent Masons. Sheriffs initially refused to arrest them. When they did, prosecutors refused to bring charges. When, forced by popular outcry to bring the conspirators to trial, the tribunals quickly became theater, attracting hundreds of spectators. Newspapers published verbatim transcripts, and news spread by word of mouth. For more than four years, the public devoured the news, most of which demonstrated Freemasonry's subversion of the political and judicial system. When most of the alleged conspirators were acquitted, a "firestorm of popular protest" was unleashed that grew into a legitimate political movement (Gunn 2001, p.374). One contemporary book concluded that the abduction, murder and cover-up was the work of hundreds of men, including prominent legislators, lawyers and sheriffs. Special prosecutors appointed by the legislature reported on 'Masonic obstructionism' and concluded that the basic charges of conspiracy, kidnapping, and murder were true.

Antimasonry's appeal, and hence its political legitimacy, grew because reasonable men believed that Freemasonry disproportionately influenced the administration of justice (Vaughn 1983). Several sheriffs, prosecutors, judges and other officials involved in the investigation and prosecution of the crime were

Masons. Most discharged their duties fairly and impartially, but others manipulated the system to protect fellow Masons. Formisano and Kutolowski (1977, p. 153) conclude that a widespread conviction that there had been “a systematic corruption of justice ... was far from fantastic.” Building a platform on equality before the law, the Antimason Party quickly emerged as a viable political force. The hot-button issues in the 1828 New York election were less state’s rights and internal improvements, than the candidate’s characters, antimasonry, and whether it was time for special privilege to give way to the popular will. Andrew Jackson polled an unimpressive 51 percent in New York; Van Buren won the governorship, but only because two opponents, including Solomon Southwick, the Antimason candidate, split the opposition vote (Benson 1961, p. 31).

Antimasonry’s consequences were profound. The number of Mason lodges fell from 490 to 80 and membership fell from 20,000 to just 3,000 (Benson 1961, p. 36). Once it had crushed its principal opponent, the movement did not fizzle. An effective leadership with access to more than 45 newspapers expanded the message. Privilege subverted more than the legal system. Privileged and secretive organizations of all types, including corporations, subverted all forms of republican virtue: equality before the law, equality of representation, and equality of opportunity became the party’s watchwords. Antimasonry was an extreme version of populism. One speaker at the 1829 Antimason convention insisted that “public opinion ... must properly govern everything, which is properly subject to governmental power” (quoted in Benson 1961, p. 22). The party’s message appealed to a leveling impulse: universal male suffrage; universal, state-supported education; antislavery; and better treatment of Indians, orphans, and the mentally ill (Van Deusen 1944).

Antimason calls for reform quickly incorporated the hot-button economic issues. The party favored strict enforcement of usury laws, elimination of imprisonment for debt, expanding the transportation network and, of course, greater sectional equality in the distribution of banking and financial services. Early histories of Antimasonry argued that it was motivated by rural-agrarian jealousies of urban-commercial wealth and power. The reality was more complex. Kutolowski (1984) and Formisano (1993) argue that antimasonry cut

across economic classes. Indeed, Kutolowski (1984) argues that support for antimasonry was stronger in townships with more improved acreage, higher population density, and higher value per acre. Antimasonry's leaders were mostly drawn from the middling to upper classes of western and southern New York – regions where the transportation and financial revolution had not yet fully arrived. The Antimason challenge was simple: Should not all men living in a democratic society have equal access to the opportunities offered by a rapidly expanding economy? Was it fair that the Regency granted unfair advantages in the race for wealth and prestige? In this respect, the movement appealed most strongly to those eager to “utilize participant politics to gain further transportation improvements, banking facilities, and ... favorable local public policy” (Kutolowski 1984, p. 281). Antimasonry flourished where the market had brought some limited prosperity. Its leaders wanted greater access to wealth-generating technologies – banks, canals, railroads – controlled by the Regency.

It was some time before the egalitarian impulse was translated into specific policies, such as free banking (Benson 1961, p. 37), but the movement gained momentum in the 1830s. In 1831, imprisonment for debt was abolished. The state expanded funding for education. Feeder canals were proposed, surveys done, and construction begun. Calls for elimination of the restraining laws on private banking reemerged in 1835 and 1836. Free banking was seriously debated in both houses of the legislature in 1837, just as a movement for a constitutional convention took shape. The ‘Utica Convention’ of 1837 proposed a constitutional amendment prohibiting future legislatures from passing laws that favored one group over another (Gunn 1988, p. 172). The convention delegates called for the abolition of legislative chartering in all forms, tighter restrictions on the state's ability to issue debt, and the elimination of all regulations restricting entry into any profession or occupation.

By 1837, legislative debates on banking policy were unmistakably Antimasonic. In condemning the assembly's committee on banks' decision not to report a bill for a bank, Representative John Wilkinson of Onondaga County fumed that “the citizens of New York [City] cannot, without arrogance, assume to judge

the propriety of incorporating a bank at Utica” (*AEJ*, 22 March 1836). That decision was best left to the citizens of Utica. A group of citizens in Albion forwarded a petition to the legislature stating that “the people are coming ... the spirit of reform is awake throughout the State” (*AEJ*, 28 March 1837). Indeed, the reform spirit had grown so strong that Regency governor William L. Marcy, in his annual message to the legislature, urged reform. The current system was “unquestionably injurious,” and it was “the essential characteristic of private property, that the owner should not only have the right of exclusive possession, but the liberty of free use” (*AEJ*, 3 January 1837). Marcy’s position, insofar as it dealt with banking, represented a significant change in Regency policy.

### **5.3. The Confluence of Party Rhetoric and Political Change in the Mid-1830s**

Regency support for free banking became official policy only when the reform impulse was so far beyond their control that support for repeal of the Safety Fund system came from a Democratic splinter group known as the Loco-Focos (or, sometimes, the Equal Rights Party). These were mostly tradesmen and small entrepreneurs in New York City who believed the current system threatened their economic well-being. They believed that economic independence was based on property ownership. Any government that passed laws that favored accumulation by the few, as the Safety Fund did, was bad government. “A viable urban-industrial democracy required that opportunities for business profits had to be equalized” (Seavoy 1982, p. 130). And more than anything else, equality of opportunity implied equality of access to bank credit. A general incorporation law was the best means to achieve this end.

