ENCYCLOPEDIA OF AMERICAN BUSINESS HISTORY AND BIOGRAPHY

Banking and Finance, 1913-1989

Encyclopedia of American Business History and Biography

Banking and Finance, 1913-1989

Edited by
Larry Schweikart
University of Dayton

A Bruccoli Clark Layman Book

Facts On File
New York · Oxford

Facts On File, Inc.
460 Park Avenue South
New York NY 10016
USA

Facts On File Limited
Collins Street
Oxford OX4 1XJ
United Kingdom

Library of Congress Cataloging-in-Publication Data

Banking and finance, 1913-1989 / edited by Larry E. Schweikart.
p. cm. — (Encyclopedia of American business history and biography)
"A Bruccoli Clark Layman book."
Includes bibliographical references.
ISBN 0-8160-2194-5
1. Banks and banking--United States—History—20th century. 2. Finance—United States—History—20th century. 3. Bankers--United States—Biography. I. Schweikart, Larry. II. Series.
HG2481.B325 1990
332.1'0973'0904—dc20 89-29596

British and Australian CIP data available on request from Facts On File.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

This book is printed on acid-free paper.

To John F. Kunkel
a valued friend

Encyclopedia of American Business History

Railroads in the Age of Regulation, 1900-1980, edited by Keith Bryant (1988)

Railroads in the Nineteenth Century, edited by Robert L. Frey (1988)

Iron and Steel in the Nineteenth Century, edited by Paul F. Paskoff (1989)

The Automobile Industry, 1920-1980, edited by George S. May (1989)

Banking and Finance to 1913, edited by Larry Schweikart (1990)

The Automobile Industry, 1896-1920, edited by George S. May (1990)

Banking and Finance, 1913-1989, edited by Larry Schweikart (1990)

Foreword

The Encyclopedia of American Business History and Biography chronicles America's material civilization through its business figures and businesses. It is a record of American aspirations–of success and of failure. It is a history of the impact of business on American life. The volumes have been planned to serve a cross section of users: students, teachers, scholars, researchers, and government and corporate officials. Individual volumes or groups of volumes cover a particular industry during a defined period; thus each *EABH&B* volume is freestanding, providing a history expressed through biographies and buttressed by a wide range of supporting entries. In many cases a single volume is sufficient to treat an industry, but certain industries require two or more volumes. When completed, the *EABH&B* will provide the fullest available history of American enterprise.

The editorial direction of *EABH&B* is provided by the general editor and the editorial board. The general editor appoints volume editors whose duties are to prepare, in consultation with the editorial board, the list of entries for each volume, to assign the entries to contributors, to vet the submitted entries, and to work in close cooperation with the Bruccoli Clark Layman editorial staff so as to maintain consistency of treatment. All entries are written by specialists in their fields, not by staff writers. Volume editors are experienced scholars.

The publishers and editors of *EABH&B* are convinced that timing is crucial to notable careers. Therefore, the biographical entries in each volume of the series place businesses and their leaders in the social, political, and economic contexts of their times. Supplementary background rubrics on companies, inventions, legal decisions, marketing innovations, and other topics are integrated with the biographical entries in alphabetical order.

The general editor and the volume editors determine the space to be allotted to biographies as major entries, standard entries, and short entries. Major entries, reserved for giants of business and industry (e.g., Henry Ford, J. P. Morgan, Andrew Carnegie, James J. Hill), require approximately 10,000 words. Standard biographical entries are in the range of 3,500-5,000 words. Short entries are reserved for lesser figures who require inclusion and for significant figures about whom little information is available. When appropriate, the biographical entries stress their subjects' roles in shaping the national experience, showing how their activities influenced the way Americans lived. Unattractive or damaging aspects of character and conduct are not suppressed. All biographical entries conform to a basic format.

A significant part of each volume is devoted to concise background entries supporting and elucidating the biographies. These nonbiographical entries provide basic information about the industry or field covered in the volume. Histories of companies are necessarily brief and limited to key events. To establish a context for all entries, each volume includes an overview of the industry treated. These historical introductions are normally written by the volume editors.

We have set for ourselves large tasks and important goals. We aspire to provide a body of work that will help reduce the imbalance in the writing of American history, the study of which too often slights business. Our hope is also to stimulate interest in business leaders, enterprises, and industries that have not been given the scholarly attention they deserve. By setting high standards for accuracy, balanced treatment, original research, and clear writing, we have tried to ensure that these works will commend themselves to those who seek a full account of the development of America.

–William H. Becker
General Editor

Acknowledgments

This book was produced by Bruccoli Clark Layman, Inc. James W. Hipp is series editor for the *Encyclopedia of American Business History and Biography*. Michael D. Senecal was the in-house editor.

Production coordinator is James W. Hipp. Systems manager is Charles D. Brower. Photography editor is Susan Brennan Todd. Permissions editor is Jean W. Ross. Layout and graphics supervisor is Penney L. Haughton. Copyediting supervisor is Bill Adams. Typesetting supervisor is Kathleen M. Flanagan. Information systems analyst is George F. Dodge. Charles Lee Egleston is editorial associate. The production staff includes Rowena Betts, Anne L. M. Bowman, Polly Brown, Teresa Chaney, Patricia Coate, Marie Creed, Allison Deal, Holly L. Deal, Sarah A. Estes, Mary L. Goodwin, Cynthia Hallman, Susan C. Heath, David Marshall James, Kathy S. Merlette, Laura Garren Moore, John Myrick, Gina D. Peterman, Cathy J. Reese, Edward Scott, Laurrè Sinckler, Maxine K. Smalls, John C. Stone III, and Betsy L. Weinberg.

