RESEARCH INSTITUTE FOR HOUSING AMERICA **SPECIAL REPORT**

MORTGAGE BANKING IN THE UNITED STATES, 1870–1940

DR. KENNETH A. SNOWDEN
PROFESSOR OF ECONOMICS
BRYAN SCHOOL OF BUSINESS
UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

RESEARCH INSTITUTE for HOUSING AMERICA

MBa
MORTGAGE BANKERS ASSOCIATION

September 10, 2014 11:58 AM 13129

RESEARCH INSTITUTE FOR HOUSING AMERICA **SPECIAL REPORT**

MORTGAGE BANKING IN THE UNITED STATES, 1870–1940

DR. KENNETH A. SNOWDEN
Professor of Economics
Bryan School of Business
University of North Carolina
at Greensboro

13129

TABLE OF CONTENTS

TABLES

FIGURES

EXECUTIVE SUMMARY

From 1870 to 1940, the mortgage banking industry in the United States was a dynamic and entrepreneurial sector that took on different shapes and developed a variety of different mechanisms to originate, service and fund mortgage loans. This diversity was driven in part by the variety of functions mortgage bankers performed. They financed agricultural expansion in the Great Plains and real estate development in expanding urban markets throughout the nation, as well as the nationwide shift to ownership of single-family homes after 1900. Because the farm mortgage banking sector developed first, several innovations originated there and were then adopted or modified by urban mortgage bankers.

Farm and urban mortgage banking also followed broadly similar paths of development. For several decades, privately financed activities and innovations dominated, until sweeping federal interventions transformed the markets in which they operated. For farm mortgage bankers, the public phase began with the passage of the Federal Farm Land Bank Act in 1916; for urban mortgage bankers the turn came with the National Housing Act of 1934 and its FHA mortgage loan insurance program. Both episodes are analyzed here by examining the debates that led to legislative enactment, the regulatory structures that were created and the impacts these had on mortgage banking organization and practice.

The history presented here should be seen as a complement to examinations of the mortgage banking industry during the immediate post-World War II era (Klaman, 1959) and the 1963–1972 period (Kidd, 1973). The three works, taken together, provide an account of nearly a century of mortgage banking progress and activity in the United States. An important generalization that emerges from the combination of the three is that the development of mortgage banking took on an hourglass shape between 1920 and 1970: it began as a sector diverse in function and technique, became narrowly focused on federally sponsored mortgage products and single funding channels in the immediate post-World War II period, and then transitioned back to a more diverse business model in the mid-1960s. This sequence was driven by the damage wrought by the 1930s mortgage crisis and public interventions that were implemented to ameliorate it.

Some additional findings of note:

- During their early pre-federal intervention periods, farm and urban mortgage bankers focused on three similar elements:
  + The use of informal guarantees or explicit mortgage insurance to protect and attract investors in the markets for whole mortgage loans.
  + The development of correspondent relationships with life insurance companies.
  + Failed experimentation with European-style covered bond programs.
- The Federal Farm Loan Bank system and the FHA mortgage insurance programs that restructured both the farm and urban mortgage banking sectors shared three common features:
  + They each encouraged the widespread adoption of long-term, amortized mortgage loans.
  + They each created mechanisms to stimulate the inter-regional transfer of mortgage credit and the convergence of mortgage rates and lending terms across regions.
  + They each established federal chartering systems for privately financed European-style mortgage banks to create active secondary markets for long-term, amortized loans.

Between 1870 and 1940 the mortgage banking industry experienced periods of remarkable stability and severe crisis. Historical perspective provides understanding of these cycles and the policy responses these episodes have stimulated, and can contribute meaningfully to a greater understanding of the industry today.

INTRODUCTION

Why do we need a history of the mortgage banking industry in the United States between 1870 and 1940? To begin with, no such treatment has yet been written. One can learn a great deal about the topic by reading descriptions of mortgage banking that were written during this 70-year period, but even these accounts have yet to be examined systematically and retrospectively. The historical perspective is important in this case, because mortgage banking was a dynamic and entrepreneurial sector during this period that took on different forms and performed several distinct functions. Because of this variation, historical accounts of specific episodes that involved mortgage bankers, or examinations of particular methods that they used, can create a disconnected impression of their activities, business practices and contributions. The goal here is to combine the historical record with evidence about the history of mortgage banking that has been produced since then, into an account of the industry's development that is integrated along several different dimensions.

