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FROM PARTISAN BANKING TO OPEN ACCESS

The Emergence of Free Banking in Early Nineteenth Century Massachusetts

Qian Lu

Palgrave Studies in Economic History

Series editor
Kent Deng
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"The critical insight of Qian Lu's book is to provide clear historical evidence that the United States was not born modern, and to understand how it made its way to a modern society with a competitive economy and polity. The insights of the book help us all understand the problems facing any country that wants to develop today. Qian Lu's book provides an in depth historical account of how this process played out in Massachusetts. The empirical work is detailed and convincing. It provides a new insight into United States history, one the Americans themselves have been slow to recognize. More importantly, however, it provides a window into how a society can begin to move from limited to open access. We need many more of this type of detailed historical studies before we can begin to understand the general process of the transition."

—John Joseph Wallis, *Professor of Economics*
University of Maryland & NBER

"Qian Lu's detailed study of the early history of banking in one U.S. state, Massachusetts, plows new ground of historical interpretation by challenging previous views that American independence from Britain changed the regulatory regime from one that stifled banking and corporate development to one that allowed virtually free entry of new banks and corporations. Qian Lu presents us with a fascinating and convincing account of this important transition in American political economy. I congratulate Qian Lu for teaching Americans something they had not previously known about their history."

—Richard Sylla, *Professor Emeritus of Economics*
Henry Kaufman Professor of the History of Financial
Institutions and Markets (1990–2015), New York University

"Employing a wide range of previously overlooked sources on Massachusetts's bankers and politicians, Lu provides a compelling and original narrative about the connection between inclusive political systems and open access economies. Lu's analysis offers an original insight into dynamics of political and economic change in a polity struggling with the establishment of what Douglass North labels the "rules of the game." Their founding choices provided opportunities for later generations of entrepreneurs to emerge and thrive."

—Howard Bodenhorn, *Professor of Economics, Clemson University*

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To My Parents, My Forever Love

Foreword I

Toward the end of his life Ernest Gellner declared, "America was born modern; it did not have to achieve modernity, nor did it have modernity thrust upon it." Ernest Gellner, Anthropology and Politics: Revolutions in the Sacred Grove (Oxford: Blackwell, 1995), p. 18. Was the US born modern? If so, the lessons that USA history might offer to developing countries today, like China, may have little relevance. The critical insight of Qian Lu's book is to provide clear historical evidence that the USA was not born modern and to understand how it made its way to a modern society with a competitive economy and polity. The insights of the book help us all understand the problems facing any country that wants to develop today.

Qian Lu makes three important contributions. First, he places emphasis on institutional changes that occurred at the state, rather than at the national level. Americans tend to focus on their national history, which is an impediment to understanding early nineteenth-century America. After establishing the national government in 1789, most of the important functions of government were undertaken by state and local governments. Banking, the sector Qian Lu focuses on, was undertaken almost completely by the states. Massachusetts was the first state to charter large numbers of banks and by 1820 had more banks and bank capital than any other state. There were two banks chartered by the national government, the First and Second Banks of the United States, but it would be the states that would determine banking policy.

Second, he focuses on the interaction of economics and politics. Rather than taking the economy as given and analyzing how Massachusetts deals with the politics of banking, or taking politics as given and analyzing how banking in Massachusetts affected economic development, Qian Lu brings both pieces together in an endogenous framework. Individual economic elites in Massachusetts wanted to establish banks because of the economic utility and profitability. Those individual economic benefits enabled the Federalist political party of Massachusetts to manipulate who got a bank charter in ways that enable the party to organize and sustain itself. The manipulation was not just designed to reward Federalist supporters and make Federalists wealthier, the normal rent seeking-explanation, it was designed to help the Federalist coordinate a political coalition. This was political manipulation of the economy for political purposes. It was not economic manipulation of politics for economic purposes.

Third, he focuses on elites and intra-elite competition. He asks the difficult question, why would elites who enjoy privileges under a set of economic and political institutions be willing to dismantle those institutions and eliminate their privileges? The answer to this question cannot simply be that elites saw the economic benefits of letting anyone charter a bank, because in the process of moving to open access in banking the existing owners of banks would almost certainly be made worse off. When the Democratic Republicans gained control of both the legislature and the governor's office in 1812, they threatened to eliminate all but one of the Federalist banks. That threat to existing interests could not be solved merely by the Federalists getting back into power (which they did) because the threat would still exist. Democracy was new in the USA in 1812, and as Massachusetts elites learned that no one party could always expect to win an open election. They had two choices. One was to continue to politically manipulate economic interests in an attempt to insure that the dominant party always won elections. The other was to adjust the system of creating economic privileges to allow any citizen to charter a bank and enjoy the privilege. Opening access, of course, reduced the value of a bank charter to any individual bank, but it insured that all banks could credibly believe that they would remain in operation no matter which party was in power. After the crisis in 1812, Massachusetts chose the second alternative.

Qian Lu's book provides an in depth historical account of how this process played out in Massachusetts. The empirical work is detailed and convincing. It provides a new insight into USA history, one the Americans themselves have been slow to recognize. More importantly, however, it provides a window into how a society can begin to move from limited to open access. We need many more of this type of detailed historical studies before we can begin to understand the general process of the transition.

John Joseph Wallis
Professor, Department of Economics
University of Maryland, USA and
Research Associate National Bureau of
Economic Research, USA

Foreword II

Historians of the early USA have contended that the outcome of the American revolution changed nearly everything. Under British colonial rule, the American colonies were heavily regulated in their economic affairs, mostly to protect the interests of the Mother Country. There were, for example, no American banks and only a handful of business corporations. Great Britain wanted the King's subjects in America to use British financial services and trade with British corporations, not establish their own.

The War of Independence, 1775–1783, made America free, the historians argued, and that included the freedom to establish their own banks and corporations. Soon, instead of having no banks or corporations, Americans used their freedom to establish all sorts of them, and the American economy began to expand at steady, perhaps increasing, rates of growth that in roughly a century would make the USA the world's leading economy.

Qian Lu's detailed study of the early history of banking in one U.S. state, Massachusetts, plows new ground of historical interpretation by challenging previous views that American independence from Britain changed the regulatory regime from one that stifled banking and corporate development to one that allowed virtually free entry of new banks and corporations. During the 1790s, two political parties, the Federalists led by Alexander Hamilton, and the Democratic Republicans led by Thomas Jefferson, arose to compete for political power at the national level and in each of the U.S. states.

Massachusetts was a stronghold of the Federalist Party, which controlled the legislature and the governorship most of the time from 1790 to 1820. In the USA, banks and corporations received their charters from the state government. The only exception was the Bank of the United States, the central bank, which Congress chartered in 1791; otherwise, all banks were created by the U.S. states, not the federal government.

Qian Lu demonstrates that the Federalists used their control of the government of Massachusetts to grant banking charters only to Federalists, not Democratic Republicans, from 1790 to 1811. Even more interesting is his finding that many of the people involved in the banks the Massachusetts Federalists chartered were also Federalist state legislators. This was hardly freedom of entry into banking. It was more like what later would be called "crony capitalism."

U.S. politics were competitive, however, at both the national and the state levels. In Massachusetts, Federalist control of the state government and the use of that control to limit bank charters only to Federalists led to a political backlash. The opposition Democratic Republicans gained control of the state government, both the legislature and the governorship, in 1811. Then they behaved just like the Federalists. They vowed not to renew the charters of the banks the Federalists had chartered, which were to expire in 1812, and they proceeded to grant bank charters only to Democratic Republicans.

In 1812, the Federalists regained control of the Massachusetts government. Now they behaved differently. Realizing that shifts of political winds could lead to their being shut out of banking, they began to charter banks backed by the opposition Democratic Republicans as well as their own Federalist supporters. Entry into banking became considerably freer in Massachusetts. The state went on to lead the USA for decades in its number of banks as well as in industrialization and economic development.

Qian Lu presents us with a fascinating and convincing account of this important transition in American political economy. My own studies of early U.S. banking would lead me to offer one minor amendment to Qian Lu's story. Banking was a new business in the young USA. Americans had little experience with it. There are some indications that early American state legislators viewed banking as more a public utility than a competitive enterprise that should be free and open to everyone. Therefore, they may have chartered only one bank in many Massachusetts towns not merely to generate monopoly rents for that bank, but because they thought it was in the public interest to prevent ruinous competition between banks. And the Federalist legislators might have granted charters only to Federalists because they feared that banks controlled by the Democratic Republican opposition would, for political as much as economic reasons, have engaged in such ruinous competition.

My amendment to Qian Lu's story would apply only to the earliest years, the 1790s and perhaps a few years thereafter. By 1811, it seems clear, as Qian Lu contends that the Federalists were restricting charters to themselves and their friends more to promote private profit than the public interest. Knowing by then that banking was not really a public utility, and that they were vulnerability to political change as they learned in 1811 when they lost power, they decided when they regained power in 1812 to make bank entry freer and let the political opposition have the banks it wanted.

I congratulate Qian Lu for teaching Americans something they had not previously known about their history.

Richard Sylla
Professor Emeritus of Economics
New York University, USA

Foreword III

Employing a wide range of previously overlooked sources on Massachusetts's bankers and politicians, Lu provides a compelling and original narrative about the connection between inclusive political systems and open access economies. A political crisis in 1811 in which a previously out of power Democratic Republican party threatened to shut down the state's banks and eliminate the economic rents accruing to previously in power Federalists. The crisis provoked a bi-partisan coalition to institute a more open and inclusive chartering regime less subject to the vagaries of electoral politics. While the political and economic elite did not relinquish their control over banking, they abandoned the practice of awarding economic rents to favored groups and manipulating economic process through overtly partisan corporate chartering. Lu's analysis offers an original insight into dynamics of political and economic change in a polity struggling with the establishment of what Douglass North labels the "rules of the game." Their founding choices provided opportunities for later generations of entrepreneurs to emerge and thrive.

Howard Bodenhorn
Professor of Economics
Clemson University, USA

Acknowledgements

I would never have considered studying economic history without encouragement from Prof. John Wallis. John led me to read great historical works and inspired me to answer important questions in history. With a great patience, he taught me how to study economic history from both the institutional and the empirical perspectives. Studying economic history, in my understanding, is more than simply collecting a set of data, carrying out regressions, and then constructing a model to fit the data. Rather, it is looking at the detailed institutional and sociological structure of a society at a specific point in time to discover new clues for understanding both well-known and little-known histories. He also taught me how to write a cliometrics paper, and how to look at data from various perspectives and to discover the pattern of the data. All of these skills, I believe, are important for me to know how to become a great historian, and to help me know what I should keep learning and practicing in the future. John is a great person with a big heart. I really enjoy the learning and reading.

I am also grateful for Prof. Peter Murrell's help in my learning. Prof. Murrell organized a workshop of institutional economics, which taught me many interesting lessons in cultural evolution, institutional economics, and Chinese history. His interests in Chinese reform history often inspired my reading on this subject and ideas on possible future research. Peter also taught me how to carry out empirical research step-by-step, which was very helpful in my dissertation writing.

I also thank Prof. Ethan Kaplan for his help in preparing me for my job market. Ethan has great knowledge in implementing empirical research and is also very nice in preparing graduate students to go through the research and job market process. Without his help, I would not prepare myself well for the job market interviews.

I also thank Prof. David Sicilia and Prof. John Shea for kindly offering me valuable suggestions on my dissertation and agreeing to sit in my dissertation committee. Prof. Allan Drazen, Prof. Razvan Vlaicu, Prof. Ginger Jin, Prof. Luminita Stevens, Prof. Judy Hellerstein, and many other professors also have helped me in my research and improvement. I am indebted to the help provided by my fellow school mates, Alvaro La Parra Perez, Ron Chan, Ben Zou, Daisy Weijia Dai, Martin Schmidt, Haishan Yuan, Martija Janced, Nona Karalashvili, Wei Li, Ling Zhu, John Liao, Jianzhi Zhao, and many others, for their help and suggestions at various points of time. I also appreciate Vickie Fletcher, Davis Terry, Fox Kelly, Wilkerson, Mark, and Heather Nalley for their backing. I also appreciate Heather Blain Vorhies, Anthony Melchiorri, Eric Herrmann, Thomas McCloskey, Aaron Tobiason, Sarah England, and other staff at the UMD writing center for their valuable suggestions in writing papers and dissertation. I thank Howard Bodenhorn, Eric Hilt, Ethan Kaplan, Naomi Lamoreaux, James Snyder, Richard Sylla, Robert Wright, and seminar participants at the University of Maryland for their suggestions. I thank Yiqing Xu's help in providing accommodations while I was digging out archives in Boston, the winter of 2013. I appreciate the staff at the Massachusetts State Library and Massachusetts State Archives for their kindly help in advising me the materials and archive information. Special thanks to Alix Quan of Massachusetts State Library for providing valuable data on state legislators.

In the past five years, I began to appreciate many things that I ignored but actually already possessed. I became less worried about what I do not own. I know more now about the complexity of the world, both in history and present-day life. I know there are more challenges and happiness awaiting me in my future, but I have no ideas about what they will look like. However, I am glad that I have made a step further.

Last, I want to express my love for my parents. I began to study away from home since the age of 16 and only occasionally met my parents after that. I never told them I loved them. I never knew that they were so precious to me. They supported me even when they were in great difficulties. I love you forever, forever more.

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Was the US Born Modern?

Abstract The first chapter asks the question "Was the US Born Modern?" "Modern" here refers to the competitive economy and polity characterized by open access, in which the state provides legal organizational forms (such as corporations) impersonally to all parties in society. The implicit assumption behind the idea of the civil society is that USA was an open access society. Section 1 challenges the idea that American civil society was a natural outcome of American revolution and democracy. Section 2 reviews the related literature, presents previous arguments and asks the question why American elites allowed the transition to an open access society, given that they would suffer a loss if privileges were opened to all. Section 3 brings up the conceptual framework, around the characters of modern society: impersonal rules and open access for organizational forms. It proposes a question: was elite competition or elite-citizen completion to be the key force behind the transition to open access. Section 4 previews the results of the following chapters.

Keywords Civil society · Open access · Limited access · Institutional change · Elite

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1 Is Civil Society a Natural Outcome of Democracy?

Since Alexis de Tocqueville wrote *Democracy in America* in 1835, the American political system has been praised for the ubiquity of organizations that affect virtually every aspect of American life. Tocqueville observed,

> Americans of all ages, all stations in life, and all types of disposition are forever forming associations … In every case, at the head of any new undertaking, where in France you would find the government or in England some territorial magnate, in the United States you are sure to find an association.[1]

The USA has always ranked at or near the top in ease of forming new economic, political, and social organizations.[2] Since 1800, the USA has led the UK, France, and Germany in the historical race for the number of corporations (Hannah, 2013; Sylla and Wright, 2013). American scholars have, to a large extent, accepted Tocqueville's argument that a combination of culture and democracy formed historically unique preconditions for the emergence of a rich civil society. As a result, the American fondness for organizations grew without much struggle. This book challenges the idea that civil society or open entry for organizations was a natural outcome of democracy; it further studies how America struggled to achieve open entry for organizations in the early nineteenth century.

The emergence of a civil society requires a society to transform from a limited access social order to an open access social order. In a limited access social order, access to organizational forms such as corporations is limited to elites, whereas in an open access social order, access is open to almost all groups of people (North et al. 2009). For instance, by the 1850s, most US states had passed general incorporation laws to allow virtually any group of people to register as a corporation. Over the last three centuries, however, only a few societies have transitioned from limited to open access social orders and created a prosperous civil society. Seeking to explore these dynamics, this book asks whether early nineteenth-century America was an open access society, and if not, how did it achieve open access?

The book answers these questions in the context of a particular time, place, and activity: Massachusetts banking in early nineteenth century. Massachusetts' economic and political history provides an ideal case to study the emergence of open access to the banking sector. New England in general, and Massachusetts in particular, represented a strain of American history and culture closely identified with the paradoxical combination of existing elites, strong beliefs that elite privilege corrupts democracy, and a long history of participatory democracy. Massachusetts is often lauded as an exemplar of open entry. The Oscar and Mary Flug Handlin's classic history of the corporation in Massachusetts—*Commonwealth* (1969)—is a celebration of how democratic forces inexorably led to extension of the corporate form to everyone. Massachusetts was also the first state to incorporate a large number of banks. It had more banks per capita than other states as early as the 1820s: "After 1820, Massachusetts had essentially free banking in the general sense of that term, and the state remained a leader in terms of numbers of incorporated banks and capital invested in banking enterprises for several decades" (Sylla 1985). By 1830, while Massachusetts had only 4.7% of the nation's population, it contained 20% of the nation's banks and 18.5% of the nation's banking capital (Wallis et al. 1994, taken from Gilbart [1837] 1967). Early nineteenth-century Massachusetts is a natural place to examine the social processes that create open access banking.

Despite these views, before 1812, banking in Massachusetts was essentially limited to merchants and entrepreneurs who were connected with the Federalist Party. As the Federalist Party grew better organized, banking became a Federalist preserve. A bank charter was a valuable privilege authorized by the legislature. By controlling the legislature and governorship in the state's early history, the Federalists were explicitly able to exclude their political opponents, the Democratic-Republicans, from obtaining bank charters. The Federalists in Massachusetts organized around a core of legislator/bankers that created rents in the banking sector in order to coordinate a political coalition that controlled Massachusetts government. Federalist domination of Massachusetts politics was broken for only one session of the legislature in 1811 under Governor Elbridge Gerry (famous for gerrymandering). In control of the state government only once, the Republicans mirrored the policies of the Federalists, chartered their own banks, and denied the rechartering of existing Federalist banks. When Federalists regained control of the government in 1812, they began to charter both more Federalist banks and Democratic-Republican banks. As a result of the political war over banking, Federalists and Democratic-Republicans formed a consensus that moved Massachusetts banking toward open entry.

None of this was inevitable in early nineteenth-century America. The movement toward free entry in Massachusetts depended on unique circumstances, which moved political and economic elites to voluntarily give up their valuable privileges. The following chapters lay out the history of Massachusetts banking and politics and test the idea that a political coalition manipulated access to banking by providing both quantitative and historical evidence. The key to limited access is the close association in Massachusetts between bankers, legislators, and parties. After 1811, this close association began to weaken, and by the time of the 1830s and 1840s, the association was not eliminated but significantly reduced. The transition to open access banking, to a large extent, was due to intra-elite competition. Unlike a revolution, intra-elite competition did not eliminate elites from banking: By the 1830 and 1840s, banks were still connected to politics, and bankers remained wealthy elites. However, intra-elite competition did move banking toward de facto free entry.

2 Why did Americans Opened Access to Corporations?

Much of the historical literature simply describes what happened in Massachusetts, while a smaller set explains why it happened. At the most general level, the democratic revolution supplies an answer to why

Massachusetts allowed many citizens to form corporations. Historians such as Oscar and Mary Flug Handlin (1969) and Pauline Maier (1992, 1993) found that Massachusetts corporations multiplied from the earliest days after the revolution. Pauline Maier's article offers an answer to the why question: Political events in the revolution created conditions under which the emergence of modern corporations and open access to those corporate forms was almost inevitable. While many people in the USA opposed corporations on principle, many became "supporters of an agenda for the design of corporate charters who drew on the revolution's fascination with the construction of Constitutions to adapt the corporation to American circumstances. In doing so, they made the corporation a part of the revolutionary heritage with far-reaching implications for American government and society" (Maier 1993, p. 53). The Handlins' *Commonwealth: A Study of the Role of Government in the American Economy, 1771–1861* (1969) has much the same tone and analysis. The state found itself confronted with such a large political and revolutionary demand for corporate charters from a wide variety of citizens that it simply could not refuse to authorize incorporations.[3]

Economic historians have similar explanations. Richard Sylla's essay on early American banking notes the significant opposition to open entry (free) banking by opponents of corporations, but attributes the opposition to a general revolutionary aversion to privilege (Sylla 1985). Americans opposed privilege for deep historical and cultural reasons. The relatively equal distribution of landed wealth (Engerman and Sokoloff 2002) gave Americans a particularly strong aversion to government created privileges. This cultural bias eventually led Americans toward prohibition of government created privileges in the Jacksonian Era.

The founding generation, who upheld the banner of American revolution, feared that organized economic and political interests, specifically economic corporations and political parties, would undermine the accomplishments of the revolution. Thomas Jefferson and James Madison opposed Alexander Hamilton's financial programs, especially the incorporation of a National Bank, fearing its power over democracy. In his farewell address, George Washington warned the baneful effect of political parties:

> The alternate domination of one faction over another, sharpened by the spirit of revenge, natural to party dissension, which in different ages and countries has perpetrated the most horrid enormities, is itself a frightful despotism. But this leads at length to a more formal and permanent despotism. The disorders and miseries which result gradually incline the minds of men to seek security and repose in the absolute power of an individual; and sooner or later the chief of some prevailing faction, more able or more fortunate than his competitors, turns this disposition to the purposes of his own elevation, on the ruins of public liberty.
>
> Without looking forward to an extremity of this kind (which nevertheless ought not to be entirely out of sight), the common and continual mischiefs of the spirit of party are sufficient to make it the interest and duty of a wise people to discourage and restrain it.[4]

A significant amount of American economic and political success in the following 200 years can be attributed to open entry of corporations and political parties. Economic historians have struggled to find what was embedded in democratic culture and revolutionary history that explains both the aversion and open access to corporations.

Viewed from a narrow perspective, explanations adopted by the Handlins, Maier, Sylla, and many others that Americans adopted open access for organizations because the political, cultural, and economic dynamics moved the society toward revolution and democracy in the colonial experience, is certainly correct. However, the Massachusetts literature lacks a critical element: intra-elite competition. In a broader perspective, revolutions and similar adoption of democratic political institutions in other societies have not led to open organizational access, for example, in Latin America after independence. These societies tried revolution and democracy repeatedly, but elites persistently frustrated attempts to open access. If the revolution and democracy were the key to open access, we should observe that in open access America, elites' political and economic privileges were largely eliminated, banks were not significantly connected to political elites, and bankers were just ordinary rich people. Was this idealistic, revolutionary view of open access the historical fact or an ideological social construction? By looking at the transition to open access from both political and economic perspectives, this book shows that the naïve revolutionary story of democratic transition is simply wrong.

Revolution and democracy were not keys to open access. Revolutionary, intellectual, and cultural predispositions were not enough to prevent early American elites from forming coalitions of organized political and economic interests to compete for government control, or to use that control to promote their own ends at the expense of the larger society. By ignoring intra-elite conflicts and asserting the inevitability of open access in post-revolutionary America, standard explanations emphasizing that revolution, democracy, and American culture led to open access cannot tell us why elites allowed open access to emerge and why elites did not disappear from American society.

3 Conceptual Framework: Impersonal Rules and Open Access for Organizations

North, Wallis, and Weingast (2009) argue that, in most societies, intra-elite competition and violence is limited by the creation of elite economic rents which sustain coordination within elite coalition. Their understanding of the transition to open access is that competition within and between elites can, under the right conditions, lead elites to move toward rules that allow all elites to form organizations.

Three doorstep conditions are necessary for transition: (1) Rule of law for elites; (2) Perpetual forms of organizations for elites (such as corporations, including the state itself); and (3) Political control of the military. All three conditions greatly expand the range of specialization and exchange. Rule of law extends the range of contracts among elites, perpetual organizations such as corporations enable elites to organize more economic activities, and political control of violence reduces the risk of violence to disrupt trade.

Once all three conditions are met, it is possible to establish impersonal exchange within elites. Elite impersonal exchange, in turn, encourages elites to extend the access to non-elites so as to expand transactions and contracts. If more people have access to elite legal system and organizational forms, they would be willing to trade with elites. Elite contracts would expand and they would benefit from increasing access at the margin. The society moves toward a new pattern of open political and economic access in which a competitive economy sustains competitive politics.

In contrast, Acemoglu and Robinson (2005, 2012) suggest that human societies have two types of institutions—"extractive institutions" and "inclusive institutions." "Extractive institutions" allow elite groups to extract wealth from citizens, and inclusive institutions "allow and encourage participation by the great mass of people in economic activities… and must permit the entry of new businesses and allow people to choose their careers."[5] The transition to "inclusive institutions" requires elites be restrained or overthrown by non-elite citizens. Acemoglu and Robinson (2012) argue that the colonial experience and the American revolution established inclusive institutions.

The key difference between North, Wallis, and Weingast (NWW) and Acemoglu and Robinson (AR) is the role of elites in the transition to open access or inclusive institutions. NWW emphasize competition between elites, while AR emphasize competition between elites and non-elite citizens. NWW suggest that it is possible to transition to open access through reconfiguration of elite groups, while AR argue that the threat of revolution by citizens may force elites to extend their privileges and allow inclusive institutions to emerge.

This book looks at early nineteenth-century banking history on an attempt to answer whether intra-elite conflicts or revolution by citizens led early nineteenth-century Massachusetts banking to open access. More specifically, early nineteenth-century America has satisfied NWW's third doorstep condition, political control of violence, but why elites were willing to extend their privileges to all citizens? Was this because of American revolution or interactions among elites? How did America achieve the first and the second condition, i.e., the rule of law and perpetual organizational forms for elites? And how did the access to citizens become open? This book tries to answer the above questions in a history covering a time range from the Constitution to the Civil War.

This book includes both historical and empirical studies. Historically, I dig into archives and uncover a forgotten history by showing that the first parties—Federalists and Democratic-Republicans—competed to control banks by dominating the legislature and excluding others from the banking sector. This winner-take-all game forced both parties to accommodate banks of the other party and moved the banking sector toward de facto free entry. Empirically, I provide a concrete measure of an elite coalition by defining elites as bank directors who had been or would become state legislators at some point in their life. Both NWW and AR construct their theories based on concepts of elites, but neither proposes a way to measure elites in historical context. I collect original data on bank directors and state legislators and show that in the early 1800s, 70% of bank directors had been or would become state legislators. However, this elite association began to weaken over the next several decades. By the 1850s, the proportion had dropped to 30%. I then provide a second measure of elite coalitions by defining elites as legislators who were bank directors in the same year. For people who were ever legislators, I show that being a legislator in a given year has 50% larger chance than not being a legislator to be a contemporaneous bank director around 1800, but this probability dropped to zero in the 1840s. Furthermore, I collect wealth data on wealthy taxpayers in Boston and show that in the free banking era, bank directors were always richer than non-bankers. The intra-elite party competition did not eliminate elites from banking, but it did move the banking sector toward free entry.

4 Preview of the Book

The second chapter will show that, from 1799 to 1810, the dominant elite coalition—the Federalist Party—created limited access to banking by controlling the majorities in both houses of the state legislature in most years as well as the governorship. They refused to charter Democratic-Republican banks. Only in 1811, of all the years between 1790 and 1824, the Democratic-Republicans were able to seize control of the House, Senate, and governorship in the same year. In that year, they chartered their own banks and refused to renew Federalist bank charters, all of which were due for renewal in 1812. After a fiercely contested campaign, the Federalists regained control of the legislature and governorship in 1812 and renewed the charters of their banks. After 1812, Federalists and Democratic-Republicans began to alter the institutions that governed entry into banking through the chartering process. The Federalists retained control of the legislature into the mid-1820s, but Federalist elites were willing to share the privilege of creating banks in favor of a policy of open entry. The Federalists adopted a policy of free entry so that if they lost control of government, they would still receive bank charters. The example of Massachusetts shows that intra-elite political competition, rather than elite-citizen competition, promoted the transition from the limited to open access.

Chapter 3 provides the major empirical contribution of this book. I define elites as bankers who had been or would become state legislators at some point of their life. I collect data on bank directors and state legislators from 1790 to 1860 to identify the affiliation between bankers, political parties, and state legislators. Over 70% of the bank presidents and bank directors before 1812 had been or would become state legislators. Moreover, most of those banker/legislators were associated with the Federalist Party, and very few were Democratic-Republicans. The stock of directors shows that from 1797 to 1811, many directors remained Federalist, despite the fact that Democratic-Republicans' strength in the legislature kept rising. However, in 1812, the proportion of bank directors that had been Democratic-Republican legislators jumped from almost zero to 24%. Ordinary Least Squares, Logit, and Probit regressions show that the probability of a bank director being a Democratic-Republican legislator increased by more than 20% after 1811, with no significant change in the probability of being a Federalist legislator. These results reveal a shift in strategy by Federalists, who extended banking privileges to their political rivals, as a direct result of the threat of charter revocation in 1811.

In addition, Chap. 3 shows that while the connection between legislators and bankers dropped after 1812, legislators and bankers nevertheless continued to be closely connected: Even in the 1850s, forty to fifty percent of all bank presidents and bank directors served in the state legislature at some point in time. Despite the continuing connection, limited partisan access to banking never returned in the second party system. After 1820, banking was still dominated by elites, but access to banking was no longer limited by political affiliation. Bankers were still much wealthier than the average citizen, and were much more likely to become state legislators, but were no longer connected with a particular party.

Chapter 4 complements Chap. 3 by examining the contemporaneous relationship between bank directors and state legislators. The results show that people who were ever state legislator at some point in their life had a significantly larger chance of being a bank director at the same time in the 1790s and the first decade of the nineteenth century. Over time, the chance that a person would be both a legislator and a banker at the same time declined to almost zero. These results provide another perspective of looking at the connection between banking and political elites, and they suggest that the banking sector was less politically connected in the second party regime.

Chapter 5 studies the transition to open access from the economic perspective. It collects wealth data from Boston tax rolls between 1827 and 1859 and data on bank balance sheets from 1804 to 1861. The results show that in the era of de facto free banking, bankers remained richer than other wealthy citizens, although the wealth inequality did not widen. Banks chartered in the free banking era were still politically connected, although their sizes were small. These results suggest that from the economic perspective, many bankers were still wealthy elites, and the banking sector was not owned by grassroots citizens.

Chapter 6 provides an explanation of open access based on the conceptual framework of intra-elite competition developed by North, Wallis, and Weingast (2009). This framework suggests that intra-elite conflicts, rather than revolution led by citizens, were a more likely explanation for the transition to open access. If the transition to open access banking was caused by revolution, as the Handlins, Maier, Sylla, and many political and economic historians have suggested, we should observe that the banking sector was largely democratized by the 1790s, with political elites eliminated from the banks and ordinary citizens becoming bankers. However, the evidence suggests that the elites were not eliminated from the banking sector, and bankers were still politically connected and remained wealthy. Intra-elite conflicts moved the banking sector toward de facto free entry.

Chapter 7 concludes the book.

Notes

1. Alexis de Toqueville, *Democracy in America*, ed. J.P. Mayer (New York: Harper & Row, 1969), p. 513.
2. For instance, the current Doing Business report (World Bank 2013, p. 3) ranks the US fourth in world on "the ease of doing business."
3. According to Handlin and Handlin (1969), "The public purpose which justifies extension of government powers to a bank, to a bridge, and to a factory soon comprehended a wide and ever widening circle of enterprises. The Commonwealth's concern with the entire productive system, its solicitude for the welfare of many diverse activities, all interdependent and all adding to the strength of Massachusetts, quickly put the corporate form to the use of many new ventures. The political balance deflated any notion of keeping the device exclusive; the expansive thinking, the excited spirits of the young state, brooked no casual denial. Charters in steadily mounting volume clothed with living tissues the skeletal hopes for an economy to serve the common interest" (p. 106).
4. Washington's Farewell Address 1796, The Avalon Project, Yale Law School 2008 Lillian Goldman Law Library.
5. Acemoglu and Robinson (2012, p. 74–75).

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2

The History of Partisan Banking

Abstract This chapter shows that, from 1799 to 1810, the dominant elite coalition—the Federalist Party—created limited access to banking by controlling the majorities in both houses of the state legislature in most years as well as the governorship. They refused to charter Democratic-Republican banks. Only in 1811, of all the years between 1790 and 1824, the Democratic-Republicans were able to seize control of the House, Senate, and governorship. In that year, they chartered their own banks and refused to renew Federalist bank charters, all of which were due for renewal in 1812. After a fiercely contested campaign, the Federalists regained control of the legislature and governorship in 1812 and renewed the charters of their banks. After 1812, Federalists and Democratic-Republicans began to alter the institutions that governed entry into banking through the chartering process. The Federalists retained control of the legislature into the mid-1820s, but Federalist elites were willing to share the privilege of creating banks in favor of a policy of open entry. The Federalists adopted a policy of free entry so that if they lost control of the government, they would still receive bank charters. The example of Massachusetts shows that intra-elite political competition, rather than elite-citizen competition, promotes the transition from the limited to open access.

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Keywords Federalist Party · Democratic-Republicans · Bank charter
Partisan banking · Free banking

This chapter presents the history of partisan banking in early Massachusetts, which has been largely forgotten by American economic historians. To understand how political parties controlled banks and manipulated the banking sector for their purposes, we need to understand both political history and banking history in early nineteenth-century Massachusetts.

1 Banking History, 1780–1810

After the American revolution, Massachusetts established a new government and wrote a new State Constitution. The Constitution prohibited the state from recognizing any association that did not serve the common good:

> Article VI. *No man, nor corporation, or association of men, have any other title to obtain advantages, or particular and exclusive privileges, distinct from those of the community, than what arises from the consideration of services rendered to the public*; and this title being in nature neither hereditary, nor transmissible to children, or descendants, or relations by blood, the idea of a man born a magistrate, lawgiver, or judge, is absurd and unnatural.
>
> Article VII. Government is instituted for the common good; for the protection, safety, prosperity and happiness of the people; and *not for the profit, honor, or private interest of any one man, family, or class of men*: Therefore, the people alone have an incontestable, unalienable, and indefeasible right to institute government; and to reform, alter, or totally change the same, when their protection, safety, prosperity and happiness require it.[1]

Article VI specifies that no corporation or association could obtain exclusive privileges except for those established for public services, and Article VII specifies that the government should not serve the private interests of any factions. Articles VI and VII together required the government to provide corporate privileges only for public services rather than private interests of certain elite factions.

All corporations—manufacturing firms, banks, churches, schools, colleges, learned academies, and fraternal organizations—were required to serve the public good. The state chartered corporations by special laws and tightly controlled them (Neem 2009; Handlin and Handlin 1969). It also specified corporate privileges including perpetual lives, the rights of suing and being sued, limited liability, and the power of issuing notes as banks. These corporate privileges could be used to provide public goods and promote economic development, but they could also be used to advance private interests of privileged elites. The question is how the state could prevent elites from using corporate privileges to corrupt government and benefit private elite interests, while allowing corporations to promote public welfare and development at the same time.

Banks were also corporations chartered by the state. As Fig. 1 shows, few banks were chartered before 1812. On average, 1.2 bank charters were granted each year between 1792 and 1811. The pattern changed after 1811. An average of 4.7 banks was chartered every year between 1812 and 1860. By the 1820s, Massachusetts had entered the era of "de facto free banking" (Sylla 1985).

In the banking sector, the concern that a few elites would use corporate privileges to benefit their private interests instead of public welfare also prevailed. In the Antebellum era, all banks could issue their own bank notes, which were private monies circulated in the economy. States authorized certain banks to issue bank notes to facilitate circulation in the economy. However, elites, by controlling the government, exclusively received bank charters and limited access to banking. As a result, people worried that elites corrupted government to receive exclusive bank charters for the exclusive issuance of monies to benefit their private interests.

Since the Massachusetts Bank received the first charter, people feared that a few elite citizens dominated the bank and abused power to issue bank notes for private benefit. In 1804, the legislature chartered the bank to provide public currency. However, nine of the twelve members

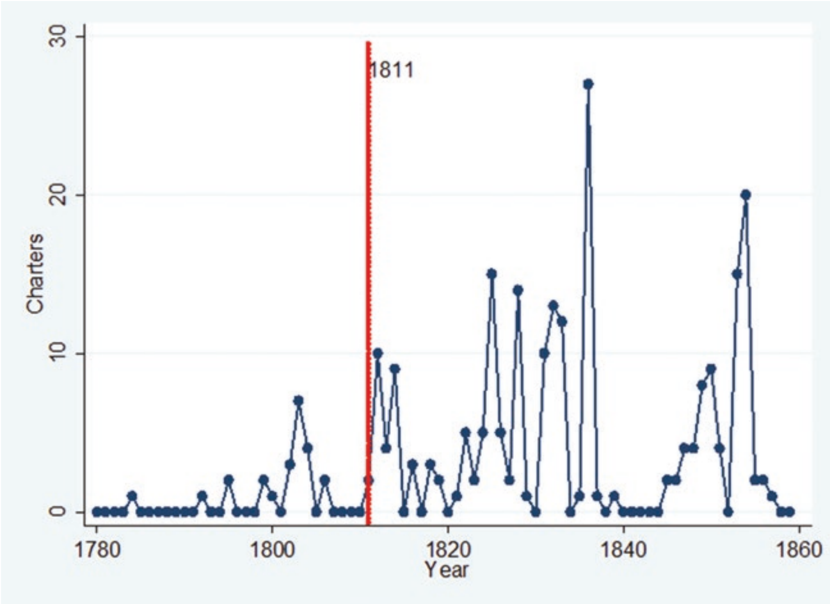

Fig. 1 Number of New Charters excluding Renewals, 1780–1860. *Source* Sylla and Wright (2013)

of the first board of directors came from wealthy families and were directly connected through birth or marriage. The remaining three were themselves wealthy merchants and two were important political figures. These powerful directors were unable to provide enough supply of species. People complained that the "few men of great influence" controlled the issue and asked for the repeal of the bank's charter to eliminate its privilege.[2]

In 1792, the state legislature chartered the Union Bank as the state's depository. The Union Bank also failed to satisfy demands for credit and received complaints about its private privileges. To meet the demand for currencies, eight more banks were created between 1795 and 1803, but each town was allowed only one bank, and petitions for competing banks were rejected.[3] In 1799, an act was passed to restrict banking privilege to corporations.[4] 1803 and 1804 were the most active years before 1812 for chartering banks, with seven and four banks chartered, respectively. However, the lack of currencies and the difficulty of redeeming country bank notes led Democratic-Republican Governor James Sullivan to propose a single monopoly of a state bank.[5] No banks were incorporated between 1806 and 1811.

The following section demonstrates how, as Massachusetts chartered banks to promote economic development in the late 1790s and early 1800s, it also provided privileges only to a certain political faction, the Federalists, who controlled all banks and refused to charter banks for other political factions. It was only in 1811 that Democratic-Republicans implemented a series of reforms extending banking privileges to a larger population.

2 From Deferential Politics to Partisan Politics

Scholars such as Pole (1966), Formisano (1974, 1983), and Keller (2009) have claimed that eighteenth- and early nineteenth-century America can be characterized as a deferential society in which elites maintained leadership in the community and occupied political offices through intermarried families. There were steep property qualifications for the state legislature and the governorship, effectively excluding most people from political power.[6] As John Adams noted in the late 1780s, "in every village of New England…the office of justice of the peace or even the representative, which has ever depended only on the freest election of the people, have generally descended, from generation to generation, in three or four families at most."[7] As these scholars have shown, the late eighteenth and early nineteenth centuries represented a time of elite political interests.

The Federalist and Democratic-Republican Parties emerged in the 1790s as elite coalitions (Formisano 1974, 1983). As voting was either oral or in person at the poll, it was possible for political parties to monitor the polls to assure the election of elite candidates. By dominating the political parties that controlled government, elites extended their influence over various organizations such as churches, universities (such as Harvard College), and academic societies (such as the Massachusetts Medical Society).[8]

Figures 2 and 3 show the proportion of Federalists and Democratic-Republicans in each annual Massachusetts legislature. Federalists dominated both houses of the legislature in most years, ceding control to the Democratic-Republicans only in 1806, 1807, and 1811. Federalists also dominated the executive branch, as the Democratic-Republicans held the governorship in just four years between 1797 and 1823. It was only in 1811 that the Democratic-Republicans were able to simultaneously control the governorship and the two houses of the legislature, when Elbridge Gerry served as governor (June 1810–March 1812). This political history of Massachusetts influenced the banking sector through political parties.

Formisano (1983) shows that the period between 1805 and 1815 exhibited an outpouring of political interest represented by increasing voter participation, town representation, and legislative activity.