Jacksonian Democrats were, likewise, driven by a strong egalitarian impulse. Jefferson’s Republicanism had extended equality of opportunity to the yeomanry of the newly settled west. Banking policy in the early West had been both inflationary and developmental. States such as Kentucky, Tennessee and Illinois, among others, had established wholly state-owned banks to provide medium-term mortgage

credit to farmers wanting to buy land. As a result, migrants flowed in, bought up the land and, in a brief period, turned a frontier into a thriving agricultural community. As the Jacksonians saw it, something similar was needed to stem the rising tide of economic inequality in the emergent urban-industrial regions of the East.

Free banking aligned the Antimason, the Jacksonians and the Equal Righters. Loco-Foco calls for equality of opportunity through general incorporation laws appealed to the Jacksonians' sense of fair play. The nagging issue for banking policy, however, was how to simultaneously equalize opportunity and provide a safe, redeemable currency. Two bills introduced in the 1837 session skirted the issue. One bill would have repealed most of the 1804 restraining act that prohibited unincorporated banks from engaging any banking function. It allowed for the creation of limited-liability partnerships granting unincorporated associations of individuals the right to engage in all pertinent banking functions, except the circulation of notes (*AEJ* 18 March 1837). The second bill would have created unincorporated banks with all the privileges of banks, including note issue, except that these banks would not be allowed to circulate notes under \$20 (*AEJ*, 3 March 1837). Both bills protected the public from bad banking by limiting these banks' abilities to interact with the public. Deposit banking was not yet widespread except among merchants and few people engaged in routine transactions would have much use for \$20 notes. Neither bill passed the Senate, largely because the Attorney General believed that they were both unconstitutional because they would have created de facto corporations in violation of the two-thirds rule. In the end, the legislature rolled back certain features of the restraining act, so that brokers could engage in some limited banking functions (Seavoy 1982, p. 150).

Before the autumn elections, panic swept the nation's financial markets. Banks suspended specie payments and Whigs soundly defeated the Bucktails at the polls. Whigs interpreted their victory as a mandate to dismantle the Safety Fund system, and many traveled to Albany intent to pass a general incorporation law. Although Marcy, the Bucktail governor, publicly recommended passage of a free banking law, he remained privately opposed. He understood that a general incorporation law would undermine the party's stranglehold

on an important source of patronage. Moreover, it might threaten the stability of the Safety Fund system itself. Seavoy (1982, p. 152) contends, as well, that Van Buren's sub-treasury plan at the federal level -- predicated on the idea that the government should separate itself from the business of banking -- discredited the Regency's long and close connection with the state's banks. Marcy had been forced into a corner and had little choice but to advocate passage of a general incorporation law.

In April 1838, New York enacted free banking. Gunn (1988, p. 229) contends that the law represented "one of the most important pieces of state legislation in the first half of the nineteenth century." It reflected a transformation in the role of legislature in economic matters: a movement away from the commonwealth ideal, a relinquishment of the iron glove. Incorporation became a purely administrative function. The legislature relinquished its power to confer privilege to a bureaucracy charged to implement a set of procedures and policies applicable to all. Free banking depoliticized the corporation and reflected the decline of legislative authority in economic matters. The corporation lost its essentially public character and became a purely private matter. It is ironic, however, that although the franchise was substantially widened, free banking and similar measures significantly restricted the electorate's ability to influence social and economic outcomes. Shortly after the public gained a greater say in politics, the polity built firewalls between itself and the economy.

Much was expected of free banking. A report of the select committee of the Assembly effectively summarizes contemporary expectations for free banking. A general incorporation law would eliminate the privilege and monopoly associated with the Safety Fund system. It would eliminate one source of legislative corruption and reduce log-rolling. Bank ownership would be more widely dispersed. The banks themselves would be more rationally located. Greater access to finance would encourage commerce and manufacturing. And, finally, it would increase and add stability to the currency. It is well beyond the scope of this study to analyze these issues, most of which have been scrutinized elsewhere (Rockoff 1974, 1986, 1991; Rolnick and Weber 1982, 1984, 1985, 1986, 1988; Dwyer 1996; Bodenhorn and Hauptert 1995, 1996)

There are two relevant features of free banking relative to the issues raised here. First, free banking replaced special interest legislation with the 'rule of law.' Relatively inflexible administrative procedures and policies replaced highly idiosyncratic, flexible, personalized charter conditions. Regulators administering rules were less prone to corruption than legislative committees and others given a measure of discretion (Glaeser and Shleifer 2002). The Safety Fund's bank commissioners, for example, were widely criticized for apparent lapses in their oversight and regulatory duties. They were charged with protecting the public by closing bad banks. In the public mind, several spectacular failures that imposed large losses on bank creditors occurred because the commission was a plum political appointment and commissioners were unwilling to discipline banks with close party affiliations.<sup>16</sup> Free banking imposed a very simple rule: any bank that failed to redeem even a single banknote into specie was to be closed by the state supervisory agency. Noteholders could exercise some discretion in reporting the infraction, but once reported, the supervisors had very little discretionary leeway. The administrative policy was clear and precise and less likely to be subverted by legislative or judicial corruption.

Second, free banking reflected the leveling impulse. The 1838 act brought together many of the features of the two 1837 proposals. One would have lifted restraints on individuals and partnerships wanting to operate private banks, and was intended to promote the establishment of relatively small institutions. The second proposal aimed to replace the current system of chartering relatively large, incorporated, commercial banks. The original bill required a minimum capital of \$200,000 for joint-stock banks, but it was later reduced to \$100,000. The final 1838 act incorporated both of these features in that it established one standard for larger joint-stock banks and a lesser standard for individual banks. Indeed, free banking enabled exactly those small-time entrepreneurial enterprises prized by Jacksonians. Joint-stock banks faced a \$100,000 minimum capital, but individuals could establish banks investing as little as \$10,000. In March 1850, for

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<sup>16</sup> Calomiris (1989) and Bodenhorn (2003) show that the issues were more complex, but contemporary public attitudes shaped policy.

example, 29 of 47 individual banks had \$20,000 or less in paid-in capital, and between 1840 and 1850 the capitalization of the average free bank declined from \$263,000 to \$176,000. (The capitalization of the average chartered bank remained constant at about \$375,000.)

