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4 The Interaction of Taxation and Regulation in Nineteenth-Century U.S. Banking

John Joseph Wallis, Richard E. Sylla, and John B. Legler

4.1 Introduction

Taxation and regulation command the attention of economists both as policy instruments and as objects of study in their own right. We want to know how taxes and regulations affect the behavior of individuals and firms. We also want to know why governments adopt particular taxes and regulations. The trade-offs between taxation and regulation are often a part of policy analysis. In international trade, for example, we consider a tariff (a tax) and a quota (a regulation) as potential policy substitutes or complements. In environmental economics pollution can be limited by a tax on output or by emission controls, equipment standards, or pollution permits (all regulations). But interactions between taxation and regulation are rarely considered when we try to explain why governments adopt certain policies. Governments, after all, impose taxes to raise revenue, and it is seldom clear how the desire to raise revenues is, or might be, related to its desire to change behavior (with the obvious exception of sin taxes).

When governments derive significant tax revenues from an industry or activity that they also regulate extensively, the relationship between taxation and regulation could potentially play a prominent role in explaining government

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behavior. Our attention was drawn to the problem in our preliminary investigation of state government revenues from banks in the eastern seaboard states in the early nineteenth century. We found that several states derived close to half their revenue from bank sources—taxes on bank capital, dividends on bank stock, and the like—while other states received little or no revenue from bank sources (Sylla, Legler, and Wallis 1987). Because state governments were also chartering banks and regulating the banking industry, we decided to examine more closely the connections between taxation and regulation of banks. To anticipate our results, what we found in a larger sample of nineteenth-century state governments is a striking connection between not only the level but the type of revenue derived from bank sources and the way in which the banking system in each state was regulated.

We believe that the early American state-chartered banking industry is an example of a more general phenomenon. When a government imposes any non-lump-sum tax (e.g., a per unit tax or an ad valorem tax), it acquires a "fiscal interest" in promoting the industry's output or sales, or both. The government's fiscal interest will depend upon what it is taxing. If the government taxes profits, it acquires an interest in larger profits. If it owns stock in a firm, it acquires a fiscal interest in raising the profits, and dividends, of that particular firm. If the state taxes inputs or outputs, it acquires a fiscal interest in larger inputs or outputs.

Political economy explanations of regulation usually focus on a set of conflicting interests, competing within the constraints of a political system that operates to diminish some interests and magnify others. We ask what happens when we consider the financial interests of the government itself, an interest that hardly needs representation at all. Our answer is that it matters a lot. The fiscal interest of state governments clearly mattered for early-nineteenth-century banking regulation. Nineteenth-century state governments relied heavily on revenues from specific businesses, such as banks, railroads, canals, and incorporations, and similar fiscal interests may have exerted an effect on regulatory policies in those industries as well. We consider the banking case in detail.

The idea that the fiscal interest of the state affects regulatory policy (and vice versa) has many potential applications in economic history. We begin, therefore, with a very general "model" of fiscal interest. The detailed study of nineteenth-century banking that follows is, in part, a test of the hypothesis and, in part, an explanation of the banking structure. We do not claim that the fiscal-interest model explains all interstate differences in banking regulation. The voluminous literature on banking provides a number of important explanations for that. Instead, we are trying to show that the fiscal interests of state governments were one of several important determinants of banking regulation. By doing so, we can illuminate both how fiscal interests interact with regulatory policy and add a new dimension to our understanding of nineteenth-century banking.

4.2 A Model of Fiscal Interest

The behavior of government is the outcome of myriad different interests competing to control the spending, taxing, borrowing, and regulatory powers of the state. Fiscal interests are only one interest. Without being specific about the other interests, we simply assume that governments maximize something, whether that something is political support, or monetary income for politicians, or stability for the bureaucracy. What the government maximizes is an issue of great interest and importance, but we are not going to address it here. For our purposes we simply assume that the government, however constructed, has some interests. It must decide, for example, how much to tax and spend, which it does as follows:

$$\max \pi = U(X) - C(V) - \lambda(X - V), \tag{1}$$

where X is expenditures, V is revenues, and $U(.)$ and $C(.)$ are dollar-valued utility and cost functions. The conclusions drawn from this type of model are simple and obvious. Governments maximize net benefits by equating the marginal benefit of spending another dollar with the marginal cost of raising an additional dollar of taxes.

Regulatory policy differs from expenditure and revenue decisions, because its political effects need not be related to levels of revenue or expenditure. A regulation can have a large effect on behavior at very low levels of expenditure, or a small effect on behavior at very high levels of expenditure. Including regulation in the government's objective function, where R represents the regulation variable, produces

$$\max \pi = U(X,R) - C(V,R) - \lambda(X - V). \tag{2}$$

Whether a regulatory policy has any fiscal effects will depend on whether dV/dR is zero, that is, whether regulation affects tax revenues.

Of course, regulation can rarely be represented by a number, and the interaction between regulation and tax revenues is rarely straightforward. Regulation comes in many different forms. Banking regulation included, among other things, controls on entry, note issue, capital requirements, accounting practices, and ownership structure. Revenues from bank sources included taxes on bank capital, taxes on bank dividends, taxes on bank clerks, dividends paid on bank stock, and bonus payments for the creation or renewal of a bank's charter. Regulation and taxation of other industries were equally complicated. We begin with a simple case.

Assume that the government imposes a per unit tax, t, on an industry's output, Q, so that revenues are

$$V = tQ. \tag{3a}$$

Suppose the government regulates entry into this industry and the regulation variable, R, represents the number of firms allowed into the industry.[1] If industry output is positively related to the number of firms, then industry output will also be related to the regulatory policy, $dQ/dR > 0$.

What will be the optimal regulatory policy? In combination equations (2) and (3a) suggests that both the tax rate, t, and the regulatory policy, R, will be determined endogenously: the regulatory policy and tax policy depend on each other. But what happens to the cost of changing R as t increases? Clearly, as governments impose a higher tax rate on output, the fiscal effects of changing the regulatory policy become higher. For example, if there are political benefits to be gotten from restricting entry by rewarding influential political supporters with market power, the cost of creating market power rises as t increases. The higher the tax rate, the greater is the state's incentive to allow entry.

This result is very simple. Even though we often think of the power to tax as the power to destroy, whenever the government establishes a tax on the output of an industry it also acquires an interest in increasing that output.[2] The interest is generated by the marginal benefits of expenditures. That is, every interest group contending for more expenditures benefits when the government raises another dollar of tax revenues.

But this is far from the whole story. Governments raise revenues in ways other than output taxes. Direct ownership of a firm or an industry, for example, gives the government a completely different fiscal interest. This case is particularly relevant for nineteenth-century banking, when states owned banks and banking systems. Now tax revenues are no longer tQ, but

$$V = t[pQ - C(Q)], \tag{3b}$$

where p is output price and $c(Q)$ is the industry (or firm) cost function. Profits flow directly to the state, and the tax rate becomes the share in total profits that accrues to the state.