The first is to connect the development of the mortgage banking industry to the specific contributions it made as the national economy grew and developed between 1870 and 1940. Three distinct trends were involved. First, between 1870 and 1900, agriculture expanded rapidly from east to west across the northern and southern Great Plains and then continued to grow there for three decades as these areas filled in and matured. The process required continuous infusions of mortgage credit for six decades, and these were facilitated by western farm mortgage bankers. Second, between 1880 and 1930, urbanization in the United States also spread across the nation in an east-to-west pattern. To finance the residential and nonresidential real estate development that accompanied this process, mortgage bankers mobilized savings both within and between these dense local markets. A third contribution was a shift in focus and the development of new funding channels for the home mortgage market as single-family and homeownership became more important to the national economy during the first three decades of the twentieth century. The history presented here is organized around these three trends, and examines the development of farm, urban and nonfarm residential mortgage banking in that order.

The discussion here is also designed to provide a coherent view of the organizational and contractual structures mortgage bankers used in these different market settings. To do so, the discussion traces how innovations and practices that were first used by farm mortgage bankers were adopted or modified by their urban counterparts. Three areas of comparison stand out. First, farm mortgage bankers used informal recourse arrangements to ameliorate the risks and informational asymmetries investors faced when purchasing whole loans; these intermediaries did so by developing and maintaining reputations to buy back troubled loans they had originated and serviced, so that their investors suffered no losses. Urban mortgage bankers, in contrast, developed explicit mortgage insurance products to deal with the same issues. Second, over time, mortgage bankers in both the farm and urban markets found it advantageous to move beyond the "retail" business of selling whole loans by forming long-term, exclusive relationships with life insurance companies. Finally, mortgage bankers in both sectors experimented with private mortgage securitization, but in different forms. In the 1880s, large western farm mortgage bankers established their own covered mortgage bond programs, and the same innovation was later introduced in the urban market. But after 1910, urban mortgage bankers also began to use participation certificates to combine or divide, and even to create tranches, from the payment streams of specific mortgage loans. The discussion here documents all three of these comparisons between farm and urban mortgage banking, but does not attempt to explain these patterns. Each one of them, in fact, represents an important topic for further analysis and study.

Business practices and outcomes in both farm and urban mortgage banking were also directly influenced during this period by sweeping federal intervention that was designed to change the fundamental structure of the mortgage markets in which they operated. Interestingly, both pieces of legislation — the Federal Farm Land Bank (FFLB) Act of 1916 and the National Housing Act (NHA) of 1934 — encouraged the adoption of the modern long-term, high loan-to-value, fully amortized mortgage loan and authorized systems of federally chartered, privately financed European-style mortgage banks to fund the new contracts. Private farm mortgage bankers rejected both elements of the FFLB system, but then operated successfully alongside it for more than a decade. In contrast, nonfarm residential mortgage bankers embraced the new Federal Housing Administration (FHA) insured loan program, but adopted a different funding mechanism for them after the proposed federally chartered, privately financed home loan mortgage banking system failed to develop.

The discussion here examines in some detail the legislative debate that led to the creation of the FFLB system and the FHA program, and the subsequent impact the two had on mortgage bankers. These analyses provide a third area of integration for this history — perspective and background that can be used to understand the origins and impacts of policies that have influenced the mortgage banking industry since 1940. It is not straightforward to draw specific recommendations about current policy from this or any other historical analysis, and I do not attempt to do so here. But history becomes more useful, as well as more interesting, when we learn from, as well as about, past experience, and there are opportunities to do so here. We will see, for example, that the FFLB system was designed and predicted to drive traditional farm mortgage banking out of business but, in this case, even government subsidy could not displace an apparently valuable business model. On the other hand, it turns out that the FHA home mortgage insurance program was successful in supporting the homebuilding recovery of the late 1930s because it complemented the correspondent system of home mortgage lending that life insurance and mortgage companies had developed a decade earlier. I also examine here three unsuccessful attempts before 1940 to establish privately financed mortgage banking systems similar to those that were being used in Europe. Each of these episodes offers valuable insights into the difficulties that can arise when new funding mechanisms are placed into existing mortgage lending systems, especially since we are currently considering how the introduction of new alternatives could help rebuild our own private mortgage lending system.

