

Understanding America's Hesitant Steps Toward Financial Capitalism

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"If [our reputation] is gone, our business is gone, however attractive our show window might be." - Jacob H. Schiff, principal of Kuhn, Loeb

I. Introduction

At the beginning of this century, a small number of private banking dynasties heavily influenced—many said “dominated”—the largest of America’s financial transactions. Railroad companies, industrial companies, and even the government had to consider that the intermediaries through which their equity and debt issues reached the financial markets were powerful oligopolists. The presence in American financial markets of these very large financial actors shaped how corporations raised funds for their expansions and investments.

This system of “financial capitalism”, as it was called, became an important political flashpoint in America between 1900 and the New Deal. The first generation of Progressives saw the apparent concentration of financial resources in the hands of a few investment bankers as the root source of many of the country’s financial problems—whether the long-term pre-1896 decline in the overall price level and in farm commodity prices, the Northern Securities Panic of 1904, or the Panic of 1907.

Later generations of neo-Progressives would blame the stock market crash of 1929 and the bank runs of 1930-32 on the close linkages that existed between the commercial and investment banking industries. “The bankers have been cast down from their high place in the temple of our civilization,” said Franklin D. Roosevelt

in his inaugural address, evoking echoes of the New Testament story of Jesus's eviction of the money changers from the temple in Jerusalem. And the thrust of the legal reforms that followed were to transfer bargaining power from Wall Street to Main Street. Adolph Berle and Gardiner Means (1934) were but the first to note that the accountability of firm managers to a large and diverse group of small shareholders was in many cases no accountability at all.

The earlier Progressive case against high finance—against the “money trust” was a very different argument from that used by the reformers of the 1930s. Progressives disliked concentration *per se*. Not money, but power, was the root of all evil. The channeling of a large part of the nation's financial resources through the hands of a few financial institutions was objectionable. Secure in their belief that power corrupts, the Progressives could point to a financial oligarchy and conclude that corruption, sharp dealing, and unjust acquisition were bound to follow.

By 1930 the argument against high finance was very different. The New Deal reformers decried the “excessive competition” that existed in the corporate securities industry: because competition was tough, investment banks bought and sold securities that might well prove bad investments because it was the only way to survive. We today would rationalize their argument as a “gambling for resurrection” argument: do whatever you must to stay in business today. But it is unlikely that the neo-Progressives of the 1930s had pushed the logic of the economic argument so far.

What they were clear on was that commercial banking involvement in financial speculation was very dangerous. A financial crisis that disrupted investment banking would disrupt commercial banking, and the flow of financial intermediation through the economy, unless there were firewalls between the investment and the commercial bankers.

Different as they were, both the turn of the century Progressive and the 1930s neo-Progressive lines of thought shared a common belief about bank involvement in investment banking business: investment banking and commercial banking should be separated, for the good of the industry and society. Both lines of argument dismissed the possibility that the closely-intertwined relationships between investment banking houses, syndicate associates, banks, and trust companies offered efficiency advantages that would make it cheaper and easier for corporations to secure external funds.

We have not come here to bury the Progressives or the New Deal reformers were wrong. We have not written this paper to trumpet that the Progressives or the New Deal reformers were wrong, and that they should have let market forces develop American finance into a “mature” form of “financial capitalism.” Previous research *has* shown that America’s form of “financial capitalism” may have brought substantial benefits to corporations raising funds on the capital market. Financial constraints that restrained firm expansion appear to have been relaxed for firms that had close associations with or put themselves under the influence of financial

oligarchs. There is some evidence that firms with close investment banker associations did sell for higher prices, thus creating shareholder value.¹

But here our objectives are different, and twofold. First, we illustrate how financial capitalism influenced the nexus between commercial banking and corporate finance by looking in some detail in how banks involved themselves in corporate securities before the Great Depression. Many financial and economic historians have documented the involvement of banks in industrial financing at the turn of the century.² Yet, today commercial banks are notoriously known for their lack of involvement in long term industrial finance—even large long-term loans from commercial banks to industrial firms are quite rare. Has this always been the case? By looking at this time series, we hope to identify major turning points in bank financing of corporations.