In the case of government ownership, entry plays a different role from the case of a tax on industry output (or inputs). By limiting entry the government restricts competition and allows the firm to charge a higher price. While it is still the case that $dQ/dR > 0$, it may no longer be the case that $dV/dR > 0$ (recall that R is the number of firms in the industry determined by the regulation). It is probably the opposite, that is, $dV/dR < 0$, since more competition will tend to reduce profits, ceteris paribus. Under this tax structure, the higher the tax rate the greater is the state's incentive to reduce entry.

Regulatory policy and taxation are still determined endogenously in this case, but it is clear (depending on the structure of demand in an industry) that a government that imposes a tax on output will choose a different level of

1. It is awkward to represent the level of regulation with a number. In our example, as R increases, the regulation on entry becomes less stringent.

2. This assumes, of course, that the purpose of the tax in the first place was not to reduce output. But even then, fiscal interest will come into play.

regulation, that is, the number of firms in the industry, than a government that owns an equity interest in the industry. Expected combinations of fiscal interest and regulation are marked with *X*s in table 4.1. States that tax output should, ceteris paribus, encourage many firms to enter to increase output. States that own firms outright should discourage entry. States that both tax output and own equity will fall somewhere in between.[3] These theoretical insights form the basis for our analysis of early nineteenth-century banking.

4.3 Balancing Fiscal Interest and Political Economy

Early nineteenth-century American banking provides a good example of how a state's fiscal interest in an economic activity affects the manner in which it is regulated. From their beginnings in the 1780s, banks were corporations chartered by governments. Their very existence depended on the favor of politicians and government officials, and every state retained the sovereign prerogative of chartering banks.

Tension between a state's fiscal interest in banking and the political economy of bank regulation were resolved in a variety of ways. As a consequence U.S. history, especially before the Civil War, generated richly variegated outcomes across states in banking development, fiscal interests, and banking regulations. Regulatory regimes ranged from free entry to monopoly, and even to prohibition of chartered banks. Fiscal interests encompassed a variety of taxes on banks, partial or total state ownership of banks with resulting stakes in their earnings, and the ability to use the chartering power to direct bank lending and investment toward public purposes.

The state financial data we have gathered allow us to focus more closely on the state's fiscal interest. We can answer some questions about the wide variety of state banking experiences and regulatory approaches that all observers find in the antebellum years. Table 4.2 shows just how important revenues from bank sources were to states before the Civil War.[4]

Table 4.1 **The Relationship between Fiscal Interest and Regulatory Policy**

Revenue Source/ Fiscal Interest	Entry Policy/Regulatory Policy		
	Encourage entry	Limit entry	Restrict entry
Input/output tax	X		
Mixed revenues		X	
Direct ownership			X

3. There are more ways to derive revenue from banks than taxing output or owning equity. These different ways of raising revenue will be discussed in more detail in later sections of the paper.

4. The figures in the table are reliable in terms of general magnitudes but are still preliminary and subject to change.

What we have called "bank revenues" are revenues, both tax and nontax, that can be identified specifically with banking. For example, a state may have had a general property tax, and a specific property tax on banks. We would identify the latter as a tax on banks, but not the former. This is, after all, what we are interested in looking at: the specific revenues derived from banks, because they were banks.

The series for each state begins when it became a state. Every state data set has some missing years. The tables, therefore, present "decade averages," where the averages are for the years for which we have data, not for all years in the decade.

Table 4.2 shows that many states made do in the nineteenth century with little or no reliance on bank revenues, whereas other states relied heavily on bank revenues. We need to be careful, however, about the terms "heavy" and

Table 4.2 Bank Revenues as Share of Total Net Revenues (decade averages)

State	1800	1810	1820	1830	1840	1850	1860
CT	0.00	0.09	0.09	0.27	0.37	0.34	0.45
DE	0.01	0.12	0.44	0.43	0.56	0.52	0.40
MA				0.61	0.45	0.34	0.21
ME	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH	0.00	0.00	0.00	0.03	0.01	0.00	0.00
NJ					0.00	0.00	0.03
NY	0.04	0.06	0.06	0.01	0.01	0.01	0.01
PA	0.42	0.38	0.53	0.23	0.09	0.04	0.06
RI	0.00	0.02	0.02	0.24	0.41	0.46	0.46
VT	0.00	0.00	0.03	0.08	0.10	0.04	0.02
Average	0.06	0.08	0.15	0.21	0.20	0.17	0.16
MD		0.29	0.05	0.09	0.18	0.04	0.03
NC			0.31	0.34	0.44	0.01	0.00
SC	0.05	0.09	0.13	0.01	0.05	0.00	0.00
VA	0.00	0.12	0.02	0.00	0.09	0.13	0.10
Average	0.02	0.16	0.13	0.11	0.19	0.04	0.03
IL				0.03	0.04	0.00	0.00
IN				0.03	0.04	0.07	0.00
MI					0.03	0.01	0.01
MN							0.00
OH		0.00	0.00	0.01	0.04	0.01	0.02
Average		0.00	0.00	0.02	0.04	0.02	0.01
AK					0.06	0.00	0.01
MO						0.13	0.06
MS			0.00	0.04	0.02	0.00	0.00
TN					0.00	0.00	0.14
Average			0.00	0.04	0.03	0.00	0.04

Notes: Blank cells in the table are decades without data. The decades run from the year ending in five to the year ending in four, that is, "1830" is 1825 to 1834. The "Average" row is the simple average of states in each region.

"large." Some states—Connecticut, Massachusetts, Rhode Island, Delaware, Pennsylvania, and North Carolina—typically received at least a third, and in a few decades close to half, of their revenues from bank sources. Another group of states—Maryland, New York, Vermont, and Virginia—flirted with bank revenues that approached 10 percent of total revenues. Only the states in the first group are heavily dependent on business revenues on a consistent basis, but the second group was (sometimes) dependent on bank revenues.

In none of the states, however, can the level of bank revenues be said to be large by any contemporary measure. Using Weiss's (1992) conjectural income estimates for the early nineteenth century and standard income estimates for the later nineteenth century, state government revenues were in the neighborhood of 0.3 percent of income in 1800 and about 1.25 percent of income in 1900.[5] Even in states where bank revenues were very important to the state's budget, tax *rates* on banks were probably very low. State governments were simply smaller actors on the economic stage than they were to become later.

The states that relied heavily on bank revenues may have done so only because they had small total revenues relative to other states. In that case the relatively large share of bank revenues might be a reflection of the small denominator in the ratio rather than large bank revenues. Examination of per capita revenues, however, suggests that this is not the case. States with large bank revenue shares range from those with the highest levels of real per capita revenues (Massachusetts, Pennsylvania, and Maryland) to those with low levels of real per capita revenues (Delaware).