This trend is consistent with Glaeser and Shleifer's (2002) interpretation of Progressive Era reforms. They contend that fears that large firms were better positioned to corrupt the judicial system led to a less corruptible, more rule-bound administrative structure. There was an assumption that, in the event of a massive calamity, social injury scaled up with the size of the firm, but judicial damage awards did not because the judiciary fell prey to the corrupting influence of big business. In the Free Banking Era, bank failures were massive calamities in which social costs scaled up with firm size. Bankers protected by unequally distributed limited liability privileges shifted most of those costs on to the public. Free banking simultaneously reduced firm scale (reducing the magnitude of calamities) and shifted the costs of failure back onto the bankers themselves (through bond-secured note issue). Indeed, after 1840 about one-half of New York's failed and closed joint-stock banks operated on \$100,000 in capital or less and most redeemed their notes at par (French 1861; King 1983).

In 1838, bond-secured note issue coupled with free entry, was an old idea, but one whose time had come. It was attractive because it satisfied several constituencies. It was consistent with egalitarian sentiments of Jacksonian populists. It created opportunities for entrepreneurs. It held out the possibility of more credit for farmers, tradesmen, and manufacturers. And it was consistent with republican notions of equal treatment before the law. It represented, in banking at least, the replacement of legislative prerogative with the 'rule of law,' which in the mid-1830s had broad appeal.

## **6. Concluding Remarks**

Corporate policy in New York and Pennsylvania in the first half of the nineteenth century represented the quintessential 'distributive' function of state government. Under this system individual, local, and sectional

interests competed for legislative largess, relying on bribery and logrolling to accomplish their goals. It was a style bound to create recurrent crises of confidence, typically as a result of one group's or another's dissatisfaction with the outcome. Moreover, it was a style of politics that pitted common interests against one another. Instead of two groups of bankers reinforcing each other's applications through common appeals to the public benefit supplied by banks, the legislature's general unwillingness to grant charters freely put the prospective bankers in a near zero-sum game. General incorporation laws, like New York's 1838 Free Banking Act, eliminated the political competition between prospective and existing bankers. An aspiring banker in Buffalo no longer had any reason to object to a petition tendered by an aspiring banker in Rochester or Syracuse. Indeed, general incorporation reordered society by creating what Gunn (1988) labels associational interests. Instead of each banker negotiating over the terms of his individual charter, groups of bankers could lobby for changes in laws beneficial to each and applicable to all. In this and other ways, general incorporation laws, of which free banking was but one, had an important leveling effect.

Free banking represented neither its inception nor its culmination, but it was characteristic of an early nineteenth century impulse to curb the excesses of activist state governments. Active, specific and specialized legislative intervention gave way to passive, general and common administrative systems that offered more predictable arenas for the resolution of economic disputes (Gunn 1988, p. 188). It represented a shift toward a state whose principal function was the establishment and enforcement of general laws, consistent with customary practices, and compatible with equal rights and equal opportunity. It is clear that these changes were wrought by a change in public sentiment that spanned most economic activity.

At about the same time, a similar thing was happening to judicial interpretation of business practice (Horowitz 1977). I have argued elsewhere (Bodenhorn 2000) that the case law dealing with commercial paper transactions lost most of its local idiosyncracies in the first three decades of the nineteenth century. As interstate differences in legal treatment of debtors and creditors diminished, the market for commercial paper expanded and regional interest rates converged. Consistent rules of negotiability were a necessary

prerequisite to extensive interstate markets in commercial paper because entrepreneurs prefer a consistent, predictable and orderly legal environment. This was no less true for statutory corporate law than for judge-made common law. The movement toward general incorporation, of which free banking was but one important step, created these conditions. It also meant that corporate charters and regulations shed their inherent partisan character. With general incorporation, regulations affected an all members of an industry regardless of political affiliation.

General incorporation laws rationalized the granting of corporate status, which generated obvious benefits, but both parties to the covenant bore a cost. A long-standing source of corruption was eliminated, but the state accepted a much-reduced ability to directly influence economic activity. Bankers and other entrepreneurs realized the advantages of incorporation, but accepted much more administrative oversight and regulatory interference (Gunn 1988, p. 253). Thus, corporate reforms in the early nineteenth century laid the foundation for Progressive Era and New Deal regulatory reforms between the late-nineteenth century and mid-twentieth century. This should remind us that historical transitions are often more seamless than they first appear.

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Table 1: Bank Capital per Capita in Massachusetts, New York, and Pennsylvania selected dates

Year	Massachusetts	New York	Pennsylvania
1800	\$ 9.01 <sup>a</sup>	\$ 5.81 <sup>b</sup>	\$ 8.06 <sup>a</sup>
1805	12.22	7.27 <sup>b</sup>	10.04
1810	14.16	7.75 <sup>b</sup>	7.41 <sup>c,d</sup>
1815	23.07	15.93 <sup>b</sup>	16.38 <sup>d</sup>
1820	20.26	15.38 <sup>b,e</sup>	14.02 <sup>d,f</sup>
1825	25.74	16.04 <sup>b</sup>	na <sup>f</sup>
1830	31.61	12.44 <sup>b,c</sup>	10.84 <sup>d,f</sup>
1835	45.36	14.72 <sup>b,g</sup>	11.65 <sup>f</sup>
1837*	54.99	16.43 <sup>b</sup>	14.86
1840	45.75	15.15	14.04
1845	36.24	15.94	7.32
1850	37.13	15.29	7.43
1855	53.05	24.19	7.67
1860	54.00	28.72	8.80

**Notes and Sources:** Unless otherwise noted, estimates are based on capital accounts reported in U.S. Comptroller (1876) and U.S. Census Office (1872). Population estimates for noncensus years calculated from continuously compounded growth rates between census years.

\* Last year of legislative bank chartering in New York State.

<sup>a</sup> Estimates are for 1801.

<sup>b</sup> Bank capital from Williams (1837, p. 235). Gallatin's (1831, pp. 97-103) imply slightly different figures: 1811, \$7.57; 1815, \$16.57; 1820, \$13.83; 1830, \$12.78.

<sup>c</sup> Estimate for 1811.

<sup>d</sup> Estimates from Gallatin (1831, pp. 97-103).

<sup>e</sup> Fenstermaker's (1965) reports for capital imply different figures: 1819, \$0.84; 1830, \$3.54.

<sup>f</sup> Fenstermaker's (1965) reports for capital yield different figures: 1820, \$6.37; 1825, \$7.57; 1830, \$9.51; 1835, \$12.39.