Walter W. Ross and Parris Boyd did the library research with the assistance of the following librarians at the Thomas Cooper Library of the University of South Carolina: Gwen Baxter, Daniel Boice, Faye Chadwell, Cathy Eckman, Gary Geer, Cathie Gottlieb, David L. Haggard, Jens Holley, Jackie Kinder, Thomas Marcil, Marcia Martin, Laurie Preston, Jean Rhyne, Carol Tobin, and Virginia Weathers.

As in the first *Banking and Finance* volume, I take great pleasure in expressing my thanks to several individuals who made this project possible. Lynne Pierson Doti, Charles Calomiris, Ed Perkins, and Ben Klebaner all read the introductory essay and offered comments. Whether or not I took their advice was a different matter, and therefore the errors that remain in the introduction are mine and mine alone. Some of the contributors again performed heroic duties, taking over where other authors could not finish or accepting entries that we both knew would be particularly difficult. Among those who aided this volume with their special efforts, I would like to thank Lynne Pierson Doti, Jim Smallwood, and Richard Timberlake. At the University of Dayton, Linda McKinley singlehandedly organized and orchestrated the assignments, contracts, and typing, and Jenny Wharton provided timely typing assistance. Once again, my wife, Dee, granted me release time from my domestic duties to write. Unlike in the first volume, which went to press some eight months ago, I cannot wax romantic about the distractions of my now two-year-old son, Adam. He has figured out how to turn on the computer, how to prompt up the commands, but not yet (thank God) how to erase. When Job was tested, the devil must have used two-year-olds. I anxiously await Adam's third birthday.

–*L. S.*

Introduction

The story of American banking in the twentieth century is the tale of growing financial democracy. American consumers at the end of the 1980s enjoyed more financial options and greater investment opportunities and found fewer restrictions based on race, religion, sex, or circumstances of birth than any other people in history. Except within a narrow range, state regulations and, on an international level, even national laws no longer could dictate investment or borrowing opportunities. Technology had linked Japanese lenders with car buyers in Kentucky and had tied the Wilshire Exchange to stock traders in remote Middle Eastern deserts. Once haughty Wall Street firms found themselves outflanked at every turn by open-collared financial entrepreneurs who could perceive value in a silicon chip or appreciate the promise of a small telephone company. Bond buyers no longer had to wait for Zeus-like pronouncements from the large brokers or banks on the worth of a security; instead, beginning in the early 1980s, average investors of every stripe participated in the longest peacetime economic boom in American history.

Yet the century had not started with nearly so much freedom in the world of finance. Only after much haggling and political turmoil–after placing major restrictions on banking activities, then removing them, and after separating banking from a host of other services, then reuniting them–only then had the banking and financial system of the late 1980s arrived at a relatively unfettered state. Banks in the 1980s found themselves freer than at any other time since the antebellum period, and they even had some freedoms denied to their predecessors. For the first time since A. P. Giannini tested the regulatory waters in the 1920s, the banking system verged on true interstate branch banking. One depression–but only one–came and went, and neither the collapse of the entire savings and loan (S&L) industry in the 1980s nor the 1987 stock market crash triggered bank runs similar to those in the nineteenth century. Deposit insurance, a dramatic addition of the twentieth century, paradoxically explained both the restoration of public confidence in banks in the 1930s and the incredible collapse of the S&Ls in the 1980s. Most important, perhaps, the arrival of foreign competition ended the American dominance of the world's capital markets, a position the nation had held since the end of World War I.

The creation of the Federal Reserve System in 1913, which could be considered the inauguration of the "Third Banking Era" in U.S. history, assured many Americans that the problems of the nineteenth century truly lay in the past. That century had seen the formation and rapid growth of a nationwide banking system under the regulation–or lack thereof–of two different authorities, the federal government and the states. The nineteenth century had also witnessed the end of private banks of issue and the development of a uniform national currency. But the main complaints about banking, such as the criticism that it did not provide an "elastic" money supply (one able to expand and contract to suit the seasonal needs of farmers and merchants), and the concern that banks were equipped inadequately to respond to infrequent but all-too-regular panics, still caused many to fear and curse the "Money Power." Passage of the Federal Reserve Act promised to address both those major criticisms and end once and for all the panics that seemed to appear every two decades.

The "First Banking Era" (1781-1863) witnessed the foundation of commercial banking in the United States. During that time the state governments chartered and regulated the banks. Banks issued their own money (notes), with the business of note issue constituting a far more important part of the banks' activities than taking deposits. Banks kept a reserve of gold and silver coin, called specie, to "redeem" their notes for customers who presented them. Operating on the well-established theory that only a small percentage of customers would seek to redeem their notes at any given time (assuming, of course, the absence of any suddenly damaging public information about the bank), a bank could keep as little as $5 in silver or gold for every $95 in notes it issued. That ratio, known as a reserve ratio, varied from bank to bank and with economic circumstances. In panic periods banks tried to bump their reserve ratios as high as possible to restore confidence.

Even the highest reserve ratios proved insufficient to assuage the concerns of the public in truly difficult times. Usually when one or two banks stopped paying specie, lest they run out completely (an action called "suspending" or "suspension"), the runs shifted to the more solid banks, forcing them into suspension as well. Legislatures that had granted the charters did not look favorably on suspension and often threatened the bankers with a host of retaliatory measures. Once the panic ended, however, the lawmakers' hearts softened and all was forgiven: or, at least, usually all was forgiven. Meanwhile, bankers themselves searched for ways to eliminate or ameliorate runs and panics, and they pioneered a variety of voluntary and mandatory frameworks from state to state, including the Suffolk System, the New York Safety Fund, clearinghouse associations, and free banking. All those efforts, while meeting with different degrees of success, represented attempts to substitute for a system of statewide branch banking that actually proved remarkably resilient and safe.