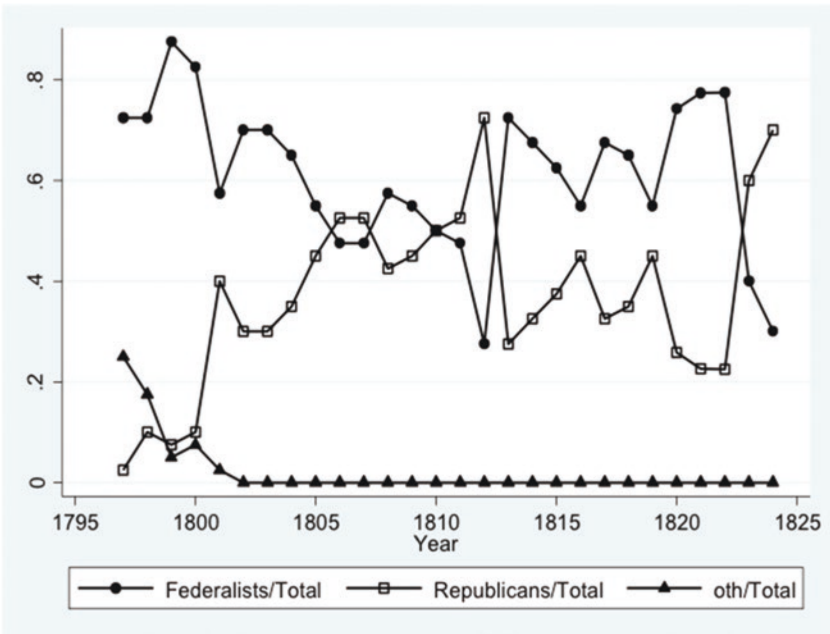

Fig. 2 Annual proportion of Federalists and Democratic-Republicans in the Massachusetts Senate, 1797–1824

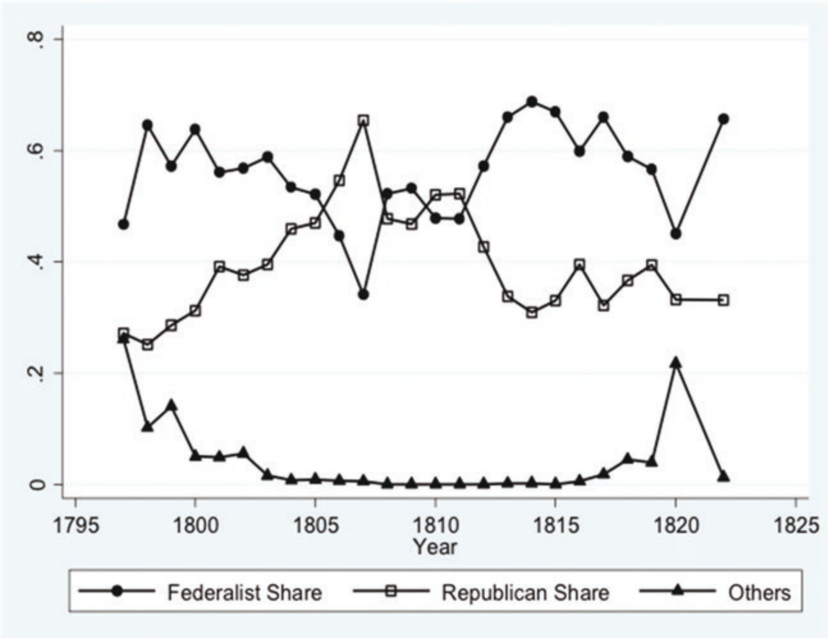

Fig. 3 Annual proportion of Federalist and Democratic-Republicans in the Massachusetts house of representatives, 1797–1822. *Note* Figures 2 and 3 plot the annual proportion of Federalists and Democratic-Republicans in Massachusetts' Senate and House, respectively, from 1797 to 1824. The dotted line plots the Federalist proportion and the hollow squares plot the Democratic-Republican proportion. Years are labeled on the horizontal axis. The data are from Dubin (2007)

The elections from 1805 to 1812 were closely contested: The percentage differences between the parties ranged from only 0.9% to just over 3.0%. People tended to vote along the same lines through the years—Federalist towns constantly supported Federalists, while Democratic-Republican towns supported Democratic-Republicans.

Political leaders in this period tended to be revolutionary heroes with an anti-partisan stance. War service in the 1770 and 1780s identified a person with the revolution and promoted him to high state offices. Both Federalists and Democratic-Republicans tried to associate their candidates with these revolutionary heroes and claimed to be the true party of the revolution. The popular leaders possessed moderate temperaments, a reputation of being a revolutionary hero, and anti-partisan views.

Early nineteenth-century Massachusetts was undergoing a transformation from deferential to partisan politics. Political parties emerged, and then became organized, and gradually played an important role in mobilizing voters and shaping political competition. The antiparty ideology was replaced by partisan politics with fierce party competition. Under this transformation, the Federalist and Democratic-Republican Parties were able to control government and banks.[9]

3 Partisan Banking, 1799–1810

In 1799, the Massachusetts legislature passed a law to prohibit banking without a state charter. As a result, all existing and new banks had to petition for a charter through the state legislature to operate.[10] By dominating the government, the Federalists controlled banks and excluded the Democratic-Republicans. For example, the Worcester Bank was chartered in 1804. Among its 135 subscribers, almost a quarter would join the Washington Benevolent Society (the national Federalist political club), and nine were prominent in Federalists county committees. The Democratic-Republican elites, such as the Lincolns or Bangs, were absent. The president and directors of the bank were also Federalists, and Daniel Waldo, the bank president, would become the president of the Worcester branch of the Washington Benevolent Society.[11]

Democratic-Republicans complained about Federalists' exclusive control of banking. On February 16, 1803, for example, the Democratic-Republican newspaper *Columbian Centinel* claimed:

> Monopolies of all kinds are odious in all countries, but they are more so in a free country like ours; they are here directly opposed to the genius and spirit both of the people and their government. And there can be no monopoly more invidious, than to give exclusive privileges by the acts of government to a few very rich men for improving their money in Banks, and to refuse the same privilege to the active merchants, and to the widows and orphans (as cited in Lake 1932, p. 32).

The Democratic-Republicans asserted that the Federalists manipulated banks for political purposes. For example, they charged the Federalist banks with being "engines of oppression," enabling the Federalists to exploit enterprising merchants and shopkeepers.[12] The Federalists monopolized "all the exclusive privileges…until the voice of private citizens is lost in the overbearing influence of privileged companies."[13] As long as "combined court parties grant banks and other privileged corporations to favored companies, equal rights cannot exist."[14] The purpose of chartering banks, they charged, was to give exclusive privileges to Federalist friends and "every incorporation for wealth and profit is a bulwark to aristocracy."[15] In 1803, after the legislature refused a petition for a "Town and Country Bank," Democratic-Republicans blamed Federalists monopolizing banks and opposing "every measure calculated to promote the interest of the middling class of citizens."[16]

The Democratic-Republicans also demanded banking reforms. Most bank charters would expire in 1812, and they thought that "incorporations should not be renewed unless the proprietors of banks consent that every officer of their banks be appointed by the State Government."[17] They also asked, "Will a director of the Boston Bank, or a man, whose 'projects' gripe every monied institution within the town, be advocates [*sic*] for such salutary measures as our situation calls for? Let the charters be free for all, if they are granted to any."[18]

The Democratic-Republicans tried every chance to overthrow the Federalist banking regime. In 1807, for example, the Democratic-Republicans managed to pass an act to insert six Democratic-Republican directors in both the Boston Bank and the Union Bank for one year so that "another political sect…participate[d] in their management."[19] When the Federalists controlled the legislature in 1808, however, these Democratic-Republican directors were subsequently excluded from the banks. In most years before 1811, the Federalist elites dominated politics, controlled banks, and excluded the Democratic-Republicans from banking. The Democratic-Republicans demanded sweeping reforms to open the access to banking; in 1811, when they assumed control of each branch of the government, they seized their chance.

4 Democratic-Republicans, Elbridge Gerry, and Political Reform of 1811

The year 1811 is the center of our story. There were only seventeen states in the USA at that time. According to A.W. Dennis (1908), "State coaches were the means of transportation for passengers. The first railroad was not built to Boston until twenty-four years later, 1835. The Pacific coast was reached only by ships sailing around South America. Fire was struck by flints and tinder. The first matches came from England in 1827. The telegraph was unknown until thirty-three years later (1844), and the telephone sixty-five years later (1876). The early records of banks were written with a quill pen, and blotting was prevented by the sifting on of fine sand."[20] The 1811 was by no means a year with a modern economy or lifestyle, but it is the year that Democratic-Republicans carried out a series of reforms which greatly transformed Massachusetts society.

In a deferential society where Federalists controlled society and knitted a tight web over all careers, it had never been easy for Democratic-Republicans to assume political power. Judge Story described this era in his autobiographical writings:

> In Massachusetts that period an enormous majority of people were Federalists. The government, the judges, the legislators were ordained in the same cause. It cannot be disguised too that a great preponderance of the wealth, the rank, the talent, and the civil and the literary character of the state in the same school. Almost all the profession of the law were of the party. I scarcely remember more than four or five lawyers in the whole state who dared avow themselves Republicans. The very name was odious and offensive epithets such as "Jacobians" were familiarly applied to them. A great struggle was just over between Jefferson and Adams and the former had been chosen to the presidency. The contest had been carried on with great heat and bitterness, and the defeated party, strong at home, though not in the nation, was stimulated by resentment and by the hope of a future triumph. Under such circumstances there was a terrible spirit of persecution abroad. Intercourse of families was broken up and most painful feuds were generated.[21]

In a society where Federalists webbed elites of various careers together, how did Democratic-Republicans rise up to the ascendency?

Both Federalists and Democratic-Republicans attracted rich men, but within the Federalist Party, it was hard for merchants whose wealth were more recent to enter the circles of established elites. The social order at that time did not allow people who gained wealth and intelligence in a short time to climb up the social ladder. The foremost example was the Crowninshield family of Salem, who accumulated their wealth in French trade in the 1790s but were denied access to power for a decade by the Derby family. Another example was William Gray, the wealthiest American at that time, who was excluded from the inner circle of Essex leadership. In Maine, William King gained his wealth in the 1790s at the age of 20s. He joined the Maine Federalists but was not able to enter the Federalist inner circle. After King and his faction failed in the fight for power within the Federalist Party, in 1804 they joined the Democratic-Republicans and dominated Maine. These newly wealthy young men desired access to patronage, land, and banks but were excluded by the existing Federalist elites. They then joined the Democratic-Republicans and helped them to acquire political power.[22] Both the Federalist and Democratic-Republican Parties were parties of elites.

Both the Federalist and Democratic-Republican Parties had supporters from various social and economic groups, and it was hard to differentiate party members by social class or economic career.[23] In a deferential society where the poor and others of low social rank depended on elites, the success of political parties relied on elites in these parties instead of the social classes that they represented. The nature of party competition between Federalists and Democratic-Republicans was competition between elite factions, instead of class struggle or competition between elites and citizens.

The Democratic-Republicans were able to capture both houses as well as the governorship in 1811. The support of Maine voters was crucial for their success. Maine was part of Massachusetts until the 1820s. It was New England's frontier, with unoccupied land and vast resources. Young immigrants from more settled parts of Massachusetts, especially those who wanted to seek economic opportunities or to escape from the established Federalist ideology, identified themselves with the Democratic-Republicans.[24] Among those immigrants, squatters played a major role in supporting Democratic-Republicans. Migrants to Maine often settled on both private and public tracts with unclear titles. Settlers developed farms and founded communities, but they were required by land owners to buy the land. The law did not recognize squatter rights, leading to conflicting claims and in some cases violence. From 1805 to 1809, Democratic-Republicans sponsored a series of land reforms which favored compromise and confirmed squatters' rights.[25] Through land reforms, Democratic-Republicans formed a political alliance with Maine immigrants, whose political support provided Democratic-Republicans the margin of victory in capturing both houses as well as the governorship in 1811.

In 1811, the Democratic-Republicans held power in both houses and their candidate Elbridge Gerry was elected as the state governor. Gerry had been elected as state governor in both 1810 and 1811. He was recognized as one of the revolutionary leaders, as he had signed the Declaration of Independence and the Articles of Confederation. He was picked as Vice President of the USA in 1813 and 1814. His first term as governor in 1810 was moderate and sought conciliation of the two parties. He restrained radical Democratic-Republicans that desired patronage and demanded the removal of Federalists from state offices. In addition, the political balance did not allow Gerry and Democratic-Republicans to push reforms either. While Democratic-Republicans held power in both houses and governorship, the Senate was equally divided in 1810. The Federalist leader Harrison Gray Otis was the president of the Senate and blocked every Democratic-Republican reform.[26]

In 1811, however, Gerry abandoned his conciliatory policy. The admission of Louisiana to the USA had already aroused animosities among Federalists. When Congress approved President James Madison's Non-Intercourse Act to cease commerce with Britain, Boston Federalists organized a mass meeting and protested the law, denouncing it as tyrannical and oppressive. They threatened to call for measures "short of force," and to elect officers who would "oppose by peaceable, but firm measures, the execution of the laws, which if persisted in must and will be resisted."[27] Gerry denounced the Boston mass meeting and claimed it advocated a revolution. He was convinced that if Federalists returned to power, they would nullify the Non-Intercourse Act or resist its enforcement, in which case "our constitutions are nullities, our constituted authorities are usurpers, and we are reduced to a state of nature."[28] In his second inaugural address in June 1811, Gerry publically criticized Federalists who "excite the spirit of the insurrection and rebellion to destroy our internal peace and tranquility."[29] He began to remove Federalists from state offices and appointed Democratic-Republicans to any new office.

In 1811, Democratic-Republicans captured both houses of the state legislature and helped Gerry implement a series of reforms to capture patronage in the state, to remove Federalists from state offices, and to occupy Federalist-controlled organizations.[30] One of the most famous of these reforms was the so-called gerrymander. In February 1812, Democratic-Republicans passed a bill to divide the state into senatorial districts along partisan lines. This change redistricted the state to make the Democratic-Republican votes count as much as possible and the Federalist ones as little as possible. This practice was nothing new, but since it was carried to extremes during Gerry's administration, it was coined the "gerrymander."[31]

The Democratic-Republican ascendency aimed to capture patronage from the Federalists. They replaced the Federalists in state offices and captured Federalist organizations. As shown in the following section, they also tried to "gerrymander" the banking system by refusing to renew Federalist banks and instead chartering Democratic-Republican banks.

5 Banking Reform of 1811

As Democratic-Republicans assumed state power in 1811, they faced the problem of how to handle the banking system had long criticized as an exclusive Federalist privilege. They had to deal with both an economic problem and a political problem at the same time.

Before 1811, Democratic-Republicans had tried unsuccessfully to reform the banking system on at least two occasions. In 1807, when

Democratic-Republicans controlled both the State House and the governorship, they passed laws to appoint six Democratic-Republican directors in both the Boston Bank and the Union Bank for one year so that "another political sect…participate[d] in their management."[32] When the Federalists controlled the legislature in 1808, however, these Democratic-Republican directors were subsequently excluded from these banks. Also in 1807, to mitigate "the frequent & distressing inconveniences & losses… and also the immense quantities of bank paper in circulation,"[33] Democratic-Republican Governor James Sullivan recommended a bill refusing to grant new charters or renew old ones, and establishing a state bank by combining all existing banks. The bill was passed in the House, but it was killed in the closely divided Senate by the Federalists.[34] These failed attempts at banking reforms convinced Democratic-Republicans that they had to totally restructure the banking sector by abolishing existing Federalist banks and establishing new Democratic-Republican banks, instead of simply chartering boards of directors, and they had to have absolute control over both houses and the governorship at the same time. In 1811, when Democratic-Republicans captured both houses and the governorship, they finally had the opportunity to implement a successful reform.

In 1811, the Federalist banks petitioned for rechartering, as all existing bank charters would expire in 1812, except the charter of the Massachusetts Bank, which ran in perpetuity. The Democratic-Republican legislature, however, refused to renew any of them.[35] When these banks expired, Democratic-Republicans argued that new ones were needed "to make loans to those persons who are indebted to existing Institutions and thereby enable them to wind up their affairs with the least possible embarrassment."[36] Democratic-Republicans chartered two new banks under their control: the Merchant Bank of Salem and the State Bank.

The charter of the Merchant Bank of Salem was granted to the Democratic-Republican elites in Salem. By 1811, Salem already had two Federalist banks—the Salem Bank and the Essex Bank. Unable to get loans from either bank, a number of Salem's most prominent Democratic-Republicans, led by the Crowninshields, a powerful Massachusetts family, desired to start a new Democratic-Republican bank. For years, their petitions for bank charters had been rejected by the Federalist legislature. When they assumed in 1811, Democratic-Republicans secured a charter for the Merchant Bank of Salem. The minister and writer William Bently explains in his diary, "To give weight to the Republican Interest in Massachusetts, the last Legislature placed several banks into the hands of their friends, and among others, one in Salem, which was completely organized this day, under the name of Merchant's Bank."[37] The Merchant Bank was started as a Democratic-Republican bank.

The Federalists questioned the value of the new bank even before it opened. On September 10, 1811, the *Salem Gazette* gravely censured the "new bank":

> It requires but little foresight to predict the influence which the institution will, and which the legislature intended it should have on the political circumstances of our Commonwealth, and particularly its elections. Viewing it in this light, it cannot be considered as an institution for the common benefit of our citizens, but on the contrary for the purpose of unblushing political corruption. Federalists will be excluded entirely from accommodation, as they were from the privilege of subscribing for shares, and Democrats only enjoy its benefits. We hesitate not to assert, that (until the Spring elections are over, at least) *any Democrat* (or "friend of the government" as the committee call them) who can bring good proofs of his attachment to the cause, *will be furnished with what money he wishes from this Bank, while federalists, let them be never so competent, will be sedulously refused a discount, except perhaps a few*, who will be held up as a mask to cover their gross, corrupt partially. Let every candid man consider this course of conduct, lay his hand on his heart, and say if he can call it by any other name than BRIBERY.[38]

The other charter was issued to the State Bank, the largest bank chartered in Massachusetts. The bank was granted a capital of $3,000,000, which was thirty times more than most banks at that time.[39] The Democratic-Republican reform of banking policy was institutionalized in the State Bank charter. The state would take a significant ownership share in the bank, initially $1 million. The state taxpayers would benefit from the bank both through dividends on state-owned stock and through the levy of a tax on bank capital of 1/2% (Wallis et al. 1994). The State Bank charter is important because subsequent bank charters also included the same capital tax, increasing the incentive for the state to charter more banks. When new banks were chartered and the charters of existing banks renewed, the charters usually contained the provision, "That the rules, restrictions, limitations, reservations and provisions, which are provided in and by the third section of an Act, entitled, 'An Act to incorporate the President, Directors, and Company of the State Bank,' shall be binding on the bank hereby established" as in the rechartering of the Worcester bank in 1812.[40]

The Democratic-Republicans directed the State Bank in its early history. Eight of its first twelve directors had been Democratic-Republican legislators, and none were Federalists. The first president was William Gray, who was a leader of the Democratic-Republican Party, the lieutenant-governor of the State, and a rich merchant ship-operator. In the circular of the bank published in July 1811, the bank committee declared, "the establishment of the present institution should be so conducted that its benefits shall be diffused as extensively as possible among the friends of the government throughout this Commonwealth."[41]

It was the Federalists' turn to denounce the Democratic-Republican monopoly over banking. They charged the State Bank of being "a powerful engine of bribery and corruption, and a machine established for the purpose of creating Democrats and destroying Federalists."[42] In the Boston *Gazette* of August 22, 1811, "A Massachusetts Yeoman" addressed a letter to William Gray, declaring "it was beyond all precedent, and wicked in the extreme, to grant a set of men, who have always been borrowers, the whole control of the circulating medium of the State." In the *Columbian Centinel*, August 31, 1811, "A Constitutional Republican" listed two complaints, "1st, that the grant of a charter to the State Bank is a violation of the Constitution; second, that those who gave it countenance and voted for it have acted corruptly." The *Salem Gazette,* September 10, 1811, wrote a most violent denunciation,

> The State Bank is managed as a powerful engine of bribery and corrupt influence. … The constitutions and the principles of republican government are derided and contemned…. It is unblushingly avowed that

> the new bank is intended as a machine to *create* Democrats and *destroy* Federalists. In this State there has been so much clamor by this very party against banks, bank directors, and exclusive privileges, that consistency required them to discountenance all. It appears that in each county an electioneering committee has been appointed, who through the influence of the new bank are to act as almoners of democratic bribes and commissioners of official corruption.

Aside from establishing new Democratic-Republican banks, the Democratic-Republicans wanted to eliminate the existing Federalist banks. The Massachusetts Bank was the first bank in Massachusetts, founded in 1784 with a perpetual charter to serve as the fiscal agency of the state. It was a Federalist bank, and its first president became the second state governor. After Democratic-Republicans chartered the State Bank, they tried to abolish the Massachusetts Bank. Afraid of losing their charter, a directors' meeting voted on February 15, 1812, "that the whole Board be a committee to exert themselves by every fair and honorable means in their power to prevent the passing of any act by the legislature to limit the duration of the charter of the Massachusetts Bank which charter is deemed perpetual." A subcommittee was given $2000 "for the purpose," and "a remonstrance be offered and that the president signs the same in behalf of the Board." The bank had to accept a new charter with a limited duration (lasting only until 1831).[43] In fact, the Democratic-Republicans attempted to reshuffle the banking industry jeopardizing all Federalist banks.

The Democratic-Republican legislature, led by Governor Gerry, seized the chance in 1811 to implement a series of reforms. However, President Madison's unpopular foreign policy caused them to lose subsequent elections. In 1812, Federalists conducted a vigorous campaign and won a majority in the House and the governorship. The Federalist legislature rechartered existing banks in 1812 to prevent their expiration. The old banks were sustained under the same name but with a charter of the 1812 model, including a provision specifying a bank capital tax as in the State Bank charter.[44]

The Federalists were chastened by the experience of 1811 and 1812. They realized that a future switch in government control might cause them to lose their bank charters. To retain their own banks in case of another political turnover, the Federalists chose to cooperate with the Democratic-Republicans. While they continued to dominate the legislature after 1811, the Federalists chartered more banks and their banks also accommodated Democratic-Republican legislators. "The settlement of 1812 had substantially stabilized the banking system, withdrawing it from the grasping hands of a favored few," as Handlin, and Handlin points out, "For a time thereafter, the question of currency was academic only."[45] As shown in Fig. 1, more bank charters were granted after 1811 than previously. Compared to the years before 1812, it was "free and easy" to incorporate a bank, and the banks were no longer confined to one party. Farmers, manufacturers, artisans, and even merchants in every region demanded banks to serve themselves. People demanded banks in every city and every street.[46]

6 Parties, Banks, and Laws, 1820–1850s

The Federalist and Republican Parties faded away in the mid-1820s to be replaced in the 1830s by the second party system which included the Whigs and Democrats as new parties. The second party system endured from the early 1830 to 1860s and included National Republicans, Whigs, Democrats, Americans, Know Nothings and other parties. Figure 4 is based on Dubin (2007) and shows the party composition of the Massachusetts Senate for this period. The National Republicans and then the Whigs usually controlled a majority of Senate seats in a competitive political regime. Figure 5 shows the party composition of the Massachusetts House. National Republican, Whig, and then Republican domination of the House are also apparent, again in the context of wild party competition and entry.

The Democrats often attacked Whigs' banking policy and argued for reforms, but the argument was no longer about limited access to

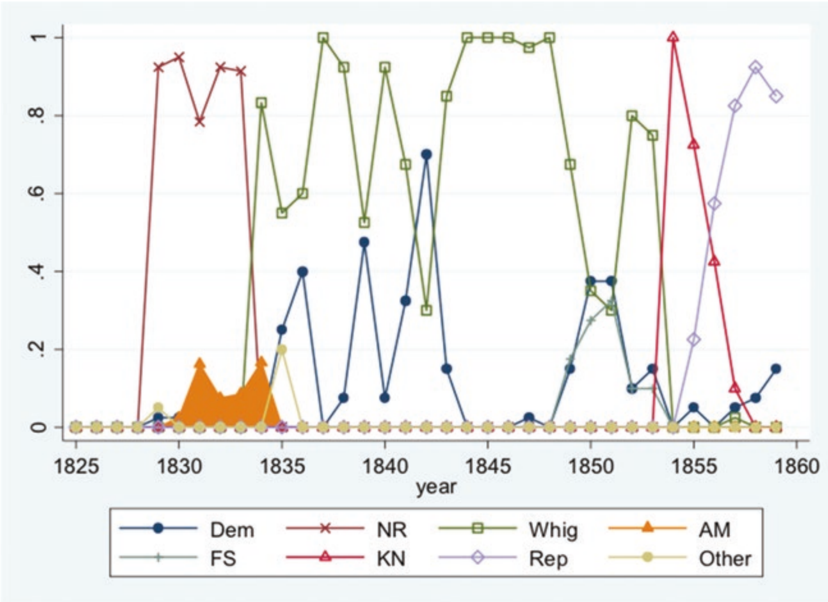

Fig. 4 Senate composition, 1825–1859

banking. In their 1830 address, Democrats acknowledged the significance of 1811 to the transition toward free banking:

> Monopolies of various grades and characters, from exclusive privilege in banking, to an exclusive right to bridge navigable streams-from a compulsory support of a religious order, to unfair exemptions and exclusive privileges to members of the learned professions-from entails by literary and religious mortmains, to private entails in life annuities and life Insurance offices, have been the favourite means by which the federal party has built up an Aristocracy, and sought to establish its permanency. *Their banking monopoly crumbled beneath the democratic power in 1811: and by the wisdom of that measure which brought life into the State Bank, and established the principle that all were alike entitled to bank Corporations*…. At the same period and by the same party, the link which in some degree bound together Church and State, was broken asunder.[47]

Democrats' assertions were verified by their own internal disagreements on the banking reform. The famous Democratic reformer, the

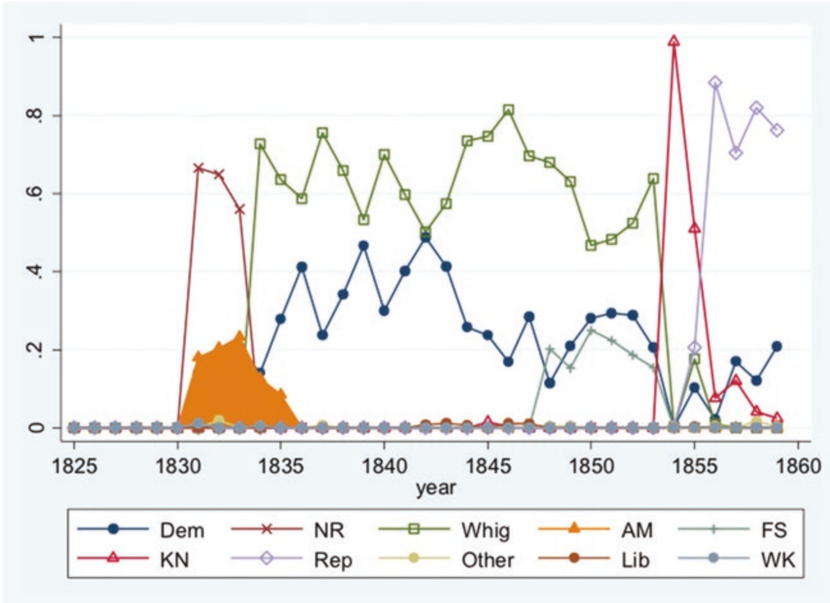

Fig. 5 House composition, 1825–1859. *Source* Dubin. *Note* Dem—Democrat, NR—National Republican, AM—Anti-Mason, FS—Free Soil, KN—Know Nothing, Rep—Republican

US senator and Massachusetts House Representative Robert Rantoul blamed the Whigs for fostering the evils of the paper-money system and sought a "complete and entire separation of Bank and State."[48] However, many Democrats showed an inclination to vote for new bank charters for themselves.[49] Even Rantoul compromised when he knew many Democrats were involved in banking business. In 1837, before Rantoul was going to give a speech in Worcester to propose banking reforms, he talked with local Democratic leaders. However, he changed his remarks on banking reform after he learned that all local leaders were connected with bankers as stockholders or officers.[50] In the next year, Rantoul fought for banking regulations and tried to forbid legislators who were bankers from voting on the matter. However, his proposal failed with the support from just over one-fourth of the votes of the House.[51] In the second party system, both parties had connections with banks and were alike entitled to bank corporations.

De facto free banking was further consolidated by formal laws. The general law of 1829 included all essential provisions of the earlier acts[52,53] and created uniformity of regulation. Its section 31 stated that "if during continuance of any bank charter, granted or renewed under the provisions of this act, any new or greater privileges shall be granted to any other bank now in operation, or which may hereafter be created, each and every bank in operation at the time shall be entitled to the same."[54] As elites from both political parties obtained equal access to banks, what mattered were unequal privileges across banks. The 1829 Regulatory Act equalized banking privileges. In retrospect, the solution to the political problem in 1811 paved way for the passage of the law.

In April 1851, House Representative Richard Frothingham of Charlestown introduced a bill to permit self-incorporation of banks. Frothingham and other Democrats criticized the existing system as being monopolistic and inadequate to secure bank notes. The debate, however, focused on economic problems instead of political corruptions. The major argument for the law was that the demand for special legislative acts to create or amend corporations placed a burden on the legislature.[55] In May 1851, Governor Boutwell approved the new law, entitled "An act to authorize the Business of Banking", authorizing any group of not less than fifty persons to incorporate a bank. The general law, however, did not forbid the grant of charters by special laws. In 1852, the alliance of Democrats and Free Soilers became the majority and they refused to grant special charters. However, bank petitioners waited for the return of the Whigs to political power. In the fall of 1852, the Whigs retained control of the legislature and issued special charters.

The Democrats and the Free Soilers also sought to solve the conflicts between public power and special privileges through amending the Constitution. The Massachusetts Constitutional Convention of 1853 tried to revise Article VI and VII and to replace them by two new propositions VII and VIII. The new Proposition VII stated that "the Legislature shall not create corporations by special act when the object of the incorporation is attainable by general laws." Another new Proposition VIII stated that "The Legislature shall have no power to pass any act granting any special charter for banking purposes, or any special act to increase the capital stock of any chartered bank; but corporations may be formed for such purposes, or the capital stock of chartered banks may be increased, under general laws." However, these amendments were rejected, and as a result, the legislature the power to enact special acts of incorporation.[56]

Until the Civil War, only seven banks were chartered under the general law and 44 banks got special charters. The general law of 1851 was unpopular and was threatened with repeal in the following years.[57] I found no evidence on why the law was unpopular in Massachusetts, but in Vermont and Connecticut, "banks chartered by special act were considered stronger financially, better regulated, and, being more limited in number, less likely to spring up during a period of inflationary excesses."[58] Vermont passed the General Act for Banking in 1851, but there was "a general and widespread distrust to companies created under general laws," and by 1870 only one bank formed under the general act.[59] For the same reason, the General Banking Act of Connecticut of 1852 was attacked and its use was prohibited after 1855.[60]

7 Conclusion

The history of partisan banking shows that in a society where the legislature authorized corporations for public welfare, corporate privileges may be seized to benefit private interests of political and social elites. This outcome was possible in a deferential society such as early nineteenth-century Massachusetts, where elite factions played critical roles in webbing the whole society together. Powerful elite factions can determine the outcome of political and economic arrangements. However, these elite factions may fight with each other, leading to the instability of these arrangements. In order to achieve stable economic rents, elite factions must agree not to use their political power to compete for economic interest. The outcome of this arrangement is an open access social order in which all elites have access to organizational forms. The case of Massachusetts banking shows that Federalists and Democratic-Republicans formed a political arrangement in 1812 to accommodate each other's banking interests, and then formally equalized banking privileges in the 1829 Regulatory Act. The 1851 general incorporation law provided an additional legal tool for self-incorporation. From underlying politics to formal legal rules, Massachusetts achieved open entry.

Notes

1. Emphasis mine. The Massachusetts Constitution of 1780 (Handlin, 1966).
2. Handlin and Handlin (1969, pp. 121–122). James Sullivan (1792), "Paths to Riches," pp. 54, 56, 60. Gras (1937, pp. 530–532); Hall (1984), "Organization of American Culture," p. 294; Jaher (1982, pp. 24–25); Redlich (1968, vol. 2, 1: pp. 33–36, 42, and 2: pp. 67–87); Whitney (1878), "The Suffolk bank," pp. 7–15, 19–20; Hammond (1967), "Banks and Politics in America," pp. 549–556.
3. Handlin and Handlin (1969, pp. 122–123); Dodd, pp. 202–203.
4. Dodd (1954, pp. 205–206).
5. Handlin and Handlin (1969, p. 128). Also see its note 60.
6. Pole (1962, pp. 640–641).
7. John Adams, *Defense of the Constitutions of the United States* … (3 vols. Philadelphia, 1797), I, pp. 110–111. Pole (1966, p. 218). The pattern persisted from the colonial times. For example, Snell (1986) has shown that between 1731 and 1760, almost three-quarters of the officials in Hampshire County of Massachusetts were associated with one of a half-dozen elite River God families.
8. Formisano (1983); Goodman (1964).
9. Formisano (1983) studies the transformation from deferential political culture to partisan political culture.
10. There were only two national banks before the Civil War. All other banks were chartered by individual states.
11. Brooke (1989, p. 281).
12. Eastern Argus, April 2, 1807.
13. Ibid.
14. Eastern Argus, December 13, 1805, and February 22 and December 6, 1805; Salem Register, March 30 and April 2, 1807.
15. Eastern Argus, November 15, 1805.

16. Republican Gazette, April 27, 1803.
17. Eastern Argus, December 13, 1805.
18. Boston Democrat, May, 1804.
19. *Massachusetts Spy*, June 25, 1806. There were, in fact, two acts passed on February 10, 1807, titled: "An act, in further addition to an act, entitled, 'An act to incorporate sundry persons by the name of the President and Directors of the Union Bank'"; and "An act, in addition to an act, entitled, 'An act to incorporate the President, Directors, and Company of the Boston Bank.'" Massachusetts Acts and Revolves, 1807.
20. This vivid description of the life in early Massachusetts is from A. W. Dennis (1908), "The Merchants National Bank of Salem, Massachusetts: an Historical Sketch."
21. Dennis (1908, pp. 9–10).
22. Banner (1970, Chap. 5, pp. 182–183). William Whiney (1958), "The Crowninshields of Salem, 1800–1808"; Edward Gray (1914), "William Gray of Salem, Merchant"; Goodman (1964, pp. 123–127). Also see Sheidley (1998): "Sectional Nationalism" for the study on Boston elites.
23. See Goodman (1964).
24. Banner (1970, pp. 170–173); Goodman (1964, pp. 119–127). In 1800, 79% of the male voting-age population in Maine was under forty-five, compared to 65% in downstate Massachusetts (Banner 1970, p. 172).
25. See Goodman (1964, pp. 155–162). For election statistics, see Billias (1976, pp. 424–427), note 21, 30, and 63.
26. On Gerry and the issues in 1811, see the following reference: Formisano (1983, pp. 74–75); Billias (1976, pp. 314–322); James T. Austin (1829, pp. 333–342, 346–347); Seaburg and Patterson (1971, p. 228); Goodman (1986, pp. 154–181); Morrison (1913).
27. "Governor's Speech to the Representatives' Chamber, June 7," Massachusetts Acts and Resolves (1811, p. 184).
28. Ibid. p. 184
29. Ibid. p. 185
30. For Democratic-Republican reforms in other sectors, see Goodman (1964).
31. Griffith (1907, pp. 17–21); Austin (1829, p. 322); Dean (1892, pp. 374–383).
32. *Massachusetts Spy*, June 25, 1806. Two acts were passed on February 10, 1807, titled: "An act, in further addition to an act, entitled, 'An act to

incorporate sundry persons by the name of the President and Directors of the Union Bank'"; and "An act, in addition to an act, entitled, 'An act to incorporate the President, Directors, and Company of the Boston Bank.'" Massachusetts Acts and Revolves, 1807.

33. House Journal, January 8, 1807, MA.
34. Goodman (1964, pp. 177–178). For indications of group attitudes see Columbian Centinel, June 6, 1807, and January 27 and February 10, 1808. "Bill to Establish a State Bank, 14 Jan. 1808," Massachusetts Legislative Documents, 1798–1809, Massachusetts State Library. For the legislative history, see House Journal, February 20, May 28, and June 5 and 9, 1807, and February 10 and 26, 1808, MA; Boston Gazette, February 11, 1807; Columbian Centinel, February 10, 1808.
35. The unpassed petitions for rechartering banks can be found in the Massachusetts State Archive.
36. Petition for the State Bank, June 11, 1811. Goodman (1964, p. 179).
37. Dennis (1908, p. 7).
38. Salem Gazette, September 10, 1811. Emphasis Mine.
39. Measured by Wealth/GDP, it is equivalent to 64 billion dollars in 2012, according to http://www.measuringworth.com/.
40. Massachusetts Acts and Resolves (1821), Chap. 26, "An Act to incorporate the President, Directors, and Company of the Worcester Bank," p. 422
41. Stetson (1893, p. 13).
42. This and the following quotes are from Stetson (1891).
43. On the Massachusetts Bank, see Gras (1937, pp. 84–85), and Williams (1984).
44. Handlin and Handlin (1969, p. 129); Dodd (1954, p. 210).
45. Handlin and Handlin, p. 175.
46. Handlin and Handlin, pp. 177–182
47. Boston Statesman, February 13, 1830. Emphasis mine.
48. Bulkley (1971, pp. 202–204); Handlin and Handlin (1969, p. 232).
49. Handlin and Handlin (1969, pp. 232–233).
50. Formisano (1983, pp. 319–320).
51. Bulkley (1971, pp. 159, 201, 217–219); Formisano (1983, pp. 319–320).
52. Similar general laws were passed earlier in other sectors. Massachusetts enacted a law enumerating the "general powers and duties" of turnpike corporations in 1805, and a similar law for the manufacturing companies in 1809. Thereafter, the incorporation to turnpike companies and the manufacturing firms were made reference to this law. The

charters were standardized, but each charter was still a special act. Acts and Resolves of Massachusetts (1805), Chap. 125; Acts and Resolves of Massachusetts (1809), Chap. 65.

53. As far as I read, the 1829 Regulatory Act was the first comprehensive general law to regulate banks in human history. Its emergence shows how regulation evolved gradually from standardization of specific contracts to general laws.
54. Massachusetts Acts and Resolves (1829).
55. "Unless we strike down this sort of special legislation, the legislature, because of the increasing business and enterprise of the community, … must … become not only a general court, but an everlasting and unadjourning court, the mere makers, managers, and agents of special incorporations," Debates and Proceedings of the State Convention of 1853, vol. 3, pp. 52, 69, Maier (1992). Rantoul and Morton had expressed similar argument.
56. Dodd (1954, p. 287).
57. Maier (1992) states that "The adoption of general laws of incorporation for business enterprises was not, then so much a major departure in Massachusetts corporate legislation—the General Court had, after all, passed similar laws in the eighteenth century—as it was yet another in a series of changes adjusting a long-established regulatory tradition to altered economic and institutional circumstances."
58. Kessler (1948, p. 49).
59. Ibid.
60. Ibid.

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3

Empirical Studies on Bankers, Legislators, and Political Parties, 1790–1859

Abstract This chapter provides the major empirical contribution of this dissertation. Qian defines elites as bankers who had been or would become state legislators at some point of their life. Qian collects data on bank directors and state legislators from 1790 to 1860 to identify the affiliation between bankers, political parties, and state legislators. Over 70% of the bank presidents and bank directors before 1812 had been or would become state legislators. Moreover, most of those banker/legislators were associated with the Federalist Party, and very few were Democratic-Republicans. The stock of directors shows that from 1797 to 1811, many directors remained Federalist, despite the fact that Democratic-Republicans strength in the legislature kept rising. However, in 1812, the proportion of bank directors that had been Democratic-Republican legislators jumped from almost zero to 24%. Ordinary Least Squares, Logit, and Probit regressions show that the probability of a bank director being a Democratic-Republican legislator increased by more than 20% after 1811, with no significant change in the probability of being a Federalist legislator. These results reveal a shift in strategy by Federalists, who extended banking privileges to their political rivals, as a direct result of the threat of charter

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revocation in 1811. In addition, this chapter shows that while the connection between legislators and bankers dropped after 1812, legislators and bankers nevertheless continued to be closely connected: Even in the 1850s, 40–50% of all bank presidents and bank directors served in the state legislature at some point in time. Despite the continuing connection, limited partisan access to banking never returned in the second party system. After 1820, banking was still dominated by elites, but access to banking was no longer limited by political affiliation. Bankers were still much wealthier than the average citizen and were much more likely to become state legislators, but were no longer connected with a particular party.