Episodes such as wars and severe economic conditions do explain some of these turning points, but we still detect what may be a structural change after the New Deal reforms were enacted: a shift away from investments in corporate securities to investments in more traditional assets such as loans and government bonds. It is very tempting to see this possible structural change as a consequence of the New Deal reforms.

Second, we examine the legislative history behind the enactment of the Glass-

¹ See for example, De Long (1991) and Ramirez (1995) for evidence in the U.S. Calomiris (1995) for comparative evidence between the U.S. and Germany.

² See for example, Carosso (1971), Moulton (1922), Redlich (1968), and Chandler (1971).

Steagall Act. What was in the reformers' minds, exactly, when they objected to the close ties between banks, financiers, and corporations? To what degree were reformers really concerned about conflicts of interests and abuses in the banking industry? To what degree were they reacting to lobbying pressure from those who stood to gain from Glass-Steagall? We estimate a political decision model that might be used to sort out these issues—to our knowledge the first application of such a model to this problem.

The evidence presented here suggests that congressmen were reacting to both kinds of pressures (public demand and special interest motives) when casting their vote.

The rest of the paper is organized as follows: in section II we describe in more detail how bankers influenced corporate finance and spending from the 1880s to the 1930s. Section III analyzes the voting of the Senate on a pre-Glass-Steagall banking act bill introduced by Senator Carter Glass. We try to use voting patterns to shed some light on what Senators might have had in mind in their decision to completely divorce commercial banking activities from the investment banking industry. And section IV concludes.

II. Banks and the Financing of the Corporation: 1880-1933

The less information that actual and potential investors have about the

businesses in which they invest, the riskier are their investments. The worse are the potential moral hazard problems that arise when uninformed investors who supply capital face informed entrepreneurs and insiders in the financial marketplace. Indeed, the amount and accuracy of the information available to an “outside” investor is perhaps the best measure of the development of a financial market: the more developed the market, the less the risk and the smaller the potential for moral hazard.

At the end of the nineteenth century financial markets in the U.S. were still not very developed. Industrial securities existed, but few had confidence that they knew how to value the business prospects of an industrial firm; hence few had confidence in their ability to value an industrial security. Financial markets were dominated by railroad stocks and bonds. More than half a century of experience with railroads gave investors more confidence in their ability to find and assess information that would allow them to judge the value of railroad securities. But this experience was counterbalanced by the cyclical nature of the industry and the terrifying consequences of the cost structure of railroads for investors: shifts in operations that made little difference to a railroad considered as a productive or a value adding entity had enormous consequences for the railroad considered as a profit-making entity.

In such an environment, you would expect that competitive advantage might be in large part based upon *reputation*. In a situation where investors have little

information about fundamental values, the recommendation of investment banking houses that have a reputation for sponsoring solid investments and that show every prospect of wishing to continue to enjoy such a reputation must be an important source of reassurance to investors.

But such reputation-based information-providing equilibria *must* be fragile. There is always the temptation to sacrifice one's reputation for recommending good investments in order to obtain a single very large immediate payoff. Potential investors know that their "honest broker" may succumb to temptation if the stakes become high enough or if its market share is falling (and the value of its reputation thus eroding). Investment bankers recognize that potential investors are suspicious and that reputation is fragile—hence investment bankers face larger incentives to "cash in" their reputation by selling not-so-promising investments.

So how are investment bankers to acquire a reputation for fair dealing in the first place? Or to convince potential purchasers that they value the future enough that they will continue past patterns of fair dealing?

One powerful way to convince potential investors of its *bona fides* is for an investment bank to commit its own resources to a security issue on a large scale. But an investment bank *per se* has a relatively small capital base: it cannot afford the large-scale long-term positions in its client firms necessary to reassure ultimate investors that the financier has confidence in the long-term prospects of the business—and is not about to shift to the mode of take-the-money-and run. Such a

reputation-protecting strategy requires the large depositary base of a commercial bank as well.