Table 4.2 tells us that banks were often an important source of state revenue, but little more. What follows in section 4.4 are detailed histories of banking regulation in nine states. Several issues affect how we present those histories. They involve the role of endogeneity and causation in our model.

We explicitly modelled the choice of tax policy and regulatory policy as simultaneous. States jointly maximize the difference between the benefits of spending money and regulating industries and the costs of raising revenues and regulating those same industries. In terms of table 4.1, the model cannot say whether a state will tax output and encourage entry or own a monopoly bank and eliminate entry. The model only suggests that states will array themselves along the diagonal.

We do not explain why a state chooses to be at one end of the policy spectrum or the other in this paper. To do that would require a full model of revenue structure and one of regulatory structure in addition to the model of the interaction between taxation and regulation we are examining in this paper. Because of the endogenous nature of taxation and regulation, causality can run both

5. Weiss's estimate for 1800 is $77 in 1840 dollars or $81 in 1880 dollars. If we take $0.35 as a reasonable middle ground for the per capita revenues from banks in 1800, the state government share of income is .0043, or 0.4 percent. In 1900 per capita income was $300 in 1880 dollars and per capita revenues were somewhere in the neighborhood of $3 to $4, or between 1 and 1.3 percent of income.

ways. A state may choose to restrict entry because it earns revenue from state ownership of bank stocks. It might also end up owning bank stock because it wants to restrict entry into the banking industry to protect the profits of existing banks, and the existing banks pay for this privilege by selling the stock to the state on attractive terms.[6] We have little to say about why a state ends up with one policy or another.

The endogeneity issue raises two other problems that can be dealt with. First, since taxation and regulation are endogenous, the pairs of policy outcomes that we observe across the states may be the result of an unidentified third factor that we have not considered. For example, the northeastern states were more commercially developed than the southern and western states. We would expect northern states to have more banks and more bank revenues, regardless of state fiscal policy. A pattern of regulation and taxation that varied systematically from north to south might have nothing to do with our explanation. Northeastern states might tax bank capital because there was a lot of bank capital to tax, and southern states might own lots of bank stock because that was the only way they could establish banks. High numbers of northern banks might reflect high profits in banking rather than ease of entry in northern states, with the reverse true in the South.

A second problem is related to a secular trend in corporation law, particularly banking incorporation. As one of us has argued (Sylla 1988), American banking was the first industry to enjoy general incorporation laws, such as the New York free banking law of 1838. By 1860 many states had some version of a free banking law with easy incorporation. Perhaps what we are seeing is a movement from equilibrium policy in 1800—state-owned monopoly banks—to another equilibrium in 1860—an open and competitive banking industry. The movement along the diagonal in table 4.1, therefore, might be purely fortuitous.

We can deal with both of these problems. We have dealt with the problem of an unexamined third factor by examining regulatory structure and fiscal interest at the regional level. We chose three states from the Northeast, three from the South, and three from the West. The regional grouping was chosen to illustrate that the differences in banking structure across states *within* each of the three regions are as substantial as the differences *across* the three regions. The association we find between taxation and regulation was not due to regional differences in commercial or economic development.

The secular trend in corporation law is important, but several of the states examined clearly indicate that more than a secular trend was at work. For example, Maryland owned bank stock and restricted entry for a time; then sold its bank stock, taxed bank capital, and encouraged entry; and still later began to sell bank charters and once again restrict entry. There was a trend toward

6. There is evidence of both kinds of behavior in the early nineteenth century. See the discussion of Virginia and Maryland in section 4.4.

free incorporation, but there was also enough variation in state experience to determine that the relationship between tax structure and regulatory policy was not the result of a simple trend.

4.4 Regional Banking Regulations: Differences among States

In 1787 the various states took very similar approaches to the new (for Americans) business of banking. During the early decades from 1781, when the first bank was chartered, to 1811, when the first Bank of the United States lost its charter, banks were regarded everywhere as public utilities. In return for monopolistic franchises they were to perform public services such as providing the paper currency that the states themselves could no longer provide because of constitutional prohibitions. They were also depositories and transferrers of public funds. Usually there was only one bank in a town; only the very largest cities had two or three.

The monopolistic privileges conferred by bank charters generated handsome profits for banks. Since politicians and governments made these profits possible, why should they not share in them? The answer was obvious to a people who deemed government necessary and therefore knew that it had to be paid for, but who nonetheless were averse to taxation. Consider the results of the plan for organizing Pennsylvania's finances developed by the young Albert Gallatin as a state legislator in 1791. The plan, aided by the federal assumption of state debts, produced a revenue surplus for the state. Decades later Gallatin wrote:

> The fear that this [the surplus] would be squandered by the legislature, was the principal inducement for chartering the Bank of Pennsylvania, with a capital of two millions of dollars, of which the state subscribed one half. This, and similar subsequent investments, enabled Pennsylvania to defray, out of the dividends, all the expenses of government without any direct tax during the forty ensuing years, and till the adoption of the system of internal improvement, which required new resources. (Quoted in Stevens 1898, 46–47.)

In our earlier paper we documented the fiscal interest of the oldest eastern-seaboard states in their banks (Sylla, Legler, and Wallis 1987). The evidence available to us then, incomplete as it was, indicated that these states as a group obtained, on average, about one-fifth of their ordinary revenues (net of loans) from banks. Most revenues took the form of taxes on banks or returns on state investment in banks. There were some instances of what today would be termed "off budget" financing. States occasionally required, for example, that chartered banks provide various forms of financial aid to institutions and enterprises that the states wanted to support. Banks financed activities the public wanted while governments avoided the need to fund them with taxes. Lotteries, also popular in this early era, performed a similar function in public finance.

We know from such classics as Bray Hammond's *Banks and Politics in America from the Revolution to the Civil War* (1957) that antebellum banking was highly politicized and that the outcome of the political process resulted in a wide variation across states. Hammond saw this as a result of battles between the commercial and industrial entrepreneurs, who wanted cheap credit, and those Jeffersonian idealists, farmers, and ordinary working folk, who wanted to keep America simple, upright, and free from the vicissitudes of bank credit. In Hammond's view both sides in the battle failed to see that money, banking, and credit had to have a controller in the form of a central bank; he paid almost no attention to the state's fiscal interest in banks.

Table 4.3 illustrates the variety of banking experiences and outcomes for the nine states before the Civil War. The table shows the state shares of U.S. population, the state shares of the number of banks, and shares of bank capital in 1820, 1830, 1850, and 1860. The three northeastern states—Massachusetts, New York, and Pennsylvania—are the largest of the commercial and industrial Northeast. The three south Atlantic states—Maryland, Virginia, and South Carolina—are states of the plantation-oriented, slaveholding South that contained important commercial centers. The three midwestern states—Ohio, Indiana, and Missouri—are part of the newly settled frontier regions. Together these nine states contained half or more of the nation's population, banks, and bank capital at each of the four dates.