Keywords Bank directors · Legislators · Political parties

1 Introduction

Chapters 2 shows that entry into Massachusetts banking, despite its democratic origins and the active political competition, was limited and highly partisan in the first thirty years of the state's history. Citizen demands for bank charters were often not met, because political competition prevented those from minority party from getting charters. While there were two competitive major political parties, the Federalists and the Democratic-Republicans, most banks and bankers remained Federalist until 1811, and Democratic-Republicans were frequently denied charters. However, once the Democratic-Republicans gained simultaneous control of the House, Senate, and Governor's office for the first time in 1811, they threatened to disband the Federalist banks and chartered their own banks. After 1811, both parties were chastened by the "bank war" and reached consensus to allow open entry of banks. After the 1820s, the banking sector became virtually open. This chapter empirically explores the long-term relationship between politics and banking from 1790 to 1860 to complement the historical narrative.

The empirical results show that before 1812, politics and banking were highly connected, but after 1812, the connection became weaker. First, I find that prior to 1811, over 70% of bankers either had been or would become state legislators at some point in time, but between 1812 and 1860, this proportion dropped from 70 to 40%. Second, before 1811, groups found it extremely difficult to get a charter if they were not connected to the Federalist Party, but by the late 1810s, banking became more open access. After 1812, the probability that a new banker had been a Democratic-Republican legislator increased by 20%, while there was no significant change for Federalists. Third, the bank level analysis shows that most banks still included legislators on the board of directors in the 1840 and 1850s, but these legislators who were bankers held less political power than those in the early 1800s, as the average legislative tenure of all legislators dropped from 10 years in the early 1800s to 2 years in the 1850s.

Although the previous literature on political economy and economic history, such as North et al. (2009), and Acemoglu and Robinson (2012), is organized around the concept of "elites," these studies did not measure elites in historical contexts. This chapter provides a measurement of elites by identifying bankers who were state legislators in early nineteenth-century Massachusetts. The evidence suggests that the North, Wallis, and Weingast contention that intra-elite competition led to open access applies to Massachusetts banking over the long period from 1790 to 1860. Banking and bankers remained elite throughout the period—at least if we define elites in terms of legislative connections—but access to banking was no longer limited.

2 Data

The names of bank directors and presidents are collected from the Massachusetts Register (1790–1859). This is a sample of bank presidents and directors, because the Registers did not collect information on every bank in every year. Particularly in the early years, the Registers contained complete information on Boston banks. For "country" banks outside of Boston, however, they included only the names of bank presidents. The second database catalogs personal and biographical information for every Massachusetts legislator between 1780 and 2003, provided by the Massachusetts State Library. I match bankers and legislators by their names, and after comparing the years that bankers appear in the data and legislators' birth year and death year, I remove the matches that went beyond a reasonable age (20–80). The dataset has 20,457 banker-year observations, of which 16,794 (82.1%) are director-year observations and 3663 (17.9%) are president-year observations. I match 9749 (47.7%) of the banker-year observations to legislators.

The banker sample includes almost all of the banks operating in Massachusetts between 1792 and 1836 and again between 1848 and 1859. I have compared the bank series to the data collected by Weber, by Van Fenstermaker, and by Sylla and Wright, showing that the data have essentially all of the banks in operation. Between 1837 and 1847, however, the Registers stopped collecting information on most of the banks outside of Boston. They resumed collecting data after 1848. Before 1851, the Registers collected bank directors for some country banks, whereas after 1851, the Registers recorded every director. For most years, I have complete information on presidents and directors of the Boston banks, but often only bank presidents for the banks outside of Boston. As a result, there are different ways to parse the data to obtain a consistent sample over time. For instance, we can look at the entire sample of all bankers or just Boston bankers, or we can look at both presidents and directors, or just a sample of presidents. The basic empirical results appear to be robust no matter what sample we look at.

Figure 1 shows the number of banks in my sample compared to the number of banks in Weber's sample. Weber tended to include banks from the year they were chartered, while the registers usually recorded banks in operation. Except for the 1837–1847 gap in the country banks, the series is quite close.[1]

Figure 2 shows the number of new bank charters, excluding renewals of existing charters, created by the state legislature. Only eight banks were chartered before 1799, when the state restricted non-chartered banks from issuing notes. Between 1799 and 1805, the state chartered another 17 banks.[2] A surge of chartering occurred between 1811 and 1813, followed by a lull. Chartering rose to higher levels in the 1820 and 1830s, but came to a halt between the financial crisis in 1837 and the early 1840s.

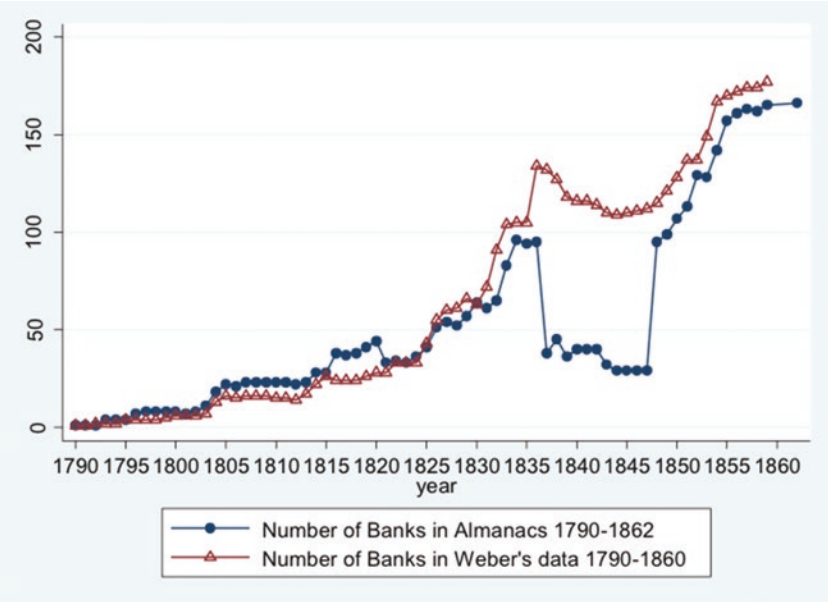

Fig. 1 Number of banks in the registers and Weber's data, 1790–1862. *Source* Number of Banks in the Registers comes from Massachusetts Registers (1790–1862), Massachusetts State Library. Number of Banks in Weber's data comes from Weber "Census of State Banks" (2011)

I have data on the entire universe of legislators, but only a sample of bankers. This causes a couple of problems. Many bankers appear in more than one year, but a significant number do not. As a result, if I use the entire sample of 20,457 banker-year observations, I have a sample selection and weighting problem. Some bankers have more weight in the "total" sample because their banks appear more often in the registers due to a longer period of survival. The second way of parsing the data, therefore, is to look at "new bankers." A "new" banker is observed in the year when he first enters the sample and only in that year. For bankers who were also legislators, I compare the first year they became bankers to the first year they became legislators. If they had been legislators before they became bankers, I identify them as "Had Been" bankers; if they became legislators after they became bankers, I identify them

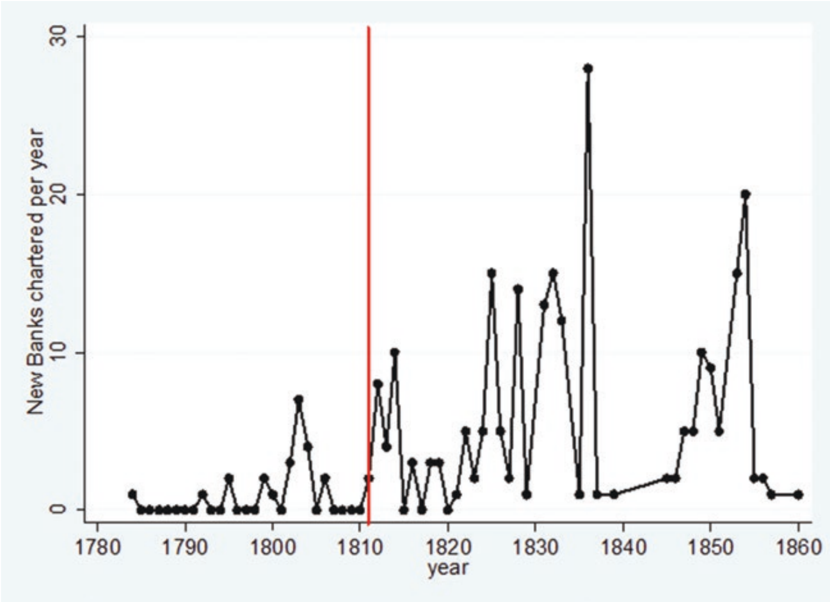

Fig. 2 Number of new charters excluding renewals, 1780–1860. *Source* Sylla and Wright (2012)

as "Would Be" bankers. The three categories—"Had Been" a legislator, "Would Be" a legislator, and "Never Was" a legislator—area complete and exhaustive set of categories. This is true whether we are looking at the "total" sample or the "new banker" sample. We determine whether a banker is a "Had Been," "Would Be," or "Never Was" legislator at the time they enter the banking sample for both samples. The total sample and the new banker sample generally show the same trends over time. The third way of organizing the sample is by individual banks rather than bankers. I look at the proportion of banks without state legislators.

I can directly identify bankers with political parties by looking at bankers who were also legislators. In each legislative session, legislators reported their party affiliations to the legislature. As political parties emerged in history in the late 1790s, the *Legislative Biographies* began to record the party affiliations of legislators beginning from 1797. A second limitation is that I cannot associate all bankers with political parties, because I only know the political party affiliation of legislators. As a result, the number of legislators with party affiliations (Party IDs) might influence the identification of party affiliation of bankers.

To see how many legislators identify their party affiliations in the Legislators' Biographies, Fig. 3 shows the proportion of legislators with Party IDs. In 1797, the proportion of legislators with Party IDs is 74%. In 1798 and 1799, this proportion is 88 and 87%, respectively. From 1800 to 1804, this proportion ranged from 94 to 97%. From 1805 to 1816, the proportion is above 99%, while it is 100% from 1808 to 1812. The proportion stays around 96 to 98% from 1816 to 1819. The proportion begins to drop in 1820: 80% in 1820, 73% in 1821, and 77% in 1822. In 1823 and 1824, the proportion drops to 55 and 48%, respectively. The proportion was below 20% from 1825 to 1829, but it increased to almost 100% from 1831 to 1859.

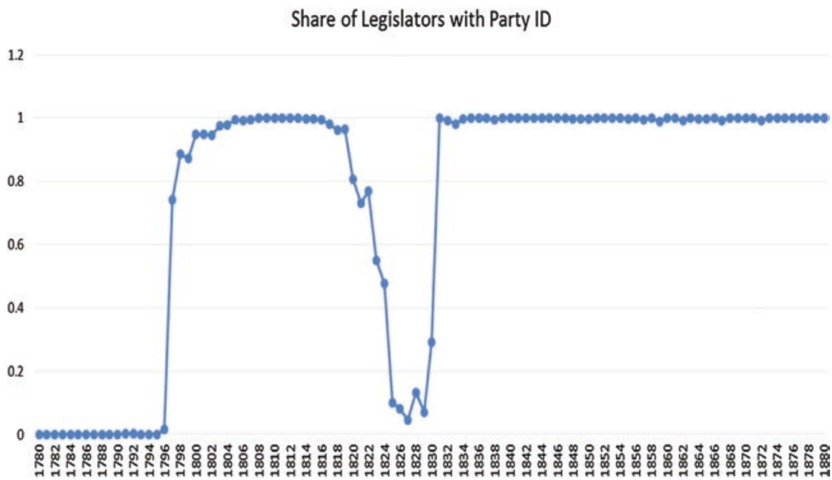

Fig. 3 Share of all legislators (not just bankers) who have a Party ID in the *Legislative Biographies. Note* In this figure plots the annual proportion of legislators with Party IDs. The first parties began emerged in 1797 and disappeared around 1824. As a result, the proportion of the legislators with Party IDs also increased from 1797 and decreased after 1820. The second party system emerged in the early 1830s. The proportions are derived from the biographies of the state legislators provided by the Massachusetts State Library. Years are labeled on the horizontal axis

To check whether the relatively smaller proportion of Party IDs in some years is due to errors in data collection, for instance, the loss of legislators' Party IDs by collectors, I compare the Legislators' Biographies and the data collected by Dubin (2007). Dubin's data document the aggregate number of legislators in each party from 1797 to 1860. For each party, the two data sources have almost the same numbers of legislators. This suggests that the smaller proportion of Party IDs in some years genuinely reflects the fact that political parties weakened or disappeared in these years.

Studies in political history suggest that the relatively small proportion of Party IDs in some years might reflect a lesser degree of party formation and party competition. Political historians agree that it was only after 1800 that party lines became clear (Goodman 1964; Robinson 1916; Morse 1909). For example, Robinson (1916) claims that,

> In Massachusetts there were traces of Anti-federalist and Shays influence in some places and two Anti-federalists, Elbridge Gerry and Jonathan Grout, were chosen members of the first Congress. But party lines were not clearly drawn, as is shown by the large number of candidates presenting themselves and the difficulty, persisting for many years, in securing a majority for any one. After 1800 party organization tended to do away with this difficulty.

The literature also suggests that the Federalist Party and Democratic-Republican Party almost died in 1823 and 1824 (Formisano 1983).

In reviewing the political history over a longer period, Formisano (1983) states that,

> After 1800 political life changed and for a time displayed activity on a scale not seen before. The period 1805–1815 in particular exhibited a spectacular outpouring of political interest, politicking, and above all, voting in state elections. In the 1820s public attention fell off and the apathetic ways of the past returned. Then sometime in the 1830s, political activity rose again at all levels, and with it political party organizations entrenched themselves to stay, both in the structure of government and, to an unprecedented degree, in the emotions of the people (Formisano, p. 33).

Both Dubin's data and historical literature suggest that the smaller proportions of Party IDs before 1800 and after 1820 might reflect a lack of fierce party competition instead of data collection bias. In the following sections, I will assume that there is a potential bias in collecting Party IDs and show that the bias does not affect the empirical results.

Figure 4 shows the number of state legislators from 1790 to 1859. This figure has a large variation across years due to political reasons. For example, there was an increase from 1800 to 1811, followed by a drop from 1812 to 1822. As towns had to pay state representatives' housing and transportation costs while they were serving, many towns avoided sending representatives to the legislature. Party competition became fiercer after the bitterly contested election of 1800, and both parties tried to mobilize people to elect representatives for them.

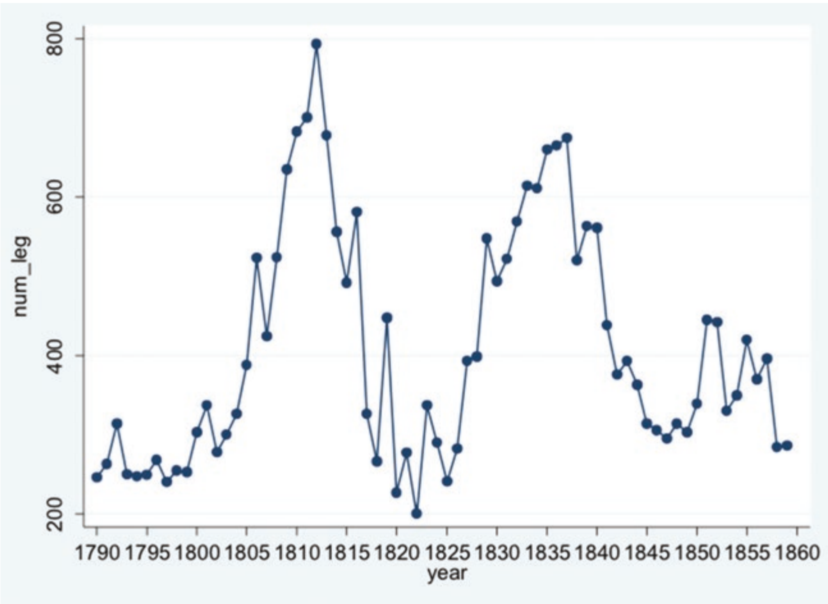

Fig. 4 Number of legislators, 1790–1859. *Source* Massachusetts Legislators' Biographies, Massachusetts State Library. *Note* In this figure plots the annual number of state legislators including members of both the House and the Senate. Years are labeled on the horizon axis

As a result, the number of legislators increased in the early 1800s. After the war of 1812, the nation entered the "era of good feeling," in which party competition began to disappear, so the number dropped.[3] When the National Republicans (later called the Whigs) and the Jacksonian Democrats entered politics in the late 1820s, there was another round of rise and fall of the number of legislators.[4]

To explore the relationship between bankers and legislators, I will first examine the sample of all bankers and then the sample of Boston bankers.

2.1 Sample of All Bankers

Figure 5 exhibits the number of bank directors and presidents for all banks collected by the Massachusetts Registers (1790–1859). The way that the Registers recorded bankers changed over time. Between 1837

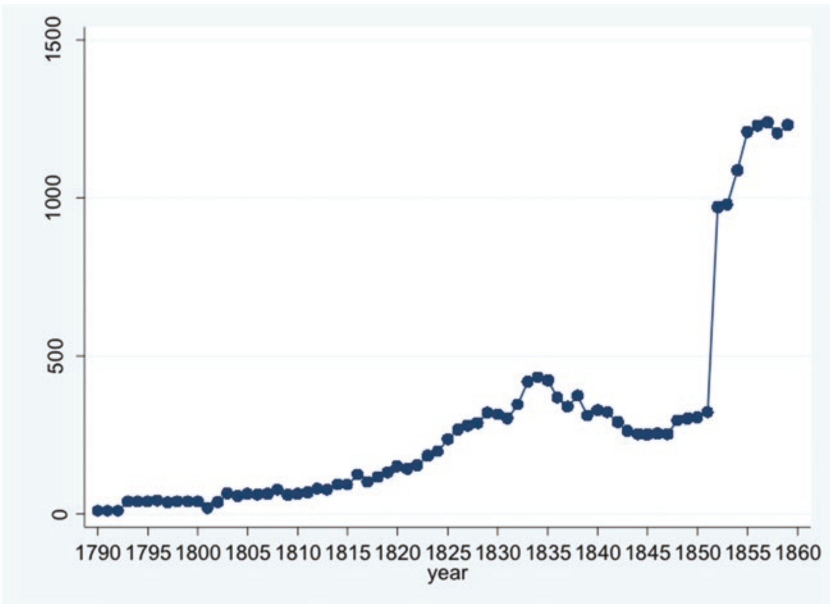

Fig. 5 Number of bank directors and presidents in the registers (1790–1859)

and 1847, the Registers stopped collecting information on most of the banks outside of Boston. They resumed collecting these data after 1848. The Registers also began to record every director of the country banks after 1851. The predominance of the country bankers results in a great increase in the number of bankers in 1851.

I match the names of bankers to the names of state legislators, and then I record the Party ID for these matched bankers if the legislators can be identified by political party. Figure 6 shows the proportion of bank directors and presidents that either had been or would become legislators from 1790 to 1859. The proportions were above 70% in

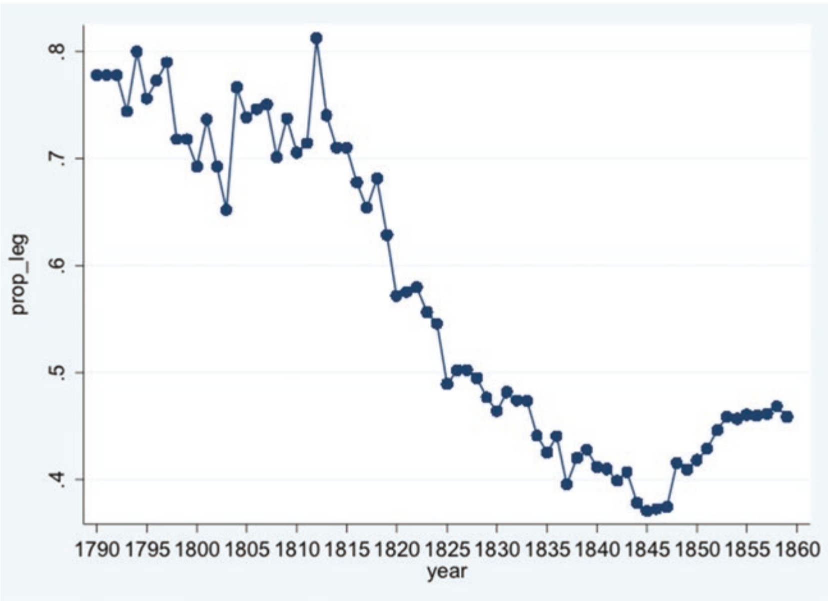

Fig. 6 Proportions of bankers that were legislators, all banks in the registers, 1790–1859. *Source* Massachusetts Registers (1790–1859) and Massachusetts Legislators Biographies (1780–2003). Both are from Massachusetts State Library. *Note* In this figure plots the annual proportion of bank directors and presidents who had been or would become state legislators. The proportions are derived by matching the list of bank directors and presidents in the Massachusetts Registers (1790–1824) and the biographies of the state legislators provided by the Massachusetts State Library. The proportion began to drop after 1812

most years before 1815. However, the proportions began to drop quickly after 1812. The proportions began to rise in the late 1840s as the Registers began to collect data of the country banks. The overall results suggest that bankers were closely connected to legislators in the early post-revolutionary years, but that this close connection began to fade after 1812.

Figure 7 further breaks out the "Had Been" and "Would Be" proportions. From 1790 to the early 1800s, the "Had Been" proportion is decreasing and the "Would Be" proportion is increasing. The "Would Be" proportion begins to decrease after 1804. In 1812, the "Had Been" proportion reaches a peak, and after that, it also decreases over time. I will discuss this pattern later when I analyze the sample of Boston Bankers. Beginning in 1852, the "Had Been" proportion is larger than the "Would Be" proportion, as the Registers began to record the names

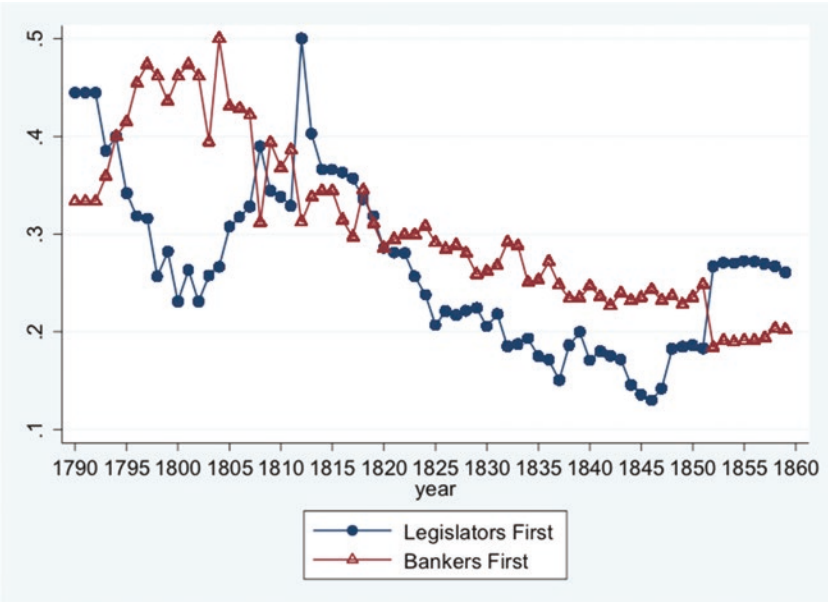

Fig. 7 Proportion of bankers that had been legislators before they became bankers, and proportions of bankers that would become legislators after they became bankers. All banks in the Massachusetts register, 1790–1859

of directors of the country banks, many of whom had been legislators in the past. Thus, the change in 1852 merely reflects the changing methods the Registers used in recording data.

The main outlines of the data are shown in Table 1. For different time periods, the 1790s, the 1800s, 1800 to 1812, the 1810s, 1820–1825, 1825–1839, and 1840–1859 the table lists the number of bankers, the number of bankers who were legislators, and the number of bankers who were legislators with Party ID in columns (1), (2), and (3). The enormous increase in the size of the banking sector in Massachusetts is evident in column (1). The number of banker years in the 1790s was 304, while from 1840 to 1859 it was 12,597.[5] Part of the increase is due to the fact that the Registers listed all the country bank directors after 1851. The most significant numbers overall are found in column (4), which gives the share of all banker years that were composed of bankers who had been or would become a legislator. In the 1790s, 74% of the banker years were for bankers who had been or would be in the legislature. From 1800 to 1812, that number was 70%. In the short period, from 1820 to 1825, the share of banker years by bankers who were also legislators fell to 55%, more than half of the decrease in a 44% share of banker years for bankers who were never legislators between 1840 and 1859. The 1820–1825 period was also when the structure of parties, in Massachusetts and the nation, underwent dramatic changes, reflected in the sharp decline in the share of legislators with Party IDs in Fig. 3. Column (5) shows that in the 1790s, only 24% of all the legislator years have Party IDs in the *Legislative Biographies*. If we look at individual bankers and legislators, the share of banker-legislators with Party IDs was 98.9% from 1800 to 1812, dropped to 56% between 1820 and 1825 and increased to 100% from 1840 to 1859.

The second way to measure the connection between legislators and bankers is to measure each banker just once, when he enters the banker sample, the "new banker" sample. Table 2 provides the number of individual new bankers in different time periods, and whether they had been or would become a legislator. The weights are different in Table 2 than in Table 1, since each banker enters only once. Between 1790 and 1799, 67% of all individual new bankers had been or would become legislators, and between 1810 and 1815, the proportion was 64%.

Table 1 Bankers and legislators, 1790–1859

Year	Number of bankers	Number of bankers who were legislators	Number of bankers who were legislators with party ID	Share of bankers who were legislators	Share of legislators with party ID	Shares of bankers with party ID
	(1)	(2)	(3)	(4)	(5)	(6)
1790–1799	304	225	95	0.740132	0.244	0.3125
1797–1799	115	82	46	0.713043	0.836	0.4
1800–1809	544	378	268	0.694853	0.983	0.492647
1800–1812	757	533	388	0.704095	0.989	0.51255
1810–1819	949	646	535	0.680717	0.993	0.563751
1820–1825	1066	589	485	0.552533	0.564	0.454972
1825–1839	5019	2346	1904	0.467424	0.732	0.379358
1840–1859	12597	5598	5035	0.444392	0.999	0.399698
1790–1859	20244	9661	8226	0.477228	0.838375	0.406343

Notes Column (1) provides the total number of bankers in several overlapping periods. Column (2) measures the number of bankers who had been or would become state legislators. Column (3) presents number of bankers who were state legislators with Party ID. Column (4) shows the share of bankers who had been or would become legislators. Column (5) shows the share of legislators with Party ID. (4) = (2)/(1), and (6) = (3)/(1)

Table 2 New bankers and legislators

Year	All	Banker only	Banker & Leg	% Banker only	% Banker & Leg
	(1)	(2)	(3)	(4)	(5)
1790–1799	77	25	52	0.324675	0.675325
1797–1799	18	7	11	0.388889	0.611111
1800–1809	85	32	53	0.376471	0.623529
1800–1812	108	40	68	0.37037	0.62963
1800–1815	144	53	91	0.368056	0.631944
1810–1815	59	21	38	0.355932	0.644068
1815–1819	94	46	48	0.489362	0.510638
1815–1825	279	153	126	0.548387	0.451613
1820–1825	185	107	78	0.578378	0.421622
1820–1829	366	205	161	0.560109	0.439891
1830–1839	483	292	191	0.604555	0.395445
1840–1849	173	109	64	0.630058	0.369942
1850–1859	1374	769	605	0.55968	0.44032

Note Column (1) shows the numbers of new individual bankers reported in the Massachusetts Registers. In contrast to Table 1, each banker is only counted once in this table. Column (2) shows the numbers of bankers who are never legislators. Column (3) shows the number of bankers either had been or would become a legislator. (4) = (2)/(1), (5) = (3)/(1)

But between 1815 and 1825, the share of new bankers who were legislators at some point fell to 45%. The share of new bankers who were also legislators declined from 67% in the 1790s to 37% in the 1840s.

All above results show that something happened in the period between 1815 and 1825 that led to a change in the relationship between bankers, legislators, and political parties. The sample of all bankers, however, is not consistent over time as the Registers changed the way of recording data over time. In the following section, I use the sample of Boston bankers to study the relationship between legislators and bankers.

2.2 Sample of Boston Bankers

The Massachusetts Registers records a continuous series of Boston bankers from the 1790 to 1859s. The advantage of using Boston banks is that it provides a consistent set of banks and bankers over the entire period, although Boston banks do not represent country banks (i.e., banks outside of Boston) perfectly. Figure 8 gives the number of bankers in Boston, both Presidents and Directors, annually from 1790 to 1859. Figure 9 gives the proportion of all Boston bankers in each year that had been or would become a state legislator. Figure 10 breaks out the proportion that had been legislators and the proportion that would become legislators.

Figure 9 initially shows that a strikingly high proportion of bankers in Boston had been or would become legislators in the early years. For the period from 1790 to 1812, the proportion never falls below 67% and is as high as 83%, with the typical year somewhere in the 70% range. The proportion of bankers who had been or would become legislators declined quickly from 1815 to 1825, 65 to 45%, and then declined slowly for the next 35 years.

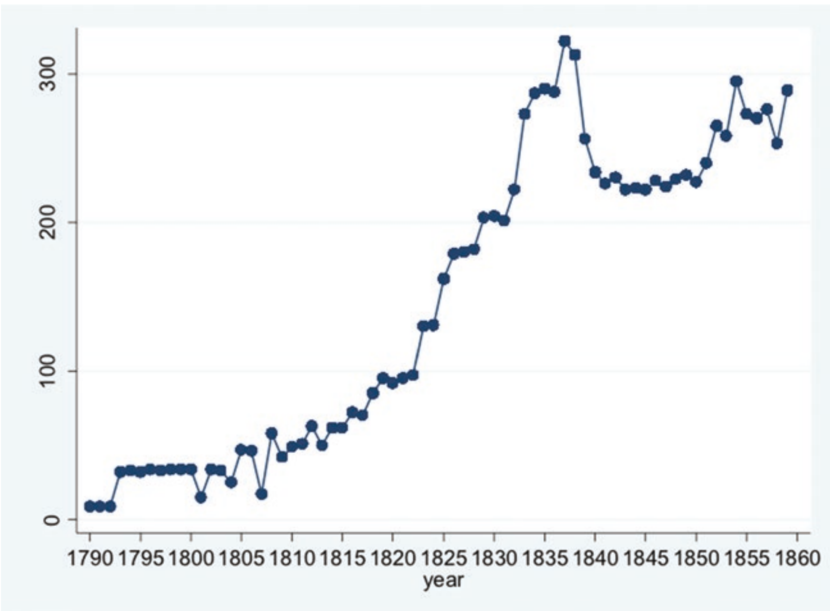

Fig. 8 Number of Boston bank directors and presidents in the registers, 1790–1859

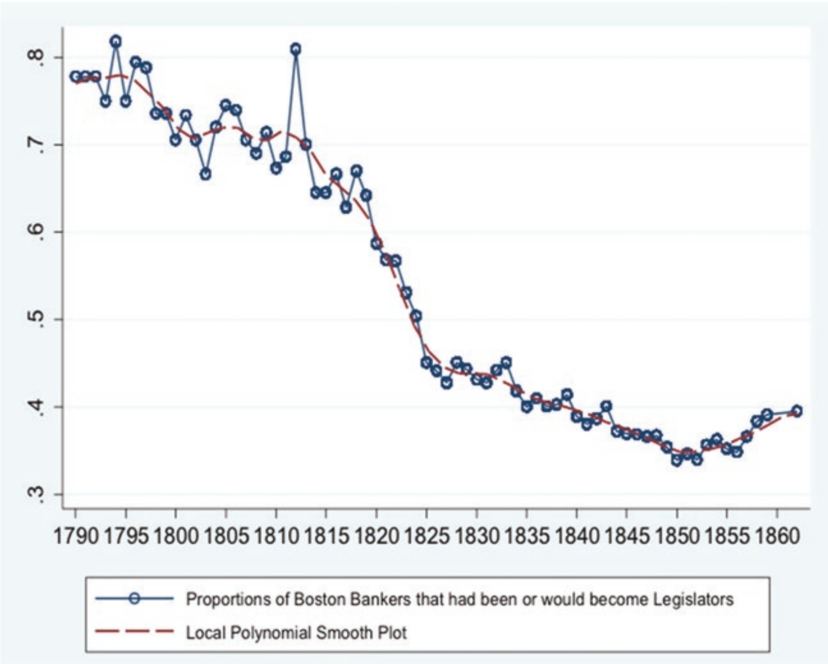

Fig. 9 Proportions of Boston bank directors and presidents who had been or would become legislators, and local polynomial smooth plot, 1790–1859. *Source* Massachusetts Registers (1790–1859) and Massachusetts Legislators Biographies (1780–2003). Both are from Massachusetts State Library. *Note* In this figure plots the annual proportion of bank directors and presidents who had been or would become state legislators. The proportions are derived by matching the list of bank directors and presidents in the Massachusetts Registers (1790–1824) and the biographies of the state legislators provided by the Massachusetts State Library. The proportion began to drop after 1812

Figure 10 breaks out the proportions that had been and would become legislators. From 1790 to 1802, the "Had Been" proportion was decreasing, and the "Would Be" proportion was increasing. After that, the trend reversed. This is because in 1799, Massachusetts passed a law to prohibit banks without state charters from operating, and in the following years, more banks obtained state charters. As the legislators had the sole power to charter banks, they chartered banks under

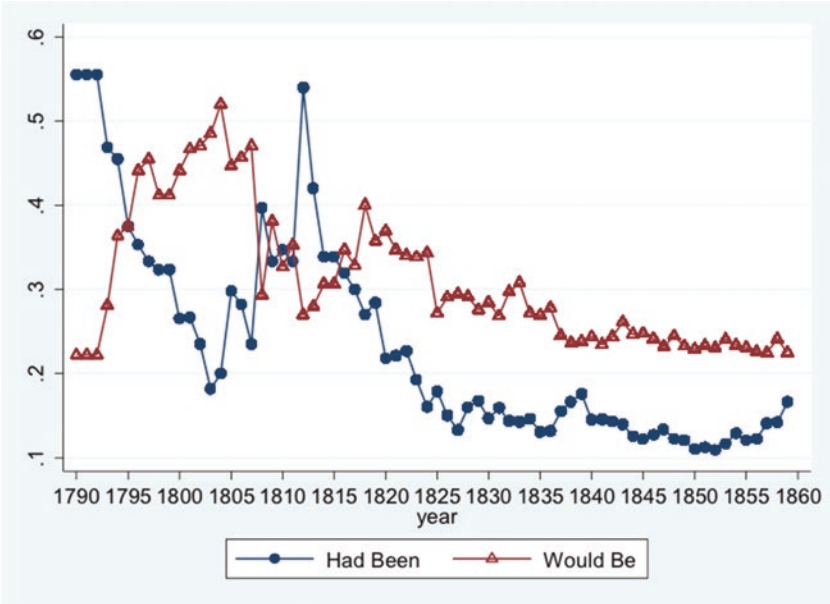

Fig. 10 Proportions of Boston bank directors and presidents who had been legislators, and proportions of boston bank directors and presidents who would be legislators, 1790–1859

their control. Therefore, more legislators joined banking and the "Had Been" proportions began to rise after 1800. For bankers who were not legislators in the 1790s, many would also become legislators after the law passed, so the "Would Be" proportions rose before 1800. This suggests that the act of 1799 put the banking system exclusively under legislators' control. The proportion of bankers who had been legislators reached its peak in 1812, after the Democratic-Republicans finally established two banks of their own in 1811, whose presidents and directors were largely Democratic-Republican legislators. From 1815 to 1825, banking became an entryway to politics, with between 25 and 30% of bankers becoming legislators, while the proportion of bankers who had been legislators declined to between 12 and 17%.

Figures 9 and 10 depict the sharp decline in the association of bankers and legislators that occurred between 1815 and 1825, a decline caused by a shift from limited elite access to open access. That was followed by much wider access in the late 1840 and 1850s, although bankers and politicians remained closely linked even then. The large overlap between bank directors and state legislators shows that financial elites and political elites were the same people.

The reduction in the close association between bankers and legislators reflects the breakdown of party identities at the national and the state level in the 1820s as well as the breakdown of partisan politics in Massachusetts. Party associations began to weaken after 1815, while the Federalists remained dominant in politics until the 1820s. I examine the regimes of party competition from 1790 to 1859 using the sample of Boston bankers in the following section.

3 Regimes of Party Competition

Chapter 2 provided evidence that the Federalist Party controlled Massachusetts politics for most of the 1790 and 1800s, and it dominated the banking sector in this period. To compare all three regimes with a consistent set of data, this section examines the sample of Boston bankers.

3.1 The First Party Regime: 1780–1821

Figure 11 shows the number of Boston bankers that had already been a Federalist or a Democratic-Republican state legislator in the year they became a banker. The sum of the two parties' proportions in Fig. 11 is lower than the "Had Been" proportion in Fig. 10. This is because Fig. 10 matches bankers with all legislators dating back to 1790, while Fig. 11 matches only legislators with Party IDs dating back to 1797. Therefore, the "Had Been" proportions in Fig. 11 begin to rise after 1797, and though the sum of two parties is still smaller than the "Had Been" proportion in Fig. 10. As Fig. 11 shows, of the Boston bankers before 1810, only 1 had already been a Democratic-Republican legislator (.02 of roughly 50 bankers), while a significant number had already been Federalist legislators.

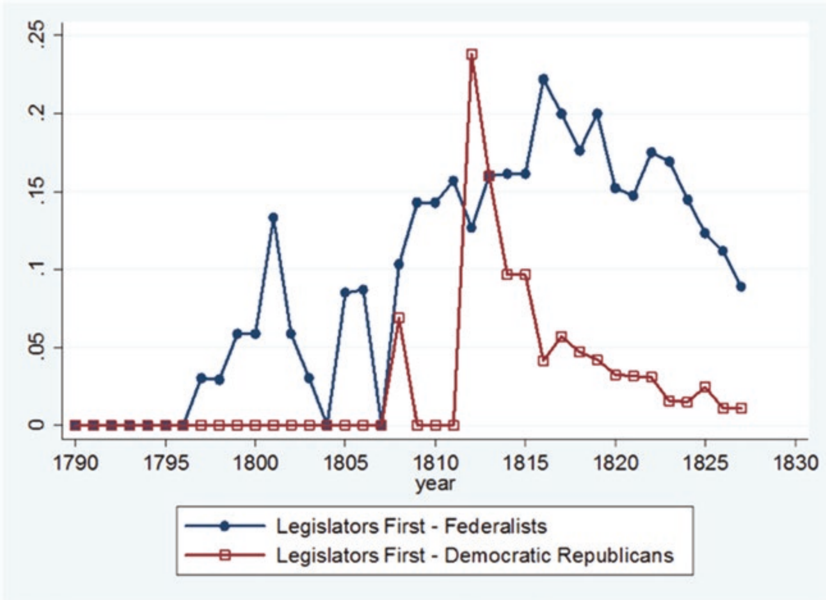

Fig. 11 Proportions of Boston bankers that had been Federalist or Democratic-Republican legislators before they became Bank directors and presidents, 1790–1827

Figure 11 demonstrates the importance of the year 1812. From 1797 to 1811, an average of 7.8% of bank directors and presidents had been Federalist legislators, but the proportion of the Democratic-Republicans was zero for most years. In 1812, however, the Democratic-Republican proportion jumped to 24%, when the Democratic-Republican legislature chartered their own banks. After that, the Democratic-Republicans' share in banking was 8% on average between 1812 and 1824, five times greater than those in the years before 1812.