Thus investment bankers may well find it very convenient to rely on bank funds to partly finance the security flotations of its client firms. And syndicates of commercial and investment bankers *were* typically involved in the process of financing a corporation. Long term relationships among financiers and bankers may well have paid off for corporations and the public, by providing an institutional mechanism that allowed investment bankers and investors to work around the moral hazard problems inevitable whenever public information is scarce.

Carosso (1970) and Chandler (1971) describe the institutional details that allowed close long-term relationships to develop, as an endogenous response of financial markets to the information problems that existed in the relatively undeveloped capital markets of those days. Along with Moulton and Redlich, they have observed that the involvement of commercial banks in corporate security issues is associated with an unprecedented increase in industrial investment at the turn of the century. It is hard to see how the industrial growth of that period could have been possible if it were not for the financial alliances between commercial and investment bankers.

Yet makers of economic policy around the turn of the century became suspicious of the involvement of banks in the financing of corporations. Critics saw no real benefits for the public from the sacrifice of the principle that dealings should

made at arms-length. They saw only the potential for abuse on the part of the bankers and financiers: using the “captive” commercial banking deposits to purchase securities that could not have obtained such a price on their own, thus transferring profits from bank depositors to the investment bank core of the business.

A first attempt towards curbing the control financiers had over banks and companies was made with the enactment of the Clayton Act of 1914. Section VIII of the Clayton Act explicitly prohibited the interlocking of directors within the same industry: if you were a director of the Pennsylvania Railroad, you could not also be a director of the New York Central Railroad. Before the Clayton Act, an investment bank like the Morgan partnership would have put one of its partners—in the case of railroads almost certainly Charles Coster—on the board of directors of nearly every firm in which it had a long-term interest. From the Morgan partnership’s view, this allowed them to realize massive economies of scope in their expertise in valuing railroads and advising railroad managers. It also made sure that at least one person on the board of directors would internalize some of the costs to the railroad’s competitors of a rate war.

The political climate in the days that the Clayton Act was passed led to a reduction in at least the formal measures of financier influence. In an attempt to head off political trouble, financiers retired from boards of directors and tried to keep themselves out of the news.

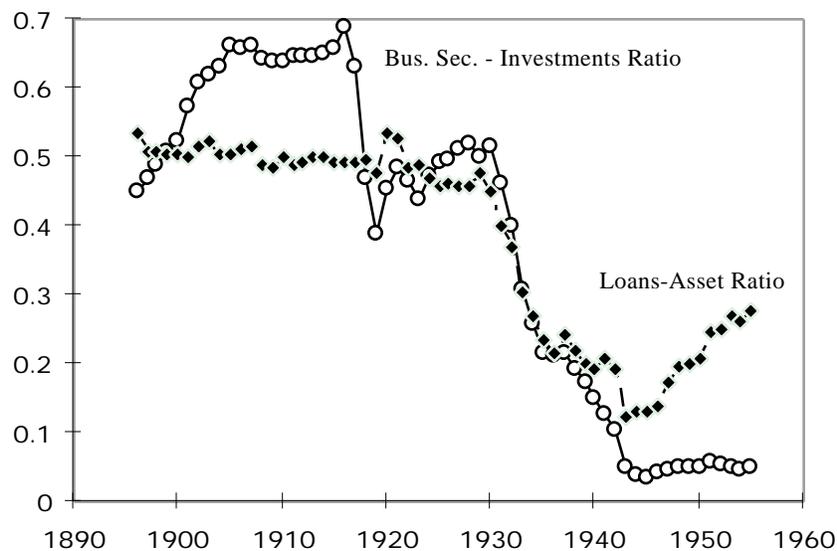
During the “Roaring Twenties” formidable economic growth silenced critics of financial capitalism. The links between commercial and investment banks tightened in the years up to 1929. But the stock market crash of 1929 and the subsequent banking panics starting in 1930 and 1931 left bankers and financiers in a very vulnerable position: their practices were perceived as a source of the Great Depression. And under these conditions it took relatively little effort for Senator Glass to introduce and for Congress to pass the Glass-Steagall act.