The period before the Civil War witnessed other interesting developments, almost all of them related to the state regulations under which the banks operated. Several states, for example, adopted free banking, under which a group could open a bank by placing on deposit with the secretary of state certain securities equal to the amount of notes issued. Should the bank fail to redeem its notes, the secretary of state could sell the securities and reimburse the noteholders. For several decades historians had accepted uncritically stories that free banking led to "wildcat banking," wherein free banks would establish branches in the frontier areas and issue far more notes there than it had specie to back. Or, as another criticism went, the wildcat bankers would collect specie while issuing notes, then abruptly take off, leaving it up to the state to reimburse the noteholders. When the state sold the bonds, it discovered their market value was less than par. Thus, the unscrupulous banker had managed to escape with a considerable amount of specie. Modern historians remain divided over the benefits of free banking but generally agree that it was far more effective than previously thought, and, as Hugh Rockoff advises, "The system was sufficiently successful to make a careful consideration of its major characteristics worthwhile."

Other states prior to the Civil War prohibited banking altogether, or allowed only a state-owned-and-operated bank to conduct business. Some southern states cultivated impressive branch banking systems. But by and large the major form of banking in the United States on the eve of the war remained unit banking. Because of the number of unit banks in the northern states, one or two New England states had as many banks as the entire South and Far West put together. Unit bankers certainly wanted nothing to do with branching, and their cohesion on that subject made them an invincible adversary almost until 1927, when Congress passed the McFadden Act to reduce restrictions on branching.

One other important banking form existed in the antebellum period: the national bank in the form of the First and Second Banks of the United States (BUS). The First BUS (1791-1811), Alexander Hamilton's brainchild, provided unity and stability for many aspects of the government's early financial affairs. Designed as a tool to provide the government with loans and to support the value of government bonds, the first BUS soon generated animosity from those who feared that foreign stockholders, particularly the English, dominated the bank. Congress let the bank's 20-year charter expire in 1811, but the instability of the nation's finances following the War of 1812 led lawmakers to charter the Second BUS in 1816 with another 20-year charter. While the Second BUS did a credible job of handling its financial obligations to the nation, it fell victim to a personal political struggle between its president, Nicholas Biddle, and the president of the United States, Andrew Jackson. In brief, Jackson won. He vetoed an 1832 effort to recharter the bank four years early, made the veto stick, and then a year later pulled all of the federal government's deposits out of the bank, effectively killing it. With the demise of the Second BUS, no nationally chartered bank existed until 1863.

The Civil War ushered in the "Second Banking Era." It brought extensive changes to the banking system when the Republican-dominated Congress passed the National Banking Act in 1863, establishing a system in which the U.S. government routinely issued hundreds of bank charters. While neither the First nor Second BUS had faced any competition at the national level, national banks under the new system had no such monopoly privileges. They did, however, possess the privilege to issue notes. The National Currency Acts, also passed during the Civil War, taxed private bank notes out of existence. From 1863 onward, then, the nation operated with a unique "dual banking system," whereby both the federal government and the states could charter, regulate, and examine banks. That system has proved troublesome even to the present because bankers bent on unscrupulous activities could switch from national to state charters with regularity to foster confusion among the examiners and to escape unwanted regulation. More important, the national banks faced restrictions their state-chartered cousins did not, and as a result states soon made their own chartering processes easier in order to encourage more banking facilities than would have existed under the confining national banking laws. A competition of sorts developed between the two systems.

Richard Timberlake has pointed out that the National Banking and Currency Acts of 1863 and 1864, envisioned as a way to "create an institutional demand for the burgeoning volume of government securities" that the Union needed to finance the war, took on a life of their own. No southern congressmen remained to restrain the Republicans, and the government certainly had no intention of establishing a system that would benefit the South after the war. The system featured reserve cities and country banks in outlying communities. Banks in reserve cities had to hold greenbacks or specie equal to 25 percent of their deposits (in earlier years, equal to 25 percent of their national bank notes issued), while the country banks only had to hold 15 percent in reserve. The system achieved many of the goals of the numerous mechanisms that states had earlier experimented with, such as the clearinghouses, including uniform note appearance and a steady market for the notes to trade at par value. National banks had to hold government bonds as collateral for the notes, thus ensuring brisk bond sales.

Until Congress prohibited note issue by state-chartered banks, when it placed a 10 percent tax on nonnational bank note issues, state banks had little interest in joining the national system. The era of competitive money in the United States came to an end, much to the disadvantage of the South and West. At first national bank charters surpassed state charters, which had dropped from 1,562 in 1860 to just 325 in 1870. But by 1890, nonnational banks had increased to 4,717, while national banks numbered only 3,484. By the end of the century nonnational banks outnumbered national banks almost three to one. In 1910 more than 18,000 nonnational banks existed along with more than 7,000 national banks.

Without private note issue, Treasury "greenbacks" printed during the Civil War and national bank notes provided the nation's entire currency. Congress had endowed the greenbacks, technically a fiat currency, with legal tender status, which generated considerable controversy. In a series of cases called the "Legal Tender Cases" the Supreme Court ultimately upheld the legal tender status of greenbacks. Although national bank notes technically did not also have legal tender status, most citizens assumed that when the greenbacks received the Supreme Court's blessing, so did national bank notes. In fact, however, greenbacks represented a promise on the part of the federal government to pay gold at a future date (ultimately 1879), while national bank notes were immediately convertible into gold. Since greenbacks were convertible into national bank notes, though, realistically greenbacks had the indirect backing of gold.