<sup>g</sup> U.S. Comptroller's (1876, p. CIII) figure implies \$14.14

<sup>h</sup> Fenstermaker's (1965) figure implies \$16.21.

Table 2: Bank Chartering in Massachusetts, New York, and Pennsylvania, 1830-1837 and 1850-1857, Summary Statistics for County-Level Data

Variable Name	1830s Mean (Std Dev)	1850s Mean (Std Dev)
Bank Capital 1830/50 (\$000)	437.27 (1925.29)	768.90 (2991.95)
Population 1830/50 (000)	32.05 (27.61)	47.20 (59.74)
Population Growth %, 1820-30/1840-50	3.13 (3.38)	1.84 (2.24)
Bank Capital per capita 1830/50 (\$)	6.14 (21.45)	7.60 (14.43)
Bank Charters 1830-37/1850-57	1.17 (2.54)	2.14 (4.17)
Bank Capital 1837/57 (\$000)	869.98 (3290.94)	1423.30 (6369.13)
Population 1837/57 (000)	37.07 (34.41)	54.79 (78.70)
Bank Capital per capita 1837/57 (\$)	11.24 (27.36)	11.64 (19.66)
NonAg Employment 1830 %	28.82 (17.98)	-- --
County Urbanization %	34.35 (30.43)	39.27 (32.98)
Canal passes through county	0.39 (0.49)	0.36 (0.48)
Massachusetts	0.12 (0.32)	0.10 (0.31)
New York	0.46 (0.50)	0.43 (0.50)
Pennsylvania	0.42 (0.50)	0.47 (0.50)
Observations	121	135

Notes and Sources for Table 2

**Notes:** Population in 1837 and 1857 calculated from continuously compounded growth rates between 1830 and 1840 or 1850 and 1860. Nonagricultural employment in 1830 calculated as average of 1820 and 1840 values.

**Sources:** Population and Urbanization: U.S. State Department, Fourth Census (1820); U.S. State Department, Fifth Census (1830); U.S. State Department, Sixth Census (1840); U.S. Census Office, Seventh Census (1850); U.S. Census Office, Eighth Census (1860). Nonagricultural Employment: U.S. State Department, Fourth Census (1820); U.S. State Department, Sixth Census (1840). Canals: Tanner, *Canals and Railroads*. Bank Capital -- Massachusetts: *Abstract* (1829); U.S. House Executive Doc. No. 172 (1837); U.S. House Executive Doc. No. 122 (1850); U.S. House Executive Doc. No. 107 (1857). Bank Capital -- New York: New York State, Assembly Doc. No. 59 (1831); New York State, Assembly Doc. No. 71 (1838); *Daily Albany Argus* (25 November 1850); New York State, Assembly Doc. No. 4 (1858). Bank Capital -- Pennsylvania: Pennsylvania, Senate, "Communication," (1830); Pennsylvania *Senate Journal* (1837-38); Pennsylvania, *Senate Journal*, vol. 2 (1851); Pennsylvania, *Legislative Documents* (1858).

Table 3: Determinants of Bank Entry in Massachusetts, New York and Pennsylvania, 1830-1837

Independent Variable	Dependent Variable = Charter (0,1)			Dependent Variable = $\Delta$ per capita Bank Capital (\$)		
	Ordered Probit Estimation			OLS Estimation		
	(1)	(2)	(3)	(4)	(5)	(6)
Log population (1830)	0.827*** (0.211)	0.718*** (0.196)	0.863*** (0.210)	2.711** (1.234)	2.106 (1.533)	2.933** (1.147)
Population Growth (1820-1830)	0.102** (0.046)	0.113*** (0.039)	0.096** (0.044)	0.493** (0.222)	0.565*** (0.197)	0.525** (0.207)
Canal	0.485** (0.218)	0.463** (0.225)	0.471** (0.219)	1.135 (1.255)	0.974 (1.199)	1.155 (1.212)
City	1.266 (0.931)	1.800*** (0.556)	0.361 (0.982)	21.448 (14.209)	19.419 (12.919)	9.448 (17.516)
NonAg Employment (1830)	0.017 (0.012)			0.020 (0.116)		
Urbanization		0.012** (0.005)			0.064 (0.056)	
Per capita Bank Capital (1830)			0.026** (0.012)			0.127 (0.122)
New York	-1.302*** (0.447)	-1.915*** (0.458)	-1.332*** (0.475)	-5.566 (3.749)	-6.959* (4.113)	-3.684 (2.692)
Pennsylvania	-2.217*** (0.486)	-2.400*** (0.494)	-2.105*** (0.524)	-5.379 (3.678)	-4.791 (3.279)	-3.208 (2.868)
Constant				-20.473 (13.625)	-15.722 (16.727)	-24.501** (12.187)
Log likelihood	-112.3	-111.4	-111.4			
Wald Chi-Square (7)	70.5***	98.1***	99.5***			
F (7, 113)				2.86***	3.26***	4.02***
R-square	0.28	0.28	0.28	0.33	0.35	0.35

Note: All regressions estimated with robust standard errors. \* implies significance at 10%; \*\* at 5%; \*\*\* at 1%.

Table 4: Determinants of Bank Chartering in Massachusetts, New York and Pennsylvania, 1830-1837  
 Dependent Variable = Charter (01,) -- Ordered Probit Estimates