As I match bankers with all the legislators of past years that can be identified with political parties, one question is whether the dramatic change of Democratic-Republican banking share in 1812 was caused by the increasing number of legislators with Democratic-Republican Party IDs over time. To show that this is not a concern, I compare Figs. 11 and 12. Figure 12 exhibits the Democratic-Republican proportion in

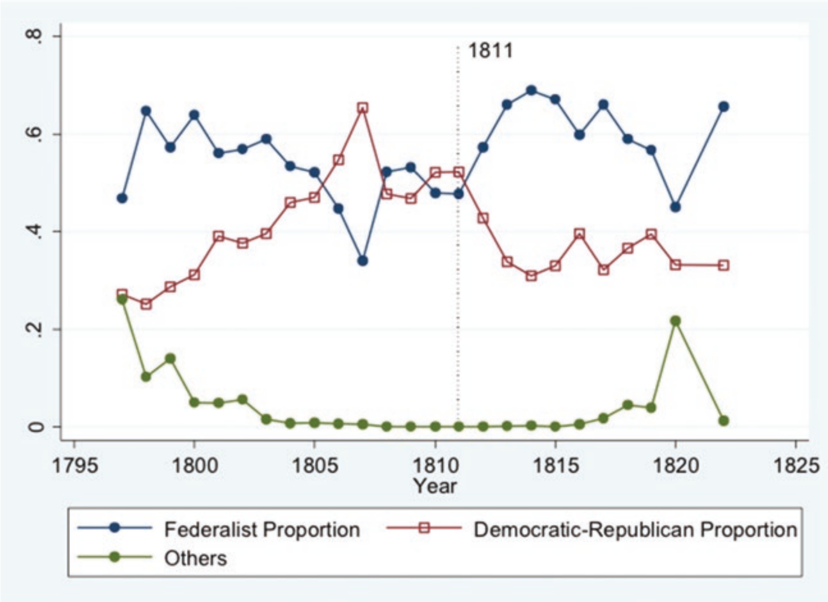

Fig. 12 Annual proportion of Federalist and Democratic-Republicans in Massachusetts house, 1797–1822. *Note* In this Fig. 11 plots the annual proportion of bank directors and presidents that had been Federalist or Democratic-Republican legislators. The dotted line reflects the Federalist proportion, and the hollow squares reflect the Democratic-Republican proportion. As a comparison, this figure plots the annual Federalist and Democratic-Republican proportion in the State House from Dubin (2007). The dotted line reflects the Federalist proportion, and the hollow squares reflect the Democratic-Republican proportion. In 1812, the Democratic-Republican proportion in banking jumped, but its proportion in the State House did not have corresponding changes. In both graphs, years are labeled on the horizontal axis

the State House, which is similar to the proportion in the State Senate. Before 1812, the Democratic-Republican proportion in the State House kept rising, while its proportion in banking was almost zero. The Democratic-Republican proportion of bankers jumped only in 1812. This suggests that the time pattern of Democratic-Republican bank directors was not caused by the increasing number of legislators with Democratic-Republican Party IDs.

Figure 13 shows the number of Boston bankers who would become a Federalist or Democratic-Republican legislator at a later date. Bankers were much more likely to become Federalist legislators than Democratic-Republican legislators. There was an increasing trend of "Would Be" Federalist legislators before 1800. This was because in 1799 the Federalist legislature passed a law to prohibit banks without state charters, and many bankers became Federalist legislators after the law was passed. These "Would Be" bankers appeared in the sample before 1800, showing an increasing trend as the year 1800 approached. After 1800, the proportion of bankers who would become Federalist legislators had a decreasing trend, without significant change for Democratic-Republicans. The decreasing trend might reflect the fact that political parties disappeared around

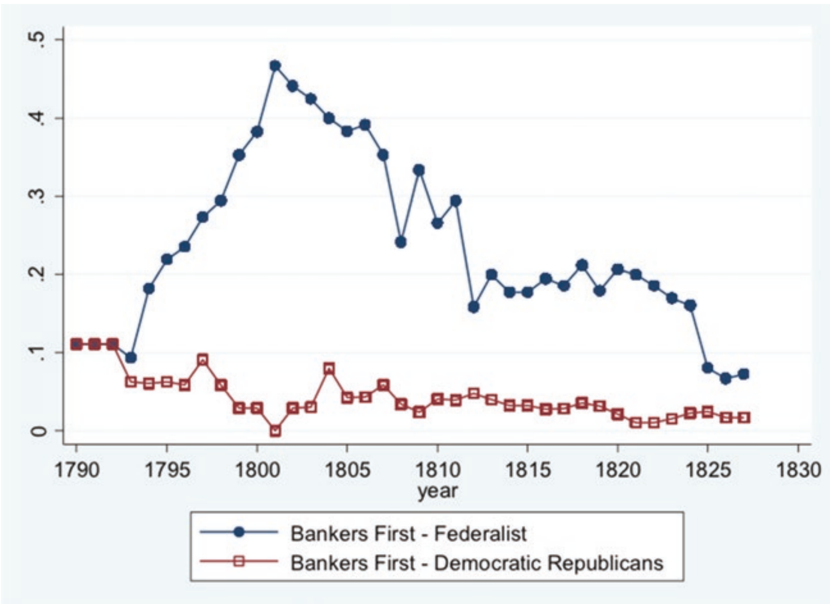

Fig. 13 Proportions of Boston bankers who became Federalist or Republican legislators after they became bankers, 1790–1827. *Note* In this figure plots the annual proportion of bank directors and presidents that would become Federalist or Democratic-Republican legislators. The dotted line reflects the Federalist proportion, and the hollow squares reflect the Democratic-Republican proportion. Most bankers would become Federalist legislators. Years are labeled on the horizontal axis

1824, so fewer bankers would become partisan legislators as that year approached.

The analysis shows that bankers and legislators had a close relationship during the 1790s and early 1900s and that the Federalists dominated banking. Of the 68 bankers in the statewide sample in 1810, 47, or 70%, had been (33%) or would become (37%) legislators. Of these 47 bankers, 4 had no party affiliation, 38 were Federalists (81%), and 5 were Democratic-Republicans (11%). Banking in Massachusetts was close to a Federalist monopoly. Of the 23 banks in our sample in 1810, only 3 banks had presidents who were Democratic-Republican legislators. Two other Democratic-Republican legislators were directors in banks dominated by Federalists. Perhaps even more telling, of the 23 banks, only four did not have a state legislator as president or director. Of those four, the Nantucket Bank was a Democratic-Republican bank, having had three Democratic-Republican legislators in 1803, the only year for which we have information on directors for that bank. The Berkshire Bank's president was Simon Larned. He was a legislator, but he was not identified with a party. While representation in the House and Senate was roughly 60% Federalist, and 40% Democratic-Republican over these years, the Federalist banks outnumbered the Democratic-Republican banks by roughly a 5 to 1 ratio.

Figures 11 and 12 correspond to the history in Chapter 2. In 1806 and 1807, the number of Democratic-Republicans in both houses surpassed the Federalists. In 1807, the Democratic-Republican legislature passed an act to insert six Democratic-Republican directors into both the Boston Bank and the Union Bank for one year. The Democratic-Republicans' proportion in banking rose from zero to 7% in the following year. But when the Federalists controlled the state legislature in 1808, the Democratic-Republicans were once again excluded from banking and their proportion dropped to zero in the next year. The Democratic-Republicans controlled the governorship as well as both houses only in the election of 1811.[6] Elbridge Gerry was the elected governor in both 1810 and 1811.[7] In the session of 1810–1811, he attempted to work out a compromise with Federalists over banking and a number of other issues. When he could not reach a compromise and when some Federalist leaders came out against what would become the

War of 1812, Gerry campaigned actively for himself and a Democratic-Republican legislature in the elections of 1811, leading to reforms in many sectors including banking.

The legislature of 1811–1812 changed the state banking policy. It chartered two new banks: the Merchant's Bank of Salem and the State Bank. The State Bank had three times the capital of any existing bank. It was also a Democratic-Republican bank. All of the twelve directors and the bank president had been or would be state legislators, and 11 of these were Democratic-Republicans. The State Bank was also intended to be a reformed bank. One-third of the $3 million capital was subscribed by the state government, with an option to subscribe an additional $1 million. The Bank was to pay a tax to the state of ½ of 1% of its paid in capital each year. The reform ideas behind both state ownership of stock and the capital tax were that the Bank, rather than being a source of private privilege to its owners would be a source of revenue for the state government.

The last element of the new banking policy resulted from the unusual fact that the charters of all the existing banks in Massachusetts expired in 1812. In the 1811–1812 legislative sessions, the Democratic-Republicans refused to renew the charters of any existing banks. This was, literally, an existential crisis for the Federalist bankers. Without their charters, they would not be able to issue bank notes, a basic function of their banks. In 1812, the Federalists carried out a vigorous campaign and regained the governorship and the House, but the Democratic-Republicans had redistricted the Senate (as a result of the "Gerrymander") and retained control of it. In the fall of 1812 (the 1812–1813) legislative session, the charters of the existing Federalist banks were renewed. All of the renewals contained the reform provisions included in the State Bank charter, including the bank capital tax. After these banking reforms, bank charters were issued more frequently, and the relationship between bankers and legislators changed over time.

In order to focus on changes in the behavior of bankers after 1815, I study each individual banker in the new banker sample, which includes a banker only in the first year in which he enters the Register data. Because the new banker sample is a subset of the full banker-year sample, the proportion of new bankers that had been, would be, or never became legislators is much more volatile. Figure 14 gives the number of new bankers in Boston each year, Fig. 15 gives the proportion of new bankers in Boston who had been Federalist or Democratic-Republican legislators for the entire period, and Fig. 16 gives the proportion of new bankers in Boston who would become Federalist or Democratic-Republican legislators. Figure 14 also tells us about the rate of bank formation. The rate of bank formation was high in 1811, 1812, and 1813, slowed for a time during the active part of the war in 1814 and 1815 and the economic recession in 1818, and then picked up rapidly in the 1820s. The number of new bankers picks up in 1816, but then falls back until 1823.

Although the small numbers of new bankers leads to graphs that fluctuate a lot from year to year,[8] a general trend is clear. Figure 15 shows that in the decade before 1812, there were years when half of the new bankers had been legislators. In 1812, half of the new bankers had been Democratic-Republican legislators. In the next decade, there were three years in which

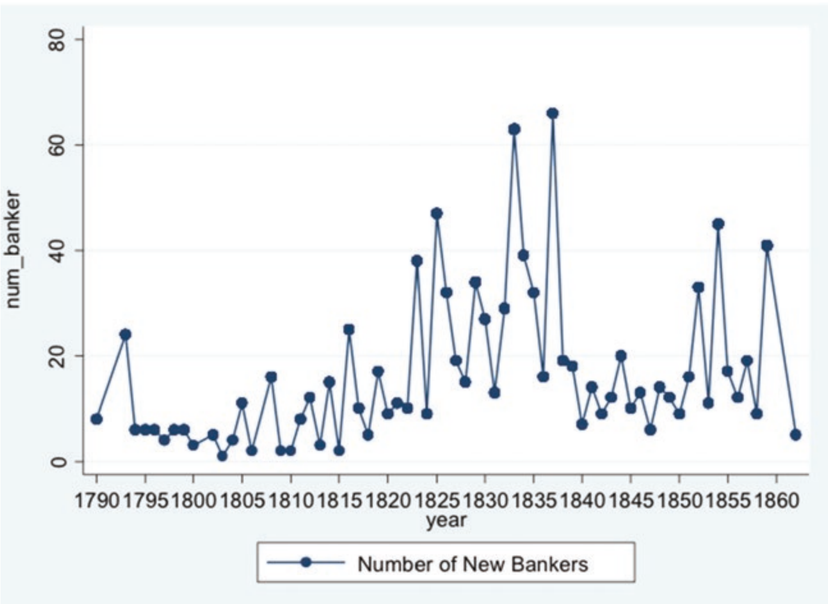

Fig. 14 Annual number of new bankers, Boston Banks, 1790–1859

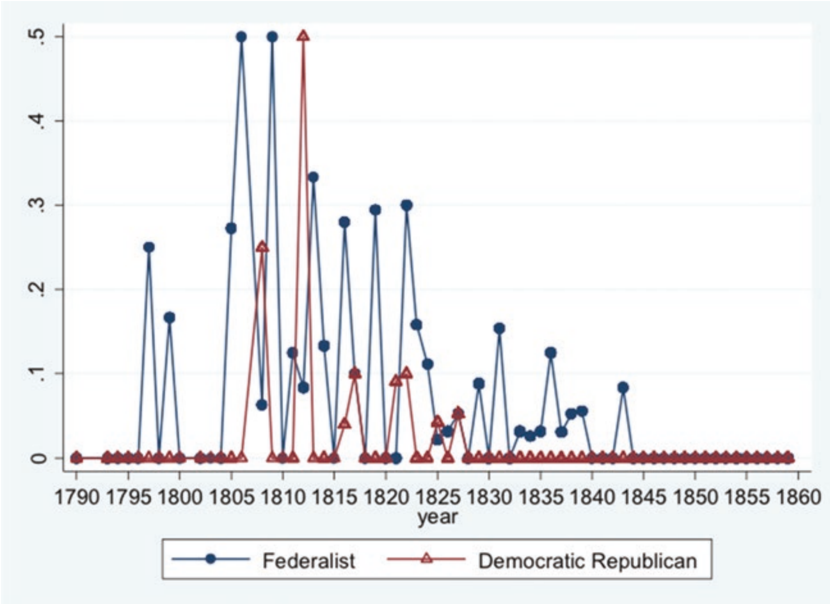

Fig. 15 Proportions of new bankers that had been Federalist and Democratic-Republican legislators, Boston Banks, 1790–1859

a third of the new bankers had been legislators, all Federalist. After 1822, when the Federalists disappeared as a party, but individuals who had been Federalist legislators in early years were still becoming bankers, the proportion of new bankers who had been Federalist legislators falls to less than 10% and then dwindles to zero. Similarly, the proportion of new bankers who would become legislators was highest before 1810, sometimes reaching 5% or higher for the Federalists. After 1810, the proportion was generally lower, rarely higher than 2.5%, again mostly for the Federalists. As both Federalists and Democratic-Republicans were in the process of disappearing as parties, the potential number of bankers who "would be" in either party was diminishing rapidly.

In summary, there was a very close relationship between bankers and state legislators in early nineteenth-century Massachusetts. Up to 1812, two-thirds of all individuals who became a bank president had been or

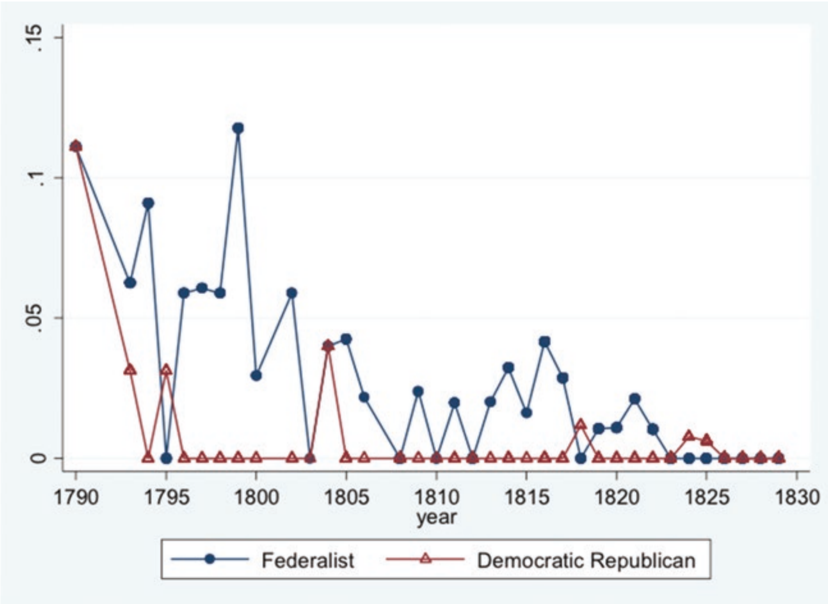

Fig. 16 Proportions of new bankers that would become Federalist and Democratic-Republican legislators, Boston Banks, 1790–1830

would become a state legislator. Federalists dominated the formation of banks up to 1811. The large majority of banks were under Federalist control. The ratio of the number of bankers and banks controlled by Federalists to the number controlled by Democratic-Republicans was roughly 5 to 1.

In 1811, for the first time, the Democratic-Republicans obtained control of the House, Senate, and Governor's chair, turning the tables on the Federalists. They chartered two new Democratic-Republican banks. They refused to renew the charters of any Federalist banks, all of which were due to expire in 1812. In 1812, the Federalists recaptured the governorship and the House, and they renewed the existing bank charters on the same reform terms as the State Bank charter in 1811. After the "bank war" of 1811 and 1812, the state continued to charter banks, but new bankers were significantly less likely to have been or become a state legislator and the relationship between bankers and legislators began to weaken.

3.2 The Non-party Regime: 1820–1830

For much of the 1820s, many state legislators were not identified with parties in the *Legislative Biographies*. As we saw earlier, Fig. 3 graphs the share of legislators with a Party ID in the *Legislative Biographies* from 1797 to 1860. Although there was an increase in bank chartering in 1812 and 1813 (Fig. 2), the explosion of banking occurred in the 1820s.[9] As Figs. 1, 2, and 8 show the numbers of bank charters and banks in operation increased dramatically. This was the same period in which the proportion of bankers who had been or would become legislators declined sharply, from roughly two-thirds of all bankers to around 40% of all bankers, as shown in Figs. 9 and 10.

Table 1 shows that the proportion of all bankers who were state legislators at some point dropped from 68% between 1810 and 1819 to 55% between 1820 and 1825 (Column 4). In the same period, the proportion of bankers that can be identified with political parties dropped from 56 to 46% (Column 5), although the share of legislators with Party IDs dropped from 99% between 1810 and 1819 to 56% between 1820 and 1825. This is because the number of bankers who were state legislators with Party IDs did not drop much, from 535 between 1810 and 1819 to 485 between 1820 and 1825 (Column 2 & 3). The small drop in numbers is because I match bankers in a given year to legislators in all the years from 1790 to 1859, rather than the legislators in the same year. As a result, the sharp drop of Party ID between 1820 and 1825 does not significantly affect the share of bankers affiliated with a particular party.

Overall, as political parties broke down in the 1820s, more banks were chartered and the connection between bankers and legislators dropped greatly. Chapter 2 also shows that in 1829 the state passed an impersonal law for banking. The temporary disappearance of political factions in the era of "Good Feelings" turned out to be associated with the open access to banking.

3.3 The Second Party Regime: 1830–1860

The structure of party politics in the USA fragmented in the 1820s. In three of the four national elections between 1824 and 1836, three or more candidates received electoral votes in the presidential elections. The exception was the election of 1828, featuring the John Quincy Adams and Andrew Jackson rematch of their 1824 race, in which Jackson had won a popular and electoral vote plurality, but Adams won the election in the House with the support of Henry Clay. Elections from 1840 to 1852 resulted in electoral votes for only the Whig and the Democrat candidates. But, as we shall see, a cauldron of party formation and loyalties boiled at the state level during this period. In 1856 and 1860, multiple parties and candidates won electoral votes, ending in the election of Lincoln and the onset of the Civil War.

Figures 4 and 5 in Chap. 2 show the mix of parties that competed for dominance in Massachusetts between 1830 and 1860. The dominant parties in succeeding elections were National Republicans, Whigs, and Republicans, with one brief period in which the Democrats held the legislature and a second brief dominance of the Know Nothing Party. The sequence of parties could be seen as representatives of the same group of dominant political players, but that would be a mistake. There was not one continuous coalition that simply changed its name over time. The National Republicans, Whigs, and Republicans were parties that succeeded each other rather than competed with each other.[10] The connection between politics and banking remained important, but not as important as in the first party system.

Table 2 shows that the proportion of bankers who were also state legislators at some point dropped sharply from 63% in the period 1800–1815 to 45% in the period 1815–1825. From 1825 to 1959, the proportion of new bankers that had been or would become legislators stayed relatively steady between 40 and 45%.

To track the association between political parties and bankers, Table 3 summarizes the information on New Bankers and political affiliation in three periods: 1790–1815, 1816–1824, and 1825–1859. The first three columns give the number of individual bankers in each

Table 3 All new bankers, by legislator or not, and by party or not

				As share of all bankers			As share of all banker/legislators		
	1790–1815	1816–1824	1825–1859	1790–1815	1816–1824	1825–1829	1790–1815	1816–1824	1825–1829
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Bankers	221	220	2268						
Not legislators	79	115	1305	0.36	0.52	0.58			
Legislators	142	105	963	0.64	0.48	0.42	1	1	1
W/Party ID	93	87	849	0.42	0.4	0.37	0.65	0.83	0.88
Parties									
Federalist	60	51		0.27	0.23		0.42	0.49	
Dem-Republican	29	17		0.13	0.08		0.2	0.16	
Other	4	19		0.02	0.09		0.03	0.18	
Whig			321			0.14			0.33
Republican			159			0.07			0.17
Democrat			128			0.06			0.13
Nat/Republican			86			0.04			0.09
Federalist			55			0.02			0.06
Know nothing			24			0.01			0.02
Other			76			0.03			0.08
No party	49	18	114	0.22	0.08	0.05	0.35	0.17	0.12

period, whether they were a legislator or not, if they were a legislator whether they had a party affiliation (Party ID), and which party they belonged to, if any. Columns (4), (5), and (6) give each of the numbers as a share of all bankers in each period, while columns (7), (8), and (9) give the numbers as a share of all banker/legislators in each period.

Tracking the association between parties and bankers is more difficult, for two reasons. First, as we noted earlier, in the early years, there were no organized political parties, so many legislators did not identify with a party. As a result, while the number of bankers who were legislators at some point dropped significantly from 1815 to 1824, the proportion of all bankers who became legislators and were associated with a party does not change much over the entire period from 1790 to 1859. As the second and third rows of the second panel (Columns (4), (5), and (6)) shows, the percentage of bankers who were legislators drops from 64% between 1790 and 1815, column (4), to 48% between 1816 and 1824, column (5). But the percentage of all bankers who can be identified with a party only declines from 42% in column (4) to 40% in column (5). This is because, before 1797, there were no organized political parties in Massachusetts, as shown in Fig. 3, and the first row of Column (5) of Table 1.

Second, the number of parties after 1825 is much larger, with four different parties commanding a majority in the same period of time. In the lower panel of Table 3, the Federalist Party accounted for 27% of all bankers between 1790 and 1815 and 42% of all bankers who were legislators. Similarly, if we merge the Federalist, National Republican, Whig, and Republican parties as a single "dominant party" they account for 27% of the bankers between 1825 and 1859 and a whopping 65% of all bankers who were legislators.

The multitude of parties after 1825 may offer us two different understandings about the role of political coalitions in the banking sector. If the succeeding parties were simply a manifestation of a political coalition (like elite groups we discussed in Chap. 2) in Massachusetts that responded to changing political conditions nationally by changing the party label attached to the political wing of the coalition, then it is possible that the coalition was still using access to banking as a way to create economic rents and hold the coalition together. On the other hand, the relative ease with which charters were made available, the declining but not disappearing direct association of bankers with legislators, and the fact that few banks after 1851 were established under the free banking law suggests that entry had opened considerably.

4 Regression Studies on Parties and Legislators, 1797–1824

The historical narrative has demonstrated that the banking sector began to open access to all political factions after 1811 because of government turnover and the Democratic-Republican threat of charter revocation. In this section, I use the sample of individual new bank directors and presidents for all banks I collected in Massachusetts from 1797 to 1824 to test whether the political turnover of 1811 had an effect on the probability that a new banker had been a Federalist or Democratic-Republican legislator. I use OLS, Logit, and Probit models to estimate the probability that an individual new banker had been a Federalist or Democratic-Republican legislator before and after 1811.

There are several alternative hypotheses that can explain the data presented above. My preferred explanation is that the probability of a new banker being a Democratic-Republican legislator rose after 1811, while the probability was unchanged for Federalists. The first alternative explanation is that more Democratic-Republicans joined banking because there were more banks after 1811. The second one is that the increase of Democratic-Republican directors merely reflects the fact that there were more Democratic-Republican legislators, and we matched these legislators to bank directors. The third alternative is that the Democratic-Republicans had more power in the State Senate and House. The fourth alternative is that other possible events around 1811, such as the War of 1812, may have caused the change.

To test whether my preferred hypothesis can be distinguished from these alternative hypotheses, I control for the annual number of incoming new directors, the number of cumulative Federalist or Democratic-Republican legislators, and the Federalist or Democratic-Republican proportion in the House and Senate. The annual number of incoming new bank directors can be used as the control variable for the number of new banks suggested by the first alternative hypothesis. The number of cumulative Federalist or Democratic-Republican legislators is used to control the Federalist or Democratic-Republican population suggested by the second alternative hypothesis. This variable also controls for potential errors in the collection of Party IDs in years such as 1797, 1823, and 1824, which have fewer Party IDs than other years. Even if in these years the Legislators' Biography identifies legislators with one party more than the other, the cumulative number of Federalist and Democratic-Republican legislators reflects the cumulative number of legislators with Party IDs and controls for the potential bias. The Federalist or Democratic-Republican proportion in the House and the Senate can be used to control for Federalist or Democratic-Republican strength in the legislature as suggested by the third alternative hypothesis. By comparing the effect of 1811 on Democratic-Republicans and Federalists, I can exclude the factors that may have a common effect on both Federalist and Democratic-Republican directors, such as the War of 1812. As the Federalists and the Democratic-Republicans emerged in 1797 and disappeared around 1824, I use the sample of new bank directors and presidents between 1797 and 1824. The estimation equation is:

$$P(y_{it} = 1) = \Phi(\alpha + \gamma \mathrm{D1812} + \beta_1 \mathrm{Banker}_t + \beta_2 \mathrm{CumLeg}_t \\ + \beta_3 \mathrm{HouseShare}_t + \beta_4 \mathrm{SenateShare}_t)$$

The unit of observation is an individual new bank director or president in the sample. The dependent variable is the probability that a new bank director or president had been a Federalist legislator or the probability that a new bank director or president had been a Democratic-Republican legislator. I run regressions for the Federalists and the Democratic-Republicans separately. D1812 is a dummy variable, representing whether a banker appeared in years 1812–1824. I control for the number of new bankers in each year (Banker_t). When the dependent variable is the probability that a new banker had been a Democratic-Republican legislator, I control for the number of cumulative Democratic-Republican legislators that had already served in the legislature (CumLeg_t), and the Democratic -Republican proportions in the House ($\mathrm{HouseShare}_t$) and Senate ($\mathrm{SenateShare}_t$) in each year. By the same token, when the dependent variable is the probability that a new banker had been a Federalist legislator, I control for the number of cumulative Federalist legislators, and the Federalist House and Senate proportions. The number of cumulative legislators is measured at the level of thousands, and the House and Senate Shares are measured as a percentage.

The results are shown in Table 4, which reports the average marginal effect. Columns (1)–(6) report the results without controlling for political parties' House and Senate proportions. Columns (1)–(3) report the regressions in which the probability that a new banker had been a Democratic-Republican legislator is the dependent variable, and (4)–(6)

Table 4 The OLS, logit, and probit tests on the probability that a new banker had been a party legislator

	(1)	(2)	(3)	(4)	(5)	(6)
	DR	DR	DR	Fed	Fed	Fed
	OLS	Logit	Probit	OLS	Logit	Probit
D1812	0.1935**	0.2633**	0.2088**	−0.0502	−0.0609	−0.0659
	−0.0892	−0.1263	−0.1041	−0.1191	−0.1308	−0.1245
Number of new bankers	−0.0006	−0.0002	−0.0003	−.0030**	0.0028**	0.0027**
	−0.0011	−0.0011	−0.0011	−0.0015	−0.0014	−0.0014
Cumulative Dem-Rep legislators	−0.1853*	−0.2592*	−0.2079*			
	−0.0998	−0.1368	−0.1174			
Cumulative Federalist legislators				0.0695	0.0855	0.0896
				−0.1197	−0.1305	−0.1248
Constant	0.1165***	−2.007***	−1.1897***	0.0514	−2.5663***	−1.4852***
	−0.0387	−0.4883	−0.2542	−0.0525	−0.4617	−0.2421
Number of observations	386	386	386	386	386	386
adj. R^2	0.0047			0.011		
Pseudo R^2		0.0265	0.0222		0.0215	0.0211
F	1.61			2.43		
LR χ^2		5.85	4.9		7.23	7.1
D1812	0.4036***	0.2751***	0.2678***	−0.1174	−0.1454	−0.1298
	(0.0952)	(0.0963)	(0.0935)	(0.1360)	(0.1391)	(0.1365)
Number of new bankers	−0.0015	−0.0005	−0.0006	0.0030**	0.0027*	0.0026*
	(0.0011)	(0.0010)	(0.0010)	(0.0015)	(0.0014)	(0.0014)
Cumulative Dem-Rep legislators	−0.0004***	−0.0002**	−0.0002**			
	(0.0001)	(0.0001)	(0.0001)			

(continued)

Table 4 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
	DR	DR	DR	Fed	Fed	Fed
	OLS	Logit	Probit	OLS	Logit	Probit
Dem-Rep Senate Share	0.0026***	0.0012	0.0010			
	(0.0010)	(0.0010)	(0.0010)			
Dem-Rep House Share	0.0081***	0.0073***	0.0078***			
	(0.0020)	(0.0025)	(0.0025)			
Cumulative Federalist legislators				0.0001	0.0002	0.0002
				(0.0001)	(0.0001)	(0.0001)
Federalist Senate Share				−0.0024	−0.0026	−0.0025
				(0.0015)	(0.0016)	(0.0016)
Federalist House Share				0.0023	0.0024	0.0022
				(0.0018)	(0.0018)	(0.0018)
Constant	−0.2472***	−7.008***	−3.7410***	0.0645	−2.5278**	−1.4057***
	(0.0846)	(1.5511)	(0.7627)	(0.1280)	(1.0033)	(0.5411)
Number of observations	386	386	386	386	386	386
adj. R^2	0.068			0.013		
Pseudo R^2		0.115	0.107		0.0304	0.0293
F	6.602			2.015		
LR χ^2		25.31	23.69		10.25	9.87

Standard errors in parentheses $*p < 0.10$ $**p < 0.05$ $***p < 0.01$

report the regressions for the Federalists. There is no significant change in the probability that a new banker had been a Federalist legislator before and after 1811 in any of the three models. However, after 1811, the probability that a new banker had been a Democratic-Republican legislator increased by 19.35% in the OLS regression, by 26.33% in the Logit Regression, and by 20.88% in the Probit Regression. All these effects are significant at 5% level. Columns (7)–(12) report the regression results after controlling for political parties' House and Senate proportions. Columns (7)–(9) report regression results for Democratic-Republicans, and (10)–(12) report results for the Federalists. The effect of 1811 on the probability that a new banker had been a Democratic-Republican legislator is significant at 1% in all three models. The estimates of the marginal effect in OLS, Logit, and Probit regressions are 40.36, 27.51, and 26.78%, respectively. In addition, the Democratic-Republican proportion in the House also has a positive and significant impact on this probability. As a comparison, in the regressions for the Federalists (10)–(12), the 1812 dummy and the Federalist proportions in the House and Senate do not have significant effects on the probability that a new banker had been a Federalist legislator. If other events that occurred around 1811, such as the War of 1812, also had any effect, they should affect both the Democratic-Republicans and the Federalists. The significant and large effect for the Democratic-Republicans, compared with the zero effect for the Federalists, suggests that it is more likely that the results are driven by the political competition in 1811, rather than other contemporary events such as the War of 1812.

The regression results have shown that after the political turnover in 1811, the probability that a new banker in a given year had been a Democratic-Republican legislator increased by more than 20%. The result is robust after adding other control variables. By carrying out regressions for Democratic-Republicans and Federalists separately, the results suggest that other events around 1811, such as the War of 1812, cannot explain the differential effect of 1811 on Federalists and Democratic-Republicans. The banking sector became open to all political factions after 1812.

5 Bank Level Analysis

As I showed in previous sections, the share of all bankers that were legislators at some point declined sharply from 1815 to 1825, but then remained fairly steady at about 40 to 45%. This section examines the bank level by defining elite banks as banks including at least one legislator in the board of directors. This definition is strict because even today, many banks are connected to politics to some degree. However, it provides us with a different perspective on data.

However, this perspective raises some difficulties. One difficulty is that the Registers often only report the name of the bank presidents for some country banks. Since only one banker name is associated with the bank, the fact that the president is not a legislator does not mean that the bank is not associated with the legislature through a director. In an attempt to control for the problem I made a few adjustments in the following discussions.

Figure 17 shows the number of banks that had no legislators in each year. As we expected, the number rises over time, except for the period between 1837 and 1847, when the Registers only recorded Boston banks. In order to estimate the effect of banks with only a president reported, Fig. 18 excludes banks that only report one banker in the Register. In other words, banks without directors reported in the Registers are excluded from Fig. 18. The picture is much different. Prior to 1840, only one bank, the Bangor Bank in 1819 and 1820, reported the names of directors and had no legislators among its president or directors. It appears that when the focus shifts from individual bankers to individual banks, almost all banks are connected to the legislature by having a president or at least one director who had been or would become a legislator.

The results are consistent with the Lamoreaux (1996) that banks were mostly as a tool for rich people to channel funds to their family business, and as a result, it cannot be a bank serving the ordinary people. These banks were commercial banks, not savings institutions or saving banks. Their purpose was not to enable ordinary people to save their

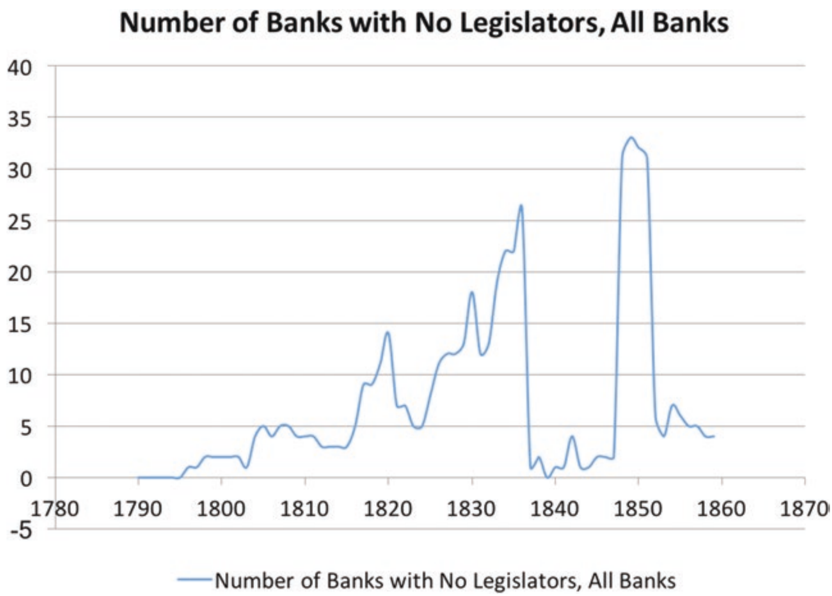

Fig. 17 The number of banks with no legislators as president or a director, all banks (whether they have directors or not), 1790–1859

money or exploit good investment opportunities. It should not be surprising that they were connected to some legislator.

Although banks were still connected to the legislature after 1812, at least by our crude definition of including a legislator in the board of directors, the legislators held less political power over time. To see how long legislators retained power, I calculate the annual tenure of a state legislator from the *Legislative Biographies*. Figure 19 presents the average lifetime tenure of legislators serving in each legislature. The sharp drop after 1820, indeed all the way to 1850, stands out in the figure.

The drop of the legislative tenure shows that political power was not dominated by a few established elites, as the legislative power turned over more frequently. Individual legislators were spending much less time as lawmakers. Elite groups who wanted their

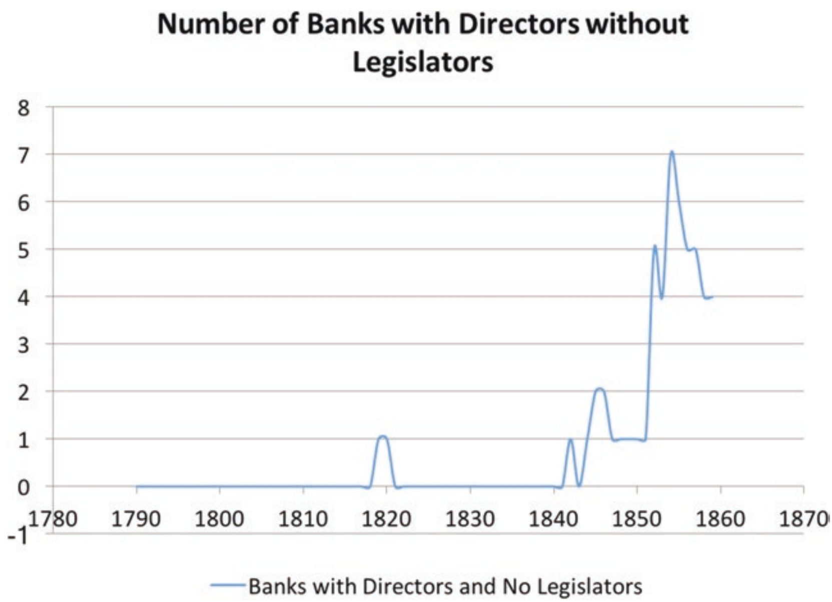

Fig. 18 Number of banks with directors who have no legislators, 1790–1859. This sample excludes banks with only presidents in the registers

voice in the legislature heard could much more easily do so, given the steadily rising turnover of legislators. But the turnover itself would have magnified the interest that all elites had in making sure that they could obtain a bank charter and that all the bank charters would be the same. This was particularly true for rising elites whose fortunes were tied to manufacturing or commerce and wanted access to their own banking facilities, ala Lamoreaux. They were not shut out. There was open access for elites, at least in the limited way we have defined elites here. Although most banks were connected to elites, those elites were not as established as those in the early 1800s when average legislative tenure was more than 10 years, but more like rising elites who held legislative power for only one to four years.

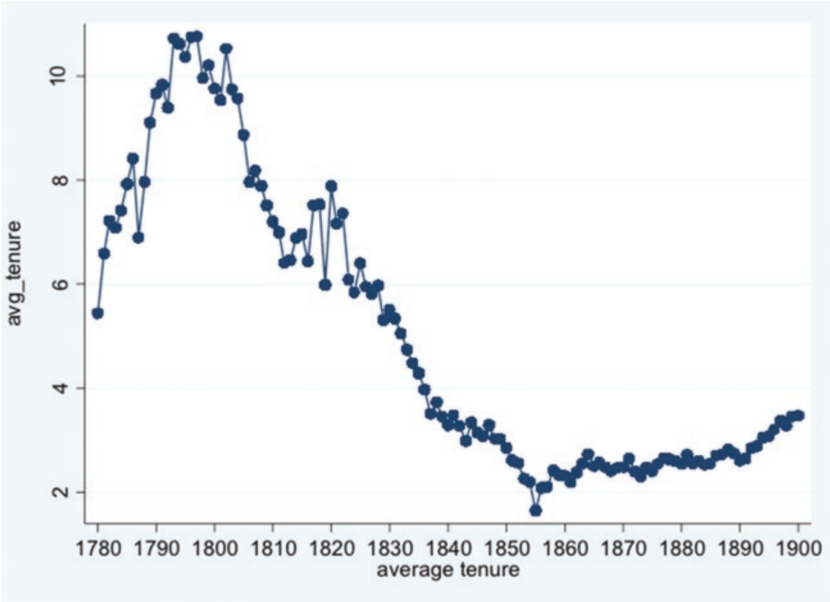

Fig. 19 Annual average tenure of state legislators, 1780–1900. *Source* Legislators' biographies

6 Conclusion

This chapter explores the long-term relationship between politics and banking. By looking at the data of bank directors and state legislators from 1790–1859, this chapter shows that politics and banking were highly connected, although this connection became weaker after 1812 in several respects. First, before 1812, 70% of bankers had been or would become state legislators, but from 1812 to 1860, the proportion of bank directors that had been or would become state legislators at some point in time dropped from 70 to 40%. Second, before 1811 groups found it extremely difficult to get a charter if they were not connected to the Federalist Party, but by the late 1810s, limited partisan access to banking had virtually disappeared. Third, the bank level analysis shows that banks were still connected to the legislature after 1812, but the average legislative tenure dropped from 10 years in the early 1800s to 2 years in the 1850s, suggesting that political elites themselves became less established. The overall results complement the history narrative of Chap. 2, suggesting that banking and politics were highly connected in the Federalist era, but that access began to open after the "bank war" in the year 1811 and 1812, and that in the second party system, the banking sector opened access to all elite groups.

Notes

1. Weber estimated the beginning and ending year of banks. For some banks, he relied on the chartering dates. Weber did not include Maine banks in Massachusetts before 1820, when Massachusetts split into two different states. Weber's data are better than Fenstemaker, and Sylla and Wright because these two sources relied exclusively on chartering dates. The Almanacs include Maine banks before 1820, which is why the number of banks falls in that year.
2. In total 17 banks. 1799: 2, 1800: 1, 1802: 3, 1803: 7, 1804: 4.
3. The seats of the Senate are fixed, but the seats of the House depend on how many representatives the towns sent. The towns did not send all representatives every year.
4. Formisano (1983, pp. 33–35).
5. In these numbers, an individual banker can appear in more than one year. Each banker year represents an individual banker in a given year. If a banker appears in multiple years, there will be multiple banker-year observations for him.
6. The election of 1811 selected the legislature for the 1811–1812 term.
7. The governors are elected yearly.
8. The current graphs are a bit confusing/misleading as well because a "0" for a single year can reflect either that there were no new bankers, or that the proportion of new bankers of a particular party was "0."
9. The War of 1812 slowed the formation of banks, as did the recession of 1818.
10. The idea that the Whigs were a simple continuation of the Federalist Party has a long history, but it appears to be wrong. Holt summarizes the idea: "Even historians routinely echoed Democratic propaganda and described Whigs as ex-Federalists. Experts now know better. Massive research in the past forty years has shown that the Whig Party evolved not from the Federalists but from divisions within the Jeffersonian party" (Holt 1999, p. 2). The national literature may not apply specifically to Massachusetts.