Thus there is a sense in which the development of American financial markets from the 1880s to the New Deal reforms can be understood as a tug of war between the “British” and the “German” model of high finance. The “British” model of arms’-length transactions and less concern within finance for the details of industrial and railroad operations had been adopted in spirit by the politicians: first the Progressives, and then the New Deal reformers. By contrast, the “German” model had been adopted on the ground by the powerful financiers of the turn of the century, and again—albeit to a lesser extent—by commercial banks and their securities affiliates during the 1920s.

What are the measurable, observable signs of commercial bank importance for corporate finance? A look at bank holdings of corporate securities is a good way to start. Figure I shows how commercial bank holdings of corporate securities as a percentage of total bank investments changed from 1896 to 1955. Note the relative rise of corporate securities in bank security portfolios at the turn of the century, from

about 45% in 1896 to about 65% in 1910-15. This upward trend corresponds with the rise of industrial securities and the rise of the modern corporation. The ratio of bank loans to total assets remains constant.

Figure I
National Banks Holdings of Business Securities Versus Loan-Asset Ratio



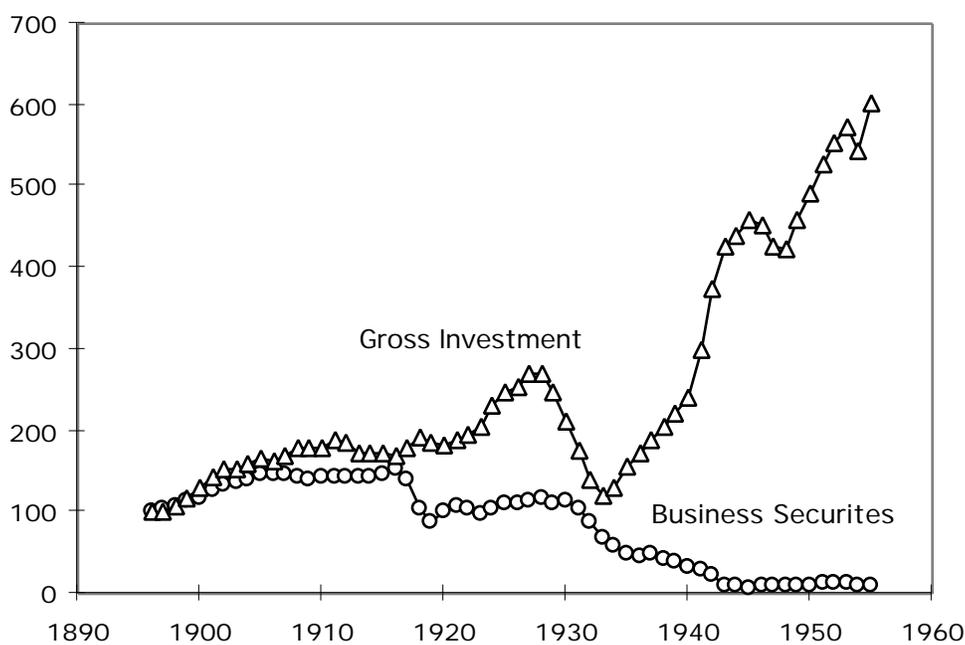
Source: All-Bank Statistics, Federal Reserve Board.

In the four years starting in 1915 we see a dramatic decline in the proportion of bank security portfolios made up of holdings of corporate securities, corresponding with World War I, the corresponding inflation, and the massive issue of government debt to finance U.S. participation in World War I. In the mid-1920s the share of corporate securities in bank portfolios rises again, but never to the levels seen during the early 1900s.