	Coefficient (Std Error)	dy/dx	Coefficient (Std Error)	dy/dx	Coefficient (Std Error)	dy/dx
Log Population (1830)	3.139*** (0.750)	0.614	4.958*** (1.099)	0.915	4.705*** (1.36)	0.551
NY*Log Pop	-2.251*** (0.781)	-0.440	-4.117*** (1.120)	-0.760	-3.897*** (1.390)	-0.456
PA*Log Pop	-2.624*** (0.865)	-0.513	-4.636*** (1.227)	-0.859	-4.148*** (1.440)	-0.486
Population Growth (1820-1830)	-0.006 (0.761)	-0.001	-0.634 (0.740)	-0.117	0.843 (1.064)	0.099
NY*Pop Growth	0.070 (0.755)	0.014	0.711 (0.742)	0.131	-0.778 (1.063)	-0.091
PA*Pop Growth	0.146 (0.737)	0.029	0.711 (0.731)	0.131	-0.725 (1.067)	-0.085
Canal	-0.490 (0.910)		0.016 (0.996)		-1.634* (0.940)	
NY*Canal	1.017 (0.969)		0.425 (1.037)		2.150** (0.996)	
PA*Canal	1.229 (0.975)		0.837 (1.056)		2.452** (1.022)	
NonAg Employment (1830)	0.044* (0.024)	0.010				
NY*NonAg	-0.016 (0.024)	-0.003				
PA*NonAg	-0.275 (0.029)	-0.005				
Urbanization			0.080*** (0.021)	0.015		
NY*Urban			-0.072*** (0.021)	-0.013		
PA*Urban			-0.076*** (0.025)	-0.014		
Per capita Bank Cap					0.111*** (0.035)	0.013
NY*Bank Capital					-0.078* (0.041)	-0.009
PA*Bank Capital					-0.112* (0.068)	-0.013
City	2.099** (0.955)		4.516*** (1.019)		3.465* (2.110)	
New York	22.599*** (8.434)		42.565*** (11.932)		40.303*** (14.600)	
Pennsylvania	25.329*** (9.295)		47.132*** (13.121)		41.726*** (15.188)	

Table 4: continued

Log-likelihood	-103.3	-97.5	-99.7
Wald Chi-square (15)	87.4***	109.5***	84.8***
Pseudo R-square	0.34	0.37	0.36

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**Notes:** See Table 3. Marginal effects (dy/dx) are the marginal effects for P(Charter =1), which was the most common non-zero outcome. In ordered probit regressions, there are marginal effects for each possible realization (in this case there are eight separate outcomes). The marginal effects are reported here to assist in interpreting of the coefficients.

**Sources:** See Table 2.

Table 5: Determinants of Bank Chartering in Massachusetts, New York and Pennsylvania, 1830-1837  
 Dependent Variable =  $\Delta$  per capita Bank Capital (\$) – Ordinary Least Squares

	Coefficient (Std Error)	Coefficient (Std Error)	Coefficient (Std Error)
Log Population (1830)	4.488 (3.595)	6.573** (2.987)	6.544* (3.567)
NY*Log Pop	-3.346 (3.694)	-6.859** (3.183)	-5.251 (3.656)
PA*Log Pop	-2.986 (4.164)	-4.762 (3.618)	-5.421 (4.317)
Population Growth (1820-1830)	16.429*** (3.486)	13.007*** (3.589)	13.231*** (4.519)
NY*Pop Growth	-16.125*** (3.482)	-12.571*** (3.590)	-12.895*** (4.516)
PA*Pop Growth	-15.365*** (3.338)	-12.340*** (3.511)	-12.752*** (4.490)
Canal	-16.858*** (2.862)	-12.87*** (4.693)	-12.201** (4.692)
NY*Canal	18.536*** (3.208)	14.743*** (4.842)	13.816*** (4.936)
PA*Canal	17.424*** (3.466)	12.853*** (4.994)	14.196*** (5.210)
NonAg Employment	-0.166* (0.096)		
NY*NonAg	0.175 (0.115)		
PA*NonAg	0.560*** (0.137)		
Urbanization		-0.017 (0.077)	
NY*Urban		0.072 (0.083)	
PA*Urban		0.0185* (0.108)	
Per capita Bank Cap			0.056 (0.082)
NY*Bank Capital			0.016 (0.132)
PA*Bank Capital			0.633*** (0.188)
City	5.157 (7.683)	8.704 (7.487)	-2.858 (11.810)
New York	34.663 (38.250)	72.881** (32.476)	61.458* (37.184)
Pennsylvania	17.786 (43.773)	51.430 (37.647)	60.712 (44.281)

Table 5: continued

Constant	-43.766 (37.399)	-70.406** (30.780)	-72.092** (36.403)
F (15, 105)	23.9***	12.9***	36.5***
Pseudo R-square	0.59	0.56	0.56

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Notes: See Table 3.

Sources: See Table 2.

Table 6: Per capita Bank Capital by Geographic Region in Massachusetts, New York, and Pennsylvania

State/Region	Per capita Bank Capital 1830	Per capita Bank Capital 1837
Mass – Southeast	\$11.94	\$27.70
Mass – Northeast	63.29	96.93
Mass – West	8.78	13.56
NY – Senate I	51.18	56.17
NY – Senate II	1.77	7.44
NY – Senate III	11.67	19.04
NY – Senate IV	0.45	3.43
NY – Senate V	2.45	8.56
NY – Senate VI	1.49	5.64
NY – Senate VII	5.66	9.37
NY – Senate VIII	1.25	6.64
Penn – Philadelphia	37.36	68.28
Penn – Southeast	6.62	8.59
Penn – Northeast	2.33	5.21
Penn – Capitol District	3.45	8.57
Penn – Pittsburgh Region	2.06	14.32
Penn – Northwest	1.02	1.68

**Notes:** Each district, except Mass– Southeast, contains approximately 250,000 inhabitants in 1830.

**Sources:** See Table 2.

Table 7: The Political and Economic Determinants of Bank Chartering in New York, 1830-1837  
 Dependent Variable = Charter (0,1) – Ordered Probit Estimates, 300 observations

	Mean (Std Error)	Coefficient (Std Error) [dy/dx]	Coefficient (Std Error) [dy/dx]	Coefficient (Std Error) [dy/dx]
Log Population 1830	10.275 (0.724)	0.535*** (0.174) [0.105]	0.511*** (0.171) [0.100]	0.648*** (0.148) [0.125]
Population Growth 1820-30	2.654 (2.930)	0.055* (0.034) [0.011]	0.058* (0.033) [0.011]	0.054* (0.031) [0.010]
Urbanization	48.948 (28.132)	0.002 (0.003) [0.0004]	0.002 (0.003) [0.0004]	-0.0002 (0.002) [-0.00003]
Canal	0.360 (0.481)	0.262 (0.165) [0.054]	0.271* (0.163) [0.056]	0.279* (0.168) [0.056]
Democratic Vote %	53.333 (9.723)	0.015* (0.009) [0.003]	0.014 (0.009) [0.003]	0.011 (0.010) [0.002]
Legislative Representation	1.860 (1.344)	-0.024 (0.075) [-0.005]	-0.029 (0.076) [-0.006]	-0.011 (0.010) [-0.005]
Bank Capital in 1830 (\$000)	423.867 (2068.49)	0.0001*** (0.00002) [0.00002]		
Assessed Wealth (\$ million)	7.125 (20.188)		0.010*** (0.003) [0.002]	
Nonagricultural Employment	24.345 (14.164)			0.017*** (0.004) [0.003]
Log likelihood		-113.3	-113.3	-112.6
Pseudo R-squared		0.15	0.15	0.15

**Notes:** Robust standard errors corrected for clustering by county. Democratic vote for 1830 - 1832 was percentage of votes cast for Democratic (Bucktail) candidate in November 1830; for 1833, 1834, and 1836, percentage of votes cast for Democratic candidate in November 1832. Legislative representation is the number of terms served by the longest-serving member of the state Assembly by county for each session. Nonagricultural employment in 1830 estimated as arithmetic average of 1820 and 1840 values.