The table indicates some striking, if unsurprising, contrasts. The three states of the Northeast had 25 to 30 percent of the U.S. population and 40 to 50 percent of the nation's banks and bank capital throughout the antebellum period. The three southern states saw their combined population share cut in half between 1820 and 1860, but were able to maintain a bank capital share that was near to, and in 1850 and 1860 actually above, their population share. Their share of U.S. banks was always lower than their share of population because they tended to have larger banks and often banks with branches. The three western states increased their shares of population, banks, and bank capital from 1820 to 1850. They about held their own in all three categories during the 1850s. But the share of population for these states greatly exceeded their share of banks and bank capital at all dates, and in two of the three states there were no chartered banks operating in 1830. These data, taken together, are supportive of customary characterizations of the three U.S. regions in the antebellum era.

Another, more interesting way of viewing the same data is presented in table 4.4. Here we treat each of the three regional groupings as a separate unit and ask what were the differences among the three states in each group. We find that the differences *within* each group of states, which are ostensibly similar in their level of economic development and in the nature of their state economies, is at least as great as the differences we find *across* the three regions. In the Northeast, for instance, Massachusetts's regional share of banks and bank capital vastly exceeds its population share at all dates, while Pennsylvania's share of the two banking variables is, after 1820, considerably less than its popula-

Table 4.3 **Selected State and Regional Shares of U.S. Totals, 1820–60**

	1820			1830		
State	Population (%)	Bank (%)	Capital (%)	Population (%)	Bank (%)	Capital (%)
MA	5.4	9.1	10.3	4.7	20.0	18.5
NY	14.2	10.7	18.6	14.9	11.2	18.2
PA	10.9	11.7	14.4	10.4	10.0	13.3
Region	30.6	31.5	43.3	30.0	51.2	50.0
MD	4.2	4.6	6.6	3.5	3.9	5.7
VA	9.7	1.3	5.1	8.1	1.2	5.1
SC	5.2	1.6	4.4	4.5	1.5	4.2
Region	19.2	7.5	16.1	16.1	6.6	15.0
OH	6.0	6.5	1.8	7.3	3.3	1.3
IN	1.5	0.6	0.2	2.7	—	—
MO	0.7	0.3	0.2	1.1	—	—
Region	8.2	7.5	2.2	11.0	3.3	1.3
U.S. Totals	9,638	307	$102	12,866	330	$110

	1850			1860		
State	Population (%)	Bank (%)	Capital (%)	Population (%)	Bank (%)	Capital (%)
MA	4.3	14.3	16.2	3.9	11.0	15.3
NY	13.4	22.5	21.3	12.3	19.2	27.1
PA	10.0	5.7	8.5	9.2	5.1	6.0
Region	27.6	42.5	46.0	25.4	35.3	48.4
MD	2.5	2.9	4.1	2.2	2.0	3.0
VA	4.8	4.3	4.5	3.9	4.4	4.1
SC	2.9	1.7	6.1	2.2	1.3	3.5
Region	10.2	8.9	14.8	8.3	7.7	10.6
OH	8.5	6.7	3.3	7.4	3.3	1.6
IN	4.3	1.6	1.0	4.3	2.3	1.0
MO	2.9	0.7	0.6	3.8	2.4	2.1
Region	15.7	9.0	4.9	15.5	8.0	4.7
U.S. Totals	23,192	830	$213.9	31,443	1,597	$422.5

Sources: Population is taken from U.S. Bureau of the Census 1975. The number of banks and the amount of bank capital for 1820 and 1830 are taken from Gilbart 1967, 43–48; for 1850 and 1860 from Sylla 1975, 249–52.

Notes: All dollar totals are in millions of current dollars. Each variable—population, number of banks, and amount of bank capital—is reported as a share of the total population, number of banks, and bank capital in the entire United States in each year.

tion share. New York is more like Pennsylvania in 1820 and 1830 but becomes more like Massachusetts in 1850 and 1860.

In the South Maryland follows a pattern like that of Massachusetts—higher shares of banks and bank capital than population—and then becomes more like New York. Virginia in 1820 starts out like Pennsylvania ends up in 1850

Table 4.4 **Within-Region Shares of Population, Number of Banks, and Bank Capital, Three Geographic Regions, 1820–60**

	1820			1830		
State	Population (%)	Bank (%)	Capital (%)	Population (%)	Bank (%)	Capital (%)
Northeast						
MA	17.8	28.9	23.8	15.7	48.5	37.1
NY	46.6	34.0	43.0	49.5	27.2	36.4
PA	35.6	37.1	33.2	34.8	24.3	26.5
South						
MD	22.0	60.9	40.9	21.6	59.1	38.0
VA	50.8	17.4	31.8	50.4	18.2	33.9
SC	27.2	31.7	27.3	28.0	22.7	28.1
Midwest						
OH	73.1	87.0	80.0	66.0	100.0	100.0
IN	18.5	8.7	8.9	24.1	—	—
MO	8.4	4.3	11.1	9.9	—	—

	1850			1860		
State	Population (%)	Bank (%)	Capital (%)	Population (%)	Bank (%)	Capital (%)
Northeast						
MA	15.5	33.7	35.2	15.4	31.2	32.1
NY	48.4	53.0	46.3	48.4	54.3	55.4
PA	36.1	13.3	18.6	36.2	14.5	12.5
South						
MD	24.6	32.4	27.8	26.3	25.8	28.1
VA	47.2	48.6	30.7	46.7	57.7	38.3
SC	28.2	18.9	41.5	27.0	16.7	33.5
Midwest						
OH	54.2	74.7	68.4	48.0	40.9	33.9
IN	27.1	17.3	20.0	27.7	29.1	21.4
MO	18.7	8.0	11.6	34.3	29.9	21.4

Sources: See table 4.3.

and 1860, but ends up like Pennsylvania starts out in 1820. South Carolina is more like New York, with population shares roughly equal to banking shares (although the banking shares decline slightly). In the West, Ohio, the early developer in this frontier region, dominates the banking data at the first three dates but then slips in its regional banking shares during the 1850s, while Missouri exhibits striking increases in the banking shares in that decade.

What explains the antebellum banking differences we find within the states of relatively homogeneous economic regions? We believe that it is mainly the result of differences in the fiscal interests each state developed in its banks and, as a consequence, in the approach each state took toward banking regulation, especially the way each state regulated entry. The following discussion attempts to bring out the political and economic forces that led to the observed differences within each region.