A final, but important, goal of the project is to produce one chapter that can be combined with others to form a comprehensive view of the entire history of mortgage banking in the United States. In pursuing this end, I have benefitted greatly from two earlier examinations of mortgage banking that were sponsored by the Mortgage Bankers Association (MBA). The first, by Saul Klaman (1959), is a masterful account of the rise of the modern mortgage company in the post-World War II era. Philip Kidd (1977) continued Klaman's analysis of trends, changes and challenges within the industry from 1963 through the early 1970s. Taken together, these two books provide a clear picture of how the mortgage banking industry was structured and operated immediately after the war and how it grew, developed and changed over the next quarter century. An obvious goal for this project was to produce a narrative that could explain how the industry described by Klaman appeared, and why it developed along the lines he and Kidd observed. It makes sense, therefore, to briefly summarize their work at the outset.

Klaman characterized the modern postwar mortgage company as a unique financial intermediary that originated and sold federally insured or guaranteed mortgage loans and derived most of its revenue from servicing those loans. These companies were privately owned, closely held and operated with small amounts of capital relative to the volume of loans they originated and sold. Important to their business model, therefore, were forward commitments from their lending partners that gave them access to short-term bank credit, which they used to produce and hold inventories of loans. Mortgage companies operated primarily in local markets, but formed close and enduring relationships with national institutional lenders who permanently funded the loans their mortgage correspondents made. During the 1950s, these institutions were usually either life insurance companies or mutual savings banks.

Klaman shows that the rapid growth of these companies after 1945 was closely connected to portfolio adjustments within the life insurance industry. These intermediaries held large amounts of Treasury debt at the end of World War II, and took more than a decade to replace these with safe, relatively high-yielding FHA and Veterans Administration (VA) home loans. Mortgage companies were the primary conduit through which these national lenders operated, and they helped to reduce segmentation in the nation's mortgage market by transferring mortgage credit from savings-abundant areas to those with greater demand for home mortgage loans. Through these activities, the postwar mortgage company helped to integrate what had been a regionally segmented mortgage market, and to equalize mortgage rates and lending conditions across the nation's residential mortgage market. Klaman also identified important challenges that lay ahead for these intermediaries. Most importantly, they had been unable by the late 1950s to extend their operations into the conventional residential mortgage market because its secondary market had not yet fully developed. As a result, postwar mortgage companies were vulnerable to changes and disruptions in the federally insured and guaranteed programs that they relied on so heavily, alterations in monetary policy that changed the relative attractiveness of loan types, and the investment decisions of their institutional partners.

In his examination of mortgage banking, Kidd (1977) characterizes the industry as "a financial intermediary in transition" between 1963 and 1972. The transition he describes was not gentle; it involved changes to every element of the postwar mortgage company that Klaman had described just a few years earlier. During the period, the correspondent relationships with life insurance companies weakened as these investors shifted mortgage lending from single-family housing toward income-producing properties. To maintain the volume of their single-family business, mortgage companies had to find new investors, so savings-and-loan (S&L) associations became important customers. The mortgage companies also began to handle a more diverse mix of loans than before, increasing multifamily activities and moving into the markets for income-producing property, conventional single-family loans and even construction financing. The new investors and loan types did not come with the forward commitments insurance companies had provided, so during the late 1960s and 1970s mortgage companies also had to bear additional risk, and develop risk-bearing techniques, in order to make and sell loans financed with short-term bank credit. Kidd documents other challenges — among them, a nationwide shift from single- to multifamily housing, the management of shocks to the housing finance system from monetary policy, and adjustment to the restructuring in 1968 of FNMA.

In the conclusion of this paper, I explain how the history of pre-1940 developments in mortgage banking presented here provides new perspective and context for the Klaman and Kidd findings. We shall see that the urban mortgage banking industry was diverse in focus and techniques in the 1920s. Some operated as correspondents for insurance companies in the home mortgage market, others retailed residential and small business property loans to local investors. Some wrote private mortgage insurance on the loans they sold, while others funded them by issuing mortgage-backed bonds or participation certificates. Against this historical background, the work of Klaman and Kidd suggests that the development of the mortgage banking industry between 1920 and 1970 took on an hourglass shape — a diverse, multifaceted sector became narrowly focused by 1945 on a single market segment and funding model before transitioning two decades later back to an industry that used different mechanisms to make and sell a variety of loan types to a broad set of investors. This sequence was driven, of course, by the damage wrought by the 1930s mortgage crisis and the public interventions that were implemented in response, to ameliorate the crisis and rebuild the nation's mortgage lending systems. I expand on this interpretation in the conclusion of the paper.

The discussion focuses first on developments in farm mortgage banking between 1870 and 1900, and then on how this segment of the industry fought against the creation of the FFLB system, and operated. The third section examines developments within the urban mortgage banking sector between 1900 and 1930, and then how it was reshaped by depression-era housing policy. All three parts are divided into sub-sections so that readers can pick their own way through the lengthy chronology.