After 1930 comes another dramatic turning point: both corporate securities holdings as a share of total bank security holdings, and the ratio of loans to total bank assets plummeted to unprecedented levels: the expected result of the Great Depression, of the Glass-Steagall act, and then of the enormous increase in government bonds to finance World War II. It is not possible at this level of analysis to disentangle the effects of these three.

From the end of the 1940s, the loan-asset ratio begins to increase again, but the share of corporate securities in bank security portfolios does not. This is a legacy of Glass-Steagall.

Chart II
Gross Business Fixed Investment and National Banks Holdings of Business Securities



Source: Gross Fixed Investment - U.S. Department of Commerce, *Long Term Economic*

Growth 1860-1970; Securities - All Bank Statistics, Federal Reserve Board.

Figure II displays how bank holdings of corporate securities vary with gross fixed business investment. The two series grow together between 1896 to World War I: as firms grew, bank holdings of business securities rose with them. The flow of capital from banks to businesses appears in part to have been carried out through the purchase of securities rather than through direct business loans, as Moulton (1922) documents.

These figures tell an old story: Glass-Steagall did its job. Before Glass-Steagall we observe a correlation commercial bank holdings of corporate securities and industrial investment, suggestive of active involvement of banks with financing industrial corporations. This involvement, however, disappears after the enactment of Glass-Steagall and does not recover in the first generation after World War II.³

III. Why Did Congress Pass Glass-Steagall?

The Banking Act of 1933-35—the Glass-Steagall Act—is the continental divide in American financial and banking history. Its intended separation of commercial banking from investment banking activities was successful: even today in its decline

³Calomiris and Ramirez (1995), and Calomiris and Raff (1995) document the rise of private placements of securities with insurance companies after World War II, suggesting that to some degree financial services previously provided by

it continues to shape American finance. Its passage was the final victory of the reform agenda that had begun with the Pujo “money trust” hearings of 1912.

So why did senators and representatives vote for Glass-Steagall? Was American apprehension about the potential for conflict-of-interest present in close ties between investment banking and commercial banking really so strong? Historians and economists have always advanced two different sets of theories about the motivations behind policy: either policy is made and conducted by keen-eyed, far-sighted, and selfless stewards of the public interest, or it is made by the corrupt bought-and-paid-for servants of prospective monopolists seeking to use the police power of the state to generate competitive advantage and riches.

The public interest motive is perhaps the most commonly accepted explanation of the voting decision of legislators among historians. It argues that the precarious economic and financial conditions of the time was primarily responsible for the passage of Glass-Steagall: were it not for bank panics and runs, the public would not have cared about and politicians would not have addressed the issue.⁴

This theory is convincing in explaining the timing of the enactment: “the economy is in crisis and the banking system in collapse—do something!” However, it falls short in explaining the motivations behind this particular act itself. Why, for example, was the separation of commercial from investment banking such an

commercial banks were being provided by insurance companies.

⁴Calomiris and White (1994) use this argument to explain the passage of the Federal Deposit Insurance Corporation (FDIC). Their evidence is very supportive of this hypothesis, especially after one considers the long history of deposit insurance in the

important issue for policymakers?

Perkins (1971) argues the answer hinges on the “real bills doctrine,” an argument inherited from British monetary theory. According to the real bills doctrine, the only loans and credit transactions that ought to be carried out were those that aided the production and movement of goods. The German banking model—which emphasized relationships between banks, financiers, and corporations; and which encouraged the generation of debt obligations that were not self-liquidating—was rejected by Senator Glass and others because it had the potential to lead to unstable expansion of the credit structure.

Historians following the chain of argument beginning with Brandeis’s *Other People’s Money* have perceived opposition to financier-banker contacts as arising out of standard American fears of conflicts of interest and of excessive private concentrations of power. Roe (1994), for example, argues that the root motivation for the act lies in the American public’s inherent distrust of big business—a distrust that has led even conservative governments to engage in trust-busting, and underpinned the Sherman Anti-Trust Act, the pre-World War I “money trust” investigations, the Clayton Act, and ultimately the Glass Steagall Act.