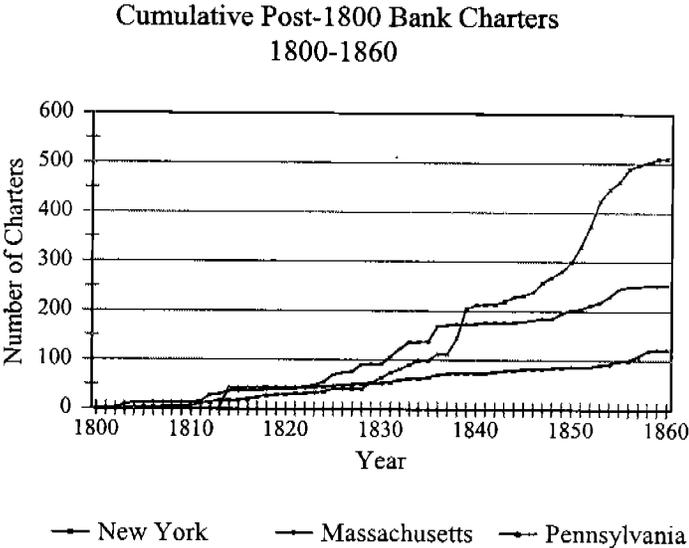
**Sources:** See Table 2 for sources of population and banking data. Democratic votes in 1830: Benson and Silby (2002). Democratic votes in 1832: Williams (1833), pp. 39-41. Assessed wealth in 1832: Williams (1833), p. 142. Legislative terms from New York State (1874).

Table 8: Determinants of Bank Entry in Massachusetts, New York and Pennsylvania, 1850-1857

Independent Variable	Dependent Variable = Charter (0,1) Ordered Probit Estimation		Dependent Variable = $\Delta$ per capita Bank Capital OLS Estimation	
	(1) Coefficient (Std Error)	(2) Coefficient (Std Error)	(3) Coefficient (Std Error)	(4) Coefficient (Std Error)
Log population (1850)	0.916*** (0.198)	1.027*** (0.207)	0.843 (0.886)	1.083 (0.767)
Population Growth (1840-1850)	0.177*** (0.048)	0.182*** (0.053)	-0.041 (0.154)	-0.027 (0.166)
Canal	0.382* (0.217)	0.401* (0.218)	-0.547 (1.102)	-0.448 (1.074)
City	-0.669 (1.170)	0.694 (0.983)	16.974 (15.129)	20.510** (9.990)
Urbanization		-0.007 (0.006)		-0.014 (0.027)
Per capita Bank Capital (1850)	0.020** (0.010)		0.053 (0.123)	
New York	0.408 (0.358)	0.221 (0.316)	-6.148** (2.873)	-6.774*** (2.286)
Pennsylvania	-1.700*** (0.423)	-2.209*** (0.472)	-9.892*** (2.857)	-11.293*** (2.763)
Constant			2.021 (9.738)	1.256 (8.867)
Log likelihood	-165.3	-166.1		
Wald Chi-Square (7)	105.6***	97.0***		
F (7, 127)			10.07***	9.20***
R-square	0.31	0.30	0.42	0.42

Note: All regressions estimated with robust standard errors. \* implies significance at 10%; \*\* at 5%; \*\*\* at 1%.

Figure 2: Cumulative Bank Charters in Massachusetts, New York and Pennsylvania 1800-1860