FARM MORTGAGE BANKING: 1870–1900

The development of farm mortgage banking in the United States during the late nineteenth century was driven by the growth of agricultural production and population to the south and west. Lance Davis (1965) argued that the spatial expansion of the economy during the period created substantial and persistent imbalances in local credit markets, because savings were disproportionately generated in the mature northeast section of the nation, while the demand for investment funds was strongest in the areas of recent settlement. These locational mismatches in the investment market mattered because information and transactions costs impeded the flow of investment funds out of the northeast. Davis collected evidence of substantial regional differentials in the costs of both short- and long-term credit during the period that followed the geographic pattern suggested by his segmentation hypothesis. He also described the appearance and development of new investment channels during the period, that were designed to facilitate the inter-regional movement of investment funds in the bank loan, commercial paper and mortgage markets. The development of farm mortgage banking examined in this section, therefore, fits into a larger historical narrative about the development of financial markets in the nineteenth-century United States.

Severson *et al.* (1966) provided a detailed, but highly localized, view of regional differences in the performance of farm mortgage markets before 1900, by combining their analysis of all mortgage loans recorded in Champaign County, Illinois between 1836 and 1895 with similar examinations of county level farm mortgage records for Story County, Iowa (Murray 1933) and York County, Nebraska (Hinman and Rankin 1933). Taken together, these studies provide a clear picture of mortgage lending conditions during a 70-year process of agricultural development across a 600-mile expanse. The persistent regional differentials Davis emphasized shows up in these counties; not only were mortgage rates in all three markets high compared to the northeast, but they also systematically varied among themselves from east to west. In particular, when measured at the same date, farm mortgage rates in Champaign County were 50 to 100 basis points lower than in Story County and 100 to 150 basis points lower than in York County. These differentials across the counties remained remarkably stable over the late nineteenth century, even as average mortgage rates in all three converge to their levels in the east — by 200 basis points in Champaign between 1865 and 1880 and by 250 basis points in Iowa and Nebraska between 1875 and 1890. In all three cases, the convergence to eastern levels occurred at the same time in each market that the share of lending by out-of-state investors increased to approximately one-half. These patterns are consistent with Davis's claim that financial innovation and development gradually facilitated the flow of inter-regional investment from the northeast to the west during the late nineteenth century, and reduced local imbalances in the supply of farm mortgage credit.

The evidence marshaled by Davis and the county level studies provides important evidence that financial market segmentation was responsible for differences across regions in access to and cost of farm mortgage credit. However, there are other plausible explanations for the observed differences in mortgage rates. Most obviously, levels of default risk were certainly higher in areas of more recent settlement, and should have converged over time to levels similar to those in more mature markets. Eichengreen (1984) examined this alternative using 1890 state-level data and found that farm mortgage risk premia were substantially higher in western and southern markets than in the east. He concluded that these risk differentials, along with the depressing impact of usury ceilings in the northeastern states, explained nearly all of the observed systematic regional differences in farm mortgage rates.

Snowden (1987) pursued the topic using a special 1890 enumeration of mortgage lending conditions in a nationally representative sample of 102 counties. The Census collected information on average loan-to-value ratios, terms-to-maturity, loan sizes and borrower distress for every mortgage loan made between 1880 and 1889 in these counties and, by doing so, provided a remarkably detailed picture of farm mortgage lending conditions across the entire nation. Data drawn from the enumeration are summarized in Table 1, and confirm the basic pattern Davis emphasized — the average cost of farm mortgage loans (including commissions) was highest in those regions that were also experiencing the most rapid expansion in population and number of farms.

Table 1
Farm Mortgage Characteristics for 102 Counties in 1890

Region[a]	Number of Counties	Effective Interest Rate	Size of Mortgage ($000s)	Encumbrance to Property Value	Average Life of Mortgage
Alabama	14	5.56	2.003	0.41	6.62
Alaska	12	7.45	1.672	0.44	4.58
Arizona (Arizona Territory)	19	7.07	1.243	0.32	4.87
Arkansas	17	8.23	0.819	0.43	2.72
California	30	8.55	0.928	0.35	3.79
Colorado	10	9.11	2.313	0.37	2.81

[a] Throughout the paper, census definitions are used: New England (ME, NH, VT, MA, RI, CT); Mid–Atlantic (NY, PA, NJ); South Atlantic (DE, MD, WV, DC, VA, NC, SC, GA, FL); East South Central (KY, TN, AL, MS); West South Central (OK, AR, LA, TX): Mountain (ID, MT, ND, SD, NE, UT, KS, CO, NM, AZ); Pacific (WA, OR, CA).