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4

Empirical Studies on Political Connection of Suffolk Legislators, 1790–1859

Abstract This chapter complements Chap. 3 by examining the contemporaneous relationship between bank directors and state legislators. The results show that people who were ever state legislator at some point in their life had a significantly larger chance of being a bank director at the same time, in the 1790s and the first decade of the nineteenth century. Over time, the chance that a person would be both a legislator and a banker at the same time declined to almost zero. These results provide another perspective of looking at the connection between banking and political elites, and they suggest that the banking sector was less politically connected in the second party regime.

Keywords Bank director · Legislator · Elites

1 Introduction

Chapter 3 measures the connection between politics and banking by defining elites as bankers who had been or would become state legislators. This measure provides insights into the behavior of an elite

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coalition, but it may also overestimate the proportion of elites by defining elites as including any banker who was a legislator at some point of their life. This section measures the group of elites in an alternative way by exploring people who were bankers and legislators in the same year. This section studies the connection between bank directors and state legislators in the Suffolk County, Massachusetts from 1790 to 1859. The results show that people who were ever state legislator at some point in their life had a significantly larger chance of being a bank director at the same time in the 1790s and the first decade of the nineteenth century. Over time the chance that a person would be both a legislator and a banker at the same time declined to almost zero.

2 Data and Empirical Tests

As in Chap. 3, data were taken from Legislators' Biographies at the Massachusetts State Library, and the names of bank directors for all banks in Boston, the major city of Suffolk County, and several banks in other counties, from 1790 to 1859. I match state legislators to bank directors in Boston by name and time to identify whether a legislator was a bank director in a given year.

This section focuses on the sample of legislators from Suffolk County in the years between 1780 and 1859. There were roughly 40 legislators from Suffolk County in each year. I use their birth date and death date to derive individual observations. Every person in the sample was a legislator at some point in their life, and they are tracked from age 20 until their death. Referring to the sample as "legislators" can be confusing, because the purpose is to determine whether these people have a greater chance of also being a banker when they are serving in the legislature in comparison with when they are not in the legislature. For convenience, I refer to people who were a legislator at some point in their life as "politicians." I generate indicators for years when individual politicians were legislators and indicators for years that they were bank directors. There were 46,681 individual observations in the sample.

Two empirical tests were carried out to estimate the correlation of being a state legislator and being a bank director in a given year. The first specification is

$$y_{it} = \alpha + \theta y_{i,t-1} + \sum_{j=1790}^{1859} \beta_j Leg_{it} * I_t^j + \varphi_i + \rho_t + \varepsilon_{it} \quad (1)$$

y_{it} is an indicator to measure whether a person *is* a bank director i in a given year t. $y_{it} = 1$ for years when a person *is* a bank director, and $y_{it} = 0$ for otherwise. Leg_{it} equals 1 if a person is a legislator in a given year and 0 otherwise. φ_i is the individual dummy and ρ_t is the time dummy. So specification (1) includes both individual and time fixed effects.

Specification (1) uses $y_{i,t-1}$ as an independent variable to control the persistent effect of being a bank director. The regression interacts Leg_{it} with each year from 1790 to 1859. I am interested to see the correlation between the identity of being a legislator and the identity of being a bank director in each of these time periods, and how these correlations changed over time. It should be noted that for years from 1780 to 1790, there are no observations on bank directors and we cannot estimate the coefficients.

In the following specification (2), I include only the year fixed effect but ignore the individual fixed effect. So the coefficient β_j measures the cross-sectional correlation of Leg_{it} and year dummies in each year 1790–1859.

$$\begin{aligned} y_{it} &= \alpha + \sum_{j=1790}^{1859} \beta_j Leg_{it} * I_t^j + \sum_{j=t0}^{T} \rho_j I_t^j + \varepsilon_{it} \\ y_{it} &= \alpha + \theta y_{i,t-1} + \sum_{j=1790}^{1859} \beta_j Leg_{it} * I_t^j + \rho_t + \varepsilon_{it} \end{aligned} \quad (2)$$

Column (1) of Table 1 reports the estimated coefficients for specification (1), and Column (2) reports the estimated coefficients for specification (2). The coefficients from both regressions are similar. The results show that in early years being in the legislature significantly increased the chance of a person also being a bank director in that year.

Table 1 Individual and time fixed effects of legislators' probability of being a bank director at the same year

	Individual and time fixed effects (1)	Time fixed effects only (2)
lagbanker	−0.00902*	−0.00893*
Leg1790	0.101*	0.102*
Leg1791	0.104**	0.105**
Leg1792	0.055	0.056
Leg1793	0.138***	0.139***
Leg1794	0.256***	0.258***
Leg1795	0.467***	0.470***
Leg1796	0.279***	0.283***
Leg1797	0.428***	0.433***
Leg1798	0.447***	0.451***
Leg1799	0.491***	0.496***
Leg1800	0.530***	0.537***
Leg1801	0.0514	0.0541
Leg1802	0.181**	0.187**
Leg1803	0.213***	0.220***
Leg1804	0.322***	0.331***
Leg1805	0.329***	0.336***
Leg1806	0.262***	0.265***
Leg1807	0.226***	0.229***
Leg1808	0.273***	0.276***
Leg1809	0.213***	0.217***
Leg1810	0.175***	0.178***
Leg1811	0.197***	0.200***
Leg1812	0.156***	0.158***
Leg1813	0.155***	0.159***
Leg1814	0.178***	0.181***
Leg1815	0.130***	0.132***
Leg1816	0.0827*	0.0843*
Leg1817	0.0655	0.067
Leg1818	0.089	0.0907
Leg1819	0.156***	0.158***
Leg1820	0.197***	0.204***
Leg1821	0.0269	0.0312
Leg1822	0.0532	0.0612
Leg1823	0.132***	0.138***
Leg1824	0.0817*	0.0862*
Leg1825	0.0818*	0.0838*
Leg1826	0.0174	0.0238
Leg1827	−0.0491	−0.0432
Leg1828	0.0133	0.0152
Leg1829	0.0920***	0.0964***

(continued)

Table 1 (continued)

	Individual and time fixed effects (1)	Time fixed effects only (2)
Leg1830	0.172***	0.177***
Leg1831	0.110***	0.114***
Leg1832	0.0869**	0.0895**
Leg1833	0.120***	0.124***
Leg1834	0.0920**	0.0934**
Leg1835	0.0899***	0.0927***
Leg1836	0.000362	0.00189
Leg1837	0.0506	0.0512*
Leg1838	0.0438	0.0456
Leg1839	0.0935*	0.0995*
Leg1840	0.0851**	0.0857**
Leg1841	0.0864**	0.0877**
Leg1842	0.0449	0.0448
Leg1843	0.0649	0.0641
Leg1844	−0.00111	−0.00272
Leg1845	0.0107	0.00855
Leg1846	−0.00998	−0.00973
Leg1847	0.0161	0.0161
Leg1848	−0.0139	−0.0138
Leg1849	−0.057	−0.0584
Leg1850	−0.0621	−0.0613
Leg1851	0.0347	0.0336
Leg1852	0.0423	0.0412
Leg1853	−0.00671	−0.0087
Leg1854	0.0711*	0.0693*
Leg1855	−0.0289	−0.0336
Leg1856	−0.0443	−0.0479
Leg1857	0.0119	0.00877
Leg1858	−0.0376	−0.0413
Leg1859	0.00771	0.00407
constant	0.0884	−1.63e−10
N	46681	46681
adj. R-sq	0.039	
F	12.08	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

For example, the coefficient for the year 1800 is above 0.5, implying politicians in the legislature in 1800 had a 50% higher probability of being a banker than politicians who were not in the legislature in 1800. The connection between legislators and bank directors was very close in

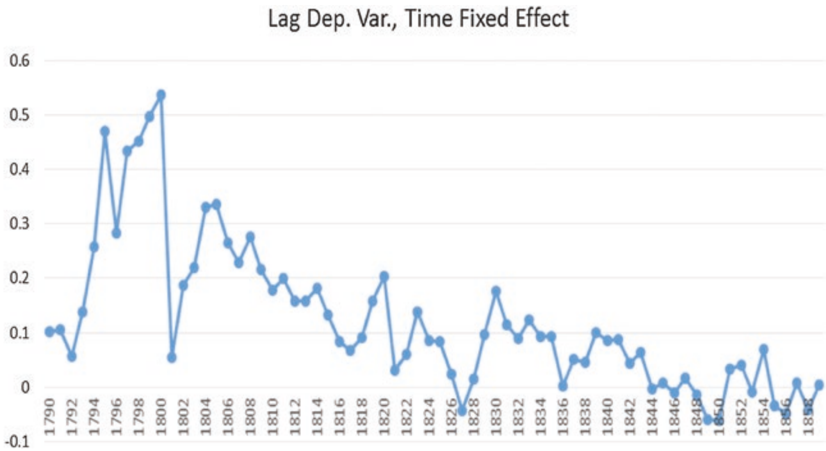

Fig. 1 Regression coefficients, time fixed effect only

the 1790s and 1800s, but gradually dropped after 1800. After 1816, the estimated coefficient dropped to below 10%, and after 1840, the coefficient is not significantly different from zero. One possible explanation is the Federalist and the Democratic-Republican legislators were elites who were able to control the banking sector, whereas, in the second party system, the elite dominance in banking gradually disappeared. As results are similar for both Column (1) and Column (2), Fig. 1 plots the coefficients from Column (2) only.

3 Conclusion

This section provides a second measurement of elites focusing on people who were bankers and legislators in the same year. This section shows that politicians, people who were legislators at some point in their life, were more likely to be legislators and bankers at the same time in the 1790s and the early 1800s than afterward. In the 1790s, for people who were ever state legislators at some point of their life, a person in the legislature was 50% more likely to be a bank director in that year than a politician who was not in the legislature in that year. In the 1820s, that probability decreased substantially, and by the 1840s, the statistical difference dwindled to almost zero.

This measurement of elites, however, has its own problems. Average legislative tenure decreased from 10 years in the early 1800s to 2 years in the 1850s, implying that it may have been more difficult to be a legislator and a banker in the same year. However, these findings complement the results in Chap. 3, and both results suggest that the longtime relationship between bankers and legislators weakened over time.

5

Empirical Studies on Bankers' Wealth and Bank Balance Sheets

Abstract This chapter studies the transition to open access from the economic perspective. Qian collects wealth data from Boston tax rolls between 1827 and 1859 and data on bank balance sheets from 1804 to 1861. The results show that in the era of de facto free banking, bankers remained richer than other wealthy citizens, although the wealth inequality did not widen. Banks chartered in the free banking era were still politically connected, although their sizes were small. These results suggest that from the economic perspective, many bankers were still wealthy elites, and the banking sector was not owned by grassroots citizens.

Keywords Bankers' wealth · Tax rolls · Wealth inequality · Bank balance sheet · Bank assets

1 Introduction

This chapter studies the transition to open access banking from an economic perspective. The previous chapters examined the transition to open access from the view of elite coalitions between bankers and state

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legislators, but they do not show the economic implications of the transition. Did a weaker association between bankers and politicians in the 1840s and 1850s imply that ordinary citizens with moderate wealth were able to join banking? And did less well-connected banks entering the 1840s and 1850s have fewer assets? This chapter examines these questions.

This chapter carries out two empirical studies. The first explores the wealth of bankers relative to other wealthy people in Boston from 1829 to 1859, where wealth is measured from property assessments in the Boston tax lists. The second empirical study examines bank assets from 1804 to 1861 by looking at bank balance sheets. The following subsections discuss data and empirical analysis for each of these studies.

2 Bankers' Wealth, 1829–1859

2.1 Introduction

In the Jacksonian era, the idea that bankers were wealthy and corrupt elites was widely held. Andrew Jackson and the Democratic Party accused these "monied interests" of swaying economic powers to manipulate political elections. Recent literature, however, suggests that bankers were becoming less elite and less wealthy in the 1830s. For example, Lamoreaux and Glaisek (1991) exploit the wealth data of bank directors in Providence, Rhode Island during the period from 1830 to 1845 and find that bank charters granted in the 1830s benefited men with relatively less property than earlier charters. Hilt and Valentine (2012) show that corporate ownership in New York, including that of banks, became more diversified and democratic in the year of 1826 compared to 1791. This research suggests that in the second party system ordinary citizens were able to participate in banking. The findings are inconclusive, however, because data were collected in sporadic years, and the literature ignores Massachusetts, the state with most banks per capita and one of the financial centers in the banking system of the antebellum era

(Wallis et al. 1994). This section complements the literature by studying the long-term pattern of bankers' wealth in Boston from 1829 to 1859.

Massachusetts bankers may have been richer than non-bankers because the compared to other sectors: Most banks had at least $100,000 initial capital in the 1830s, equivalent to $1,640,000,000 in 2013 inflation-adjusted dollars.[1] Lamoreaux (1996) shows that banks in the antebellum era were vehicles to facilitate investments in manufacturing companies owned by a few bank directors from rich families. There is, however, a lack of substantial statistical evidence to assert that bankers were richer than other citizens over a longer time frame. This section collects the wealth data of bankers and other wealthy taxpayers and compares them from 1829 to 1841.

Chapter 3 provides empirical evidence showing that after 1811, the banking sector in Massachusetts moved to de facto free banking. Those results suggest that bank directors (or banks), legislators, and political parties gradually became less affiliated with one another between the 1810s and the 1850s, implying that the banking sector became less elite over time.[2] Even in the 1840s, however, 30–40% of bankers had been or would become state legislators at some point in their lives, so a significant connection between bankers and legislators remained. The question is whether bankers were or were not considerably richer than others, as Lamoreaux and Glaisek (1991) found out in Providence, besides their high political connection?

This section answers this question by analyzing a sample of taxpayers' real and personal assessed wealth collected from the Boston tax rolls between 1829 and 1859. Inclusion in the reported list was based on total value of property, so the list only included wealthy taxpayers. I then identify whether an individual in the sample was a bank director. Average wealth for bankers and non-bankers in the sample are calculated and compared. The basic results suggest that bankers were always richer than other wealthy taxpayers from 1829 to 1859, but the relative wealth of bankers to other taxpayers, measured by the ratio of wealth of bankers to that of taxpayers, was stable. As entry and exit to the sample may affect the distribution of wealth, various robustness checks are performed.

2.2 Data

From the Legislators' Biographies, available at the State Library, I collected the names of state legislators in Suffolk County (where the major city is Boston); from the Massachusetts Registers (1790–1859), I compiled a list of all bank directors in Boston. The lists of wealthy taxpayers in the city of Boston—from *List of Persons, Copartnerships, and Corporations, Taxed in the City of Boston*—document a person's or an organization's real and personal holdings (under the name "real estate" and "personal estate"), and taxes paid between 1829 and 1859 (1831, 1834, 1854, 1855, and 1856 are missing).[3] Only wealthy taxpayers with wealth above certain thresholds are included in the tax lists. From 1829 to 1848, the list includes wealth for individuals taxed $25 and upwards (since the tax rate was roughly 0.8% of wealth, the property cut-off was approximately $3125); from 1849 to 1853, the list includes individuals whose personal property was $6000 and upwards, and from 1857 to 1859, $10,000 and upwards. Thus, the sample included in the lists varies across years. As demography changed and younger people aged, they presumably acquired more wealth. The varying data truncation levels and the demographic patterns across years mean that making comparisons over time are problematic.

I collected random samples of personal taxpayer information from the tax rolls. The tax rolls include wealth from partnerships, various corporations such as banks, manufacturing corporations, wharfs, and heirs of the deceased which I exclude. The studied sample also does not include illegible entries from the taxation rolls.[4] Table 1 shows that the taxpayers in the tax lists represent roughly the top 15–19% wealthy taxpayers in Boston. In most years, the sample size is over 1000 and yields reliable comparisons of different groups. I match the sample of wealthy taxpayers to Boston bank directors. There are 42,923 individual taxpayers and 3277 bankers.[5]

Table 2 shows the total number of entries on the tax rolls, the size of the random sample drawn from the rolls, and the respective percentages. The table also shows for each year the number of Boston bankers, the sample size, and percentage of those bankers that matched to taxpayer rolls. Columns (1)–(3) in the table show that in most years the

Table 1 Representation of the tax lists and sample

Year	Boston population from the US Census (1)	US Census divided by five (2) = (1)/5	Number of taxpayers in the Boston tax lists, including organizations (3)	Number of taxpayers in the sample (4)	Ratio of taxpayers in the tax lists over all taxpayers (5) = (3)/(2)	Ratio of taxpayers in the sample over all taxpayers (6) = (4)/(2)
1830	61,392	12,278.4	1836	1083	14.95%	8.82%
1840	93,383	18,676.6	3648	766	19.53%	4.10%
1850	136,881	27,376.2	4921	2487	17.98%	9.08%

Source Boston population in Column (1) are from US Census

Table 2 Sample size of taxpayers and Boston bankers, 1829–1859

Year	Number of taxpayers in the tax lists (including business organizations)	Number of taxpayers in the sample (without business organizations)		Number of all Boston bankers in the registers	Number of Boston bankers in the sample	
	(1)	(2)	(3) = (2)/(1)	(4)	(5)	(6) = (5)/(4)
1829	1914	1180	61.65%	200	88	44.00%
1830	1836	1083	58.99%	201	101	50.25%
1832	2166	936	43.21%	219	86	39.27%
1833	2345	174	7.42%	261	17	6.51%
1834	2516	670	26.63%	280	72	25.71%
1836	2835	1362	48.04%	283	140	49.47%
1837	2997	585	19.52%	319	53	16.61%
1838	2970	677	22.79%	306	77	25.16%
1839	3552	600	16.89%	253	50	19.76%
1840	3648	766	21.00%	232	61	26.29%
1841	3663	1499	40.92%	223	99	44.39%
1842	3605	1141	31.65%	227	83	36.56%
1843	3888	1256	32.30%	219	83	37.90%
1844	4270	1338	31.33%	221	84	38.01%
1845	4830	1101	22.80%	220	47	21.36%
1846	4902	2834	57.81%	226	145	64.16%
1847	5265	2711	51.49%	221	125	56.56%
1848	5883	3291	55.94%	225	153	68.00%
1849	4572	2618	57.26%	229	142	62.01%
1850	4921	2487	50.54%	224	132	58.93%
1851	4921	2370	48.16%	237	131	55.27%
1852	5168	2644	51.16%	263	162	61.60%

(continued)

Table 2 (continued)

Year	Number of taxpayers in the tax lists (including business organizations)	Number of taxpayers in the sample (without business organizations)		Number of all Boston bankers in the registers	Number of Boston bankers in the sample	
	(1)	(2)	(3) = (2)/(1)	(4)	(5)	(6) = (5)/(4)
1853	4512	2769	61.37%	253	156	61.66%
1857	4256	2344	55.08%	271	130	47.97%
1858	4224	1770	41.90%	250	111	44.40%
1859	4320	1851	42.85%	281	128	45.55%

Note (1) Table 2 exhibits the annual sample size of all taxpayers in the tax rolls, and the sample size of taxpayers and bankers that I collected between 1829 and 1859. It also shows the percentages of the collected samples in the sample of tax rolls. In most years, the samples are pretty large and good representatives of the sample of tax rolls. (2) The percentage in Column (3) changes from 22.8% in 1845 to 57.8% in 1846 because it is easier to parse the data and recognize the names for the tax lists after 1845 size of the taxation samples was large enough to carry out reliable statistical analysis and comparisons. In 16 of 26 years, the sample size was above 40% of the size of the tax rolls, and in the other 8 of 26 years was approximate to or above 20% of the size of the tax rolls. In 19 out of 26 years, the samples included more than 1000 individuals. Only in 1833, the year with most illegible names, was the random sample below 10%, at just 7.4% of the tax rolls, but even in this year there were 174 taxpayers in the sample. Columns (4)–(6) show the number of all Boston bankers in the Massachusetts Registers and the sample size and percentage of Boston bankers. Except for 1833, the banker samples were fairly large. In 15 out of 26 years, above 40% of the bankers can be found in the tax rolls and in the other 8 out of 26 years we can locate above 20% of the bankers.

2.3 The Basic Results

The basic empirical results compare the average wealth of wealthy taxpayers and bankers.[6] Table 3 shows the mean and standard deviations of the wealth, real estate, and personal estate holdings from 1829 to 1859 (wealth = real estate + personal estate). In most years, the standard deviation is larger than the mean: There is a large variation of wealth in most years. Figure 1 plots the average wealth for all taxpayers and bankers in the wealth sample. The average wealth of bankers is always larger than the average wealth of taxpayers. Column (7) shows that the ratio of bankers' wealth over taxpayers' wealth stayed between 1.4 and 2.2 over all the years, and around 1.7 or 1.8 in 17 of all 26 years. Plotting ratios over years presents a stable and relatively flat curve (Fig. 2). Table 4 shows the growth rates of wealth for taxpayers and bankers and their difference. Figures 3 and 4 plot these statistics. Columns (3) and (4) of Table 4 present the annual growth rates by dividing growth in the annual average wealth in a given year t over the average wealth level in the last year $t-1$: $(AverageWealth_t - AverageWealth_{t-1})/AverageWealth_{t-1}$. Column (5) shows the difference of growth rates by differentiating bankers' and taxpayers' growth rate in a given year. In most years, the difference is not larger than 10%. Figures 3 and 4 present the growth rates and the growth difference respectively.

Table 3 Summary statistics for wealth of taxpayers and bankers, 1829–1859

Year		Taxpayers' wealth	Taxpayers' real estate	Taxpayers' personal estate	Bankers' wealth	Bankers' real estate	Bankers' personal estate	Ratios of average wealth of bankers to taxpayers
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1829	Mean	26,976.13	17,610.26	9334.124	46,804.21	28,183.16	18,427.08	1.735023
	s.d.	41,417.97	26,547.32	25,134.43	63,471.24	36,717.61	32,096.04	
	Number	1176	1176	1180	95	95	96	
1830	Mean	24,675.97	15,729.57	8877.932	45,738.18	27,056.36	18,513.51	1.853551
	s.d.	32,824.76	24,412.76	16,696.96	49,502.67	38,421.7	20,378.7	
	Number	1082	1082	1083	110	110	111	
1832	Mean	29,928.21	20,096.25	9800.445	62,471.58	38,901.05	23,570.53	2.087381
	s.d.	51,073.53	30,828.94	30,928.52	73,995.11	49,446.85	35,442.54	
	Number	933	933	936	95	95	95	
1833	Mean	28,954.02	18,355.17	10,598.85	45,977.78	24,922.22	21,055.56	1.587958
	s.d.	42,354.92	21,662.06	29,310.7	40,109.55	21,238.71	23,030.6	
	Number	174	174	174	18	18	18	
1834	Mean	28,254.87	17,093.25	11,111.64	40,086.08	20,111.39	19,974.68	1.418732
	s.d.	59,248.12	25,283.47	52,615.86	35,682.41	18,234.41	24,295.44	
	Number	667	667	670	79	79	79	
1836	Mean	25,747.42	18,247.97	7458.425	43,950.33	27,431.37	16,518.95	1.70698
	s.d.	42,063.57	30,108.15	20,035.72	54,099.66	30,079.35	28,617.11	
	Number	1354	1355	1359	153	153	153	
1837	Mean	21,089.17	18,639.2	750.5146	36,047.14	31,546.43	704.9123	1.709273
	s.d.	34,631.6	32,128.93	3747.285	52,820.74	50,233.81	2936.932	
	Number	578	578	583	56	56	57	
1838	Mean	23,965.53	16,732.34	7186.963	35,235.44	22,002.53	13,232.91	1.470255
	s.d.	28,885.31	20,712.73	16,110.01	31,902.14	21,908.51	18,496.35	

(continued)

Table 3 (continued)

Year		Taxpayers' wealth	Taxpayers' real estate	Taxpayers' personal estate	Bankers' wealth	Bankers' real estate	Bankers' personal estate	Ratios of average wealth of bankers to taxpayers
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Number	673	674	675	79	79	79	
1839	Mean	19,952.68	15,502.34	4225.795	36,630.4	23,429.09	11,694.58	1.835864
	s.d.	25,583.44	19,852.81	12,152.98	39,483.77	27,564.6	24,124.63	
	Number	595	598	596	55	55	55	
1840	Mean	21,240.57	15,679.27	5064.999	45,849.16	24,611.59	18,995.43	2.158565
	s.d.	30,242.35	20,387.51	15,267.21	46,697.56	26,074.43	29,879.47	
	Number	759	762	763	67	69	67	
1841	Mean	20,181.25	15,981.02	4106.933	33,867.06	22,596.52	11,270.54	1.678145
	s.d.	27,213.97	21,709.39	12,266.26	31,150.65	21,242.68	20,996.11	
	Number	1493	1496	1496	115	115	115	
1842	Mean	21,907.18	15,249.84	6634.005	36,751.14	25,365.17	11,195.56	1.677584
	s.d.	30,970.67	20,419.79	19,201.91	34,060.84	28,061.1	16,080.78	
	Number	1137	1137	1141	88	89	90	
1843	Mean	20,424	14,006.51	6317.288	36,552.69	21,385.11	14,937.63	1.789693
	s.d.	24,353.14	17,368.85	13,965.89	30,892.42	17,319.27	18,898.76	
	Number	1244	1248	1251	93	94	93	
1844	Mean	21,571.82	14,812.45	6729.035	40,409.89	22,091.21	18,318.68	1.873272
	s.d.	29,071.34	23,175.17	14,059.61	37,107.69	20,527.63	21,008.49	
	Number	1331	1331	1337	91	91	91	
1845	Mean	21,415.57	14,294.91	6878.95	43,815.79	21,429.82	22,385.96	2.045978
	s.d.	30,404.2	19,766.87	16,470.89	57,120.65	28,581.56	32,526.96	
	Number	1100	1100	1101	57	57	57	
1846	Mean	26,049.68	13,443.46	12,606.22	56,242.72	26,406.27	29,836.45	2.159056
	s.d.	55,253.58	34,219.85	32,359.77	83,808.58	34,791.6	36,746.64	

(continued)

Table 3 (continued)

Year		Taxpayers' wealth	Taxpayers' real estate	Taxpayers' personal estate	Bankers' wealth	Bankers' real estate	Bankers' personal estate	Ratios of average wealth of bankers to taxpayers
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Number	2833	2833	2833	187	187	187	
1847	Mean	26,613.43	14,614.76	11,998.66	58,420.7	29,921.44	28,499.26	2.195159
	s.d.	57,444.29	35,830	33,682.18	94,339.31	43,565.23	40,026.13	
	Number	2710	2710	2710	164	164	164	
1848	Mean	24,103.44	13,992.99	10,064.83	51,845.71	24,204.23	27,553.82	2.150967
	s.d.	43,078.72	29,348.15	24,498.92	74,069.7	39,659.03	34,317.69	
	Number	3289	3289	3289	204	204	204	
1849	Mean	30,152.26	17,092.06	13,041.17	58,071.84	27,350.79	30,593.87	1.925953
	s.d.	54,331.22	35,073.47	32,247.45	84,437.98	41,650.07	39,383.27	
	Number	2617	2617	2617	179	179	179	
1850	Mean	31,483.81	16,590.44	14,893.37	65,961.22	31,364.92	34,596.3	2.095084
	s.d.	54,931.8	36,942.9	31,054.45	99,521.55	55,373.19	38,795.77	
	Number	2486	2486	2486	165	165	165	
1851	Mean	32,776.58	18,508.81	14,267.78	58,122.87	28,589.55	29,533.32	1.773305
	s.d.	59,972.04	40,521.7	32,248.13	68,089.56	42,707.98	37,231.64	
	Number	2369	2369	2369	165	165	165	
1852	Mean	32,345.44	18,651	13,692.19	61,322.91	32,146.44	29,176.47	1.895875
	s.d.	59,750.13	41,177.92	31,044.84	97,386.41	54,622.24	37,184.25	
	Number	2643	2643	2643	208	208	208	
1853	Mean	34,037.54	18,715.56	15,305.77	58,773.2	25,055.1	33,718.1	1.726717
	s.d.	60,866.32	37,849.7	36,745.74	63,993.16	28,676.96	40,494.49	
	Number	2768	2768	2768	194	194	194	
1857	Mean	44,847.84	21,382.09	23,449.51	76,913.82	33,297.75	43,616.07	1.714995
	s.d.	65,180.41	41,258.69	43,758.18	78,402.68	46,644.56	57,756.69	

(continued)

Table 3 (continued)

Year		Taxpayers' wealth	Taxpayers' real estate	Taxpayers' personal estate	Bankers' wealth	Bankers' real estate	Bankers' personal estate	Ratios of average wealth of bankers to taxpayers
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Number	2344	2344	2344	158	158	158	
1858	Mean	44,173.99	22,550.24	21,623.75	84,074.08	40,049.58	44,024.5	1.903248
	s.d.	70,329.17	45,813.32	43,477.77	99,089.86	77,560.14	58,094.87	
	Number	1770	1770	1770	127	127	127	
1859	Mean	45,557.62	27,152.94	18,404.68	84,557.95	46,201.67	38,356.28	1.856066
	s.d.	73,295.6	49,781.25	46,267.7	96,148.26	77,829.83	48,917.92	
	Number	1851	1851	1851	150	150	150	
Summary	Mean	29,576.08	17,340.95	12,165.01	55,183.16	28,697.42	26,279.02	1.865804
	s.d.	52,606.02	34,340.1	31,285.24	74,058.61	43,773.79	37,667.88	
	Number	41,976	41,991	42,025	3152	3156	3157	

Note Table 3 lists the mean and the standard deviation of the total wealth (= real estate + personal estate), real estate, and personal estate for all taxpayers and bankers in the sample from 1829 to 1859. It also presents the ratios of the average wealth of bankers to taxpayers in Column 7, which is derived from dividing the average wealth of bankers by the average wealth of taxpayers

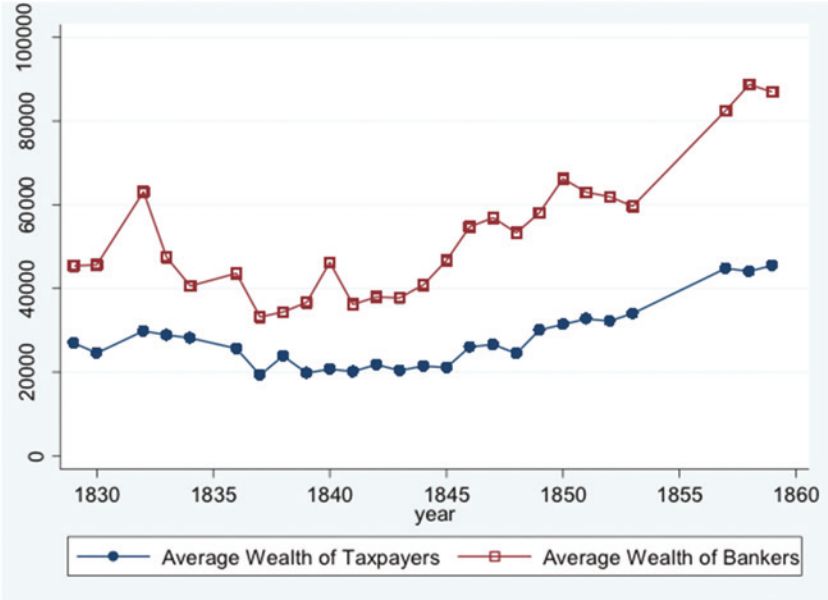

Fig. 1 Average wealth of taxpayers and bankers, 1829–1859

A basic analysis of the data shows four distinctive features. First, the average wealth of bankers was larger than the average wealth of all listed taxpayers over all years. Second, average wealth was decreasing from 1829 to 1836, but after that it began to increase from 1837 to 1859. In 1829, the average wealth of taxpayers and bankers was $26,976 and $46,804 respectively, and in 1859 they rose to $45,558 and $84,558 respectively.[7] There were consecutive financial crises in 1837, 1839, and in 1841/1842, which may undoubtedly affect wealth accumulation, but the exact measurement of the impact is beyond the scope of this research. From 1837, there was a rising wealth inequality over time, consistent with Steckel and Moehling (2001), which analyzes long-term trend in wealth inequality between 1820 and 1910, by matching the households heads listed in the manuscript schedules of the census matched to with real and personal property tax record in Massachusetts. Third, despite the large difference in the absolute wealth level, the ratios

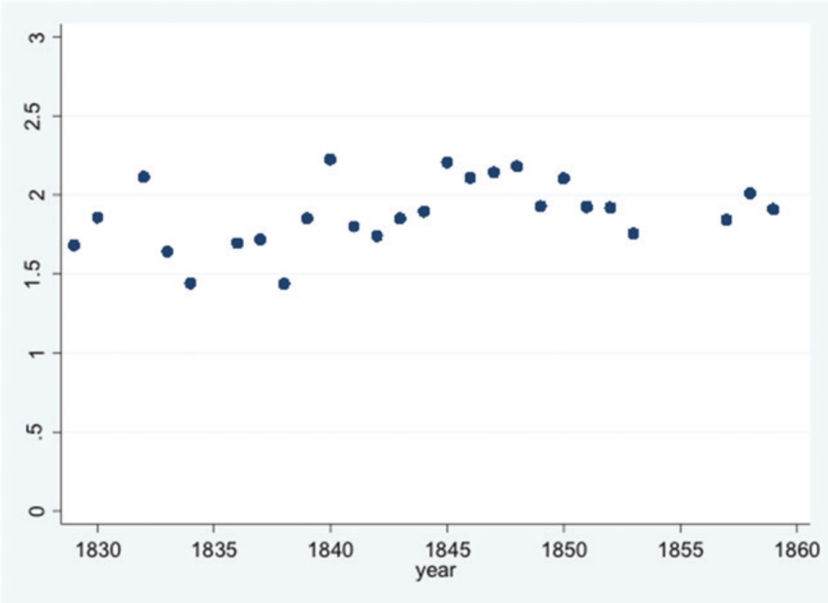

Fig. 2 Average wealth of bankers to taxpayers

of the wealth between bankers and taxpayers did not change much over the years, suggesting relative wealth inequality between bankers and taxpayers was not growing. Fourth, the difference in the wealth growth rates between bankers and taxpayers is smaller than 10% in most years. For the purpose of this research on bankers' elite status, the most important results are that bankers were always richer than other taxpayers from 1829 to 1859, and that relative wealth inequality stayed stable over time.

I adjust the wealth by deflating inflation by historical CPI.[8] The inflation-adjusted average wealth shown in Fig. 5 and Table 5 is close to the data shown in Fig. 1 and Table 3, suggesting that inflation did not play a large role in the pattern of wealth accumulation over time.