Not only did the nation's banks grow unevenly because of the national/nonnational problem, but sections of the country also found themselves nearly devoid of banking services. When the Union victory sealed the doom of the Confederate financial system, virtually all southern banks collapsed due to their support of the rebel government through bond purchases for war loans. Southern banks also lost huge amounts following the sudden change in the status of slaves, who served as collateral for many loans. Furthermore, the banks in the South that managed to survive the war found themselves at a severe disadvantage when it came to acquiring national bank charters. The Republican Congress certainly did not intend to grant charters to loyal Confederates, nor did Congress leap to confer charters on the freedmen. Moreover, the original National Banking Act limited total note allocation to $300 million, with Treasury Secretary Salmon P. Chase authorized to make half the allocation on the basis of population (therefore mostly in the North), and half on the basis of "existing banking capital, resources, and business" (again the North). As Timberlake points out, national banks in the South comprised only 4 percent of all national banks and received only 3 percent of national bank notes in 1870. However, national banks had to trade off profits in note issue against other profitable activities, such as lending. State banks made loans through deposit creation rather than note issue, and over the last quarter of the century deposits bypassed bank notes to become by far the largest component of the money stock. The inelasticity of note issue, caused by penalties associated with issuing national bank notes, prevented the national bank system from dominating the nation as many had predicted.

The Civil War also bred a new type of financier, the investment banker. Jay Cooke and J. P. Morgan typified the investment banker, who arranged the large capital backing for projects such as railroads, and later utilities and steel, through the underwriting of bond sales. Quite frequently that entailed forming a syndicate of several banking concerns, so large were the demands of the railroads in particular. Morgan's preeminence as an investment banker in the postbellum period grew when he guided his company and many of the railroads through the Panic of 1873. His firm provided a source of stability during the so-called Populist era as well. In addition to overseeing the reorganization of dozens of railroad lines under new structures of managerial hierarchies, Morgan assembled funding for a vast spectrum of business.

Morgan's personal role in American finance grew to the point that he almost overshadowed the government itself. During the Panic of 1893 he formed a syndicate with August Belmont & Company and the Rothschilds of London to deliver 3.5 million ounces of gold to the U.S. Treasury. Morgan almost singlehandedly prevented the nation from defaulting on its promise to exchange gold for its dollars. In 1907 another panic shook Wall Street and then spilled over to the rest of the country. Again Morgan stepped in to use his enormous wealth and influence to try to quell the money markets, lending $25 million at 10 percent interest to the New York banks (outlending the U.S. Treasury, which only deposited $19 million in those banks during the crisis). Despite Morgan's efforts, everyone recognized–especially Morgan himself–that no individual banker or even small group of banks could act as the lender of last resort any longer. The economy had simply grown too large.

Bankers had for some time studied options for reforming the American banking system that emphasized correcting the elasticity problem and reducing the dominance of the New York banks. Many bankers thought that the solution to the former problem required a central bank, but few could conceive of any type of central bank that did not give New York greater power still. The Panic of 1907 convinced almost everyone that they had to arrive at a plan soon. Congress passed as a stopgap measure the Aldrich-Vreeland Act of 1908, which authorized the secretary of the Treasury to issue emergency currency during future panics. More important, however, it created the National Monetary Commission to make recommendations to prevent future crises. That committee, too, concluded that the nation needed a central bank.

While the commission, led by Senator Nelson A. Aldrich of Rhode Island, studied the banking problem, its members met privately with many important bankers, including Frank A. Vanderlip, Paul M. Warburg, Morgan, and others. Due to deliver their report to Congress in 1911, the members had not worked out the details of their plan by late 1910. In November of that year, in a setting that some have labeled "conspiratorial," Vanderlip, Warburg, Aldrich, Henry Davison (a Morgan partner), and A. Piatt Andrew, a Harvard professor, met in secrecy on Jekyll Island, Georgia, to outline the scope, functions, management, and organization of a new financial system. But the plan, known as the Aldrich Plan, floated listlessly in Congress before it finally met defeat, largely because it promised increased centralization of power–in the government's hands, according to some, or, according to others, in the hands of the bankers.

Supporters of the Aldrich Plan quickly mounted a new offensive, with Representative Carter Glass of Virginia, chairman of the House Committee on Banking and Currency, introducing a bill to create the Federal Reserve System. Both houses of Congress quickly passed the bill, and Woodrow Wilson signed it on December 28, 1913, inaugurating the "Third Banking Era." The new system featured 12 Reserve Banks scattered throughout the country (Missouri had two!) in cities such as Minneapolis and Atlanta. It appeared that indeed New York's power had been diluted. Each Federal Reserve Bank was a corporation, which the member banks in its district "owned" through each bank's required investment of 6 percent of its paid-up capital and surplus. The member banks chose most of the Reserve Bank directors, but although those directors chose the officers, the member banks themselves did not directly vote for anyone on the central governing committee, the Federal Reserve Board. Instead, the president of the United States appointed five members of the board, and both the comptroller of the currency and the secretary of the Treasury served as ex-officio members.

The Federal Reserve System sought to contain bank runs through the rapid transfer or availability of funds from the reserve banks. There was no system of national deposit insurance, although several states, patterning themselves on the Oklahoma Deposit Guaranty Law, either had already enacted or soon passed similar laws, which proved unmitigated disasters. In a prelude to the Savings and Loan debacle of the 1980s, the collapse of the deposit insurance funds in the 1920s clearly demonstrated the dangers of making all depositors share risks with unscrupulous or ill-managed financial institutions.