Source: Report on Mortgages (1895), Volume 12, 1890 U.S. Census.

Snowden (1987) used these data to build an empirical model of interest rates that controlled for the effect of default risk, loan administration costs, term premia and state usury laws. Within this framework, it was also possible to estimate the impact of market segmentation on mortgage rates because the Census reported the share of lending by out-of-state investors in each of the sample counties. The regional means of this variable, also shown in Table 1, reveal that inter-regional transfers of farm mortgage credit were significant in all regions outside of the northeast and especially in the west north central region. The measure of out-of-state lending turns out to be an important and significant determinant of variations in farm mortgage rates, even after controlling for other lending risks and costs; the model predicts that average farm mortgage rates would have been 150 basis points higher in a county that relied solely on out-of-state funds relative to one that was totally self-sufficient. This historical record provides compelling evidence, therefore, that the farm mortgage market was spatially segmented in the late nineteenth century and of the importance of improvements in the mechanisms used to move funds inter-regionally during the period. The farm mortgage banking industry was central to the process.

Loan Agents in the Inter-Regional Farm Mortgage Market

Prior to 1900, mortgage markets in the United States were much less heavily intermediated than in the modern era and especially so in the farm mortgage market. Commercial banks were well placed to serve mortgage borrowers throughout the country, but their participation was either limited by the strictures of the real-bills doctrine (state banks) or prohibited entirely (national banks). The evolving role of commercial banks after 1900 in the farm and urban mortgage market are treated in greater detail below. As a result, most farm mortgage loans, even within local markets, were made and held by individual lenders. These lenders, therefore, had to actively manage loan origination and servicing themselves or hire people to perform these services locally. In the inter-regional farm mortgage market, an investor could participate only by relying on a representative located close to the property being mortgaged. These loan agents were used by every intermediary or individual investor who participated in the national mortgage market before 1900, and we first explore what these agents did and how they were supervised and compensated. The next section explores why and how mortgage companies arose to monitor them.

We have a clear picture of the relationship between an individual investor and a western loan agent through Bogue's (1955) detailed account of the mortgage business conducted by a wealthy New York family, the Davenports, who invested heavily in farm mortgages in Illinois, Iowa, Kansas and Nebraska between 1870 and 1900. The family chose lawyers, real estate promoters and, most frequently, bankers, as its loan agents. Individuals like these could easily and at low cost acquire and assess information required to select and service mortgage loans. The Davenports required much more, however. The Davenports first sent a son to live in Illinois for several years in the 1860s to learn the intricacies of the western mortgage loan business: how to select borrowers, set loan terms and maintain lending records (Bogue 1955, 9–11). He also developed an understanding of how to handle delinquencies, foreclosure proceedings and land sales. Potential agents had general knowledge of these matters but, with hands-on experience, the Davenports could be explicit about the lending and servicing model they preferred and could insist that their agents follow it. After selecting and training an agent, moreover, the Davenports typically put each one through a trial period during which only a few loans were made and the new agent's performance could be assessed. Only then would the Davenports entrust an agent with substantial lending capacity and discretion over loan selection (Bogue 1955, 62).

Even an experienced loan agent, however, had to be monitored and provided with incentives to perform in the Davenports' best interest. The loan agent, after all, observed information about the borrower and the encumbered property that the family could not. He had both opportunity and incentive, therefore, to increase his own well-being at the Davenports' expense by making high-risk loans, sharing "hidden returns" with the property owner or supplying too little enforcement effort. Moreover, because loan agents so frequently had collateral interests in their local real estate markets, they also had opportunity and incentives to gain for themselves by mismanaging the family's lending business.

The Davenports used two techniques to keep loan agents in line. First, they monitored their agents directly with frequent correspondence and by sending a family member west each year to conduct on-site evaluations of their agents' work and records. Supervision of this type protected against gross negligence or fraud, but could not assure that the agent was diligent when negotiating or enforcing each loan. To provide these incentives, the Davenports, like all other investors, relied on a commission-based compensation system for their mortgage loan agents. Under this contract, the agent agreed to search for prospective borrowers, take applications, perform appraisals and forward the papers for the investor's approval. If the investor accepted the loan, the agent was compensated with a commission. The commission was calculated as a percentage of the loan's principal and was normally paid by the borrower to the agent when the loan was closed. The agent then passed the mortgage to the investor and agreed to service the loan until it was repaid.