4.4.1 The Northeast

Why did Massachusetts from 1820 to 1860 develop shares of banks and bank capital that vastly exceeded its share of population in the Northeast region and in the United States, as tables 4.3 and 4.4 indicate? The answer, we think, lies in the Bay State's decision to levy a 1 percent per annum tax on the capital of Massachusetts banks in 1812. The tax, which became the mainstay of the state's revenue from then until the Civil War (Sylla, Legler, and Wallis 1987), gave the state a fiscal interest in the growth of bank capital. Massachusetts relied heavily on the bank capital tax throughout the antebellum period.

Massachusetts's rapid growth in manufacturing and commerce was diffused among a large pool of small entrepreneurs. These entrepreneurs wanted to set up their own banks and borrow from them—what Naomi Lamoreaux (1994) terms "insider lending." This also meant a large increase in the number of unit banks. In the Settlement of 1812, Massachusetts opted for "free-and-easy incorporation" (free entry) and the tax on capital (Handlin and Handlin 1947, 175).

Before 1812 the state's banking policy was more like the other states that chartered the nation's earliest banks.[7] Massachusetts was then an investor in, and dividend recipient from, banking monopolies akin to public utilities that issued hand-to-hand currency. In that period the state came to own one-eighth of the capital stock of Massachusetts banks. It protected its investment by a reluctance to grant new charters, born of a fear that competition would lower the commonwealth's return on investment. Except for Boston, towns received only one chartered bank, and unchartered private or "unauthorized" banking was restrained by law as early as 1799 (Handlin and Handlin 1947, 123).

Why Massachusetts changed the nature of its fiscal interest in banks in 1812 is not clear. The state was not facing a fiscal crisis at the time, although it did face political pressures from those who wanted charters for more banks of issue. A tax on bank capital had been proposed on more than one occasion in earlier years by not enacted. Perhaps the growth of banks and bank capital that was actually allowed, and the clamor for more, gradually increased the legislative interest in the revenue possibilities of such a tax. By 1812 legislators apparently became convinced that banking privileges had to be shared. Even the old banks, an interest group invariably opposed to new entry, muted their opposition because to oppose new entrants would be "hard and invidious" (Handlin and Handlin 1947, 124–30; Bullock 1907, 26–30). The old Puritan conscience may have been at work, too. In any case, after the Settlement of 1812, the state proceeded to liquidate its bank stock to pay state debts, which it completed by 1820, and to freely charter banks when requested. It "consis-

7. The early financial records for Massachusetts cannot be used for our purposes until the 1820s.

tently brushed aside qualmish attempts to curb expansion" of banks and their note issues (Handlin and Handlin 1947, 174).

One such attempt, or proposal, came from Nathan Appleton (1831), who attacked the bank tax as excessive, unwise, counterproductive, and pernicious. Appleton, for safety and soundness reasons, wanted note issue restricted to large, well-capitalized banks and limited to one-third of their capital. He argued for a 3 percent tax on note circulation, to replace the 1 percent tax on capital without sacrificing revenue. (That revenue neutrality would have been true, as he did not note, only if all banks were large and well capitalized.) Appleton apparently represented the views of the large Boston banks that had relatively more capital and relatively fewer notes in circulation than the small country banks. Such banks would have benefited from lower taxation under Appleton's proposal, provided their note circulation was less than a third of their capital. But then the state would have less banknote currency than it did with the tax on bank capital. The legislature ignored his proposal, kept chartering banks when requests came in, and continued to tax their capital.

Elsewhere in New England, Rhode Island also enacted a tax on bank capital. Rhode Island taxed capital at a lower rate than Massachusetts, but coupled it with higher rates on increases in the capital of existing banks and bonus taxes for newly issued charters. Like Massachusetts it had many small banks, had invested a large amount of capital in banking, and typically received a significant proportion of total revenue from its banks. Maine was a part of Massachusetts when the 1812 tax on bank capital was instituted, and it maintained the tax after statehood in 1820. New Hampshire taxed bank capital at half the Massachusetts rate starting at 1821 (Sylla, Legler, and Wallis 1987). In our view the fiscal-interest implications of these measures go far in explaining the unusually high concentration of U.S. banks and bank capital in antebellum New England.

The key issues of the state's fiscal interest in banking, and therefore of the way in which it might be led to regulate bank entry in pursuing that interest, are delineated by the example of Massachusetts. Hence, we may be briefer in discussing the other states in our sample.

New York is a most interesting case. What needs to be explained is the Empire State's retarded development of banking compared with Massachusetts, revealed in our data for 1820 and 1830, and then the catching up and attaining of a leading position in bank numbers and capital in 1850 and 1860. The explanation is straightforward. Like Massachusetts, New York developed a substantial investment interest in banks during the early period and then liquidated most of its holdings by 1820. Unlike Massachusetts, proposals for a tax on bank capital were defeated in the legislature in 1815, 1818, and 1819. Instead of developing a tax interest or maintaining an investment interest, New York "privatized" these interests for political purposes.

Control of bank chartering in the late 1810s passed into the hands of the Albany Regency, the policy-making committee of the New York Republican

Party, headed by Martin Van Buren. Control over the banking system was achieved by restraining private banking by legislation in 1818, and then inserting a "two-thirds clause" in the state constitution of 1821—there would be no charters without a two-thirds vote by the legislature. Charters went only to friends of the Regency. Political discipline was maintained by allowing legislators to subscribe at par to initial offerings of bank stock, which then sold at a premium because of entry limitations. Between 1819 and 1828, a period of canal-related growth in the state economy, only ten banks were chartered; in the same period Massachusetts chartered more than fifty. New York's canal-fund revenues were deposited in friendly banks, a forerunner of the Jacksonian policy on the federal level a decade later.

Because bank charters were awarded for political correctness rather than on economic merit, bank defaults and failures became a problem for the Regency's continued domination. The solution was the Safety Fund, a bank-liability insurance plan proposed by Van Buren, then governor, in 1829. After that date, chartering activity picked up, but it was far less than the demand for charters. In 1836, for example, charters for ninety-three new banks were proposed, but only twelve were approved. Corruption in legislative chartering and the Panic of 1837 combined to defeat the Regency and the Republicans in that year. When their opponents, the Whigs, took office, they passed the now famous New York Free Banking Act of 1838. Thereafter, New York caught up with and eventually surpassed the far smaller state of Massachusetts in bank numbers and capital (Seavoy 1982, chaps. 3–6).

Pennsylvania lagged both Massachusetts and New York in antebellum banking development, although the difference between the Keystone and Empire States was minimal in 1820, as shown in table 4.4. The nature of the state's fiscal interest in banking is an important part of the story. Pennsylvania was a large investor in its banks, for reasons discussed in the quotation from Gallatin above. Unlike Massachusetts and New York it maintained its investment interest into the early 1840s, when its bankruptcy forced it to liquidate its bank shares. Its fiscal interest was of an investment nature—bank dividends. In the words of an 1822 legislative committee, bank dividends were Pennsylvania's "first and principal source of revenue" (quoted in Hartz 1948, 90). Bank dividends accounted for roughly 40 percent of total revenues from 1795 to 1825, declining to 18 percent from 1825 to 1835, and disappearing after 1845.