Roe also argues that “special interests” played an important role in the voting decision of congressmen. Smaller financial institutions may have favored Glass-Steagall because they wanted to reduce competition from larger, more powerful banks. A reduction in the financial resources available to larger banks might give

smaller institutions a better chance to compete for business loans in local markets.

The drive to separate commercial and investment banking had a moderately-long gestation period. Although Glass-Steagall was not formally conceived until the late 1920s, congressional debates about the separation of commercial banks from the investment banking area had begun as early as 1913 with the Pujo “money trust” investigation, at which the committee evoked testimony that commercial bank involvement in the securities industry was *ultra vires*—outside their charter, and so illegal: “The national banks in the great cities are exceeding their charter powers in the character of the business they are conducting and from which their principal revenues are derived. They are acting as promoters, underwriters, and houses of issue for the securities of railroad and industrial corporations.”

Yet the separation of commercial from investment banking did not become part of the legislative agenda of the World War I period for at least two reasons. First, the war absorbed the full attention of banks and their affiliates in the task of raising funds to finance at first allied purchases of military supplies from the U.S. and later U.S. government expenditures on the war. To disturb the financial system and to possibly disrupt bankers’ and financiers’ ability to underwrite Liberty bonds became unpatriotic.

Second, after the war the U.S. enjoyed a boom that stimulated formidable demand from the public for corporate securities. The combination of these events clearly kept policymakers largely uninterested in the separation issue.

By 1933 the perception had changed. Senator Glass had begun his personal campaign in 1929 with newspaper articles denouncing commercial banker use of an investment bank “affiliate” to enter the securities industry. Committee hearings on his bill did not begin until the winter of 1931. Subsequent debates during 1932 led to the Senate passage of bill S.4412, the precursor of the Glass-Steagall Act.

To analyze why legislators voted for Glass Steagall, we need information on how lawmakers voted. There is no vote count on the Glass Steagall Act *per se*: once it was clear that it was going to pass, and that voting against would expose one to populist attack and have no effect on the substance of the act, no one wished to stand up and be counted on the “anti” side.

But there is a vote count on bill S.4412, the Glass Steagall Act’s precursor. To be sure, S.4412 is not the Glass-Steagall Act. But it included the “separation” clause. Thus we use the vote on S.4412 to study the voting patterns of the senators.

The Senate passed S.4412 on January 25, 1933 by a vote of 54 to 9 with 33 not present. With such an overwhelming vote in favor, the interesting question to ask is: who voted no and why? The states voting against were Texas, Minnesota, the Dakotas, and Nebraska. Oklahoma was split (one senator voted in favor, the other against).

Table I compares a set of basic statistics of states whose senators voted in favor of S.4412 with that of states whose senators did not. States that voted no typically depend more on agriculture (higher fraction of the population in farms); had lower

business failure rates; and had relatively more concentrated banking (measured as total national bank assets per capita).

Table I
State Statistics

<i>Variable Name</i>	<i>Voting in Favor</i>	<i>Voting Against</i>	<i>t-statistic</i>
Corp. Sec./ Tot. Investments (%)	45.24 16.14	26.91 5.87	6.23
Assets per Bank, 1928	328,821 236,225	130,208 71,206	4.97
Assets per Bank, 1933	372,096 311,148	136,406 85,945	4.61
Farm Population, 1930 (%)	28.18 16.51	46.5 10.31	-4.46
Failure Rate, 1933	0.99 0.42	0.68 0.32	2.55
Failed Liabilities per capita, 1933 (‘000)	308 199	165 96	3.39
Total Bank Failures, 1928-1933	-0.36 0.14	-0.33 0.12	-0.78

This table presents statistics to identify characteristics of states voting in favor and of states voting against S.4412, the predecessor of Glass-Steagall.

“Corp. Sec./Tot. Investments” is the state’s average of the dollar amount of corporate security holdings of national banks divided by total investments.

“Assets per bank” is the state’s average of the total amount of national bank assets divided by the total number of national banks in 1928 and 1933.