Table 4 Growth rate of taxpayers and bankers, and their difference

Year	Average wealth of taxpayers	Average wealth of bankers	Wealth growth rate of taxpayers	Wealth growth rate of bankers	Difference of growth rate
	(1)	(2)	(3)	(4)	(5) = (4)–(3)
1829	26,976.13	46,804.21			
1830	24,675.97	45,738.18	−0.08527	−0.02278	0.06249
1831					
1832	29,928.21	62,471.58			
1833	28,954.02	45,977.78	−0.03255	−0.26402	−0.23147
1834	28,254.87	40,086.08	−0.02415	−0.12814	−0.104
1835					
1836	25,747.42	43,950.33			
1837	21,089.17	36,047.14	−0.18092	−0.17982	0.0011
1838	23,965.53	35,235.44	0.13639	−0.02252	−0.15891
1839	19,952.68	36,630.4	−0.16744	0.03959	0.207032
1840	21,240.57	45,849.16	0.064547	0.25167	0.187122
1841	20,181.25	33,867.06	−0.04987	−0.26134	−0.21146
1842	21,907.18	36,751.14	0.085521	0.085159	−0.00036
1843	20,424	36,552.69	−0.0677	−0.0054	0.062303
1844	21,571.82	40,409.89	0.0562	0.105524	0.049325
1845	21,415.57	43,815.79	−0.00724	0.084284	0.091527
1846	26,049.68	56,242.72	0.21639	0.283618	0.067228
1847	26,613.43	58,420.7	0.021641	0.038725	0.017083
1848	24,103.44	51,845.71	−0.09431	−0.11255	−0.01823
1849	30,152.26	58,071.84	0.250953	0.12009	−0.13086
1850	31,483.81	65,961.22	0.044161	0.135856	0.091695
1851	32,776.58	58,122.87	0.041061	−0.11883	−0.15989
1852	32,345.44	61,322.91	−0.01315	0.055056	0.06821
1853	34,037.54	58,773.2	0.052313	−0.04158	−0.09389
1854					
1855					
1856					
1857	44,847.84	76,913.82			
1858	44,173.99	84,074.08	−0.01503	0.093095	0.10812
1859	45,557.62	84,557.95	0.031322	0.005755	−0.02557
Mean	29,576.08	55,183.16	0.011948	0.006429	−0.00552

Note Columns (1) and (2) show the annual average wealth of taxpayers and bankers, calculated from the Boston tax lists, the same to Columns (1) and (4) of Table 3. Columns (3) and (4) present the annual growth rates of wealth. Column (5) shows the difference of growth rates by differentiating growth rate of wealth of bankers and taxpayers

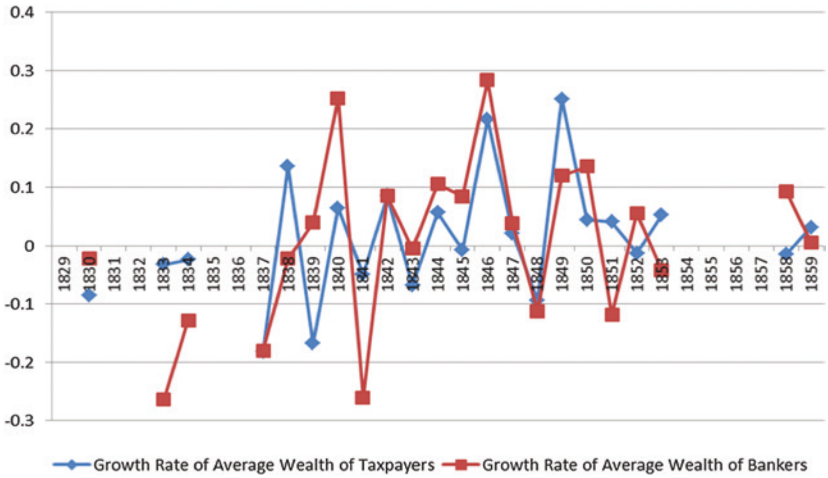

Fig. 3 Growth rates of the wealth of taxpayers and bankers, 1829–1859

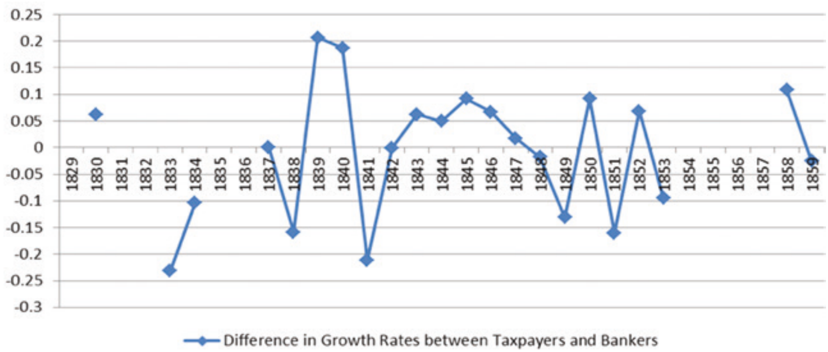

Fig. 4 Difference in growth rates of the wealth of bankers and taxpayers, 1829–1859

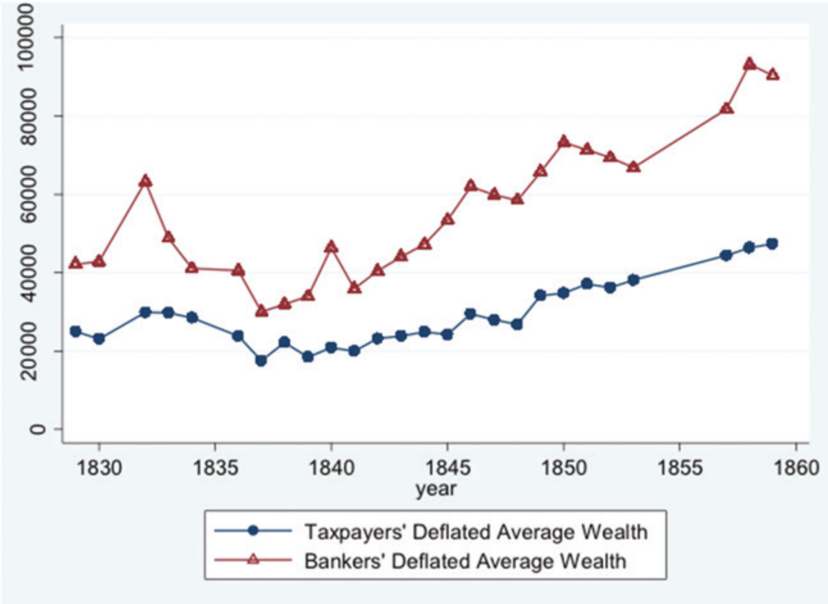

Fig. 5 Taxpayers and bankers' deflated average wealth, 1829–1859. *Note* Taxpayers and Bankers' Average Wealth is deflated by Annual Consumer Price Index for the USA 1829–1859, using the price level in 1840 as the base level. The CPI data are available at Measureworth.com

2.4 Robustness Checks

The comparison of wealth over time may be problematic due to potential sampling bias, data truncation, and entry and exit of taxpayers and bankers. The varying truncation levels over years may affect the distribution of wealth and the level of average wealth over time. The entering new people may be young and relative poor and the exiting people may be old and rich, so in years with more entering taxpayers and bankers, the average wealth may be lower than other years. To see whether these potential biases affect the basic results, I provide some robustness checks. The first robustness analysis is to look at the wealth data for all taxpayers and bankers whose family names start with letter "P." I collect all the names and wealth data for the letter "P" people, and then look at

Table 5 Summary statistics: mean, s.d., and number of deflated wealth of taxpayers and bankers by year

Year	Historical CPI		Taxpayers' deflated average wealth	Bankers' deflated average wealth	Ratio of bankers' to taxpayers' wealth
	(1)		(2)	(3)	(4) = (3)/(2)
1829	1.076372	Mean	25,062.08	43,483.29	1.735023
		s.d.	38,479.22	55,067.36	
		Number	1176	95	
1830	1.066826	Mean	23,083.49	42,873.15	1.857308
		s.d.	30,749.57	43,064.42	
		Number	1082	110	
1832	1	Mean	29,928.21	62,471.58	2.087381
		s.d.	51,073.53	70,126.6	
		Number	933	95	
1833	0.97136	Mean	29,807.7	47,333.39	1.587958
		s.d.	43,603.72	41,284.83	
		Number	174	18	
1834	0.990454	Mean	28,527.21	40,472.45	1.418731
		s.d.	59,819.19	34,615.52	
		Number	667	79	
1836	1.076372	Mean	23,920.55	40,831.9	1.70698
		s.d.	39,079.02	46,299.95	
		Number	1354	153	
1837	1.106205	Mean	17,534.01	29,166.31	1.663414
		s.d.	29,668.28	47,018.33	
		Number	578	56	
1838	1.076372	Mean	22,265.09	32,735.37	1.470255
		s.d.	26,835.8	27,348.35	
		Number	673	79	

(continued)

Table 5 (continued)

Year	Historical CPI		Taxpayers' deflated average wealth	Bankers' deflated average wealth	Ratio of bankers' to taxpayers' wealth
	(1)		(2)	(3)	(4) = (3)/(2)
1839	1.076372	Mean	18,407.57	32,631.53	1.772723
		s.d.	23,540.75	35,367.01	
		Number	595	55	
1840	1	Mean	20,832.93	44,341.7	2.128443
		s.d.	29,245.31	45,691.83	
		Number	759	67	
1841	1.009547	Mean	19,937.98	33,546.81	1.682558
		s.d.	26,895	30,309.45	
		Number	1493	115	
1842	0.942721	Mean	23,238.25	38,915.57	1.674634
		s.d.	32,852.43	35,230.82	
		Number	1137	89	
1843	0.855609	Mean	23,870.72	42,721.27	1.789693
		s.d.	28,462.95	34,201.98	
		Number	1244	93	
1844	0.865155	Mean	24,934.05	46,708.26	1.873272
		s.d.	33,602.46	41,116.73	
		Number	1331	91	
1845	0.874702	Mean	24,214.1	50,092.27	2.068723
		s.d.	33,710.41	63,244.62	
		Number	1100	57	
1846	0.884248	Mean	29,459.69	63,605.12	2.159056
		s.d.	62,486.5	63,306.01	
		Number	2833	187	
1847	0.952267	Mean	27,947.44	61,349.06	2.195158
		s.d.	60,323.7	68,744.12	
		Number	2710	164	

(continued)

Table 5 (continued)

Year	Historical CPI		Taxpayers' deflated average wealth	Bankers' deflated average wealth	Ratio of bankers' to taxpayers' wealth
	(1)		(2)	(3)	(4) = (3)/(2)
1848	0.912888	Mean	26,403.5	56,793.08	2.150968
		s.d.	47,189.51	62,846.2	
		Number	3289	204	
1849	0.884248	Mean	34,099.32	65,673.69	1.925953
		s.d.	61,443.41	73,645.42	
		Number	2617	179	
1850	0.903341	Mean	34,852.62	73,019.16	2.095084
		s.d.	60,809.58	89,093.83	
		Number	2486	165	
1851	0.884248	Mean	37,067.18	65,731.39	1.773304
		s.d.	67,822.63	70,493.81	
		Number	2369	165	
1852	0.893795	Mean	36,188.88	68,609.61	1.895875
		s.d.	66,849.95	85,682.05	
		Number	2643	208	
1853	0.893795	Mean	38,082.06	65,756.93	1.726717
		s.d.	68,098.77	60,142.05	
		Number	2768	194	
1857	1.009547	Mean	44,423.75	76,186.5	1.714995
		s.d.	64,564.05	76,638.17	
		Number	2344	158	

(continued)

Table 5 (continued)

Year	Historical CPI		Taxpayers' deflated average wealth	Bankers' deflated average wealth	Ratio of bankers' to taxpayers' wealth
	(1)		(2)	(3)	(4) = (3)/(2)
1858	0.952267	Mean	46,388.23	88,288.32	1.903248
		s.d.	73,854.45	101,440.6	
		Number	1770	127	
1859	0.961814	Mean	47,366.36	87,915.08	1.856066
		s.d.	76,205.59	94,936.42	
		Number	1851	150	
Summary	0.947339	Mean	31,476.74	58,394.92	1.855177
		s.d.	56,440.14	67,741.96	
		Number	41,976	3153	

Note (1) Table 5 presents historical CPI, the mean, standard deviation, and the number of taxpayers' and bankers' wealth deflated by historical CPI, and their ratios. (2) Historical CPI is taken from Lawrence H. Officer and Samuel H. Williamson, "The Annual Consumer Price Index for the United States, 1774–2013," Measuring Worth, 2014. The base period is 1840 their average wealth over time. This exercise helps us check the potential sampling errors in the data collection process. The second robustness check is to look at the wealth growth rates for people appearing in two adjacent years. This exercise helps us check the results by eliminating the potential problems caused by entry and exit. The third robustness check examines the average wealth of entering new taxpayers and bankers. This helps us explore the wealth pattern of entering new people, and also whether the varying truncation levels affect the wealth distribution. The fourth robustness check estimates a counterfactual average wealth by considering both the entering new people and the growth of wealth growth for existing people, and the counterfactual average wealth of considering growth rates of existing people only. I compare these two counterfactual average wealth to roughly estimate the contribution of entering new people on growth of wealth.

The first robustness check looks at the people whose last names starting with letter "P." Table 6 presents the statistics on wealth of those taxpayers and bankers. Figure 6 plots the average wealth of these taxpayers and bankers over the years. There are not many bankers in the "P" sample: In some years such as 1859, there are only 3 bankers. In both years, bankers had exceptionally high average wealth due to the small sample. The results are consistent with the results from the full sample: Bankers have larger average wealth than wealthy taxpayers in most years. Figure 7 plots the ratios of the wealth of the bankers to taxpayers. The ratios are exceptionally high in 1859, and they drop in 1837 and 1840, but in most years stay around 1.5. The ratios for the years after 1841 are not larger than those in the 1830s. Overall, the results for taxpayers whose family names starting with letter "P" suggest that bankers were always richer than taxpayers, and the relative wealthy inequality measured by the ratio of bankers' wealth to taxpayers' wealth did not change much.

In order to control for entry and exit effects, the second robustness check includes only people who appear in two adjacent years. As many taxpayers and bankers enter and exit the sample due to changing demography, the tax threshold, or the distribution of wealth over time, the pattern of the average wealth level may reflect the pattern of entering and exiting taxpayers and bankers.

Table 6 Wealth of taxpayers and bankers whose family names starting with letter "P"

Year		Taxpayers' wealth	Bankers' wealth	Ratio of wealth of bankers to taxpayers
		(1)	(2)	(3) = (2)/(1)
1829	Mean	31,872.73	52,720	1.654079
	s.d.	47,683.15	59,303.6	
	Number	99	10	
1830	Mean	29,175.26	45,314.29	1.553175
	s.d.	44,499.32	39,273.55	
	Number	97	7	
1832	Mean	34,520	73,171.43	2.119682
	s.d.	56,209.58	87,048.3	
	Number	95	7	
1833	Mean	32,416.53	64,460	1.988492
	s.d.	52,794.67	76,139.87	
	Number	121	10	
1834	Mean	33,967.74	58,836.36	1.732125
	s.d.	55,579.36	87,173.93	
	Number	124	11	
1836	Mean	34,004.38	64,650	1.901226
	s.d.	73,204.13	70,202.26	
	Number	137	4	
1837	Mean	33,456.58	30,320	0.906249
	s.d.	72,210.39	27,749.09	
	Number	152	5	
1838	Mean	36,216.42	50,350	1.390253
	s.d.	76,794.35	18,364	
	Number	134	4	
1839	Mean	36,377.27	55,150	1.516057
	s.d.	79,467.41	42,674.7	
	Number	132	4	
1840	Mean	36,936.84	31,685.71	0.857835
	s.d.	113,599.6	21,002.49	
	Number	152	7	
1841	Mean	31,789.28	47,880	1.506168
	s.d.	62,250.9	24,900.84	
	Number	167	5	
1842	Mean	31,523.76	37,687.5	1.195527
	s.d.	63,790.83	30,198.55	
	Number	181	8	
1843	Mean	29,552.82	39,088.89	1.322679
	s.d.	59,769.38	32,657.63	
	Number	195	9	

(continued)

Table 6 (continued)

Year		Taxpayers' wealth	Bankers' wealth	Ratio of wealth of bankers to taxpayers
		(1)	(2)	(3) = (2)/(1)
1844	Mean	32,080.51	41,472.73	1.29277
	s.d.	73,014.4	32,069.96	
	Number	197	11	
1845	Mean	29,123.79	44,344.44	1.522619
	s.d.	59,596.6	33,678.15	
	Number	206	9	
1846	Mean	27,846.25	43,216.67	1.551975
	s.d.	65,752.39	35,576.62	
	Number	240	12	
1847	Mean	28,938.46	49,300	1.703615
	s.d.	65,795.45	37,558.19	
	Number	247	10	
1848	Mean	27,951.1	41,866.67	1.497854
	s.d.	61,027.34	38,423.49	
	Number	272	12	
1849	Mean	35,823.94	53,988.89	1.507062
	s.d.	70,964.43	39,848.76	
	Number	213	9	
1850	Mean	35,281.68	56,387.5	1.598209
	s.d.	69,220.47	45,347.84	
	Number	202	8	
1851	Mean	35,199.51	45,585.71	1.295067
	s.d.	70,636.04	38,725.63	
	Number	204	7	
1852	Mean	32,755.66	44,785.71	1.367266
	s.d.	61,360.59	39,994.89	
	Number	212	7	
1853	Mean	35,322.48	43,371.43	1.22787
	s.d.	71,400.71	37,979.41	
	Number	218	7	
1857	Mean	50,345.86	91,540	1.818223
	s.d.	88,835.56	72,220.34	
	Number	181	5	
1858	Mean	49,539.13	89,700	1.81069
	s.d.	86,762.77	70,591.01	
	Number	184	5	
1859	Mean	50,852.36	147,433.3	2.899242
	s.d.	86,851.87	61,126.62	
	Number	191	3	
Summary	Mean	35,270.24	60,916.27	1.727129
	s.d.	72,720.35	98,071.69	
	Number	4687	209	

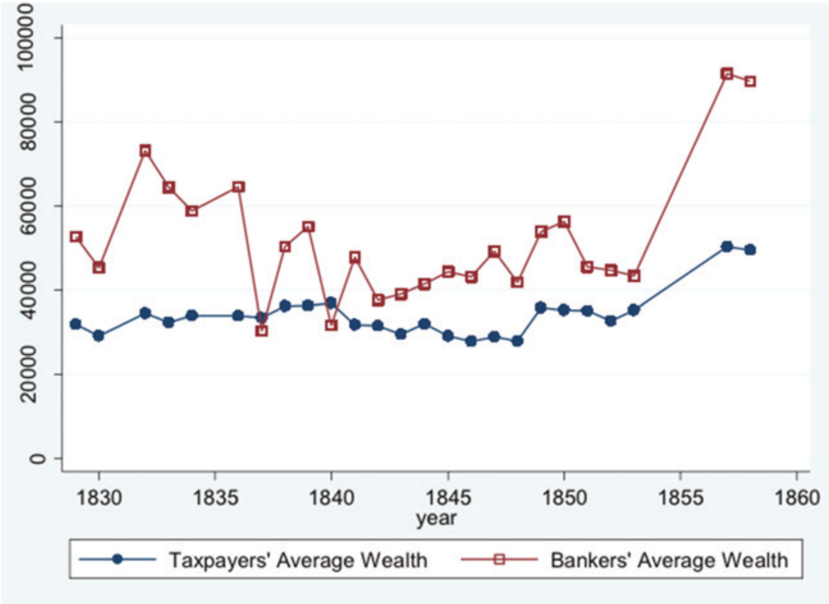

Fig. 6 Average wealth of taxpayers and bankers whose family names starting with letter "P," 1829–1858. *Note* The numbers can be seen from Table 6. Figure 6 excludes 1859, in which the average wealth level for bankers is exceptionally high due to the small banker sample

Entering new bankers and taxpayers tends to be less wealthy and exiting ones tend to be richer, which may result in lower average wealth. For a given year, I focus on the sample of existing taxpayers and bankers who appeared in both this year and the prior year. I calculate the average wealth for existing taxpayers and bankers in a given year. I then calculate the growth rates of wealth in year t by $(AverageWealth_t - AverageWealth_{t-1})/AverageWealth_{t-1}$. I call this sample the linked sample and the growth rate the "linked growth rate." Table 7 shows the mean, the standard deviation, and the number of observations of the average wealth of existing taxpayers and bankers, and the estimated linked growth rate. It also shows the difference in the linked growth rate. Figure 8 plots the average wealth of existing taxpayers and bankers, Fig. 9 plots their linked growth rates, and Fig. 10 plots the difference of the linked growth rates.

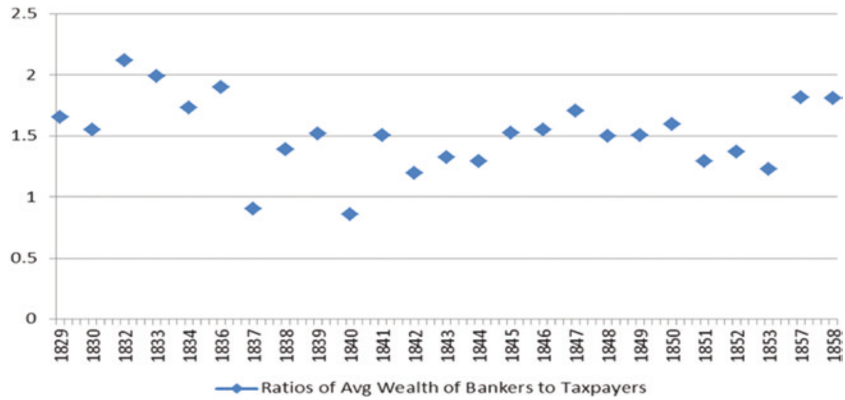

Fig. 7 Ratios of average wealth of taxpayers to bankers whose family names starting with letter "P," 1829–1858. *Note* The numbers can be seen from Table 7. In 1827, the ratio is as high as 6.6. In other years, the ratios did not change much, stay around 1.5

The figures and the tables suggest that the growth pattern of existing taxpayers and bankers is similar to that of the full sample of taxpayers and bankers. Bankers' wealth growth rates are higher than taxpayers' in most years, and are lower only in 1832, 1833, 1837, 1840, 1847, 1848, 1850, and 1852. In most years, the absolute difference between bankers' and taxpayers' linked growth rates is within the 15% range. From 1841 to 1846, bankers' wealth growth rates were persistently higher than non-bankers, which may lead to cumulative effect on wealth divergence. Overall, bankers' wealth growth rate is larger than taxpayers, but in most years the differences in growth rates were not large.

To further explore the accumulated wealth derived from the linked growth rates and the growth rates calculated from the entire sample, I carry out a counterfactual analysis. I assume two people, one banker and one taxpayer, have the same wealth $1000 in 1836. Then I calculate their wealth each year from 1837 to 1853, assuming both individuals grow at the linked growth rate. I choose the period between 1836 and 1853 because we have data on growth rates for all these years. I also calculate the actual growth rates of the average wealth of all taxpayers and bankers in the sample, including new ones and existing ones. Table 8

Table 7 Average wealth of existing taxpayers and bankers and linked growth rates

Year	Average wealth of existing taxpayers	Taxpayers' linked growth rate	Average wealth of existing bankers	Bankers' linked growth rate	Difference in linked growth rates
	(1)	(2)	(3)	(4)	(5) = (4)-(2)
1829	35,822.58		53,013.79		
1830	28,394.62	−0.20735	50,142.22	−0.05417	0.153188
1832	34,080.66		66,033.73		
1833	30,938.21	−0.09221	49,562.5	−0.24944	−0.15723
1834	29,302.83	−0.05286	43,206.06	-0.12825	−0.07539
1836	31,670.7		51,052.18		
1837	24,763.21	−0.2181	40,544.58	−0.20582	0.012283
1838	27,454.84	0.108695	36,932.35	−0.08909	−0.19779
1839	22,641.22	−0.17533	37,809.44	0.023749	0.199077
1840	24,313.83	0.073875	46,650.68	0.233837	0.159962
1841	23,118.66	−0.04916	36,768.49	−0.21183	−0.16268
1842	24,273.77	0.049964	39,480.77	0.073766	0.023802
1843	22,840.74	−0.05904	38,751.22	−0.01848	0.040558
1844	24,660.79	0.079684	43,687.5	0.127384	0.047699
1845	25,038.48	0.015315	45,525	0.04206	0.026745
1846	31,917.12	0.274723	60,193.37	0.322205	0.047482
1847	30,227.01	−0.05295	63,018.48	0.046934	0.099887
1848	27,275.11	−0.09766	52,839.08	−0.16153	−0.06387
1849	31,248.07	0.145662	58,611.77	0.10925	−0.03641
1850	32,848.01	0.051201	68003.21	0.160231	0.10903
1851	34,291.5	0.043945	58,872.5	−0.13427	−0.17821
1852	33,673.82	−0.01801	62,687.83	0.064807	0.082819
1853	36,287.84	0.077628	59,373.63	−0.05287	−0.1305
1857	50,839.75		80,744.8		
1858	47,864.95	−0.05851	85,694.41	0.061299	0.119813
1859	48,587.37	0.015093	89,441.08	0.043721	0.028628

Note Table 7 shows the average wealth of existing taxpayers and bankers in a given year. It also shows their linked growth rates, the difference of their growth rates, and the estimated counterfactual wealth of taxpayers and bankers based on linked growth rates

presents the estimates of the average wealth in each year 1837–1853. The estimated actual wealth based on the growth rate of the wealth of all taxpayers and bankers in 1853 is $1322 and $1337 respectively, that is, 1.32 and 1.34 times of the wealth in 1836. The estimated wealth based on the linked growth rate for existing taxpayers and bankers in

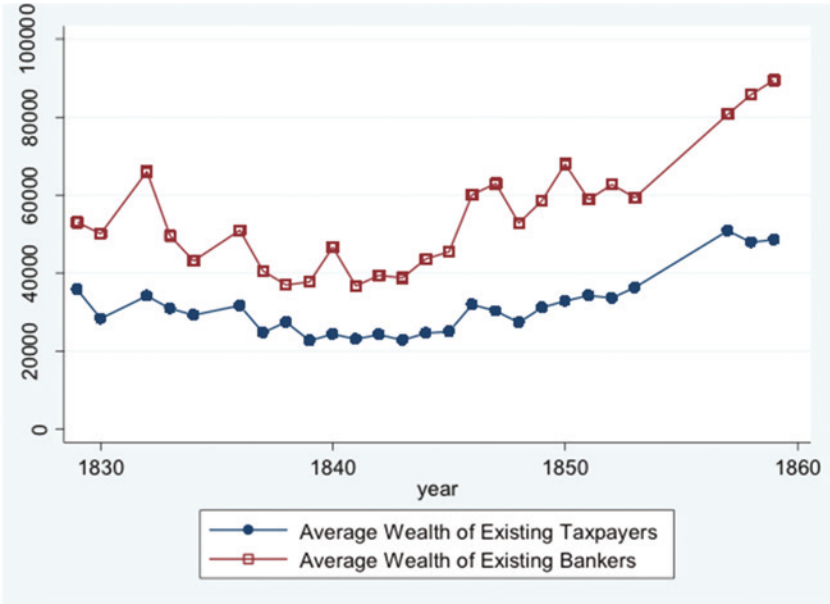

Fig. 8 Average wealth of existing taxpayers and bankers, 1829–1859

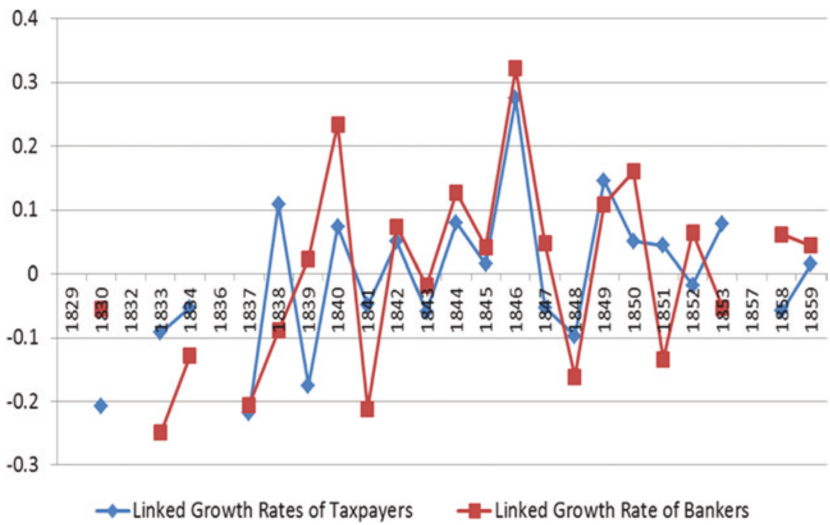

Fig. 9 Linked growth rates of the wealth of taxpayers and bankers, 1830–1859

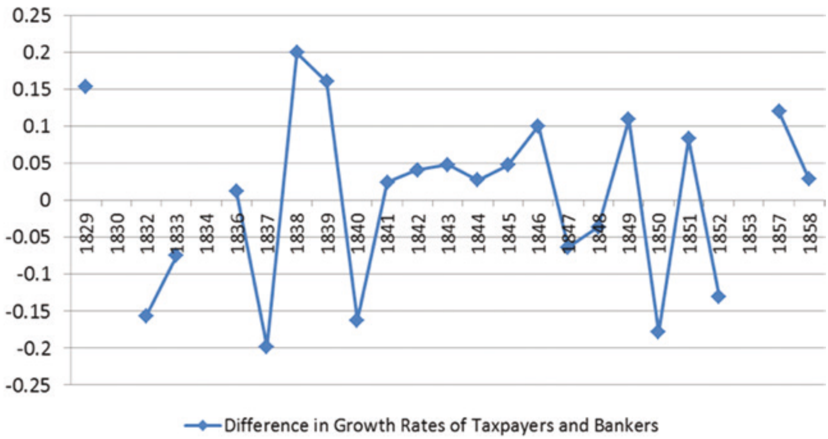

Fig. 10 Differences in linked growth rates of taxpayers and bankers, 1829–1859

1853 is $1146 and $1163, that is, 1.15 and 1.16 times of the average wealth in 1836. Figure 11 shows the estimated counterfactual wealth for taxpayers and bankers. The gap between the wealth of taxpayers and bankers was not large in the years before 1842, but it began to be widening after 1842. This is because from 1841 to 1846, bankers' linked growth rates were persistently higher than taxpayers, as shown in Fig. 10. This robustness check suggests that while entry and exit is significant, when we control for them using the linked samples, bankers' wealth grows at similar rate as non-bankers in most years, and only a bit faster from 1841 to 1846.

The third robustness check is to look at the wealth of entering new bankers and new taxpayers. The linked wealth growth rates exclude individuals in the year they enter the sample. However, new entrants were likely to have lower than average wealth. Table 9 exhibits the mean, the standard deviation, and the number of observations of wealthy taxpayers and bankers when they were entering the sample. Figure 12 plots the average wealth of the entering people over the years. The average wealth of new bankers entering the sample was larger than that of the wealthy taxpayers in most years. Figure 13 plots the ratios of the average wealth of entering new bankers to taxpayers.

Table 8 Counterfactual estimates of wealth

Year	Wealth growth rates of taxpayers	Wealth growth rates of bankers	Estimated wealth of taxpayers	Estimated wealth of bankers	Linked wealth growth rate of taxpayers	Linked wealth growth rate of bankers	Estimated wealth of taxpay-ers—Linked growth rates	Estimated wealth of bankers-linked growth rates
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1836			1000	1000			1000	1000
1837	−0.18092	−0.17982	819.079	820.1791	−0.2181	−0.20582	781.8965	794.1792
1838	0.13639	−0.02252	930.7935	801.7105	0.108695	−0.08909	866.8845	723.4236
1839	−0.16744	0.03959	774.939	833.4499	−0.17533	0.023749	714.8948	740.6038
1840	0.064547	0.25167	824.9592	1043.204	0.073875	0.233837	767.7074	913.7843
1841	−0.04987	−0.26134	783.8164	770.5758	−0.04916	−0.21183	729.97	720.2139
1842	0.085521	0.085159	850.8495	836.1971	0.049964	0.073766	766.4425	773.3415
1843	−0.0677	−0.0054	793.2445	831.6818	−0.05904	−0.01848	721.1947	759.0512
1844	0.0562	0.105524	837.8245	919.4445	0.079684	0.127384	778.6626	855.7421
1845	−0.00724	0.084284	831.756	996.9388	0.015315	0.04206	790.5881	891.7347
1846	0.21639	0.283618	1011.739	1279.688	0.274723	0.322205	1007.781	1179.056
1847	0.021641	0.038725	1033.635	1329.244	–0.05295	0.046934	954.4156	1234.394
1848	−0.09431	−0.11255	936.1497	1179.643	–0.09766	−0.16153	861.2096	1035.001
1849	0.250953	0.12009	1171.079	1321.306	0.145662	0.10925	986.6555	1148.076
1850	0.044161	0.135856	1222.795	1500.813	0.051201	0.160231	1037.173	1332.033
1851	0.041061	−0.11883	1273.004	1322.467	0.043945	−0.13427	1082.752	1153.183
1852	−0.01315	0.055056	1256.259	1395.278	−0.01801	0.064807	1063.248	1227.917
1853	0.052313	−0.04158	1321.979	1337.264	0.077628	−0.05287	1145.786	1162.999

Note Columns (1), (2), (5), and (6) of Table 8 show the growth rates of taxpayers and bankers calculated from the full sample and the linked sample. Columns (3), (4), (7), and (8) show the counterfactual estimates of the wealth by assuming the wealth of taxpayers and bankers in 1836 is $1000

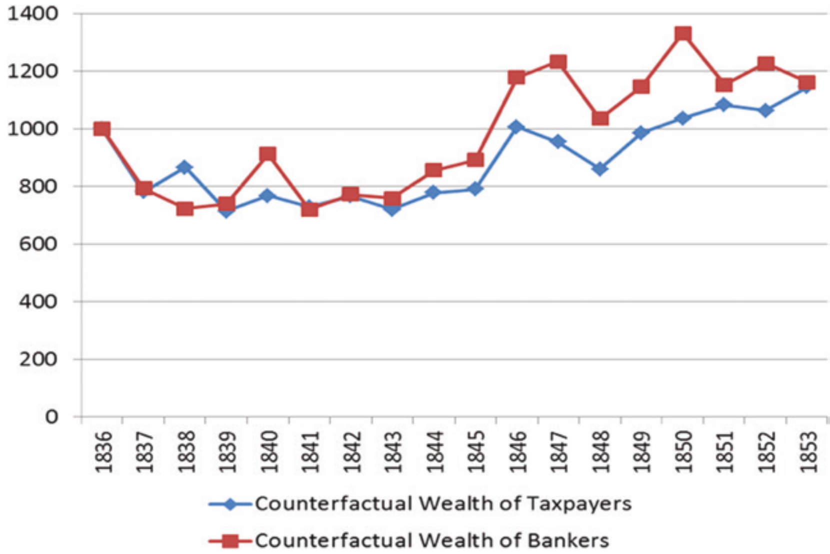

Fig. 11 Counterfactual wealth, estimated by linked growth rate

The ratios in most years are around 1.7. As with the linked growth rates, the wealth of entering bankers increased relative to non-bankers in the mid and late 1840s to above 2, and then dropped back in the 1850s. The data on entering taxpayers and bankers are consistent with the entire sample.

The fourth robustness check is to create a counterfactual growth in wealth by considering both the linked growth rates and the entry of new taxpayers and bankers. Both the wealth growth for existing taxpayers and bankers and the entry of new people contribute to the growth of the overall average wealth. In each year, the entry of new people tends to lower the average wealth for all taxpayers and bankers, reducing the pace of wealth accumulation. To estimate the contribution of the entering new people on the growth of average wealth of the taxpayers and bankers, I estimate the counterfactual average wealth by weighting the

Table 9 Average wealth of entering new bankers and taxpayers

Year	Average wealth of taxpayers	Average wealth of bankers	Ratio of average wealth of bankers to taxpayers
	(1)	(2)	(3) = (2)/(1)
1829	20,844.99	38,854.05	1.863951
1830	16,291.72	26,200	1.608179
1832	18,918.53	35,650	1.884396
1833	24,168.63	17,300	0.715804
1834	25,076.92	26,430.77	1.053988
1836	16,481.06	21,464.04	1.302346
1837	10,779.19	11,618.75	1.077887
1838	14,187.57	24,745.46	1.744165
1839	12,672.24	26,040	2.054885
1840	11,682.87	19,800	1.694789
1841	12,702.84	19,843.72	1.562148
1842	15,035.62	15,516.67	1.031994
1843	13,653.48	26,209.09	1.91959
1844	12,947.35	20,345.46	1.5714
1845	13979.98	31,783.33	2.273489
1846	13,883.02	46,668.38	3.361544
1847	14,901.8	31,828.88	2.135908
1848	14,026.22	40,401.71	2.880442
1849	23,054.58	40,912.5	1.774593
1850	21,728.66	51,187.52	2.355761
1851	19,822.62	27,406.25	1.382575
1852	22,384.67	34,783.33	1.553891
1853	20,902.38	48,160.4	2.304063
1857	32,321.44	51,649.9	1.598007
1858	27,059.24	32,562	1.20336
1859	31,007.23	28,646.42	0.923863
Summary	18,582.23	34,152.23	1.837897

wealth of existing people and the wealth of entering new people with the following formula:

$$Wealth_t = (PropofExistingPeople)_t * Wealth_{t-1} * (1 + LinkedGrowthRate_t) + (PropofNewPeople_t) * (AvgWealthofNewPeople)_t$$

Only in consecutive years there are linked growth rates, so I focus on the years between 1837 and 1853, which cover all the 1840s and is most relevant to the study. The exercise starts with the actual average wealth of taxpayers and bankers in 1836, \$25,747 and \$43,950

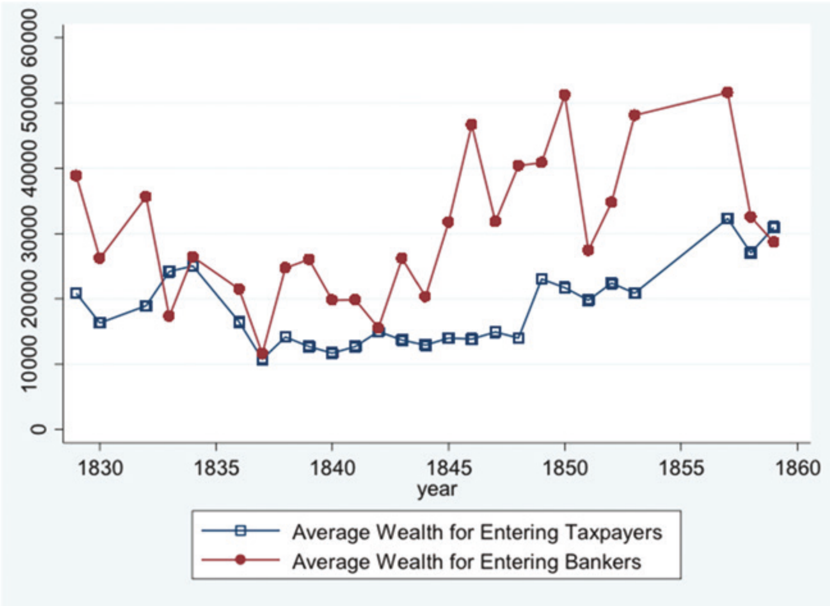

Fig. 12 Average wealth for entering taxpayers and bankers, 1829–1859

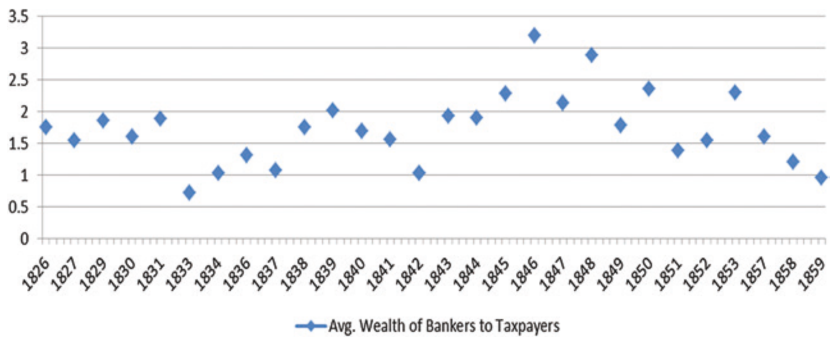

Fig. 13 The ratios of average. Wealth of entering new bankers to average wealth of entering new taxpayers

Table 10 Counterfactual estimates of the average wealth, entering people and linked growth rates

Year	Average wealth for entering taxpayers	Average wealth for entering bankers	Proportion of new taxpayers	Proportion of new bankers	Linked wealth growth rates of taxpayers	Linked wealth growth rates of bankers	Counterfactual wealth of taxpayers—entering taxpayers & linked growth	Counterfactual wealth of bankers—entering bankers & linked growth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1836	16,481.06	21464.04	0.390602	0.271429			25,747.42	43,950.33
1837	10,779.19	11,618.75	0.275214	0.150943	−0.2181	−0.20582	17,557.909	31,389.656
1838	14,187.57	24,745.46	0.261448	0.142857	0.108695	−0.08909	18,086.235	28,043.482
1839	12,672.24	26,040	0.28	0.1	−0.17533	0.023749	14,287.154	28,442.538
1840	11,682.87	19,800	0.241514	0.04918	0.073875	0.233837	14,458.737	34,341.324
1841	12,702.84	19,843.72	0.288859	0.171717	−0.04916	−0.21183	13,446.057	25,826.475
1842	15,035.62	15,516.67	0.256792	0.120482	0.049964	0.073766	14,353.545	26,259.913
1843	13,653.48	26,209.09	0.265924	0.13253	−0.05904	−0.01848	13,545.301	25,832.209
1844	12,947.35	20,345.46	0.263827	0.130952	0.079684	0.127384	14,182.129	27,973.406
1845	13,979.98	31,783.33	0.326976	0.191489	0.015315	0.04206	14,262.211	29,654.228
1846	13883.02	46,668.38	0.33204	0.186207	0.274723	0.322205	16,753.477	40,597.963
1847	14,901.8	31,828.88	0.235706	0.152	-0.05295	0.046934	15,639.023	40,880.862
1848	14,026.22	40,401.71	0.238833	0.091503	-0.09766	-0.16153	14,091.297	34,837.771
1849	23,054.58	40,912.5	0.13369	0.028169	0.145662	0.10925	17,067.757	38,707.705
1850	21,728.66	51,187.52	0.122638	0.083333	0.051201	0.160231	18,406.075	45,433.014
1851	19,822.62	27,406.25	0.131224	0.030534	0.043945	−0.13427	19,294.674	38,968.56
1852	22,384.67	34,783.33	0.117625	0.049383	-0.01801	0.064807	19,351.512	41,162.603
1853	20,902.38	48,160.4	0.146262	0.064103	0.077628	−0.05287	20,860.847	39,574.421

Note Columns (1) and (2) show the average wealth of entering new taxpayers and bankers. Columns (3) and (4) exhibit the proportion of new taxpayers and bankers in a given year. Columns (5) and (6) present the linked growth rates of existing taxpayers and bankers. Columns (7) and (8) show the estimated counterfactual wealth by considering both the entering new taxpayers and bankers, and the linked growth rates respectively, and then uses the linked growth rates, the proportion of new taxpayers and bankers, and the average wealth of entering new people to calculate the counterfactual wealth using the formula. Table 10 shows the estimated counterfactual wealth in each year from 1837 to 1853 and the data used to calculate it. The estimated counterfactual wealth in 1853 for taxpayers and bankers is $20,861 and $39,574 respectively, or 0.81 and 0.90 times of the wealth in 1836.

Table 11 compares the estimated counterfactual wealth considering both the entering new people and the linked growth rates of existing people, with the estimated counterfactual wealth considering linked growth rates only. The estimated wealth from linked growth rates only is larger than the estimated counterfactual wealth considering both the entry and linked growth, suggesting that the entry of new taxpayers and bankers lowered the average wealth. For example, in 1853, the estimated counterfactual wealth using the linked growth rates only for taxpayers and bankers is 29,501 and 51,114. These numbers are larger than the wealth calculated from both entering new people and linked growth rates, which are 20,861 and 39,574. Both the counterfactual wealth of taxpayers and bankers in 1853 for linked growth rates only is 1.15 and 1.16 times of the wealth in 1836, whereas the counterfactual wealth for both the entry and linked growth is 0.81 and 0.90 times of the wealth in 1836. Over 17 years, the entry of new taxpayers and bankers lowers the accumulated wealth by 30% and 22.4% respectively.[9] Figure 14 plots the estimated counterfactual wealth considering both the entry and the linked growth and the counterfactual wealth considering linked growth only. The wealth estimated from the linked growth rates only was larger than the wealth estimated considering both the entry and the linked growth rates.

This empirical method also has its own deficiencies. In each year, the linked sample is different and there are also people constantly exiting the sample. The growth rates calculated from linked sample may not be applicable to the average wealth of the existing bankers of the prior year. However, it provides a simple method to estimate the relative contribution of the growth rates and entrance on wealth accumulation.