Pennsylvania's fiscal interest in banks created incentives for the state to restrict charters. This was recognized. An earlier legislative committee of 1807–8 on charter proposals noted, "Upon such applications the stake the commonwealth already has in . . . existing institutions ought always to be kept in view" (quoted in Hartz 1948, 53–54).

The state recognized that these incentives were in conflict with the public interest more generously conceived to allow easier entry into banking. In the legislative session of 1812–13, a resolution introduced in the legislature stated, in part:

> Whereas, the intimate connection and union of pecuniary interests between a government and great monied institutions, tends to create an influence, partial to the latter and highly injurious to the former. It being the duty of government to consult the general will and provide for the good of all, embarrassments must frequently be thrown in the way of the performance of this duty, when the government is coupled in interest with institutions whose rights are founded in monopoly, and whose prosperity depends on the exclusion and suppression of similar institutions. The government in such cases becomes identified with these establishments, and the means of promoting and extending commerce, manufactures, and agriculture equally over the whole state for the general good are too often lost sight of by this dangerous and unnatural union. (Quoted in Schwartz 1987, 11.)

The resolution was defeated by legislators who looked after a different perception of the public interest.

Bank chartering in Pennsylvania from the 1790s to the 1840s was characterized by bidding wars between the old banks, which wanted to keep newcomers out, and the new banks, which wanted to get in. Besides arranging for the state to own bank shares, legislators discovered that bonus taxes could also be collected. Whether a charter was approved depended on which party, the proponent or the opponent, made the most attractive offer to the state. The most famous example occurred in 1835, when a chastened Nicholas Biddle desperately sought a Pennsylvania charter for the Bank of the United States, whose federal charter was about to expire. The bank's lobbyist spent $128,000 on legislative pressure, and in the end the bank, by the terms of the state charter, had to pay Pennsylvania a bonus of $2 million and grant the state a "temporary" loan of $1 million annually as well as a "permanent" loan of $6 million (Hartz 1948, 55, 64).

Such terms could be extracted only if bank charters were restricted, so that the banks could recoup their payments in excess profits. Hence, the nature of Pennsylvania's fiscal interest dictated a slow growth of banking in the state, relative to Massachusetts and, from the 1830s, to New York.

The northeastern states provide a very strong test of the fiscal-interest hypothesis. All three of these states contained major commercial sectors, all were leading industrial states, all had relatively high incomes. Each state began the nineteenth century with the same banking policy: charter a few banks as public utilities in which the state government owned a substantial equity interest. But the three states thereafter moved along divergent paths, paths that neatly trace the diagonal of table 4.1. Massachusetts taxed bank capital and encouraged entry. Pennsylvania owned bank stock and discouraged entry. New York realized political gains from granting charters and moved through a middle ground until political forces displaced the Regency. Other regions show the same pattern, but imposed over a different background.

4.4.2 The South

Maryland early, and South Carolina late, in the antebellum era, followed the

Massachusetts pattern of a bank capital share well in excess of the population share. Virginia, however, replicates the laggard pattern of Pennsylvania. The fiscal-interest motives for these differences were similar to, but more mixed and muted that, those in the Northeast.

Maryland, like other old states, created its initial fiscal interest in banks by investing in them. But the actual investment was not high. The state, when granting bank charters, reserved the right to invest but seldom did so, and then only to a limited extent. There was no investment of state funds after 1811. In the 1830s, when the demand for bank capital was great, the state sold its rights to subscribe to shares of newly chartered banks to private investors and pocketed the cash for the treasury. Selling such rights was a streamlined method of capturing the value that arose from restricting the number of bank charters.

In 1813 the state's fiscal interest in banks began to change, as it did in Massachusetts in 1812. Old banks had their charters, due to expire in 1815, extended to 1835 on two conditions. First, in keeping with the growing demand for internal improvements, the renewal charters directed the banks to subscribe to a road-building fund, implementing a proposal that annually arose in the legislature after 1803. Second, the charters required the banks to pay an annual tax of $20,000 into a fund to support schools. In 1815 the tax was changed to an annual tax of twenty cents per hundred dollars of capital paid in. The school tax continued to 1863, yielding $30,000 to $40,000 per year. These measures shifted the state's fiscal interest from one that benefited from restricting bank charters to one that benefited from having more banks and more bank capital. Banks chartered nearly doubled, from fourteen to twenty-seven, between 1812 and 1819 (Fenstermaker 1965). But about half failed. Nonetheless, among its southern peer states, Maryland in 1820 and 1830 stood out for its disproportionate banking development.

Around 1830 Maryland caught the Pennsylvania bug and began to sell bank charters for bonus payments, reverting in part to its earlier fiscal interest. As in Pennsylvania, the bonuses that could be extracted, like the rights to subscribe to bank shares, depended on restricting the number of charters granted. In 1835 an earlier monopoly granted to the existing banks of Baltimore was renewed in return for bonuses aggregating $75,000; no new banks were chartered in Baltimore for more than a decade. In 1850 and 1860 our data indicate that Maryland had retreated from being a banking leader in its region to being merely average.

In this respect Maryland traded places with South Carolina, whose regional share of capital and banks about matched its share of population in 1820 and 1830, but then increased to reach a disproportionate level of bank capital in 1850 and 1860. South Carolina developed an interesting mixed system of private chartered banks located primarily in Charleston and a state-owned bank, the Bank of the State of South Carolina, headquartered in Charleston with branches throughout the state. The capital of the Bank of the State consisted of funds in the state treasury; thus it varied from year to year, usually in a range of $1.5 to $4 million. The Bank of the State did compete with the private banks in Charleston, but its main and intended purpose, in the eyes of the planter-dominated legislature, was to extend credit facilities to planters in the interior. This business was not pursued by the private, merchant-oriented banks of Charleston.

South Carolina moved to the banking forefront of its region in the mid-1830s when the Charleston branch of the Bank of the United States was forced to close. It was succeeded by the Bank of Charleston, newly chartered by the state with a large capital of $2 million, which was soon increased to $3 million. The Bank of the State opposed the chartering of this rival; losing the battle, the Bank of the State bought a large block of stock in the Bank of Charleston (Lesesne 1970, 143–45). In 1836 South Carolina also chartered the Southwestern Railroad Bank to aid railroad development, and subscribed to its stock (Schweikart 1987, 103–8; Lesesne 1970, 145–46).