Not only did the Federal Reserve System lack a deposit insurance feature, but in theory the board was to act as an apolitical body. The presence of the comptroller and the treasurer, as well as five appointees of the president, made that goal illusory. As Eugene White has shown, the New York Federal Reserve Bank quickly took the lead and dominated the policies, if not the affairs, of the system. Not only had the hope of creating an apolitical system been thwarted, but the notion that the Federal Reserve would reduce the dominance of New York by giving all banks access to loans previously available (or so critics assumed) to the "Money Trust" also went astray as smaller banks retained their state charters and became the correspondents of national banks in large cities.

The Reserve Banks exercised their powers to "regulate" the money supply through the discounting to member banks (that is, the short-term borrowing of Reserve funds). To expand credit the Reserve Banks lowered the discount rate, to contract credit they increased it. Reserve Banks discounted according to the "real bills" doctrine, a theory that held that money should represent self-liquidating, short-term loans backed by "real," tangible goods. In actuality, however, lending officers at the Reserve Banks determined the "eligibility" of bills offered for discount, thus effectively separating money from any "real" standard. That marked the system's solution to the problem of elasticity. As Timberlake explains, the authors of the Federal Reserve Act so thoroughly expected the gold standard to continue to operate that they built into the act few links between the Reserve system and gold. Consequently, discretionary discounting, increasingly based on government interventions, soon, as Timberlake put it, "divorced the results of decision-making from those who had a self-interest in maintaining the integrity of the system."

Just as the nation's most renowned and talented financial minds had contributed in one degree or another to the long process that resulted in the creation of the Federal Reserve System, so did the new system have exceptional individuals in key positions. Warburg, once called the "ablest banking mind" of a group that included Vanderlip, Henry P. Davison, and Charles Norton, played a critical role in persuading other eminent bankers to participate in the system. His efforts, along with Davison's, prevailed in persuading Benjamin Strong to serve as governor of the Federal Reserve Bank of New York. Warburg himself served as a member of the Federal Reserve Board for two years and as vice-governor for two more years and then presided over the Federal Advisory Council for two years.

Staffed with talented individuals–but often factionalized–the Federal Reserve immersed itself in managing the country's banking system. While it partially regulated the national banks that were members, it had only an indirect effect on the nonmembers, which included not only state banks but a host of other financial institutions that conducted banking business. In 1910 Congress had passed an act creating the Postal Savings System, a method by which small savers who harbored suspicions about banks could earn interest on their money. Under the act, selected post offices could received deposits and pay 2 percent interest on the accounts. Although never the serious competition to banks that bankers always complained they were, the Postal Savings Banks did offer an alternative that grew extremely attractive during the Great Depression. They faded with the coming of the Federal Deposit Insurance Corporation in 1933, and Congress abolished the program in 1967. Proposals to revive the system stirred the air in the late 1980s, however.

Another alternative banking program, coincidentally also started in 1910, the Morris Plan Banks, targeted consumer lending to working people "of good character." Whereas Postal Savings

Banks satisfied the deposit needs of low-income Americans, the Morris Plan Banks made small loans to people who had collateral or who could produce a cosigner. However, because Arthur Morris, who founded the banks, thought the risk was high, the banks charged a steep rate of interest, which usually violated normal state usury laws. They survived by having borrowers purchase with their loan an "investment certificate" upon which they technically made payments rather than directly repaying the loan itself. Morris franchised his banks, helping to start new institutions and holding a 25 percent share in them. By 1920 more than 100 Morris Plan Banks operated, although many of them gradually converted to normal commercial banking. By 1940 only 87 remained.

A third type of alternative to the commercial bank was savings and loans, building and loans (B&Ls), and mutual savings banks. Those institutions operated on the same basic principles as banks, with some exceptions. In general, they all sought to finance home construction. Mutual savings banks and mutual savings associations had the name "mutual" in their titles because the members owned the assets and all profits went into their deposit accounts. The first mutual savings bank, the Philadelphia Savings Fund Society, appeared in 1816, and by 1964 that form of bank accounted for approximately 20 percent of all savings deposits in the nation, despite the fact that many states restricted them. By 1988 only 18 states allowed mutual banking. Because they did not operate for the profit of stockholders, but for the benefit of the members who oversaw the business of the bank, mutual associations proved conservative and effective in their primary mission of financing housing construction. B&Ls, later generally superceded by S&Ls, used depositors' funds to finance long-term mortgages. In 1932, under the Federal Home Loan Bank Act, S&Ls were prohibited from making commercial loans. Somewhat in compensation, in 1966 they were permitted to pay a slightly higher interest rate to attract depositors. Since that interest rate consistently still fell well below the return on long-term mortgages, no one expected that aspect of the S&L business would prove a fatal character flaw in the 1970s and 1980s.

Whereas banking had a variety of faces in the early twentieth century, most people identified finance with New York and with one place in particular, the New York Stock Exchange (NYSE), the "largest and most important market for stock an bond trading in the United States," according to NYSE archivist Steven Wheeler. A group of traders founded the NYSE in 1817 as the New York Stock and Exchange Board, and by the end of the century 1,300 securities traded there. Trading on the exchange exceeded 3 million shares in 1901 and continued to grow through World War I, when the Liberty and Victory Loan drives convinced Americans of average means that they, too, could participate in the dealings on Wall Street. Innovative securities salesmen such as Charles E. Merrill, who went on to found Merrill, Lynch & Company, pioneered the practice of mass marketing securities. Possessed of an unmatched concern for customer education in securities, Merrill and the customers who took his advice escaped the worst consequences of the 1929 stock market crash. By the 1940s, Merrill had "democratized" securities sales and ownership to such an extent that he broke the strangle hold that a few firms and elitist attitudes had perpetuated for decades.