“Farm Population” is the average of the farm population share.

“Failure rate” is the state average of the total number of failed business establishments divided by the total number of business establishments.

“Failed liabilities per capita” is the state average of the amount of liabilities of failed businesses divided by total population.

“Total Bank Failures, 1928-1933” is the state average of the percentage change in the number of national banks from 1928 to 1933.

Standard Deviation are included in italics. “t-statistic” shows the results of a difference in means test.

Source: All-Bank Statistics, Federal Reserve Board. *The States Yearbook*, 1934 and 1932

To understand more about the voting decision logit and a probit models are estimated with several potential explanatory variables. Table II presents these results. In both regressions the dependent variable is the voting decision (1 if the senator voted yes, 0 if he voted no). As independent variables we included: (a) the 1933 dollar amount of national bank deposits per capita; (b) the business failure rate; (c) the percentage of farm population in the state; (d) the total amount of U.S. government deposits in national banks; (e) corporate security holdings as a proportion of total investments; and (f) the bank failure rate, measured as the percentage change in the number of national banks from 1928 to 1933; and (g) the number of national banks per capita in 1933.

**Table II: Panel A
Logit Results**

Variable	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5
Constant	30.24 14.38	27.03 11.54	9.65 4.91	10.95 3.80	4.12 2.10
Failures	1463.29 767.11		-157.42 236.91		
Farm Pop	-0.60 0.29	-0.40 0.17	-0.14 0.06	-0.11 0.05	-0.10 0.038
Deposit per capita	-.15 0.07	-.10 0.04			
U.S. Deposits		0.04 0.03			
Nat'l Bank Fail. Rate					4.13 3.33
Securities/Total Investments			4.76 3.72		-0.086 2.98
Num of Banks per capita			-34.81 15.98	-29.49 10.88	
Capital Asset ratio				-34.54 29.29	
Number of Observations	63	63	63	63	63
Percent Explained	60/63	59/63	55/63	57/63	53/63

Logit results for S.4412. The dependent variable is the vote of the senator in favor (=1) or against (=0) bill S.4412.

"Failures" is the total number of failed business establishments divided by the total number of business establishments.

"Farm Pop" is the farm population in each state.

"Deposits per capita" is defined as the total amount of deposits of national banks of each state divided by the state's population.

“U.S. Deposits” is the total amount of U.S. government deposits in national banks.

“Nat’l Bank Fail. Rate” is the percentage change in the number national banks from 1928 to 1933.

“Securities/Total Investments” is the dollar amount of corporate security holdings of national banks divided by total investments.

“Num of Banks per capita” is the total number of national banks in the state divided by the state’s population.

“Capital-Asset Ratio” is the total amount of national bank’s capital divided by total assets.

“Number of Observations” is the number of Senators voting.

“Percent Explained” the number of cases the model correctly predicts divided by the total number of observations.

Standard errors are in italics under each coefficient.

**Table II: Panel B
Probit Results**

Variable	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5
Constant	16.92 7.60	15.81 7.04	5.74 2.99	5.91 2.01	2.31 1.18
Failures	788.40 392.65		-104.67 137.46		
Farm Pop	-0.33 0.15	-0.23 0.10	-0.08 0.03	-0.06 0.02	-0.06 0.02
Deposit per capita	-0.08 0.03	-0.06 0.03			
U.S. Deposits		0.02 0.015			
Nat'l Bank Fail. Rate					2.39 1.93
Securities/Total Investments			2.65 2.23		0.08 1.69
Num. Banks per capita			-20.67 9.49	-16.54 6.09	
Capital Asset ratio				-18.28 17.42	
Number of Observations	63	63	63	63	63
Percent Explained	59/63	59/63	55/63	57/63	52/63

Probit results for S.4412. The dependent variable is the vote of the senator in favor (=1) or against (=0) bill S.4412.

“Failures” is the total number of failed business establishments divided by the total number of business establishments.

“Farm Pop” is the farm population in each state.