Bank Chartering and Political Corruption  
In Antebellum New York

Howard Bodenhorn  
Lafayette College  
and  
NBER

July 2003

# Cumulative Post-1800 Bank Charters 1800-1860

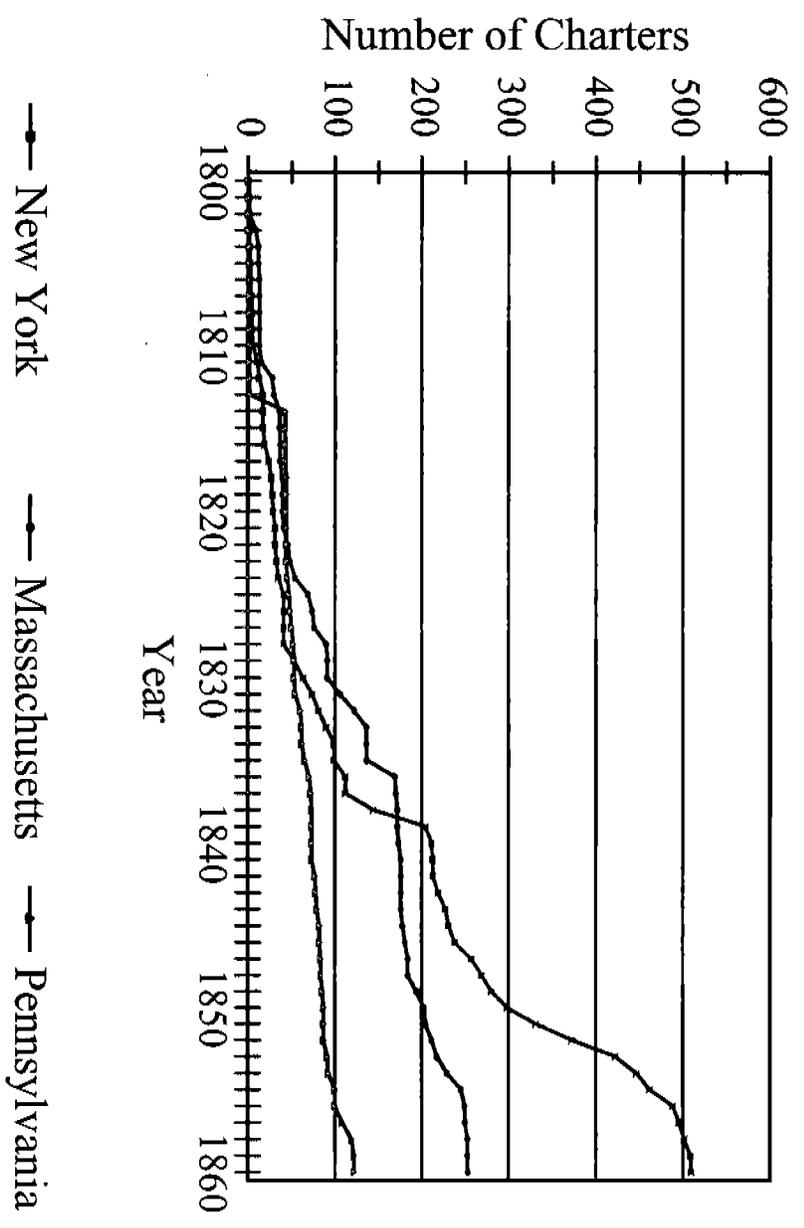


Table 1: Bank Capital per Capita in Massachusetts, New York, and Pennsylvania selected dates

Year	Massachusetts	New York	Pennsylvania
1800	\$ 9.01 <sup>a</sup>	\$ 5.81 <sup>b</sup>	\$ 8.06 <sup>a</sup>
1805	12.22	7.27 <sup>b</sup>	10.04
1810	14.16	7.75 <sup>b</sup>	7.41 <sup>c,d</sup>
1815	23.07	15.93 <sup>b</sup>	16.38 <sup>d</sup>
1820	20.26	15.38 <sup>b,e</sup>	14.02 <sup>d,f</sup>
1825	25.74	16.04 <sup>b</sup>	na <sup>f</sup>
1830	31.61	12.44 <sup>b,e</sup>	10.84 <sup>d,f</sup>
1835	45.36	14.72 <sup>b,g</sup>	11.65 <sup>f</sup>
1837*	54.99	16.43 <sup>h</sup>	14.86
1840	45.75	15.15	14.04
1845	36.24	15.94	7.32
1850	37.13	15.29	7.43
1855	53.05	24.19	7.67
1860	54.00	28.72	8.80

**Notes and Sources:** Unless otherwise noted, estimates are based on capital accounts reported in U.S. Comptroller (1876) and U.S. Census Office (1872). Population estimates for noncensus years calculated from continuously compounded growth rates between census years.

\* Last year of legislative bank chartering in New York State.

<sup>a</sup> Estimates are for 1801.

<sup>b</sup> Bank capital from Williams (1837, p. 235). Gallatin's (1831, pp. 97-103) imply slightly different figures: 1811, \$7.57; 1815, \$16.57; 1820, \$13.83; 1830, \$12.78.

<sup>c</sup> Estimate for 1811.

<sup>d</sup> Estimates from Gallatin (1831, pp. 97-103).

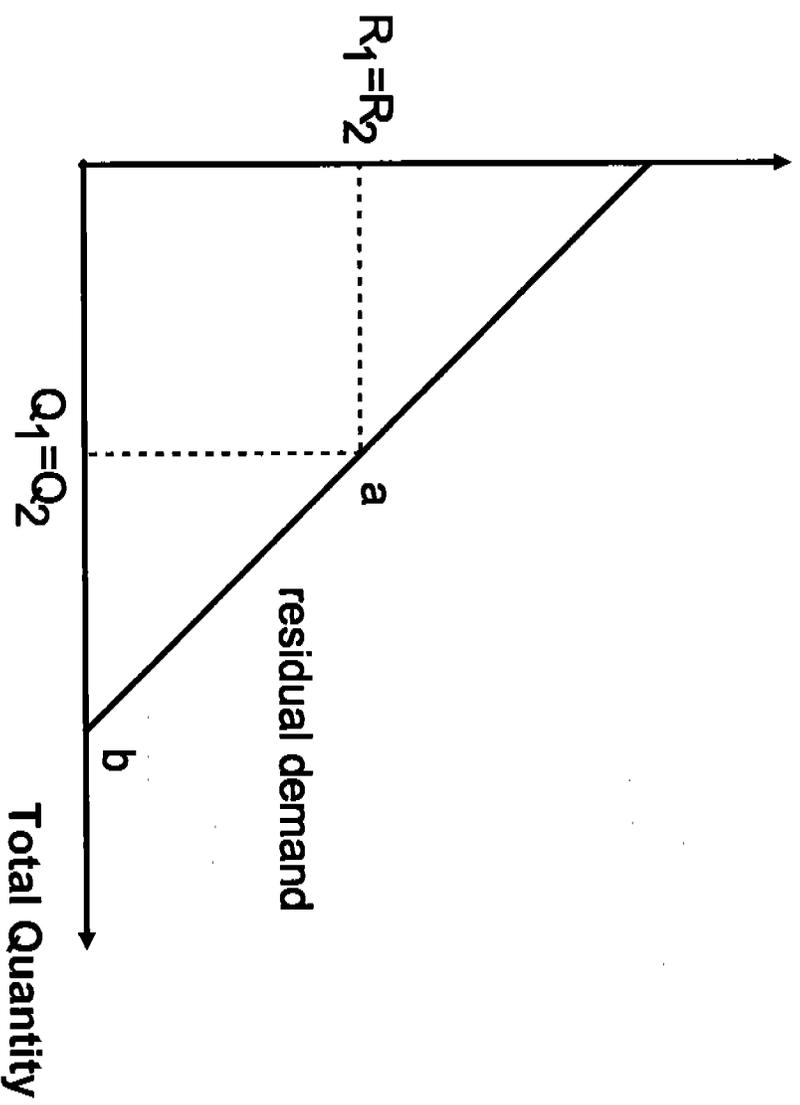
<sup>e</sup> Fenstermaker's (1965) reports for capital imply different figures: 1819, \$0.84; 1830, \$3.54.

<sup>f</sup> Fenstermaker's (1965) reports for capital yield different figures: 1820, \$6.37; 1825, \$7.57; 1830, \$9.51; 1835, \$12.39.