Because of Wall Street and the presence of the New York Federal Reserve Bank, led by its exceptional president, Benjamin Strong, in the twentieth century New York City grew more dominant than ever in American financial affairs. It replaced London as the "world's banker" during World War I, and, despite the fact that the Fed had only started to understand the tools at its command, the New York Federal Reserve Bank played an increasingly important role in determining money policy, not only for the United States but also for the European powers. The war left Germany saddled with onerous reparations payments and had eroded some of the economic base of Britain and France. With the new U.S. ascendance in world finance, New York bankers naturally found themselves wrapped up in international negotiations to determine a feasible and peaceful payment of German reparations. That, in turn, required direct involvement–foreign critics called it "meddling"–in the finances of Germany, and, to a lesser extent, Britain and France. Benjamin Strong, Seymour Parker Gilbert, Charles G. Dawes, and Owen D. Young emerged as key representatives of the American financial community during those efforts. After two years of acrimony, French occupation of the Ruhr, and general deadlock on the subject of German reparations, U.S. Secretary of State Charles Evans Hughes requested that Owen Young, a General Electric executive, serve on an expert committee chaired by Chicago banker Dawes to review the payments and work out a plan of payments that the Germans indeed could meet. The resulting Dawes Plan drastically revised the London Schedule of Payments, with its "stratospheric" level of payments, as Stephen Schucker has termed them, and required Germany to pay reparations at a low level beginning in 1924, with the amounts rising as the German economy revived.

Dawes's plan not only called for sacrifices from the Allies, who stood to receive less reparations money, at least initially, and from the American bankers, who had to divert money from more profitable domestic lending to supply the loans, but also from the Weimar Republic, which had to reorganize its banking and money system. The Germans immediately requested another commission, one headed by Young, but, as Schucker observed, "For five years . . . the Dawes Plan kept a semblance of harmony and promoted economic reconstruction in Europe." Some, such as Gilbert, the Reparations Agent called by William C. McNeil "the most powerful individual in international financial affairs" of the period, wanted to force the Germans into fiscal discipline, but he lacked the authority to control such areas as German government spending. He therefore tried to dry up the supply of American loans in New York, an attempt that in general failed. The Young Plan of 1929 revised the Dawes Plan by reducing the reparations, giving Germany all responsibility for raising her own foreign currency, and removing the Reparations Agent. Contrary to some critics' assertions that Wall Street used the reparations issue to further its own end, American involvement in German affairs clearly showed just the opposite by the time it ended: American capitalists wanted a stable German government with a sound currency and low deficits. Indeed, had the Americans had their way, Germany might have avoided its economic collapse of the early 1930s, and the corresponding rise of Nazism.

While the problems of international finance occupied some New York financiers, more mundane difficulties confronted their country counterparts, especially in the West and Midwest. First, a robbery wave swept banks in Iowa, the Dakotas, Texas, Oklahoma, and other Plains states in the 1920s. Made possible by the ease of escape provided by the automobile and the relative isolation of country towns, the surge of criminal activity posed a real crisis to small rural banks. Insurance rates in Minnesota, Iowa, and the Dakotas soared. Bankers such as George Wingfield placed shotguns behind the tellers' cages in all the banks in his chain. Arizona bankers experimented (unsuccessfully) with teller-operated tear gas guns. Gradually, however, unified action by bankers in establishing bank robber identification posters, combined with beefed-up alarm and security systems and augmented by increased police involvement and the use of police radios, brought the eruption of felonies under control. From roughly 1940 to 1960, bank robberies subsided.

As harmful as robberies were to the Midwestern banks, a far worse calamity struck in the early 1920s when farm prices fell as a result of the end of World War I. A recession struck the agricultural areas, made worse in spots by an invasion of the boll weevil, which destroyed the southern cotton crop, and horrible cold weather destroyed many of the cattle herds in Montana and Wyoming in mid decade. For farm-state banks, which faced severe difficulties as farmers defaulted on their loans, certain regulations added early in the century provided the knockout blow. Several states, beginning in 1908 with Oklahoma, established systems of mandatory or voluntary deposit insurance for all state-chartered banks. The Dakotas, Kansas, Mississippi, Nebraska, Texas, Washington, and others followed. As Charles Calomiris has shown, the mandatory laws especially, but generally all deposit guaranty laws, created an environment that fostered "moral hazard" by rewarding excessive risk taking on the part of the insured banks (as opposed to the actions of the national banks, which were not a part of any of the state deposit insurance systems). The Kansas bank guaranty fund, which had only \$1.1 million in it, faced debts of \$6.7 million from member banks by 1926. Oklahoma repealed its law in 1923 with outstanding obligations to depositors totaling more than \$7 million. Not only did the poorly designed deposit guaranty laws prove disastrous, they delayed real reform by making legislators think, at least at first, that deposit insurance could take the place of branch banking as a safety device. The combined effect of the farm crisis and poor regulations wiped out Midwestern and farm-state banks in a "massacre," as one western bank historian called it. While still some others failed, by the time the Great Depression set in, most farm states had already seen the ranks of their financial institutions drastically thinned, with only the most solvent remaining. National totals reflected the farm state fallout: from 1919 to 1929, the number of banks dropped by more than 4,200.