South Carolina's mixed fiscal interest in banking was in the profits of the Bank of the State and in bonus payments from the chartered private banks, which provided a modest annual revenue (Lesesne 1970, 149). The ownership interest in the Bank of the State might have been expected to lead to a restriction of competitive charters. Compared with the northeastern states, there were not so many independent banks in South Carolina, but unlike the Northeast many of the South Carolina banks had branches. The state's liberal banking policies after 1830, despite the investment interest in the Bank of the State, appear to have resulted from the urban-rural division of labor in banking, with the Bank of the State intended to specialize in lending to planters. With that interest, the state had few objections to encouraging chartered commercial banking in centers such as Charleston.

Virginia, the largest southern state studied here, with about half of the combined population of our three-state southern region between 1820 and 1860, was the laggard of the three in banking development. The nature of Virginia's fiscal interest in its banks was once again an important factor. The state chartered a small, mercantile bank in Alexandria in 1792. It was highly profitable to its owners, but it was transferred from Virginia's jurisdiction to that of the District of Columbia from 1801 to 1847.

Antibank sentiments in the state delayed a second charter until 1804, when the Bank of Virginia was formed, with headquarters (the "mother bank") in Richmond and branches in three other towns. The state subscribed for one-fifth of the stock, made the bank's notes acceptable for payments to the state, and deposited all public moneys in it. A conscious goal was to share in the profits of banking, a goal furthered in 1805 by a law banning note issues of unchartered private banking companies. By 1811 other towns wanted banks or branches of the Bank of Virginia, which the bank had up to then refused to open. Legislators considered several options—independent banks, an enlarged Bank of Virginia, or a second mother bank with branches. The last option was chosen. This was in spite of opposition and a counteroffer from the Bank of Virginia. The state's motivation was revenue maximization. The new bank would pay more to the state in 1812, and the wily legislators reasoned that the Bank of Virginia would pay more to have its charter renewed in 1814 than it was willing to pay in 1812 to prevent the second bank from receiving a charter. Interestingly, a proposal was made at the time to build new roads in the state by taxing bank capital 2 percent per year, but it was not enacted (Starnes 1931, 43).

Thus by 1812 a pattern was set that would control bank chartering for decades in Virginia. The state would charter a few large, well-capitalized banks with branches and would take large ownership stakes in them. The state's shares were paid for gradually as dividends accrued on them, a sort of tax on the private shareholders, who were also charged bonuses and required to make loans to the state in return for further favors.[8] On terms such as these, the state in 1817 chartered two new mother banks with branches in the western part of Virginia.

That was the situation until 1834, when a legislative committee was appointed to consider the expediency of funding internal improvements by means of increasing bank capital. The committee concluded that "the chief reason Virginia had not advanced as rapidly as other states lay in the slow development of her banking facilities" (Starnes 1931, 74). Despite proposals to do more, the state responded with deliberate speed by chartering one new bank in 1834, another in 1837, and another one in 1839. Virginia legislators were protecting the value of the state's investments in banks.

No more banks were chartered until 1851, when Virginia, responding to demands for more banking capital and the reluctance of its old banks to provide it, adopted free banking. The old banks responded to the competitive threat of free banking by expanding their capital and opening twenty-four new branches in the next five years. Although thirty-five free banks were granted charters, after the old banks expanded their operations, only thirteen went into operation. Virginia's experience suggests that the threat posed by free banking may have mattered as much as or more than the innovation itself.

To discharge its public debts, Virginia liquidated its bank shares in 1856, which amounted to one-seventh of all the stock in the state's banks, realizing $2 million from the sale (Starnes 1931, 108). This was four decades after similar actions by Massachusetts and Maryland, and a decade after Pennsylvania. Historical narrative and comparative banking data reinforce one another. The nature of the state's fiscal interest in banking retarded banking development in Virginia for most of the antebellum era.

4.4.3 The West

Unlike the states of the Northeast and the South, Ohio, Indiana, and Missouri were at different stages of settlement early in the antebellum era. This is

8. This points to one of the problems in interpreting the figures in table 4.2. A significant part of Virginia's bank revenues came in the form of bank stock and thus do not appear in the table.

reflected in their dates of statehood, 1803, 1816, and 1821. For that reason no particular significance should be attached to the banking data through 1830, a period when Ohio had two-thirds to three-quarters of the three-state sample's population and an even greater proportion of its banks and bank capital. The changes from 1850 to 1860, however, do have significance.

Ohio's fiscal interest in banking began in 1815, when the state enacted a 4 percent tax on bank dividends for revenue purposes, and, to promote a sounder currency, prohibited note issue by unauthorized banks. In 1816 Governor Worthington proposed to the state auditor that the state consider investing in banks to establish a fund to keep taxes down. The auditor, who must have been familiar with Virginia practice, responded by suggesting that when existing bank charters expired in 1818, the state could reincorporate its banks and take one-fifth of their stock, which would be paid for by means of a partial down payment and by future dividends on the stock. Worthington then proposed, and the legislature enacted, a "bonus law" which superseded the dividend tax and extended bank charters, while incorporating six new banks and six old private banks. The state was to receive one of every twenty-five shares issued as its "bonus." Dividends on the state's shares were to be reinvested in shares until the state owned one-sixth of a bank's stock, after which dividends would be paid to the state. Seven more banks were charted under these terms during 1817 and 1818 (Bogart 1912, chap. 5; Huntingdon 1915, 272–73).

In 1825, after the state realized that it was receiving no revenue from the bonus law and that it held accounts in failed and shaky banks, it reintroduced the 4 percent tax on dividends. The tax was raised to 5 percent in 1831. By the later 1830s, after a number of new banks were chartered, the tax yielded a revenue of $50,000 to $70,000 a year. In the depression of the early 1840s, however, two-thirds of Ohio's chartered banks disappeared. An act of 1845 reorganized the remaining banks, created a new class of independent banks, and, most important, founded the State Bank of Ohio, composed of branches all over the state and partly state-owned.

The 1845 act replaced the dividend tax with a 6 percent tax on the net profits of the independent banks. Gradually, the favored State Bank increased its branches, while the old banks and the independent banks marked time. To meet the clamor for more banks, the state in 1851 enacted a free banking law, but in the same year, after a dozen free banks appeared, a new state constitution banned further free bank organizations. Heavy new taxes—later declared unconstitutional by the U.S. Supreme Court—were imposed on banks in 1851 and 1852. When the banks resisted, the state in 1852 passed an infamous "crowbar law" that allowed sheriffs to enter bank vaults by force, if necessary, to seize money for taxes (Huntingdon 1951, 456–59). The crowbar law was later declared unconstitutional.

After 1845 Ohio taxed the independent banks to promote its State Bank. In a sense the policy was successful. By 1854 thirty-seven of fifty-seven banking offices in Ohio were branches of the State Bank. In another sense it was not.