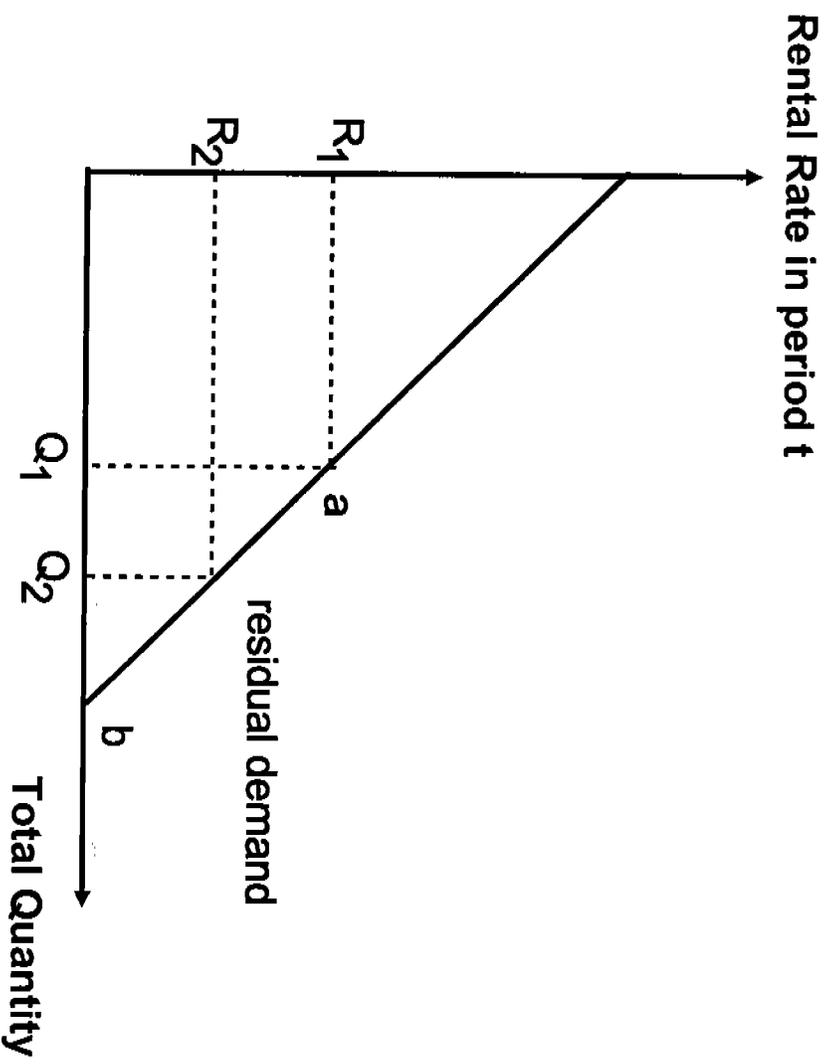
<sup>g</sup> U.S. Comptroller's (1876, p. CIII) figure implies \$14.14

<sup>h</sup> Fenstermaker's (1965) figure implies \$16.21.

Rental Rate in period  $t$



**Durable Good Monopolist Credibly Committed to Zero Units  
in Period 2**



**Durable Good Monopolist that Cannot Credibly Commit to  
Zero Units in Period 2**

Table 3: Determinants of Bank Entry in Massachusetts, New York and Pennsylvania, 1830-1837

Independent Variable	Ordered Probit Estimation		OLS Estimation	
	(a) Coefficient (Std Error)	(2) Coefficient (Std Error)	(3) Coefficient (Std Error)	(4) Coefficient (Std Error)
Log population (1830)	0.718*** (0.196)	0.863*** (0.210)	2.106 (1.533)	2.933*** (1.147)
Population Growth (1820-1830)	0.113*** (0.039)	0.096*** (0.044)	0.565*** (0.197)	0.525*** (0.207)
Canal	0.463** (0.225)	0.471** (0.219)	0.974 (1.199)	1.155 (1.212)
City	1.800*** (0.556)	0.361 (0.982)	19.419 (12.919)	9.448 (17.516)
Urbanization	0.012** (0.005)		0.064 (0.056)	
Per capita Bank Capital (1830)		0.026** (0.012)		0.127 (0.122)
New York	-1.915*** (0.458)	-1.332*** (0.475)	-6.959* (4.113)	-3.684 (2.692)
Pennsylvania	-2.400*** (0.494)	-2.105*** (0.524)	-4.791 (3.279)	-3.208 (2.868)
Constant			-15.722 (16.727)	-24.501** (12.187)
Log likelihood	-111.4	-111.4		
Wald Chi-Square (7)	98.1***	99.5***		
F (7, 113)			3.26***	4.02***
R-square	0.28	0.28	0.35	0.35

Note: All regressions estimated with robust standard errors. \* implies significance at 10%; \*\* at 5%; \*\*\* at 1%.

Table 8: Determinants of Bank Entry in Massachusetts, New York and Pennsylvania, 1850-1857

Independent Variable	Dependent Variable = Charter (0,1) Ordered Probit Estimation		Dependent Variable = $\Delta$ per capita Bank Capital OLS Estimation	
	(1) Coefficient (Std Error)	(2) Coefficient (Std Error)	(3) Coefficient (Std Error)	(4) Coefficient (Std Error)
Log population (1850)	0.916*** (0.198)	1.027*** (0.207)	0.843 (0.886)	1.083 (0.767)
Population Growth (1840-1850)	0.177*** (0.048)	0.182*** (0.053)	-0.041 (0.154)	-0.027 (0.166)
Canal	0.382* (0.217)	0.401* (0.218)	-0.547 (1.102)	-0.448 (1.074)
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Urbanization		-0.007 (0.006)		-0.014 (0.027)
Per capita Bank Capital (1850)	0.020** (0.010)		0.053 (0.123)	
New York	0.408 (0.358)	0.221 (0.316)	-6.148** (2.873)	-6.774*** (2.286)
Pennsylvania	-1.700*** (0.423)	-2.209*** (0.472)	-9.892*** (2.857)	-11.293*** (2.763)
Constant			2.021 (9.738)	1.256 (8.867)
Log likelihood	-165.3	-166.1		
Wald Chi-Square (7)	105.6***	97.0***	10.07***	9.20***
F (7, 127)			0.42	0.42
R-square	0.31	0.30		

Note: All regressions estimated with robust standard errors. \* implies significance at 10%; \*\* at 5%; \*\*\* at 1%.