The West provided the setting for another major development in banking in the Roaring Twenties, the incredible growth of branch banking in California, highlighted by the dramatic rise of the Bank of Italy (Bank of America after 1928). A. P. Giannini, a former agricultural wholesaler, founded his bank in 1904 to serve the Italian immigrants in the North Beach community of San Francisco. The bank spread its branches throughout the state, occasionally meeting competition from Joseph Sartori and his own powerful branch system, the Farmers and Merchants Bank. Giannini, truly a visionary, not only planned to create a statewide empire but also intended to find a way to cross state lines. He had purchased controlling interest in a New York bank, and sought a means to start uniting the New York and California financial networks. He ran up against state laws prohibiting branch banking. In the mid 1920s Giannini planned a two-stage approach to circumvent state antibranching laws. First, he would bring his banks into the national system, provided that Congress changed the national banking laws to permit branching, which the National Banking Act prohibited (according to successive comptrollers' interpretations). Second, he would press for changes to allow interstate banking.

Congress obliged Giannini in the quest of his first goal by passing the McFadden Act in 1927, ostensibly to staunch the flow of national banks converting to state bank charters, but specifically to bring the Bank of America's 300 branches into the national system. The relative disadvantages of national charters compared to state charters had grown so substantial that the national system experienced mass defections in the period from 1910 to 1925. Antibranching provisions had inspired some of the defections, as did the low capitalization requirements of the state banks.

While McFadden could be viewed as a victory for branching proponents, it also could be seen in a reverse light. It still maintained important restrictions against intrastate branching, and Congress never enacted laws that would allow Giannini (or anyone else) to branch across state lines. Several factors accounted for the failure. The unit bank lobby remained a strong voice in the halls of Congress, and it adamantly refused to entertain any talk of branching for any reason. The chaos in the banking system engendered by the Great Depression led legislators to seek short-term solutions (such as deposit insurance) rather than the option of statewide or even nationwide branching. Certainly during the early years of the Depression, Giannini's own bank could hardly consider expansion: the Bank of America had received several Reconstruction Finance Corporation loans, and during the "Bank Holiday," evidence now suggests, probably was insolvent, kept open only because its closing would destroy what little confidence remained in the banking system. Finally, circumstances combined to place Henry Morgenthau, Jr., and later Marriner S. Eccles in critical positions in Franklin D. Roosevelt's New Deal presidential administration. Neither man wanted to see Giannini's empire grow. Eccles, eventually chairman of the Federal Reserve Board, who had great influence beyond the positions he held, had favored branch banking in theory, yet opposed it in practice when it came to the Bank of America.

The federal government's failure to authorize nationwide branch banking not only contributed to the collapse of the country unit banks in the 1920s, but made it difficult for some of the large chains to survive at the end of the decade. For example, the Wingfield chain in Nevada, which held more than 60 percent of all bank assets in the state, might have been saved by interstate branching, and available evidence suggests it could. Certainly the fact is worth noting that many states either repealed their antibranching legislation or modified it to permit limited branching during the Depression, an admission that they had been too restrictive in the past.

If the failure to authorize nationwide branching in the 1920s was a nonevent, no one can say the same for the merger wave and the rise of the trust companies during the same period. As elsewhere in American industry, a merger movement swept the nation's banking enterprises, leading to the formation of truly large institutions. That gave them unprecedented flexibility with investments, and helped foster the rise of trusts and holding companies. Trusts originated as nonbank enterprises, but as state laws relaxed they took on the activities of commercial banks. Trusts had less clearing activity and were less involved in correspondent banking, so they represented important competitors to banks. Trusts also often faced less regulation than national banks and thus further eroded the national bank system. Holding companies allowed banks to circumvent restrictions by placing the bank and its affiliate both under another entity, or by creating a separate entity to hold the affiliate. The Bank of Italy proved especially adept at merging banks into holding companies in the 1920s.

As larger banks developed through the merger movement, they had far more funds to invest, and the securities of the growth industries at the time—electricity, automobiles, radio—offered new fields in which the banks could put their money. Moreover, the fact that most of the large banks were in major urban areas led to a centralized securities market, explaining the close link between the mergers, the rise of trusts, and the stock market boom of the 1920s. Specifically to handle the new securities trading, banks already had started to form "security affilitates" in the early part of the century. But as the new heavy industries took off, banks expanded their underwriting activities in the bond market.

The banks' activities in the securities market have provided a target for critics. Some have argued that unsound banking practices contributed to the famous crash of October 29, 1929. They have pointed out, for example, that margin buying (buying on credit with the security standing as collateral for the balance of the loan) constituted an abuse when brokers, requiring as little as 15 percent down, extended a steadily increasing number of margin loans. Lending by brokers indeed rose from $1 billion at the beginning of the decade to $9 billion by the time of the Crash. Another abuse they have pointed to, "pyramiding," wherein holding companies owned companies that owned still other companies, proved troublesome when perfectly solvent lower-lever companies were acquired by bigger companies involved in fraud, with the best example being the utilities companies owned by Samuel Insull. The critics have argued that especially since they often occurred in combination, those practices made for a dangerous situation, one exacerbated by the continual upward climb of the stock market in the Roaring Twenties. To the critics, that posed a problem because people of ordinary means started to "play" the market as speculators, not investors. Legendary stories circulated about shoeshine boys who gave stock tips to financiers such as J. P. Morgan, Jr., and salaried salesmen could turn a $100 investment into a considerable fortune—*if* they got out of the market in time.

In the context of the banks' relationship with the securities markets, no banker received more condemnation for his activities in the bond market than National City Bank's (later Citibank) Charles E. Mitchell, the "Scapegoat of the Crash." Mitchell had succeeded the prominent Frank A. Vanderlip in the presidency of National City Bank and had pushed the bank into trust activities and securities operations. Dragged before the Senate Banking Committee's counsel, Ferdinand Pecora, Mitchell represented to all Americans the "banksters" who had manipulated the nation's financial system and brought about disaster.