“Deposits per capita” is defined as the total amount of deposits of national banks of each state divided by the state’s population.

“U.S. Deposits” is the total amount of U.S. government deposits in national

banks.

“Nat’l Bank Fail. Rate” is the percentage change in the number national banks from 1928 to 1933.

“Securities/Total Investments” is the dollar amount of corporate security holdings of national banks divided by total investments.

“Num of Banks per capita” is the total number of national banks in the state divided by the state’s population.

“Capital-Asset Ratio” is the total amount of national bank’s capital divided by total assets.

“Number of Observations” is the number of Senators voting.

“Percent Explained” the number of cases the model correctly predicts divided by the total number of observations.

Standard errors are in italics under each coefficient.

The dollar amount of national bank deposits per capita, and the number of national banks per capita, are included as a test of the interest group hypothesis—if, for example, the coefficient of the dollar amount of deposits per capita is negative (and statistically and economically significant), this would indicate that higher banking intensity in the state (measured as the amount of deposits per capita) is associated with a lower probability of voting for the act.

Similarly, if the number of banks per capita coefficient is negative (and statistically and economically significant), this would indicate that bank lobbying effort against the act increases with their concentration in the state. This is of course, consistent with the special interest group hypothesis. The table results show consistently negative and statistically significant coefficients, providing some

empirical support for the special interest group hypothesis.

The business failure rate is included as an admittedly inadequate proxy variable as a way of testing the “conventional wisdom” that senators voted in favor as a way to demonstrate that they were trying to do something about the precarious economic conditions of their constituencies. The coefficient is positive and statistically significant, indicating that states hit harder by the Great Depression were more likely to vote in favor. The bank failure rate coefficient is not statistically significant in any of the regressions.

The farm population coefficient is positive and statistically significant as well.

None of the other variables included in the regressions was statistically significant. Neither corporate security holdings as a proportion of total investments nor U.S. government bank deposits were important explanatory variables. Their statistical insignificance implies that bank involvement in corporate securities in a state did not seem to have much effect on how senators would vote. Given what national banks stood to lose with the act, this is somewhat surprising to us.

IV. Conclusion

Financial history in America is full of political struggles. These struggles over this period reflected disagreements of opinions on politics, economics, and even philosophy. We want to argue that both “special interest” considerations and

“public interest” are apparent in the construction of the coalition that underpinned Glass-Steagall and its enforced separation of commercial from investment banking. States with larger deposits per capita tended to vote against Glass-Steagall. States with larger business failure rates tended to vote in favor of Glass-Steagall.

The passage of Glass-Steagall was not entirely a symbolic, “we are doing something” attempt by legislators to reassure constituents during the Great Depression. In this paper we have pointed to evidence of bank influence on corporate financing. We have looked at bank holdings of corporate securities over time. We saw a high correlation between bank holdings of corporate securities and the rise of business investment until World War I, a correlation that returns during the 1920s, but then disappears after the 1930s.

Crowding out can account for at least some of the large reduction of corporate securities holdings during 1918-20 period, and again during World War II. But Glass-Steagall must be used to explain the pattern in the first post-World War II generation.

It is hard to prove that the passage of Glass-Steagall, and the consequent two-generation-long separation of commercial from investment banking in the United States, had significant costs in terms of slowing America’s economic growth. Perhaps the web of financial intermediation channeled funds elsewhere, so that the net flow of capital for industrial investment was undisturbed.

But it does seem as if the American financial system seeks to have closer

integration of commercial and investment banking operations than the Glass-Steagall Act allowed. Certainly there appear to be substantial private profits from such integration—certainly such integration is desired by both commercial and investment banks. And it is hard to see such profits as derived totally from either greater ease of monopolization or from diverting returns away from bank depositors.

Banks were clearly financing corporate growth at the turn of the century. Thus the imposition of restrictive government regulations that pushed commercial banks out of the investment banking business may well have had real costs in terms of slowing economic growth. And any countervailing benefits must be sought on the political rather than the economic side of the ledger.

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