The results suggest that bankers had larger wealth than taxpayers over all the years from 1829 to 1859, but their relative wealth remained

Table 11 Average wealth of the counterfactual wealth of the entering new people and linked growth, and counterfactual wealth of the linked growth only

Year	Counterfactual wealth of taxpayers—entering taxpayers & linked growth	Counterfactual wealth of bankers—entering bankers & linked growth	Counterfactual wealth of taxpayers—linked growth only	Counterfactual wealth of bankers—linked growth only
	(1)	(2)	(3)	(4)
1836	25,747.42	43,950.33	25,747.42	43,950.33
1837	17,557.909	31,389.656	20,131.908	34,904.473
1838	18,086.235	28,043.482	22,320.145	31,794.834
1839	14,287.154	28,442.538	18,406.754	32,549.929
1840	14,458.737	34,341.324	19,766.553	40,161.307
1841	13,446.057	25,826.475	18,794.83	31,653.937
1842	14,353.545	26,259.913	19,733.894	33,988.922
1843	13,545.301	25,832.209	18,568.805	33,360.806
1844	14,182.129	27,973.406	20,048.442	37,610.439
1845	14,262.211	29,654.228	20,355.484	39,192.334
1846	16,753.477	40,597.963	25,947.603	51,820.3
1847	15,639.023	40,880.862	24,573.678	54,252.434
1848	14,091.297	34,837.771	22,173.812	45,489.039
1849	17,067.757	38,707.705	25,403.694	50,458.716
1850	18,406.075	45,433.014	26,704.389	58,543.767
1851	19,294.674	38,968.56	27,877.913	50,683.095
1852	19,351.512	41,162.603	27,375.832	53,967.714
1853	20,860.847	39,574.421	29,500.963	51,114.441

Note Columns (1) and (2) present the estimated counterfactual wealth considering both the entering new people and the linked growth rates of existing people. Columns (3) and (4) exhibit the estimated counterfactual wealth considering linked growth rates only

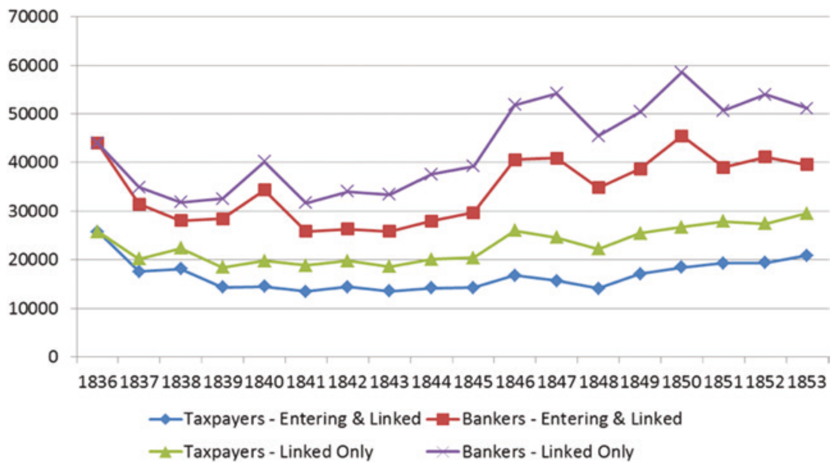

Fig. 14 Counterfactual wealth of taxpayers and bankers with linked growth rates and entrance of new people, and wealth of linked growth only

stable. These results are robust when we look at the inflation-adjusted wealth, taxpayers whose last name starts with letter "P," linked wealth growth rates for existing taxpayers and bankers appearing in two adjacent years, the wealth of entering new taxpayers and bankers, and the counterfactual exercises with both entering new people and linked growth rate. In addition, the entrance of new taxpayers and bankers considerably lowers the growth of wealth for existing taxpayers and bankers. These results do not show that the wealth of bankers fell relative to other wealthy taxpayers, as suggested by the literature, but they do suggest that the relative wealth inequality between bankers and taxpayers do not change much over time in the era of de facto free banking. The assertion that in the 1830s bankers' wealth became close to ordinary citizens, people in the 1830s, as suggested by Lamoreaux and Glaisek (1991), does not apply to Massachusetts banking.

3 Bank Balance Sheet

3.1 Introduction

The previous section analyzed the transition to open access from the perspective of bankers' wealth. This section studies the transition from the perspective of bank balance sheets. It explores whether new banks chartered in the era of de facto free banking were smaller or larger in size, and whether such banks had a higher or lower proportion of legislators on their boards of directors, as compared to banks chartered before the financial crisis between 1837 and 1842.

Bank assets from 1804 to 1861 are taken from the Boston banks' balance sheets collected by Warren Weber (2011).[10] In particular, bank assets are examined for three groups of banks: the banks that opened before the crisis and closed during the financial crisis (1837–1842), banks that opened before the crisis and continued to operate afterward, and banks that opened after the financial crisis. As Tables 12 and 13 show, 11 banks opened before 1837 and closed during the crisis, 24 banks opened before the crash and continued to operate afterward, and 22 new banks were chartered after the banking crisis.[11] The new banks chartered after the crisis opened between 1846 and 1862, during the de facto free banking era.[12] After examining the chronological dimension, I categorized new banks into three subcategories: banks with fewer than 33% of directors as state legislators, banks with between 33% and 66% directors as state legislators, and banks with more than 66% directors as state legislators. Bank size and the political connections of new banks chartered in the era of de facto free banking are also examined.

The results suggest that, first, the average assets across banks had a large fluctuation in the years before the mid-1820s, stabilized in the 1830s, and increased in the 1840s and the 1850s. Second, banks that failed during the crisis were, on average, smaller than the banks that lasted through the crisis. Third, new banks chartered after the crisis had fewer bank assets than banks opened before the crisis and continued to operate afterward. Fourth, within new banks chartered after the crisis, less politically connected bankers had greater bank assets than more politically connected banks.

Table 12 Beginning and ending year of Boston banks from bank balance sheet

Name of bank	Beginning year	Ending year
Group 1: Banks closed between 1837 and 1843:		
11 banks		
Franklin Bank	1829	1836
Lafayette Bank	1836	1837
Winnisimmet Bank/Fulton Bank	1835	1837
Commercial Bank	1831	1838
Commonwealth Bank	1825	1838
Oriental Bank	1832	1838
Kilby Bank	1837	1838
American Bank	1825	1838
Hancock Bank	1834	1839
Middling Interest Bank	1836	1839
South Bank	1833	1842
Group 2: Banks opened before 1837 and operated after 1843		
24 banks		
New England Bank	1814	1861
Suffolk Bank	1819	1861
Washington Bank	1825	1861
Union Bank	1803	1861
Warren Bank/Shawmut Bank	1837	1861
State Bank	1812	1861
Granite Bank	1833	1861
North Bank	1826	1861
Hamilton Bank	1832	1861
Globe Bank	1825	1861
Mechanics Bank	1836	1861
Shoe & Leather Dealers Bank	1836	1861
Eagle Bank	1822	1861
Freeman's Bank	1836	1861
Columbian Bank	1822	1861
Atlas Bank	1835	1861
Manufacturers & Mechanics Bank/Tremont Bank	1814	1861
Traders Bank	1831	1861
City Bank	1822	1861
Merchants' Bank	1831	1861
Market Bank	1833	1861
Boston Bank	1804	1861
Atlantic Bank	1828	1861
Massachusetts Bank	1803	1861
Group 3: Banks opened after 1843:		
22 banks		
Cochituate Bank	1850	1853
Grocers' Bank	1849	1855

(continued)

Table 12 (continued)

Name of bank	Beginning year	Ending year
Bank of Commerce	1850	1861
Webster Bank	1853	1861
Bank of the Metropolis	1859	1861
Mount Vernon Bank of the City of Boston	1861	1861
Howard Bank(ing Company)	1853	1861
Eliot Bank	1854	1861
Revere Bank	1859	1861
Bank of Mutual Redemption	1858	1861
Maverick Bank	1855	1861
Safety Fund Bank	1859	1861
National Bank of Boston	1853	1861
Broadway Bank	1854	1861
Bank of North America	1851	1861
Faneuil Hall Bank	1852	1861
Hide & Leather Bank	1858	1861
Continental Bank	1861	1861
Boylston Bank	1846	1861
Exchange Bank	1847	1861
Bank of the Republic	1860	1861
Blackstone Bank	1852	1861

Source Weber, Warren E. 2011. Balance sheets for US Antebellum State Banks. Research Department, Federal Reserve Bank of Minneapolis. http://www.minneapolisfed.org/research/economists/wewproj.html. *Note* I do not separate banks that failed in financial crisis and those closed due to other reasons

3.2 Data

The Boston bank balance sheets, collected by Warren Weber (2011),[13] consist of individual bank balance sheets compiled from the reports of state banking authorities. The Secretary of the Commonwealth of Massachusetts collected bank balance sheets in various reports, such as *A True Abstract of the Statement of the Several Bank Corporations in the Commonwealth of Massachusetts.*[14] The available reports cover the years 1803–1809, 1811–1815, 1819, 1820, 1822, 1823, and 1825–1861. The balance sheets include detailed information on bank assets and liabilities, from which I focus on "total bank assets."[15]

Table 13 Beginning and ending year of Boston Banks from Massachusetts Registers

Name of bank	Beginning year	Ending year
Group 1: Banks closed between 1837 and 1843: 15 banks		
Manufacturers and Mechanics' Bank	1816	1830
Winnisimmet Bank	1835	1835
Branch of the United States Bank	1793	1836
Warren Bank	1837	1837
Commonwealth Bank	1825	1838
Lafayette Bank	1837	1838
Kilby Bank	1837	1838
Oriental Bank	1833	1838
Commercial Bank	1833	1838
Franklin Bank	1824	1838
Fulton Bank	1836	1838
Middling Interest Bank	1837	1839
Hancock Bank	1834	1839
American Bank	1825	1839
South Bank	1834	1843
Group 2: Banks opened before 1837 and operated after 1843: 25 banks		
Charlestown Bank	1833	1845
Mechanics Bank	1837	1859
Suffolk Bank	1819	1859
Union Bank	1793	1859
Merchants Bank	1832	1859
Traders Bank	1832	1862
Boston Bank	1804	1862
North Bank	1826	1862
New England Bank	1814	1862
Hamilton Bank	1833	1862
Shoe & Leather Dealer's Bank	1837	1862
City Bank	1823	1862
Massachusetts Bank	1790	1862
Columbian Bank	1823	1862
Washington Bank	1826	1862
Freeman's Bank	1837	1862
Granite Bank	1834	1862
Atlantic Bank	1829	1862
Globe Bank	1825	1862
Market Bank	1833	1862
Atlas Bank	1834	1862
Eagle Bank	1823	1862
State Bank	1812	1862

(continued)

Table 13 (continued)

Name of bank	Beginning year	Ending year
Shawmut Bank	1838	1862
Tremont Bank	1831	1862
Group 3: Banks opened after 1843: 26 banks		
Agawam Bank	1848	1849
Blackstone Bank	1852	1854
Boylston Bank	1846	1854
Cochituate Bank	1850	1854
Grocers' Bank	1849	1856
Wamsutta Bank	1857	1857
Exchange Bank	1848	1859
Hopkinton Bank	1855	1859
Webster Bank	1854	1862
Maverick Bank	1855	1862
Bank of Commerce	1851	1862
Revere Bank	1862	1862
Safety Fund Bank	1859	1862
Continental Bank	1862	1862
Pawners' Bank	1862	1862
Bank of the Metropolis	1859	1862
Eliot Bank	1854	1862
Bank of Mutual Redemption	1859	1862
National Bank of Boston	1854	1862
Shelburne Falls Bank	1857	1862
Howard Banking Co.	1855	1862
Broadway Bank	1854	1862
Hide and Leather Bank	1859	1862
Bank of North America	1851	1862
Faneuil Hall Bank	1852	1862
Mount Vernon Bank	1862	1862

Source Massachusetts Registers 1790–1862. *Note* I do not separate banks that failed in financial crisis and those closed due to other reasons

The USA went through an inflationary boom between 1832 and 1836, a financial panic in 1837, and a long depression lasting from 1839 to 1843. Many banks failed between 1836 and 1843. Table 14 categorizes three groups of banks from Weber's data. I compare these banks with banks recorded in the Massachusetts Registers, shown in Table 13. The number of banks with bank balance sheet data is smaller than the number of banks in the Registers for each category.

Table 14 The mean, the standard deviation, and the number of bank assets, 1803–1861

Year		Total assets	Year		Total assets
1803	Mean	1,773,210	1836	mean	1,274,593
	s.d.	911,616.2		s.d.	793,481.8
	Number	2		number	33
1804	Mean	1,392,533	1837	mean	1,260,067
	s.d.	613,027.3		s.d.	778,665.3
	number	3		number	34
1805	mean	1,062,229	1838	mean	1,172,008
	s.d.	614,418.1		s.d.	730,921.7
	number	4		number	60
1806	mean	1,348,739	1839	mean	1,060,849
	s.d.	808,843.8		s.d.	738,896.2
	number	4		number	27
1807	mean	1,248,002	1840	mean	1,286,675
	s.d.	791,153.8		s.d.	881,188.5
	number	4		number	25
1808	mean	1,552,108	1841	mean	1,319,679
	s.d.	836,506.5		s.d.	921,488.1
	number	4		number	25
1809	mean	1,529,827	1842	mean	1,224,146
	s.d.	846,814.9		s.d.	818,673.7
	number	4		number	25
1811	mean	2,799,257	1843	mean	1,619,382
	s.d.	165,267.2		s.d.	1,374,356
	number	3		number	24
1812	mean	2,735,785	1844	mean	1,576,335
	s.d.	739,565.5		s.d.	1,287,205
	number	4		number	24
1813	mean	3,532,422	1845	mean	1,656,260
	s.d.	1,028,419		s.d.	1,384,795
	number	4		number	24
1814	mean	2,868,873	1846	mean	1,545,880
	s.d.	1,850,338		s.d.	1,242,194
	number	6		number	25
1815	mean	2,113,685	1847	mean	1,664,969
	s.d.	900,793.5		s.d.	1,327,226
	number	6		number	26
1819	mean	1,563,917	1848	mean	1,398,017
	s.d.	567,046.2		s.d.	1,036,977
	number	7		number	26
1820	mean	1,646,181	1849	mean	1,455,036
	s.d.	571,274		s.d.	1,037,710
	number	7		number	27

(continued)

Table 14 (continued)

Year		Total assets	Year		Total assets
1822	mean	1,141,309	1850	mean	1,519,080
	s.d.	665,061.4		s.d.	1,133,754
	number	10		number	29
1823	mean	1,217,285	1851	mean	1,603,003
	s.d.	460,145.7		s.d.	1,177,172
	number	10		number	30
1825	mean	1,251,306	1852	mean	1,723,981
	s.d.	561,466.3		s.d.	1,212,140
	number	14		number	32
1826	mean	1,207,370	1853	mean	1,792,957
	s.d.	464,615.1		s.d.	1,281,718
	number	15		number	35
1827	mean	1,242,677	1854	mean	1,771,812
	s.d.	479,225.3		s.d.	1,248,225
	number	15		number	36
1828	mean	1,239,926	1855	mean	1,761,727
	s.d.	574,660.3		s.d.	1,205,415
	number	16		number	37
1829	mean	1,247,806	1856	mean	1,794,232
	s.d.	541,378.5		s.d.	1,202,538
	number	17		number	36
1830	mean	1,271,896	1857	mean	1,639,306
	s.d.	602,596.9		s.d.	1,105,206
	number	17		number	36
1831	mean	1,333,800	1858	mean	1,974,044
	s.d.	639,390.2		s.d.	1,417,525
	number	20		number	38
1832	mean	1,273,923	1859	mean	1,806,044
	s.d.	532,738.3		s.d.	1,196,598
	number	22		number	41
1833	mean	1,271,455	1860	mean	1,885,729
	s.d.	592,835.8		s.d.	1,189,209
	number	25		number	42
1834	mean	1,291,496	1861	mean	1,852,420
	s.d.	589,387.2		s.d.	1,236,806
	number	26		number	44
1835	mean	1,210,505	Summary	mean	1,529,940
	s.d.	550,566		s.d.	1,053,929
	number	28		number	1138

3.3 Empirical Results

Table 14 shows the average assets across all banks in a given year for the years from 1804 to 1861. Figure 15 exhibits the average assets for all Boston banks from 1804 to 1861, and from 1826 to 1861. The large variation in years before 1825 obscures the pattern for the years after 1825, so Fig. 16 focuses on the period after 1825. 1825–1861 is also the period for which I have wealth data. These graphs show that the average bank assets increased from 1805 to 1813, dropped from 1814 to 1821, stabilized from 1821 to 1843, and gradually increased after 1843. The period before the 1820s was the period when Federalists and Democratic-Republicans fought for control of the banking sector (as shown in Chap. 2). Before 1812, Federalists dominated the banking sector and chartered banks with larger and larger assets. In 1811, the Democratic-Republicans chartered their own banks, the State Bank,

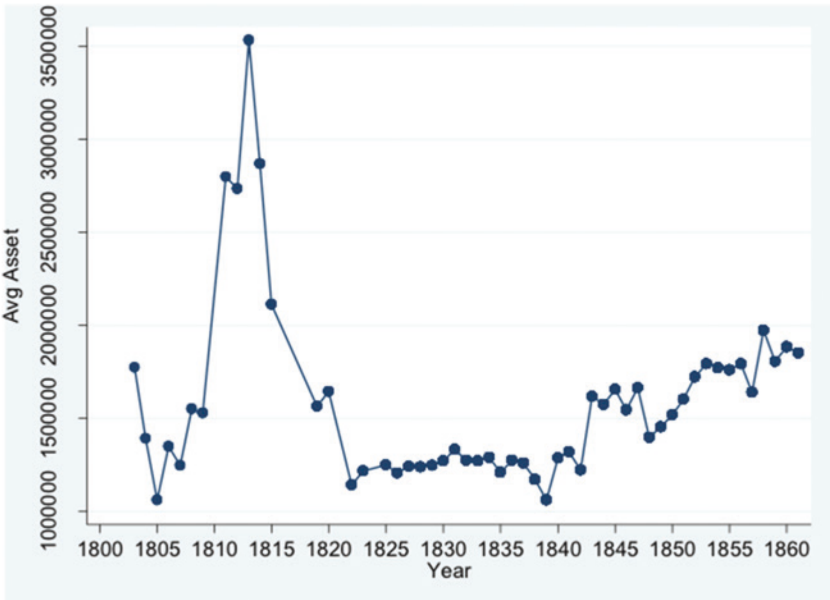

Fig. 15 Average assets for all banks in Boston, 1804–1861

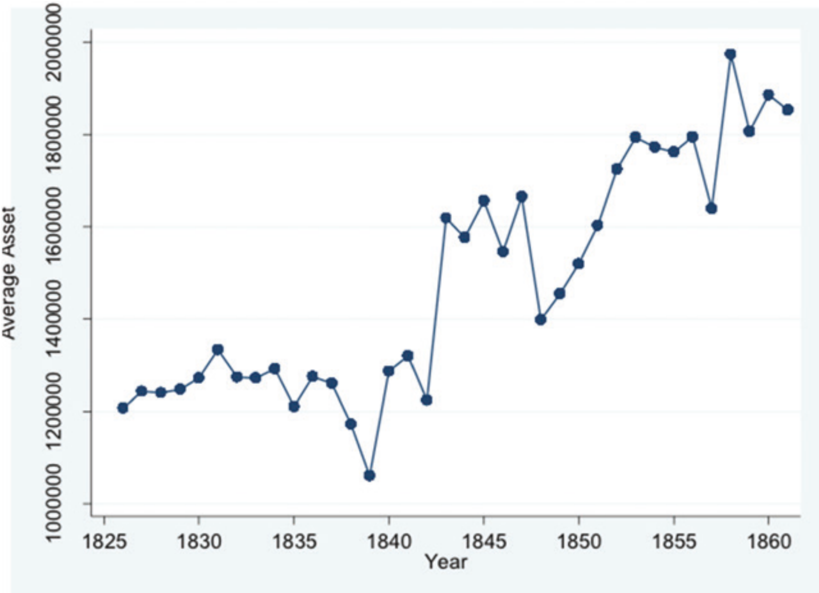

Fig. 16 Average assets, all banks in Boston, 1826–1861. *Source* Figs. 15 and 16, from Weber, Warren E. 2011. Balance sheets for US Antebellum State Banks. Research Department, Federal Reserve Bank of Minneapolis. http://www.minneapolisfed.org/research/economists/wewproj.html

and the Merchant Bank. The State Bank had a capital stock of $3 million, which increased the average of the banking sector, but it did not appear in the balance sheets data until 1813, the year with the largest average asset.[16] After that, more banks were chartered and these banks had smaller capital and assets. Between 1821 and 1843, which included the early stage of the second party system and the booming period in the mid-1830s and the crisis in the late 1830s, average bank assets stabilized. After the crisis ended in 1843, the economy began to recover and average bank assets began to grow.

Table 15 and Fig. 17 show average assets for new banks between 1803 and 1861. The results show that the average assets of entering banks decreased from 1812 to 1820, and increased after 1845. The pattern for entering banks is consistent with all banks over this time frame.

Table 15 Average asset for entering banks

Year		Asset	Year	Asset
1803	Mean	1,773,210	1836	268,081.9
	s.d.	911,616.2		155,699
	Number	2		5
1804	Mean	1,656,765	1837	862,410.4
	s.d.	–		38,358.35
	Number	1		2
1805	Mean	455,943	1846	386,620.3
	s.d.	–		–
	Number	1		1
1812	Mean	2,011,114	1847	913,033.8
	s.d.	–		–
	Number	1		1
1814	Mean	967,826.3	1849	652,728.4
	s.d.	477,102.2		–
	Number	2		1
1819	Mean	751,027.3	1850	1,038,316
	s.d.	–		972,069.5
	Number	1		2
1822	Mean	382,842	1851	1,174,335
	s.d.	66,291.79		–
	Number	3		1
1825	Mean	927,585.7	1852	946,094.5
	s.d.	493,475.8		295,417.7
	Number	4		2
1826	Mean	736,523.3	1853	1,206,132
	s.d.	–		828,264.9
	Number	1		3
1828	Mean	396,868.4	1854	440,937.9
	s.d.	–		342,927.2
	Number	1		2
1829	Mean	162,747.4	1855	747,877.3
	s.d.	–		–
	Number	1		1
1831	Mean	923,002.1	1858	1,678,255
	s.d.	230,088.5		135,817
	Number	3		2
1832	Mean	1,096,920	1859	1,235,389
	s.d.	366,078.2		624,593.3
	Number	2		3
1833	Mean	702,885.4	1860	1,595,502
	s.d.	389,662		–
	Number	3		1

(continued)

Table 15 (continued)

Year		Asset	Year	Asset
1834	Mean	1,052,623	1861	376,785.4
	s.d.	–		93,226.86
	Number	1		2
1835	Mean	920,856.9	Summary	884,455.8
	s.d.	238,136.2		545,625.8
	Number	2		58

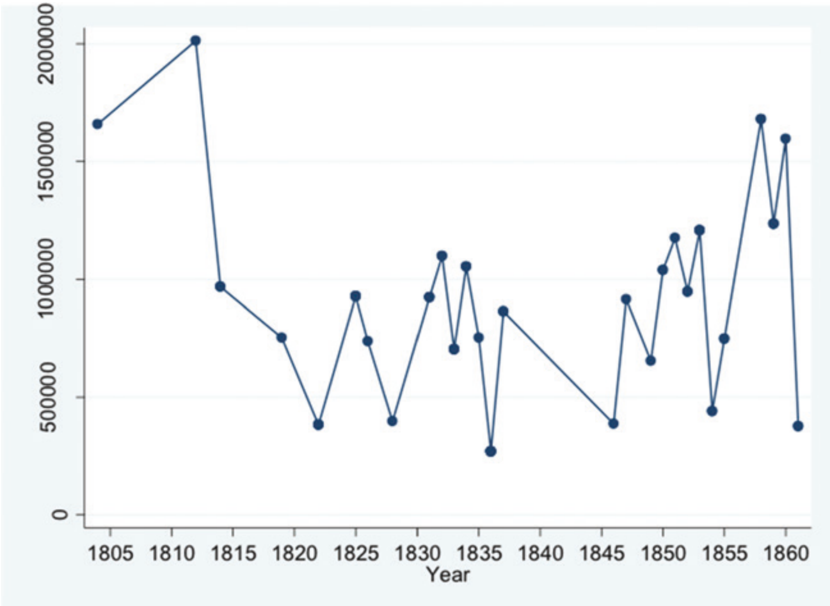

Fig. 17 Average asset for entering new banks, 1803–1861

The general picture for the long-term development of the banking sector over a sixty-year range can be sharpened by dividing banks into three groups: banks opened before 1837 that continued to operate after 1843, banks opened before 1836 that closed between 1836 and 1843, and banks opened after 1843. I do not separate banks that closed because of the financial crisis and banks that closed for other reasons, but the concentration of closing banks shutting down in the financial crisis suggested the crisis was the most likely reason for bank closure.

Figure 18 and Fig. 19 show the average bank assets for banks of the three groups from 1803 to 1861, and from 1826 to 1861 respectively. Table 16 exhibits the mean value and the standard deviation of bank assets, and the number of banks for each group. The results show, first, that banks that survived through the financial crisis between 1836 and 1843 had greater average assets compared to banks that failed in the crisis, and compared to banks that opened after 1843. For example, in 1840, the average assets for banks closed during the crisis were $642,022, just half of the average assets for banks opened before the crisis that continued to operate ($1,313,536). In 1853, the average assets for banks opened after the crisis was $1,579,164, and the average assets for banks opened before the crisis that continued to operate was $1,890,945. Second, all the banks closed during the crisis were chartered after 1825 during the second party system, and all surviving

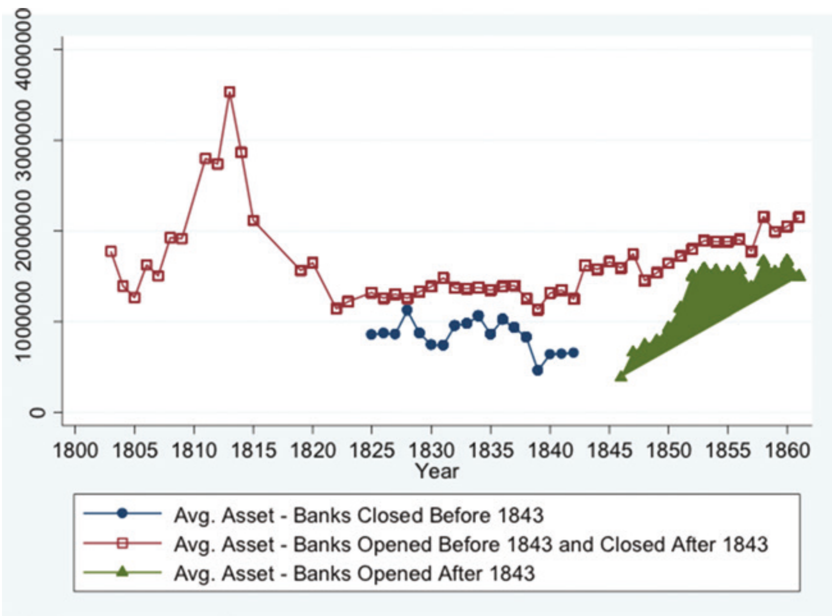

Fig. 18 Average assets for banks opened before 1837 and closed during crisis, banks opened before 1837 and operated after 1843, and banks opened after 1843. Period 1826–1861

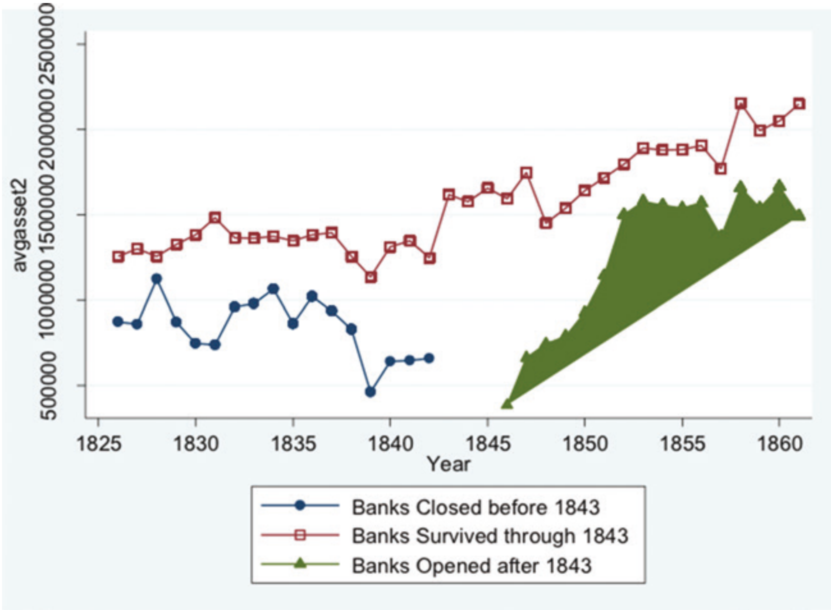

Fig. 19 Average assets for banks opened before 1837 and closed during crisis, banks opened before 1837 and operated after 1843, and banks opened after 1843. Period 1826–1861

banks were chartered before 1825. Third, for new banks that opened after 1843, their initial average assets were smaller than surviving banks but they grew faster. Overall, the larger banks chartered in the first party system survived whereas smaller banks chartered in the second party system failed in the crisis. New banks chartered after 1843, during the de facto free banking era, tended to have fewer assets, when compared to banks chartered before the crisis.

How were these banks connected to legislators? For each bank, I calculate the proportion of bank directors who were also state legislators at some point in their lives. Figure 20 shows the average proportion of state legislators across all banks in a given year. The proportion was high before 1812, around 70%, and dropped to around 35% in the 1850s. It is similar to Fig. 21, which shows the proportion of bankers that had been or would become state legislators, calculating the ratio of

Table 16 Average assets for banks opened and closed in different periods

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1803	Mean	–	1,773,210	–	1,773,210
	s.d.	–	911,616.20	–	911,616.20
	Number	0	2	0	2
1804	Mean	–	1,392,532.67	–	1,392,532.67
	s.d.	–	613,027.33	–	613,027.33
	Number	0	3	0	3
1805	Mean	455,943.00	1,264,324.33	–	1,062,229
	s.d.	0	566,753.19	–	614,418.05
	Number	1	3	0	4
1806	Mean	522,964.00	1,623,997.33	–	1,348,739
	s.d.	0	725,768.22	–	808,843.79
	Number	1	3	0	4
1807	Mean	478,647.00	1,504,453	–	1,248,001.5
	s.d.	0	737,754.89	–	791,153.80
	Number	1	3	0	4
1808	Mean	430,418.00	1,926,004.15	–	1,552,107.61
	s.d.	0	459,154.60	–	836,506.49
	Number	1	3	0	4
1809	Mean	373,583.00	1,915,241.79	–	1,529,827.09
	s.d.	0	429,390.65	–	846,814.92
	Number	1	3	0	4
1811	Mean	–	2,799,256.83	–	2,799,256.83
	s.d.	–	165,267.21	–	165,267.21
	Number	0	3	0	3

(continued)

Table 16 (continued)

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1812	Mean	–	2,735,784.59	–	2,735,784.59
	s.d.	–	739,565.54	–	739,565.54
	Number	0	4	0	4
1813	Mean	–	3,532,422.33	–	3,532,422.33
	s.d.	–	1,028,419.26	–	1,028,419.26
	Number	0	4	0	4
1814	Mean	–	2,868,872.88	–	2,868,872.88
	s.d.	–	1,850,337.83	–	1,850,337.83
	Number	0	6	0	6
1815	Mean	–	2,113,684.68	–	2,113,684.68
	s.d.	–	900,793.54	–	900,793.54
	Number	0	6	0	6
1819	Mean	–	1,563,917.37	–	1,563,917.37
	s.d.	–	567,046.15	–	567,046.15
	Number	0	7	0	7
1820	Mean	–	1,646,180.91	–	1,646,180.91
	s.d.	–	571,274.01	–	571,274.01
	Number	0	7	0	7
1822	Mean	–	1,141,309.02	–	1,141,309.02
	s.d.	–	665,061.43	–	665,061.43
	Number	0	10	0	10
1823	Mean	–	1,217,284.97	–	1,217,284.97
	s.d.	–	460,145.68	–	460,145.68
	Number	0	10	0	10

(continued)

Table 16 (continued)

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1825	Mean	859,570.00	1,316,595.2	–	1,251,305.88
	s.d.	62,509.84	582,799.16	–	561,466.30
	Number	2	12	0	14
1826	Mean	875,684.63	1,258,398.84	–	1,207,370.28
	s.d.	61,878.70	479,967.88	–	464,615.09
	Number	2	13	0	15
1827	Mean	860,287.07	1,301,506.35	–	1,242,677.11
	s.d.	62,429.23	489,375.76	–	479,225.32
	Number	2	13	0	15
1828	Mean	1,125,880.94	1,256,218.69	–	1,239,926.47
	s.d.	350,208.29	607,715.89	–	574,660.28
	Number	2	14	0	16
1829	Mean	872,843.92	1,328,154.72	–	1,247,805.75
	s.d.	625,970.25	510,926.86	–	541,378.53
	Number	3	14	0	17
1830	Mean	747,231.56	1,384,324.35	–	1,271,896.21
	s.d.	477,405.57	578,549.62	–	602,596.88
	Number	3	14	0	17
1831	Mean	738,837.55	1,482,540.44	–	1,333,799.86
	s.d.	391,668.01	607,588.92	–	639,390.20
	Number	4	16	0	20
1832	Mean	958,615.27	1,366,660.5	–	1,273,922.95
	s.d.	400,358.81	540,576.38	–	532,738.33
	Number	5	17	0	22

(continued)

Table 16 (continued)

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1833	Mean	979,594.81	1,363,621.21	–	1,271,454.88
	s.d.	538,823.36	592,112.88	–	592,835.80
	Number	6	19	0	25
1834	Mean	1,064,838.75	1,375,001.65	–	1,291,496.25
	s.d.	446,860.18	623,352.14	–	589,387.19
	Number	7	19	0	26
1835	Mean	862,928.96	1,349,535.78	–	1,210,505.26
	s.d.	319,673.70	567,353.73	–	550,565.96
	Number	8	20	0	28
1836	Mean	1,022,687.81	1,384,116.76	–	1,274,592.84
	s.d.	566,371.00	862,084.78	–	793,481.77
	Number	10	23	0	33
1837	Mean	935,894.42	1,395,138.51	–	1,260,066.72
	s.d.	399,033.57	861,917.84	–	778,665.27
	Number	10	24	0	34
1838	Mean	830,342.87	1,257,423.97	–	1,172,007.75
	s.d.	384,934.28	773,766.74	–	730,921.70
	Number	12	48	0	60
1839	Mean	462,426.18	1,135,651.78	–	1,060,848.93
	s.d.	212,996.59	748,790.39	–	738,896.20
	Number	3	24	0	27
1840	Mean	642,022.12	1,313,535.77	–	1,286,675.22
	s.d.	0	889,624.81	–	881,188.50
	Number	1	24	0	25

(continued)

Table 16 (continued)

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1841	Mean	647,595.14	1,347,682.62	–	1,319,679.12
	s.d.	0	930,377.44	–	921,488.10
	Number	1	24	0	25
1842	Mean	658,784.42	1,247,702.89	–	1,224,146.15
	s.d.	0	827,581.21	–	818,673.65
	Number	1	24	0	25
1843	Mean	–	1,619,381.95	–	1,619,381.95
	s.d.	–	1,374,356.46	–	1,374,356.46
	Number	0	24	0	24
1844	Mean	–	1,576,335.38	–	1,576,335.38
	s.d.	–	1,287,205.1	–	1,287,205.1
	Number	0	24	0	24
1845	Mean	–	1,656,259.53	–	1,656,259.53
	s.d.	–	1,384,795.12	–	1,384,795.12
	Number	0	24	0	24
1846	Mean	–	1,594,182.4	386,620.30	1,545,879.92
	s.d.	–	1,244,697.26	0	1,242,194.25
	Number	0	24	1	25
1847	Mean	–	1,748,371.05	664,143.96	1,664,968.97
	s.d.	–	1,347,204.19	351,983.34	1,327,225.61
	Number	0	24	2	26
1848	Mean	–	1,452,480.25	744,458.83	1,398,017.07
	s.d.	–	1,057,484.67	487,085.15	1,036,976.69
	Number	0	24	2	26

(continued)

Table 16 (continued)

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1849	Mean	–	1,538,098.01	790,541.09	1,455,036.13
	s.d.	–	1,068,098.7	366,352.78	1,037,709.64
	Number	0	24	3	27
1850	Mean	–	1,642,105.17	928,561.16	1,519,080.34
	s.d.	–	1,189,131.81	583,428.28	1,133,754.1
	Number	0	24	5	29
1851	Mean	–	1,717,595.86	1,144,631.99	1,603,003.09
	s.d.	–	1,247,578.97	749,941.42	1,177,171.76
	Number	0	24	6	30
1852	Mean	–	1,798,430.77	1,500,633.14	1,723,981.36
	s.d.	–	1,220,356	1,239,961.53	1,212,140.39
	Number	0	24	8	32
1853	Mean	–	1,890,945.13	1,579,164.43	1,792,956.91
	s.d.	–	1,359,264.28	1,123,709.41	1,281,717.99
	Number	0	24	11	35
1854	Mean	–	1,879,583.66	1,556,270.02	1,771,812.45
	s.d.	–	1,351,598.07	1,030,413.33	1,248,225.26
	Number	0	24	12	36
1855	Mean	–	1,882,467.09	1,538,821.53	1,761,726.76
	s.d.	–	1,330,783.46	938,989.88	1,205,414.58
	Number	0	24	13	37
1856	Mean	–	1,906,124.2	1,570,448.9	1,794,232.43
	s.d.	–	1,306,695.93	974,236.66	1,202,537.54
	Number	0	24	12	36

(continued)

Table 16 (continued)

Year		Banks opened before 1837 and closed before 1843	Banks opened before 1843 and operated after 1843	Banks opened after 1843	Total
		(1)	(2)	(3)	(4)
1857	Mean	–	1,772,816.26	1,372,285.07	1,639,305.86
	s.d.	–	1,182,672.6	919,387.32	1,105,206.36
	Number	0	24	12	36
1858	Mean	–	2,157,593.82	1,659,387.31	1,974,044.05
	s.d.	–	1,579,454.36	1,066,075.19	1,417,525.05
	Number	0	24	14	38
1859	Mean	–	1,994,479.12	1,540,017.8	1,806,043.94
	s.d.	–	1,363,187.24	883,109.68	1,196,597.54
	Number	0	24	17	41
1860	Mean	–	2,050,937.44	1,665,450.18	1,885,728.61
	s.d.	–	1,343,812.35	936,837.85	1,189,208.56
	Number	0	24	18	42
1861	Mean	–	2,151,228.43	1,493,849.57	1,852,419.86
	s.d.	–	1,400,587.19	916,067.87	1,236,805.53
	Number	0	24	20	44
Total	Mean	867,052.21	1,604,376.36	1,472,573.51	1,529,940.12
	s.d.	408,167.24	1,092,880.5	940,585.26	1,053,928.8
	Number	87	895	156	1138

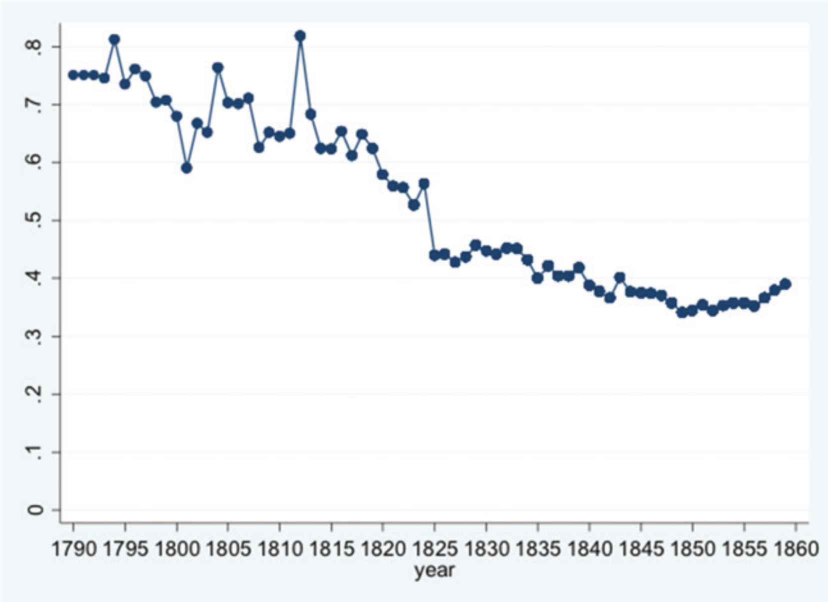

Fig. 20 The average of the legislators' proportion across banks, 1790–1859

all connected bankers over total bankers. The difference between Fig. 20 and 21 is that the former calculates the proportion by averaging across all individual banks, and the latter calculates the proportion of all connected bank directors over the total number of bank directors. Both figures show decreasing trends over time.