Several points bear consideration when confronting traditional stories proffered by critics of the banks' role in the 1920s "boom and bust" market. First, Eugene White has shown that the banks that formed securities affiliates suffered far less during the crash and the Depression than the banks lacking such affiliates. Second, the boom in securities, particularly those related to utilities and automobiles, consisted of a natural rise in the stocks of rapidly growing new industries, not speculation. Finally, the rapid combination of the newly merged large banks, the sudden growth of trust companies, the appearance of many new, consumer-oriented industries, and marvelous advances in communication and transportation made a boom market almost inevitable. The rise of the securities markets with the new communications links helped thousands of smaller banks and millions of individual Americans directly invest in rapidly rising stocks and bonds. So somewhat naturally, banks' involvement with securities increased in the 1920s. Banking, in fact, focused the wealth of the nation at the right time on the right industries.

Critics had other bones to pick with the banks, though. In addition to the perceived ill effects of banking on the bond market through the securities affiliates and, more directly, through individuals such as Mitchell, banking suffered even greater criticisms (some of it post hoc by scholars) for its contributions to the state of the economy, both before and during the Depression. First, critics maintained that to funnel money into the bonds of large firms and foreign governments, the commercial banks had departed from the real bills doctrine. Second, critics charged that the tax cuts inspired by Secretary of the Treasury Andrew Mellon spawned a disastrous maldistribution of wealth, putting too much wealth in the hands of the upper income brackets. Finally, many scholars argue that the Federal Reserve never slowed the economy in the mid 1920s, then, when it had gotten out of control, failed to reflate the money supply.

Certainly banks made fewer commercial loans in the 1920s because of falling demand. That represented a fundamental transition in business, wherein most companies went to the securities markets for capital rather than to commercial banks. Insofar as banks loaned on anything except tangible goods, they departed from the real bills doctrine, and indeed many banks had long abandoned that view (if they ever subscribed to it at all). So in that regard, the critics were right. However, "big business" represented the fastest-growing sector of the economy, and the flow of money to that sector represented a natural development. Moreover, claims that the 1920s constituted nothing more than a "speculative bubble" are ludicrous. During the 1920s auto sales equaled those of the 1950s, radios in home use during an eight-year period increased from 60,000 to 7.5 million, total assets of the largest 200 companies doubled during the decade, industrial capital equipment increased by $100 million, and output per worker rose 43 percent from 1919 to 1929. Perhaps the most important new industry, electricity, profited from a 330 percent increase from 1899 to 1929, spurring the burst in utilities stocks. So the growth was real, and it transferred money from commercial and agricultural purposes to the industrial sector, creating a massive surge in the economy.

Closely linked to the first criticism was the second, namely that the Mellon tax cuts created a maldistribution of wealth, which led to underconsumption. That view, later espoused by historian Arthur Schlesinger, Jr., and economists such as John Maynard Keynes and Peter Temin, found contemporary champions in William Trufant Foster and Wadill Catchings, authors of *Road to Plenty* (1928). The criticism held that the tax cuts enacted along the lines requested by Secretary Mellon embodied no more than tax breaks for the wealthy in hopes that the benefits would "trickle down" to the working groups. (Hence critics frequently referred to any type of tax cut in the top brackets as "trickle down" economics.) When Mellon took office in 1921, he found tax rates for the top bracket in excess of 70 percent and that those high rates, in David Beito's words, "created a veritable cottage industry among the wealthy to find tax shelters." By lowering the top brackets from 71 percent and 51 percent to 58 and 50 percent respectively, Mellon got exactly what he wanted: the wealthy put their money into productive, and *taxable*, enterprises rather than shelters. The percentage of total taxes paid by the wealthy rose by *15 percent* after the institution of the Mellon program until 1929, while the percentage paid by the taxpayers earning less than $5,000 fell by more than 12 percent. Mellon's cuts generated new tax revenues that reduced the federal debt by one-third and allowed the nation to lend $10 billion abroad. The reinvigorated business sector, unburdened by oppressive taxes, took off.

Most social historians appreciate the effect of the automobile on American culture and daily life, but few understand its impact on banking and credit. The automobile opened up credit markets for rural Americans who previously relied on the local bank. Suddenly–almost overnight–rural customers could shop for loans the way they shopped for shoes. Bankers no longer had captive markets. Moreover, automobiles engendered road construction, spawned a true consumer petroleum industry, and ultimately, much to consumers' dismay, required an entire support network of spare parts and mechanics. No amount of institutional change or shifts in the money supply affected lending in rural America as did the arrival of the automobile, and banks readily took advantage of it. In another respect, however, many banks missed a shining opportunity to jump into automobile financing, and institutions such as General Motors Credit Acceptance Corporation filled the void. When the opportunity came again, in the post-World War II era, banks did not make the same mistake.

Despite the freedom and competition introduced by the automobile, rural America still suffered from the worldwide overproduction of farm goods that drove agricultural prices through the floor. Banks soon reached the limit of their lending abilities, and, as a result, farmers turned their outrage toward the Federal Reserve, which they accused of contracting credit to agricultural areas. South Carolina banker David R. Coker, who served on the Richmond Fed, claimed that the Reserve Banks were "as helpful as possible" and extended as much credit as they could to agricultural areas. In fact, throughout much of the 1920s the money supply expanded (leading to charges by modern historians that Mellon had followed a program of deliberate inflation for political purposes, or that the