In 1860 Ohio, which had become one of the leading states of the Union in population, rather remarkably had a smaller share of the nation's bank capital than it did when it was still a frontier state in 1820. Moreover, its share of bank capital in our three-state grouping for the West fell from more than two-thirds in 1850 to about one-third in 1860 (see tables 4.3 and 4.4). The nature of Ohio's fiscal interest in banking moved it backward in banking development compared to other states.

Ohio's late antebellum history illustrates that a policy of protecting a state bank from independent competitors was not a good way to develop a state's banking system. The banking histories of Indiana and Missouri reinforce the point. Neither state had much success in developing chartered banks in its frontier stage of development, and both were without chartered private banks in 1830. Both states responded by chartering a monopoly state bank with branches.

Indiana's monopoly bank appeared in 1834 and lasted until 1857. During that period no other bank was to be authorized or permitted in the state. The state financed its fifty percent share of the State Bank of Indiana by selling bonds in London at 5 percent. It also loaned funds to private investors to purchase stock in the bank. These investors discharged their loans from the state by applying their dividends, which averaged over 6 percent, to principal and interest (McCulloch 1889, 115).

Hugh McCulloch, who ran a branch of the State Bank of Indiana for many years and later went on to become U.S. comptroller of the currency and secretary of the treasury, was rather proud of the bank. The bank never lost a dollar, he said, even though it lent on real estate security. The State Bank returned a net profit of $3 million to Indiana, which became the basis of the state's school fund: "the profits of the bank were large, but they were legitimate." He did, however, note a possible, drawback. Early in its history the State Bank established thirteen branches around the state, but no more. In time "[s]ome towns in which branches of the bank were established were being outstripped by towns that were hardly known when the bank was chartered" (McCulloch 1889, 120, 124). The State Bank, in other words, led the quiet life that is the reward of a true monopoly and did not bother to respond to credit demands arising in other places in Indiana. Neither did the state, which as the chief stockholder received the majority of the profits of the monopoly, until the popular demand for free banking became irresistible in the 1850s.

Missouri's monopoly bank, the Bank of the State of Missouri, was similar to Indiana's. The bank's monopoly of chartered banking and note issue lasted for twenty years, from 1837 to 1857. When the bank was charted, it was deemed necessary to ask a branch of an Ohio bank that operated in St. Louis to leave the state. The state owned about three-fourths of the stock, half of which it paid for from its share of the federal surplus distribution in 1837. Returns were handsome: dividends typically were 5 of 10 percent semiannually, and in the bank's last years of monopoly, earnings averaged 18.5 percent of the capital invested.[9] Management that produced such returns had to be rewarded: "The salary schedule was quite liberal," wrote the historian of the bank (Cable 1923, 207). And good salaries attracted uncommon talent; when money was tight in the 1850s the bank's president "made use of his characteristic good humor and persuaded his customers to curtail their business where possible. This personal trait was of untold value to the State Bank. *The Democrat* suggested that one could always get a smile at the State Bank even though loan applications might be turned down. As a whole the city was much less prosperous than one might guess from the condition of the State Bank" (Cable 1923, 197).

Growing dissatisfaction with this state of affairs prompted the legislature to enact a general banking law when the State Bank's monopoly ended in 1857. The law contained Massachusetts's provision of 1812; newly chartered banks were to pay the state a bonus tax of 1 percent of capital each year in lieu of all taxes. In three years St. Louis had eight banks of issue, including the old State Bank, and bank capital had tripled. By 1860 Missouri, with less population than either Ohio or Indiana, had considerably more bank capital, completely reversing its position a decade earlier.

The old State Bank's profits were greatly reduced, and the state liquidated its holdings after a few years. As in virtually every other state that had a shift of fiscal interest from being an owner to being a taxer, there was a marked change in the way banks were regulated, especially in controls on entry.

4.5 Conclusion

We have approached the state regulation of the banking industry in the early nineteenth century from a different perspective. The connection between taxation and regulation has been ignored in the regulation and political economy literature. There is evidence that the way states taxed banks had important implications for the way states regulated banks, and that the way they regulated banks had important implications for the way they taxed banks. States that taxed inputs such as bank capital had an incentive to adopt regulations (such as generous or free charter provision) that maximized the use of that input. States that owned a substantial equity interest in banks had an incentive to maximize the value of that interest by restricting competition. States that had no fiscal interest may have been less concerned about the structure of the banking industry than states with a fiscal interest in the banking industry.

There is also evidence that taxation and regulation are endogenous. New

9. Our series on Missouri begins in 1849, and we are still working on the early years. From 1849 to 1857 bank dividends ranged from a 10 to 17 percent return on the par value of the state stock, with an exceptional return of 26 percent in 1858 when the "excess profits" of the bank were distributed. In 1859 bank dividends fell to 8 percent.

York adopted a regulatory policy of limited entry that was driven by the political benefits to be had from granting charters, and tax policy followed the political imperatives. When the political environment changed, the regulation changed to free banking. Maryland swung back and forth between encouraging and restricting entry, in part because of fiscal interest and in part to protect the interest of the existing banks, particularly in Baltimore. On the other hand, states like Virginia and Pennsylvania clearly stated that revenue requirements forced them to restrict entry into banking to protect their fiscal interest in existing banks.

We need to rethink how political entities decide to regulate economic activity. State governments may be "pro" or "anti" particular business interests for reasons that are not apparent from the identities of the historical protagonists in debates about the regulation. Who gains and who loses from the regulation will not encompass all of the relevant interests if the state's revenues will be affected by the regulation. At that point every taxpayer and every person who receives benefits from state expenditures will be affected by the regulation.

The implications of our investigation go well beyond the interaction of taxation and regulation. A well-developed banking system is an important, perhaps critical, element in the growth of an economy. Early American states that discouraged the competitive expansion of their banking systems may have ended up with slower rates of economic development. The states themselves were aware of the problem. As the quotations in the paper suggest, looking out for the fiscal interests of the state occasionally involved overlooking the economic interests of the state's citizens.

In this regard, traditional views about taxation are exactly wrong. States that taxed bank capital ended up encouraging, rather than discouraging, the banking system to grow. States that owned the banking system did not acquire a Coasian encompassing interest in promoting economic growth generally. Instead, they acquired an interest in promoting the profits of the banks they owned at the expense of the banking system as a whole, and perhaps, at the expense of more rapid growth.

Twentieth-century perceptions about the nature of government revenues, not to mention the ways in which the government intervened in the economy, are not particularly applicable to the nineteenth century. Government was small by the contemporary standard of revenues as a share of income. But many nineteenth-century governments did not rely on general revenue instruments like income, property, and sales taxes, the burdens of which were shared by all (albeit not in equal portions). Instead they utilized specific revenue instruments that not only fell more heavily on certain groups, but may have created an affinity between the government and those groups. Today we usually think about the relationship between taxation and the taxed in exactly the opposite way. How strange, and wonderful, it would be to find that states ultimately promoted those activities that they taxed most heavily.

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