Why did banks chartered after 1843 start with small assets and increase over time? I categorize banks according to the proportion of legislators on boards of directors: legislators whose proportion was smaller than 33%, those larger than 33% and smaller than 66%, and those larger than 66%. I focus on the banks chartered after 1843 and examine their assets over time. Table 17 and Fig. 22 show the average bank assets in the three subcategories for banks chartered after 1843. The figure shows that the average assets for banks in the below 33% category and 33–66% category were initially small, and kept increasing over time, but the bank assets for the category of above 66%

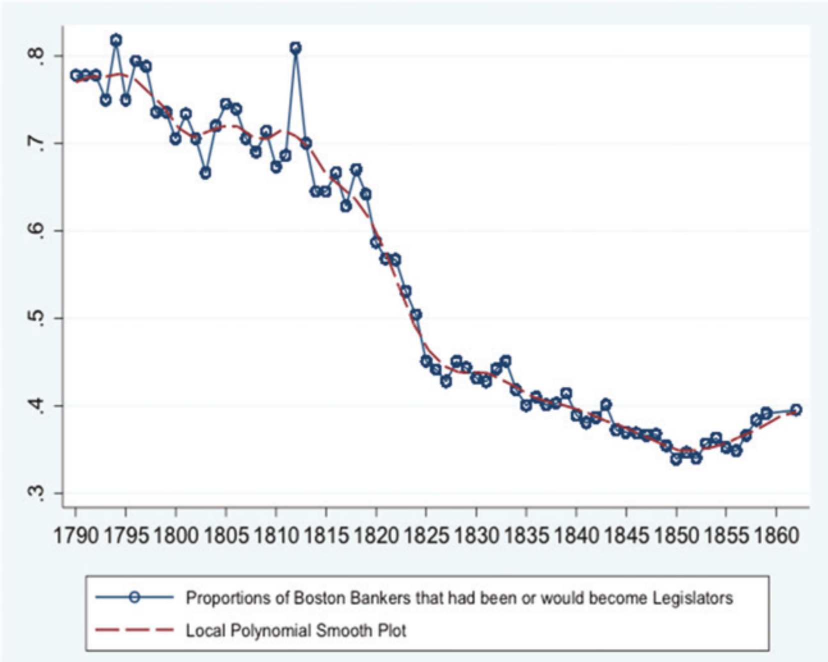

Fig. 21 Proportions of Boston bank directors and Presidents who had been or would become legislators, and local polynomial smooth plot, 1790–1859. *Source* Massachusetts Registers (1790–1859) and Massachusetts Legislators Biographies (1780–2003). Both are from Massachusetts State Library. *Note* Fig. 21 plots the annual proportion of bank directors and presidents who had been or would become state legislators. The proportions are derived by matching the list of bank directors and presidents in the Massachusetts Registers (1790–1824) and the biographies of the state legislators provided by the Massachusetts State Library. The proportion began to drop after 1812

category were stable. In the years 1847 and 1850, there was only one bank with over 66% of its directors as state legislators, and this bank had $800,000 more in assets than banks of the other two categories. In the 1850s, although the number of banks in the above 66% category increased to 4–6, their average bank assets dropped below the average assets of the other two categories. For example, in 1855 there were four banks in the above 66% category with the average assets of $1,176,039, four banks in the 33–66% category with average assets

Table 17 Average bank assets for banks chartered in different periods and within different categories

Year	Banks chartered after 1843		
	Leg. <=0.33	0.33 < Leg. <=0.66	0.66 < Leg.
1846		1 386,620	
1847		1 415,254	1 913,034
1848		2 744,459	
1849	1 652,728	2 859,447	
1850	2 517,396	2 941,170	1 1,725,673
1851	3 1,223,699	3 1,065,565	
1852	4 1,719,958	4 1,281,309	
1853	4 1,972,381	3 1,686,130	4 1,105,723
1854	4 1,734,271	5 1,681,893	3 1,109,563
1855	5 1,581,968	4 1,847,671	4 1,176,039
1856	2 2,017,029	7 1,528,551	3 1,370,491
1857	2 2,196,976	6 1,260,539	4 1,127,559
1858	1 1,267,914	7 1,904,512	6 1,438,654
1859	2 1,444,799	10 1,653,607	5 1,350,927

Note Fig. 17 presents data of average bank assets for banks chartered in different categories and with different proportion of state directors as state legislators. Leg <=0.33 represents the proportion of bank directors as state legislators is smaller than or equal to 33%. 0.33 < Leg <=0.66 represents the proportion of bank directors as state legislators is larger than 33% but smaller than or equal to 66%. 0.66 < Leg represents the proportion of bank directors as state legislators is larger than 66%

of $1,847,671, and five banks in the below 33% category with average assets of $1,581,968. Among those banks chartered after the crisis, banks in the above 66% category tended to have lower average bank

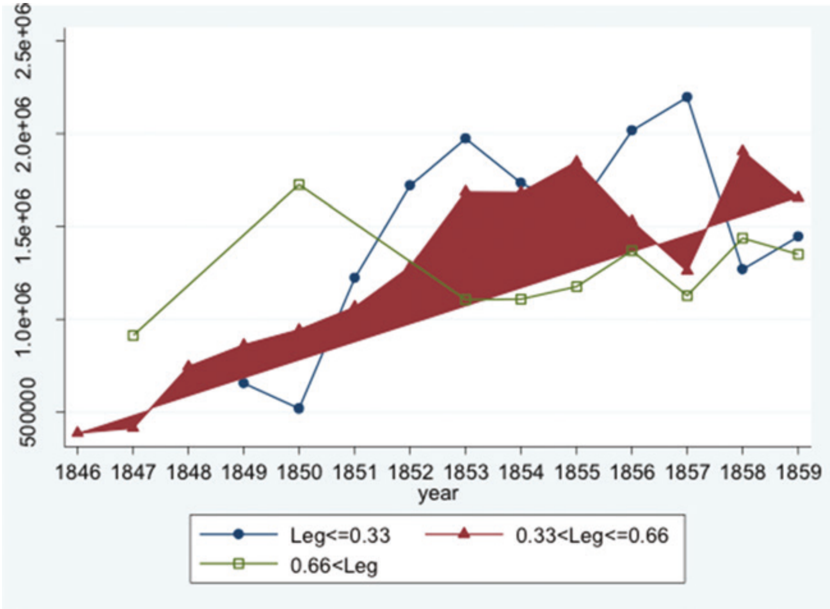

Fig. 22 Average bank assets for banks with different proportion of bank directors as state legislators: Proportion of Legislators <=0.33, 0.33 < Proportion <=0.66, and 0.66 < Proportion

assets. One explanation for why average bank assets for banks chartered after 1843 started small and rapidly increased, is that banks with a smaller proportion of directors as state legislators also started small and rapidly increased fast.

The overall results for bank balance sheets suggest first that the average assets across banks had a large fluctuation in the years before the mid-1820s, stabilized in the 1830s, and increased in the 1840s and the 1850s. Second, new banks chartered after the crisis had fewer assets than banks opened before the crisis and continued to operate afterward. Third, within new banks chartered after the crisis, less politically connected banks had greater bank assets. While more detailed and advanced econometric analysis could be done in further studies, the basic analysis of the data has provided a picture that banks entering in the de facto free banking era were smaller and less connected to politics.

4 Conclusion

This chapter examines economic variables such as bankers' wealth and bank size over an extended time frame. The literature suggests that in the 1830s, bankers became more democratic in the sense that less wealthy people were able to participate in banking. The results from previous sections, which suggested that bankers became less associated with politicians over a longtime frame, also suggest that bankers may have been less elite. This section provides empirical studies from tax lists and bank balance sheets to examine whether bankers and banks became less elite in the sense that bankers were not wealthier than taxpayers, whether bank sizes were decreasing, and whether banks were becoming less closely associated with legislators. Although the empirical research does not establish the direct causal link between bankers' wealth and their connection to politics, it provides various views of the data and statistics from multiple datasets. The general conclusions are that the wealth inequality between bankers and other taxpayers did not shrink but remained stable, and that banks chartered in the era of de facto free banking were smaller in size. These results suggest that the conclusions in the literature on bankers' elite status in Rhode Island and New York should be reconsidered and further explored. Very possibly, democratic or grassroots banking did not exist in Boston during the period.

Notes

1. The value is calculated by https://measuringworth.com, measuring the amount of income or wealth relative to the total output of the economy and compares these historical values in different years.
2. I use bankers to represent bank directors in this article.
3. The tax lists do not specify how the taxes were collected. However, according to Steckel and Moehling (2001), which surveyed the historical literature and documents on the wealth data in Massachusetts, "Real estate included land and buildings, and personal estate included goods, chattels, money; ships; money at interest; public stocks and securities; stocks in turnpikes, bridges, and moneyed corporations, in or out of

state. Property exempted from taxation included household furniture not exceeding $1000 in value, wearing apparel, farming utensils, and mechanics' tools initially up to an unlimited amount and later up to a value of 300."

4. I copy the names of taxpayers and their "personal estate" and "real estate," and paste them into excel. I then parse these data into names and numbers. I organize the data that are easily parsed and recognized in the excel. These data are presumably random samples.
5. Among these 3277 bankers, 1108 (or 33.8%) either had been or would become state legislators. I carry out the same analysis for bankers who were state legislators, and the results are the same as for bankers taken as a group. In terms of wealth, legislators are slightly less wealthy than bankers, but wealthier than the sample average.
6. Huse (1916) states that Boston raised the assessment from 50% of market value to 100% of market value in 1842. For all the wealth data collected before 1842, I double the their value.
7. All numbers for wealth are in nominal terms.
8. Taxpayers and Bankers' Average Wealth is deflated by Annual Consumer Price Index for the USA 1826–1859, using the price level in 1840 as the base level. The CPI data are available at Measureworth.com.
9. The entrance of new taxpayers lowers the wealth accumulation of taxpayers by ((1.15–0.81)/1.15) = 30%, and the entrance of new bankers lowers the wealth accumulation of bankers by ((1.16–0.90)/1.16) = 22.4%.
10. Weber, Warren E. 2011. Balance sheets for US Antebellum State Banks. Research Department, Federal Reserve Bank of Minneapolis. http://www.minneapolisfed.org/research/economists/wewproj.html.
11. All banks were transformed into National Banks before 1862.
12. Among these 22 banks, 17 banks were chartered after 1851, when the state passed the general incorporation law for banking. After 1851, the state adopted a "dual-track" system for chartering banks: It issued both special charters and general charters. The balance sheets data do not separate both types of banks. What is the difference between banks with special charters and those with general charters is beyond the scope of this study.

13. Weber, Warren E. 2011. Balance sheets for US Antebellum State Banks. Research Department, Federal Reserve Bank of Minneapolis. http://www.minneapolisfed.org/research/economists/wewproj.html.
14. The titles of the reports may vary across years. http://www.minneapolisfed.org/research/economic_research/bankarchive/info/Massachusettes%20Bibliography.html.
15. I do not examine bank capital since they were fixed in the charters by the legislature, and thereby do not change much over time.
16. The Bank Asset is much larger than Bank Capital.

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6

An Intra-Elite Explanation of Open Access

Abstract This chapter provides an explanation of open access based on the conceptual framework of intra-elite competition developed by North et al. (Violence and Social Orders. A Conceptual Framework for Interpreting Recorded Human History, Cambridge University Press, 2009). This framework suggests that intra-elite conflicts, rather than revolution led by citizens, is a more likely explanation for the transition to open access. If the transition to open access banking was caused by revolution, as the Handlins, Maier, Sylla, and many political and economic historians have suggested, we should observe that the banking sector was largely democratized by the 1790s, with political elites eliminated from the banks and ordinary citizens becoming bankers. However, the evidence suggests that the elites were not eliminated from the banking sector, and bankers were still politically connected and remained wealthy. Intra-elite conflicts moved the banking sector toward de facto free entry.

Keywords Intra-Elite competition · Free banking · Elite-Citizen competition · Open access

We have seen that after the 1820s de facto access to banking gradually opened. In the second party regime, no political parties were excluded

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from obtaining charters. The proportion of bankers who were also state legislators at some point in their lives dropped from 70% in the late 1790s to 40% in the 1850s. Bankers still enjoyed greater wealth than other wealthy taxpayers, although relative wealth inequality remained stable. New banks chartered in the de facto free banking era, in particular after the financial crises from 1837 to 1842, tended to be smaller. These results suggest that access to Massachusetts banking gradually opened, but elite political connections did not totally disappear and bankers remained wealthy. The transition to open access society does not imply that elites were overthrown by citizens or lost their political and economic power. Political and economic elites still held control of the banking sector, but banking moved to open entry. How do we explain this historical paradox?

Two recent books examine the transition to modern society from the perspective of elites. North et al. (2009) argue that, in most societies, intra-elite competition and violence are limited by the creation of elite economic rents. Rents sustain coordination within elite coalition. Their understanding of the transition to open access hinges on the idea that competition within or between groups of elites can, under the right conditions, lead elites toward rules that allow all elites to form organizations.

Three doorstep conditions are necessary for transition: (1) Rule of law for elites; (2) Perpetual forms of organizations for elites (such as corporations, including the state itself); (3) Political control of the military. All three conditions greatly expand the range of specialization and exchange. Rule of law extends the range of contracts among elites, perpetual organizations such as corporations enable elites to organize more economic activities, and political control of violence reduces the risk of violence to disrupt trade. Once three conditions are met, elites have incentives to increase access to these institutions at the margin, so as to expand contracts and trade with non-elites. The society moves toward a new pattern of open political and economic access in which a competitive economy sustains competitive politics.

In contrast, Acemoglu and Robinson (2005, 2012) suggest that human societies have two types of institutions: "extractive institutions" and "inclusive institutions." Extractive institutions allow elite groups to extract wealth from citizens, while inclusive institutions “allow and encourage participation by the great mass of people in economic activities… and must permit the entry of new businesses and allow people to choose their careers.” The transition from extractive to inclusive institutions requires that elites be restrained or overthrown by non-elite citizens. Acemoglu and Robinson (2012) argue that Americans established inclusive institutions during the colonial period and the American revolution.

The key difference between North et al. (2009) and Acemoglu and Robinson (2005, 2012) is their conception of the role of elites in the transition to open access or inclusive institutions: The former emphasizes intra-elite competition and the latter emphasizes elite-citizen competition. The former suggests that it is possible to transition to open access through reconfiguration of elite groups, while the latter argues that the threat of revolution by citizens may force elites to extend their privileges and allow inclusive institutions to emerge. The evidence presented for Massachusetts shows that the transition from limited to open access banking in early nineteenth-century Massachusetts stemmed from intra-elite rather than elite-citizen competition. Intra-elite competition was not akin to a revolution that eliminated elites. Rather, banking elites remained politically connected and wealthy, but intra-elite competition moved the banking sector toward de facto free entry.

From a larger perspective, politically active elites in early America competed with other elite groups. Their conflicts were vituperative and loud, and public rhetoric was vicious and personal, but it rarely broke out into open violence. Moreover, the government was rarely in one faction’s firm control. Even a well-organized coalition like the Massachusetts Federalists had trouble defeating their political rivals. In this environment, elites in control of government were willing to use their control to enhance their own privileges and weaken their opponents. Like elites in many countries around the world today, over time the Federalists might have figured out how to stabilize their coalition in the presence of democratic elections.

Americans were particularly paranoid about the possibility that a political faction, like the Federalists, would manipulate economic privileges to gain control of the democratic polity, influencing the “interests” of individuals who relied on the political faction for their economic benefits (Wallis 2006). For this reason, Americans, both elites and non-elites, feared organized political parties. Despite the existence of an electoral system in which parties were indispensable in managing the government, elites and non-elites alike viewed the emergence of parties as a sign of corruption.

The Americans' fear of political factions manipulating the economic system turned out to be a reality. All banks had to petition for bank charters from the state legislature, and Federalists, who dominated the legislature, monopolized the issuance of these bank charters from late 1790s to 1810. When Democratic-Republicans gained the control of both houses and the governorship in 1811 they rejected all Federalist charters and chartered their own banks instead. After Federalists regained power in 1812, they began to charter more banks. As a result of the events of 1811 and 1812, which exemplified the logic of a winner-take-all political competition, both Democratic-Republicans and Federalists were chastened. They came to face the reality that tying economic interests to political interests would produce unpredictable results if the winning party was free to dismantle the economic organizations of the losing party. They began to open access in the banking sector so that all elite groups could form banks no matter which party held political power. Thus, the competition between elite parties led to open access banking. Ultimately, what mattered was that existing elites did not consolidate their position by denying rising elites access to the organizational tools that make competitive organizations viable, whether they were economic, political, or social organizations.

What followed 1811 makes much more sense if we conceive of the relevant conflict as being between elites rather than between elites and the masses. The Democratic-Republicans put the State Bank forward as a model for future banks (it was also a power grab). A key part of the reform was the tax on bank capital, which was intended to return to the state and the state's taxpayers some of the bank's profits. Significantly, the Democratic-Republicans wanted the capital tax to apply to all future incorporated banks. According to the State Bank charter of 1811:

> *Provided however*, That the same tax, payable in manner aforesaid, shall be required by the Legislature of all banks that shall be hereafter incorporated within this Commonwealth, from and after the said first Monday of October: *And provided further*, That nothing herein contained shall be construed to impair the right of the Legislature to lay a tax or excise upon any bank already incorporated, under the authority of the Commonwealth, whenever they may think proper to do so.[1]

The Federalists could have reversed the "reform" provisions of the State Bank charter when they came back into power, but they did not. Rather than undo the capital tax provision, they kept it in place; all of the bank charter renewals in 1812 contained the capital tax provision. In this new system, when the legislature chartered new banks, or renewed existing bank charters, the charters usually contained the provision that the new bank followed the rules of the State Bank charter. For instance, in the rechartering of the Worcester bank in 1812, "That the rules, restrictions, limitations, reservations and provisions, which are provided in and by the third section of an Act, entitled, 'An Act to incorporate the President, Directors, and Company of the State Bank,' shall be binding on the bank hereby established…"[2] The charter of the Worcester Bank repeated the capital tax provision of the State Bank charter word-for-word.

The terms of new bank charters in Massachusetts became formally standardized on February 29, 1829 with the passage of the Act to Regulate Banks and Banking. The Act required that all banks would be governed by the same rules and regulations.[3] The Act reconfirmed the bank capital tax and the right of the state to invest in any bank, as well as to borrow from it. The clincher was section 31, which not only guaranteed that all existing bank charters would have the same provisions but any new provisions introduced in the future would retroactively apply to all existing banks: "*Be it further enacted,* That if, during the continuance of any Bank Charter, granted or renewed under the provisions of this Act, any new or greater privileges shall be granted to any other bank now in operation, or which may hereafter be created, each and every Bank in operation at the time shall be entitled to the same" (p. 161). Massachusetts had passed an "impersonal" rule for the creation and governance of banks—a rule that treated all banks the same.

The aftermath of the 1811 election confirmed that intra-elite competition, rather than competition between elites and regular citizens, was the driving force towards open access. The events of 1811 and 1812 exhibited the potential danger posed to all economic organizations by a change in legislative party control, if legal recognition of organizations could be revoked at the pleasure of the party in control. That all the existing bank charters (with the exception of the Massachusetts bank) were up for renewal in 1812 was a unique occurrence that highlighted the danger. One limited response was the movements towards making all bank charters contain the same privileges and provisions, a move began with the State Bank charter in 1811 and was finalized in the general regulatory Act of 1829. Making all bank charters the same removed one way in which political parties could manipulate economic organizations. Banks were still connected to political elites, and many bankers were wealthy economic elites, but no elite group could manipulate bank charters and gain additional privileges.

The history and the empirical analysis suggest that the competition between elite groups, rather than between elites and citizens, was the key to move Massachusetts banking towards open access. The revolution achieved the third doorstep condition, political control of the violence, but it did not bring about the second and the third condition. Americans had to find a way to establish impersonal exchange among elites. The events of 1811 and 1812 expanded the access to corporations from Federalist elites to Democratic-Republican elites, and the 1829 regulatory act established the rule of law for all banking elites. Elite competition after the revolution made the three conditions possible.

What followed was the extension of the impersonal institutions for non-elites. The tax on bank capital provided the state over 50 percent of its revenue. Plenty in fiscal revenue even allowed the state to abolish property tax and poll tax during years from 1826 to 1830, 1832 to 1834, and 1846 to 1853.[4] Elites benefited from the expansion of the banking access to non-elites, from the expansion of contracts and trade, as well as the elimination of property tax. As access gradually opened, elites were less connected to banks and their political power weakened, but they remained wealthy. All these paved the way for the passage of 1851 general incorporation laws, which institutionally opened entry into banking for all citizens. The society moved toward a new pattern of open political and economic access in which a competitive economy sustains competitive politics.

Notes

1. Massachusetts, 1811, Chapter 84, "An Act to Incorporate the President, Directors, and Company of the State Bank," p. 507.
2. Massachusetts, 1821, Chapter 26, "An Act to incorporate the President, Directors, and Company of the Worcester Bank," p. 422.
3. Massachusetts, 1831, Chapter 96, "An Act to regulate Banks and Banking," Section 1, p. 145, "That from and after the passing of this Act, every Bank which shall receive a Charter, from or by the authority of this Commonwealth, and every Bank whose Capital shall be increased, or whose Charter shall be extended, shall be governed by the following rules, and subjected to all the duties, limitations, restrictions, liabilities and provisions, contained in this Act."
4. Charles J. Bullock, "Historical Sketch of the Finances and Financial Policy of Massachusetts from 1780 to 1905," Publications of the American Economic Association, 3rd ser., vol. 8, no. 2 (1907), p. 21.

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7

Conclusion: Democracy, Civil Society, Elites, and Impersonal Rules

Abstract This chapter answers the question that the first chapter raises up: Was USA born a civil society? And if not, how it evolves into a modern society in the sense of impersonal rules and open access of organizations? This project provides clear evidence that the USA was not an open access society in the sense of competitive economy and polity, shown by early nineteenth century banking.

Keywords Open access · Civil society · Impersonal rules

In *Democracy in America*, Tocqueville famously observed "Americans of all ages, all stations in life, and all types of disposition are forever forming associations." For Tocqueville, civil society replaced aristocracy as a check on tyranny in democracy. American historians, such as Arthur M. Schlesinger, Pauline Maier, and the Handlins largely embraced Tocqueville's idea of civil society and celebrated its ubiquity in daily American life.[1] For them, American revolution, democracy, and culture altogether provided unique conditions that adapted corporations to American circumstances. Thus Paulin Maier (1993) claimed corporations as "a part of the revolutionary heritage with far-reaching

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implications for American government and society," and the Handlins (1969) suggested "the public purpose which justifies extension of government powers to a bank, to a bridge, and to a factory soon comprehended a wide and ever widening circle of enterprises…quickly put the corporate form to the use of many new ventures."

American revolution, democracy, and culture seem to provide a once and for all solution for the acceptance and prevalence of corporations and other organizational forms. Americans quickly adopted these tools in promoting social and economic development. What's left is just technical details on fixing the abuse of corporations by knitting a web of regulations. In this book, I provide largely ignored historical evidence to show that in early nineteenth century Massachusetts, the access to corporations was highly restricted and partisan. American revolution, democracy, and culture did not naturally lead to the open access to corporations for all groups of people. American civil society was neither naturally nor easily established.

Corporations assumed a large role in American history. Today, no one would doubt the tremendous power of business corporations, political parties, nonprofit organizations, churches, and other big organizations in American economic, social, and political life. The wide utilization of corporations, however, did not occur all at once, but happened over a course of the early nineteenth century. Despite revolutionary efforts, USA remained a limited access society where a certain faction of elites dominated the privilege of acquisition of corporate charters. I do not claim democracy doesn't work, but its effect varies differently within different social structure. In a limited access social order, where factions of elites formed coalitions and dominated various organizations, democracy either retains the elite rule or overthrows the whole elite dominant coalition. In the latter case, elite factions fall into violence and rent from trade dissipate. To retain these rents, elite factions would form a new dominant coalition again. In the end, we have a democracy with characteristics often identified as crony capitalism. Only in the open access social order, where entry of business and political organizations is open, the shift of political dominance does not generate severe negative consequences for the interests of other groups. Elites would not fight violently for controlling government, and democracy could be sustainable.

Competitive economy and politics reinforce each other and form a new equilibrium. The remaining question is why elites in the limited access society are willing to share rents with non-elites by allowing free entry of organizations.

The transition was neither inevitable nor obvious. It was only until the 1850s when states passed a series of general incorporation laws, the USA shifted from limited access to open access society. No group of people was excluded from the privilege of utilizing corporations anymore. Of course, the access was not universal, as sex, race, wealth, and class might still be *de facto* preconditions for forming organizations. But from the perspective of elite privileges, the access was open. As we have seen in previous chapters, under the banner of Federalists, Massachusetts elites formed a coalition and dominated various corporations such as banks, churches, universities, and academic societies. In banking, Federalists held monopoly by dominating the state legislature in charge of issuing charters for new banks, effectively prohibiting members of the opposing political parties, the Democratic-Republicans from opening banks. Political turnover in the period between 1810 and 1812, temporarily eliminated the Federalist political monopoly, and allowed for the possibility of open entry in the banking sector. Democratic-Republican legislature and Governor Elbridge Gerry implemented a series of reforms to remove Federalist's dominance. They refused to renew Federalist bank charters, and instead chartered their own banks. Democratic-Republicans distributed political favor for their supporters. After Federalists returned to power, however, they began to accommodate Democratic-Republicans in banking. The book shows that the emergence of civil society or open access was not born at the time of revolution or Constitution. Rather, these modern institutions took form through a process in which elite factions competed and cooperated back and forth.

What Tocqueville and some other scholars missed is the role of elites in the formation of civil society. From their perspective, civil society provides a check to the tyranny of the state, so the players in the story are organizations on one hand, and the state on the other. After all, the stories of "state vs civil society", or "state vs market" constantly draw people's attention in the course of the twentieth century, in which both state and corporations grew to a tremendous scale never seen before.

This perspective, however, missed the fact that it was individuals, the elites, who participated in and organized both state and corporations. And to a large extent, the same faction of elites, here the Federalists or Democratic-Republicans, organized corporations in all fields by dominating the state. Around 1800, over 70% of bank directors were state legislators, though the connection became weaker to 40% in the 1850s. State and civil society are not separate and independent entities. Political and financial elites were not checks on each other. They were just the same people. In a limited access society, we cannot count on civil society to provide a check on state, as both civil society and state belong to the same group of elites. Revolution and democracy might remove one faction of elites from both government and banks, but another faction of elites would grasp political power, dominate banks, and created limited access social order again. Elites still limited the privileges of banking and other business to themselves, just as what happened in Massachusetts in early nineteenth century and developing countries today. It was intra-elite conflicts that moved society to open access. As we have seen in the book, intra-elite competition did not eliminate elites from banking: political elites and banks were still connected, bankers remained wealthy, but the intra-elite competition did lead the banking sector toward free entry.

Intra-elite competition did not eliminate all elites from corporations, but they did pave the way for open access. The key to this transition was the creation of impersonal rules for elites. By 1829, Massachusetts had moved to impersonal rules for forming and operating a bank. Those rules provided sophisticated and powerful tools to banking organizations. The tools were not just listed in bank charters, but also they were embedded in the economic, political, and legal systems. These systems gave shape and substance to the chartered organizations. The next step was to extend charters to non-elites. Impersonal rules allowed all elites to form banks. As more elites received bank charters, a large number of small banks joined competition, and banking profits were not sustainable. The benefits from limited access kept decreasing. At the same time, opening access became more attractive for elites, as bank capital tax provided half of government revenue. Plenty of fiscal revenue even allowed the state to abolish property tax and poll tax during half of the years from 1826 to 1853.[2] Elites also benefited from extension of the banking privilege. While the interests from limiting access diminished, the interests from opening access kept growing. Critically, bank charters and access to those tools were first opened to elites, and in the 1850s it spread to non-elites. Intra-elite competition and the creation of impersonal rules for elites, therefore, were essential for transition toward open access.

American history has a complicated relationship with the notion of elites. Elites participated in and led the American revolution and played central roles in the formation of new governments in the late eighteenth and early nineteenth century at both the national and state level. The widespread antipathy toward political parties produced a curious politics in which elite groups competed for control of governments, attempted to plausibly deny that they had formed a political party to promote the interests and objectives of their group, and vehemently denounced the opposing elite groups as corrupt, dangerous, partisans who would wreck American society in pursuit of their own goals. It is difficult to overstate the sheer nastiness of early American politics.

There have been many approaches to this history by American historians. They differ in choosing the poles of their story: Federalists vs Republicans, Hamilton vs Jefferson, and Nationalist vs Decentralists. In many histories, the poles are abandoned as substantive devices, but retained as rhetorical ones. Accepting that the many sides of these many polarizing debates had merits as well as flaws, the interaction of elites is taken as a sign of the vibrancy of American culture and democracy. Then the bottom line often becomes a story of non-elites vs elites, of Democrats vs Whigs, and of Populists vs Plutocrats, and of communalists vs capitalist. This is the story of the triumph of revolution, democracy, and the interest of the common man. It is a great story, but not one that very well with historical reality, since elites are the primary actors in the early part of the story. In order to rescue the story, America has to be endowed with good elites who acted in the nation's best interest. The fluctuating historical fortunes of founding fathers like John Adams, Alexander Hamilton, and to a certain extent James Madison results from the periodic recalculations of what it means to be a good elite in American history. George Washington and Thomas Jefferson seem secure.

People outside the USA are doubtful that this kind of idiosyncratic and personalized American history holds much in the way of lessons for how their societies might attempt to promote development. Their doubts are not surprising. Their societies are plagued by elites that propose reforms and then subvert them, by populist leaders who rise to influence and power and then act just like the elites they replaced. The only way American history makes sense in the development context is if we recognize that American elites were as competitive, vindictive, and personally motivated as well as elites in nations around the world today. What differed about elites in the USA was the dynamics of the way how the elites interacted, not their moral character or political philosophy.

What happened in the USA, as exemplified by Massachusetts bankers, was a change in the internal dynamic of intra-elite competition. The change produced a set of institutional changes that altered relationships between elites. Significantly, Massachusetts moved to a set of impersonal rules for elites. At that point, the politics of banking moved from creating special privileges through unique provisions in charters (or geographic monopolies, for examples) to a system where all elites enjoyed the same organizational tools. Entry was still limited to those who possessed the political clout and wealth to get into the legislature, but that was becoming a lower bar as the dynamics of political parties shifted and the average tenure (commitment) of a state legislator declined. Many bankers remained politically connected and wealthy but the banking sector did move to de facto free entry, and no elite group was excluded from banking any longer.

Impersonal rules and relative open elite entry produced a large number of relatively small banks. The banks were profitable, but did not enjoy substantial rents from limited entry. Instead, banks were useful in combination with the growing manufacturing and commercial sectors (Lamoreaux 1996). Furthermore, bank capital tax was so large that the state abolished the property tax. Under those conditions, extending banking privileges to non-elites was no longer such a big deal.

Open access for banking played a critical role for the development of American financial sector, which in turn provided funds for the economic development. From 1820 to 1860, Massachusetts shares of banks and bank capital vastly exceeded its share of population in the Northeast region and in the USA. For example, in 1830, while Massachusetts had only 4.7% of the nation's population, it contained 20% of the nation's banks and 18.5% of the nation's banking capital (Wallis et al. 1994). As in Massachusetts, New England largely adopted free entry of banks. By 1860, Maine had 68 banks, New Hampshire 51, Vermont 44, Connecticut 74, and Massachusetts 178. Open access to banking promoted New England's rapid growth in manufacturing and commerce, where many small entrepreneurs wanted to set up banks to finance their own business. Open access banking also became widespread in other states. From 1837 to 1860, 18 states enacted free banking laws. First in Michigan in 1837 and New York in 1838, free banking laws allowed anyone who fulfilled certain requirement, such as raising a certain amount of capital, could operate a bank. Bank charters were no longer special laws passed by the legislature or subject to political connection. State by state, the USA opened access for banking. Since Americans coordinated the intra-elite relationship and solved the political problem of open access, later development in financial sector would largely focus on the regulatory issues, such as the soundness of banks and bank notes. Savings banks, investment banks, trust companies, insurance companies, and other financial institutions emerged in late nineteenth century and twentieth century, and played a significant role in American development and its global wrestling. People in these institutions did not need to worry that intra-elite competition would destruct them or restrict their access to financial organizations.

In the twentieth century, the USA rose to the superpower of the world. The American global dominance largely benefited from its tremendous scale and scope of business, financial, and political organizations. In most part of the world, people are not able to escape from the influence of giant American organizations. Google, Apple, Wal-Mart, Ford, General Motors, Harvard University, Goldman Sachs, J. P. Morgan, the New York Stock Exchange, the Chicago Board of Trade, the Standard Oil Trust, Carnegie Steel Corporation, the Federal Reserve, the US Federal Government, and many other American organizations have big clouts on people's life. Within Fortune Global 500 in 2016, 134 or more than 1/5 are American corporations.[3] Within the USA, a great number of business corporations, nonprofit associations, churches, schools, senate and house districts, local, county, and municipal governments, and political parties permeate all aspects of American life.

The tremendous scale and scope of organizations reflect the underlying political and economic social order that accommodated the growth of organizations. Open entry of organizations allows deep specialization facing a global market, and also the accumulation of knowledge necessary for managing big organizations. Open entry promotes competition and innovation at the quality, sales, technology, and management, and thereby provides the foundation for Schumpeter's creative destruction. It foresees the emergence of big organizations by merger and acquisition, Alfred Chandler's research subject. The internal governance and external regulation of big corporations, such as investment banks, became crucial issues in the twentieth century, after access was not exclusive for elites anymore.

All of these are based on the open access social order where no elite factions could exclude others from entry. The accommodation, however, does not exist in many developing countries. In these countries, elites in dominant coalition controlled all important organizations in society. The access to corporations and other organizational forms is not open. If there exists a big organization out of their control, elites have to either take over or eliminate it. Just as what happened in early nineteenth century Massachusetts, elites in these countries would outlaw banks of other factions. In a limited access society, we would not see the vast growth of organizations in a variety of economic, social, and political fields as in the USA. For a country to become a global competitor, it must solve the problem of conflicts among groups of elites and transit to open access society, just as what Massachusetts history has shown us.

The primary lesson to learn from Massachusetts is that even in a society with a long democratic tradition, with cultural norms that stress the importance of equality and charity, that it is difficult for a society to consciously and deliberately eliminate elite privileges. Support for, and limits on, organizations is a key element in those privileges. Until we understand the dynamics of how elites decide to move to impersonal rules for elites that can genuinely create and sustain open access for elites, we are unlikely to understand how to do it for the larger population. The naïve view that generating revolutions and transplanting democratic system is what facilitates political and economic open access, has not worked anywhere, even in the USA.

Notes

1. Arthur M. Schlesinger, "Biography of a Nation of Joiners," in *Paths to the Present: American Manners and Morals Seen in the Light of the History that has Conditioned them* (1949; Boston: Houghton Mifflin, 1964); Oscar and Mary Handlin, "Voluntary Associations," in *The Dimensions of Liberty* (Cambridge: Harvard University Press, 1961).
2. Charles J. Bullock, "Historical Sketch of the Finances and Financial Policy of Massachusetts from 1780 to 1905," Publications of the American Economic Association, 3rd ser., vol. 8, no. 2 (1907), p. 21.
3. *"Global 500 2016." Fortune*. Number of companies data taken from the "Country" box.

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Appendix

Table A.1 Number of legislators and legislators with party IDs, 1780–1859

Term year	Number of legislators	Number of legislators with party IDs	Share of legislators with party IDs
1780	263	0	0
1781	255	0	0
1782	228	0	0
1783	277	0	0
1784	275	0	0
1785	292	0	0
1786	250	0	0
1787	322	0	0
1788	300	0	0
1789	267	0	0
1790	246	0	0
1791	263	1	0.003802
1792	314	1	0.003185
1793	250	0	0
1794	247	0	0
1795	249	0	0
1796	268	4	0.014925
1797	240	178	0.741667
1798	255	226	0.886275
1799	253	221	0.873518

(continued)

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Table A.1 (continued)

Term year	Number of legislators	Number of legislators with party IDs	Share of legislators with party IDs
1800	303	287	0.947195
1801	337	320	0.949555
1802	278	263	0.946043
1803	300	293	0.976667
1804	326	319	0.978528
1805	388	386	0.994845
1806	523	519	0.992352
1807	424	422	0.995283
1808	524	524	1
1809	635	635	1
1810	683	683	1
1811	701	701	1
1812	794	794	1
1813	678	677	0.998525
1814	556	555	0.998201
1815	492	491	0.997968
1816	581	578	0.994837
1817	326	320	0.981595
1818	266	256	0.962406
1819	448	432	0.964286
1820	227	183	0.806167
1821	277	203	0.732852
1822	200	154	0.77
1823	337	185	0.548961
1824	290	138	0.475862
1825	241	24	0.099585
1826	282	23	0.08156
1827	393	18	0.045802
1828	399	53	0.132832
1829	548	38	0.069343
1830	494	145	0.293522
1831	522	522	1
1832	569	565	0.99297
1833	614	603	0.982085
1834	611	609	0.996727
1835	660	659	0.998485
1836	665	665	1
1837	675	675	1
1838	520	517	0.994231
1839	563	563	1
1840	561	561	1
1841	438	438	1

(continued)

Table A.1 (continued)

Term year	Number of legislators	Number of legislators with party IDs	Share of legislators with party IDs
1842	376	376	1
1843	393	393	1
1844	363	363	1
1845	314	314	1
1846	306	306	1
1847	295	295	1
1848	314	313	0.996815
1849	303	302	0.9967
1850	339	338	0.99705
1851	445	445	1
1852	442	442	1
1853	330	330	1
1854	350	350	1
1855	420	419	0.997619
1856	370	370	1
1857	396	394	0.99495
1858	284	284	1
1859	286	283	0.989511
1860	281	281	1
1861	280	280	1
1862	282	280	0.992908
1863	279	279	1
1864	283	282	0.996467
1865	281	280	0.996441
1866	283	283	1
1867	281	279	0.992883
1868	281	281	1
1869	281	281	1
1870	281	281	1
1871	281	281	1
1872	284	282	0.992958
1873	280	280	1
1874	282	282	1
1875	283	283	1
1876	280	280	1
1877	281	281	1
1878	283	283	1
1879	283	283	1
1880	282	282	1

Table A.2 Number of bankers, legislators, and party IDs

Year	Number of bankers	Number of bankers who were legislators	Number of bankers who were legislators with party IDs	Share of bankers who were legislators
1790	9	7	2	0.777778
1791	9	7	2	0.777778
1792	9	7	2	0.777778
1793	39	29	8	0.74359
1794	40	32	11	0.8
1795	40	29	11	0.725
1796	43	32	13	0.744186
1797	37	28	14	0.756757
1798	39	27	15	0.692308
1799	39	27	17	0.692308
1800	39	26	18	0.666667
1801	19	14	11	0.736842
1802	38	25	19	0.657895
1803	65	42	29	0.646154
1804	58	44	31	0.758621
1805	64	45	31	0.703125
1806	62	44	32	0.709677
1807	63	45	32	0.714286
1808	76	51	34	0.671053
1809	60	42	31	0.7
1810	64	44	33	0.6875
1811	69	47	36	0.681159
1812	80	64	51	0.8
1813	77	56	49	0.727273
1814	93	64	52	0.688172
1815	93	64	52	0.688172
1816	124	82	70	0.66129
1817	101	65	57	0.643564
1818	116	78	66	0.672414
1819	132	82	69	0.621212
1820	152	86	70	0.565789
1821	144	82	69	0.569444
1822	154	88	72	0.571429
1823	184	102	87	0.554348
1824	197	110	91	0.558376
1825	235	121	96	0.514894
1826	267	140	107	0.524345
1827	280	145	108	0.517857
1828	288	146	111	0.506944

(continued)

Table A.2 (continued)

Year	Number of bankers	Number of bankers who were legislators	Number of bankers who were legislators with party IDs	Share of bankers who were legislators
1829	320	157	123	0.490625
1830	316	152	124	0.481013
1831	302	148	117	0.490066
1832	345	166	134	0.481159
1833	419	198	163	0.472554
1834	431	194	159	0.450116
1835	423	183	153	0.432624
1836	368	166	140	0.451087
1837	339	136	122	0.40118
1838	375	160	131	0.426667
1839	311	134	116	0.430868
1840	328	137	121	0.417683
1841	322	135	118	0.419255
1842	291	117	103	0.402062
1843	263	108	95	0.410646
1844	254	98	88	0.385827
1845	251	95	86	0.378486
1846	255	97	87	0.380392
1847	254	97	87	0.38189
1848	296	123	103	0.415541
1849	303	123	102	0.405941
1850	306	128	106	0.418301
1851	322	138	117	0.428571
1852	972	438	383	0.450617
1853	979	448	397	0.45761
1854	1088	495	445	0.454963
1855	1209	556	506	0.459884
1856	1229	568	520	0.462164
1857	1239	570	525	0.460048
1858	1205	562	519	0.46639
1859	1231	565	527	0.458976

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