Under this contract, the eastern investor bore all of the monetary default risk on the loan, while the better-informed agent received a commission that was fixed and independent of the loan's outcome. This structure is at first surprising because contracts often place risk on the party who can observe and affect a risky outcome — with "skin in the game," the informed loan agent would have had incentive to select good quality mortgages and to service troubled loans with care and diligence. How could a loan agent be expected to do the same under a commission system in which he suffered no personal monetary loss when a loan defaulted?

The commission contract worked because the loan agent expended time and effort, rather than financial resources, when originating and servicing mortgage loans. Considerable time and effort was spent locating potential borrowers, taking their applications and making appraisals before sending a loan application for the investor's approval. If the investor did not accept the loan, the agent received no commission and, therefore, no compensation for his time. Thus, he had stronger incentives to submit only high-quality loans than he would have had, for example, under a salary system where he could, unless closely monitored, expend little or no effort, recommend loans of poor quality and still receive compensation. Similar issues would have arisen if the agent was put on salary when servicing a troubled loan. In that case, the agent would have had incentive to increase the demand for servicing by making risky loans look safe at origination or by postponing the resolution of a default.

But how did the receipt of a commission at origination provide incentives for the agent to spend the time and effort required to enforce a mortgage that went into default? To begin with, the commission received by the agent had to compensate him for the expected level of "effort cost" associated with loan administration and servicing. Under this contract, the agent had incentive to originate high-quality loans, reduce the rate of delinquency and minimize his enforcement activities. But once the loan had been made and the commission paid, it seems the agent would have little incentive to protect the lender's interests, given that he would receive no explicit payment for the substantial amounts of time and effort that were involved. The incentives would exist only if the agent expected to lose something of value if he walked away from a bad loan. Investors in the inter-regional mortgage market frequently established long-term relationships with their agents and could threaten to discontinue lending through those agents who failed to enforce a loan. Therefore, it was the promise of future commissions that provided loan agents with the incentive to service and enforce outstanding mortgage contracts.

The experience of the Davenports underscores the considerable time, effort and expense eastern investors had to bear in order to locate, train and monitor western loan agents. The Davenports spread these costs over 4,500 loans they made and held in Illinois, Iowa, Kansas and Nebraska between the mid-1860s and 1890. Moreover, the large volume of lending provided agents with steady streams of commissions on new loans that encouraged agents to value their long-term relationship with the Davenports and to perform their duties carefully and faithfully. There were many eastern investors who were attracted by the high returns provided by western mortgage loans, but few could operate on the scale of the Davenports. As a result, too little mortgage credit flowed to the west and south to close the inter-regional funding gap in the farm mortgage market. A mechanism was required so that a broader class of eastern investors could use loan agents to help fund western agricultural development.

The Western Mortgage Company

A few western farm mortgage companies operated in the Midwest during the 1850s, but the industry did not grow substantially in number and size until the 1870s, when agricultural development pushed into Iowa, Minnesota, Missouri and the Great Plains (Herrick and Ingalls 1915, 8–16). Most mortgage companies evolved out of the business of successful individual loan agents, but a few were organized by eastern entrepreneurs who recognized the rewards associated with more formally organizing the inter-regional flow of mortgage funds. By the 1880s, the increased popularity of the western mortgage companies prompted legislators in the most important eastern markets — Connecticut, New York and Massachusetts — to require these "foreign" mortgage companies to apply for a license and to file annual or semiannual statements of financial condition. Table 2 presents a summary of the number and location of companies that were licensed in New York and Massachusetts, or invited to apply for a license by the New York regulator. More than a dozen of these companies were headquartered in the east near their investors, but the great majority was concentrated in Missouri, Iowa, Minnesota and the northern Great Plains, the same areas with the fastest growth in population and farming.

Table 2
Location of Headquarters of Western Farm Mortgage Companies Operating in New York and Massachusetts in 1890

Region	Number	State	Number	Region	Number	State	Number
NE	13	CT	4	**WNC**	143	IA	23
		MA	3			KS	48
		NH	5			MN	9
		VT	1			MO	21
						NE	24
MA	1	NY	1			ND	10
						SD	8
ENC	3	IL	2				
		WI	1	**WSC**	6	TX	6
SA	4	FL	2	**MT**	10	CO	9
		GA	1			MT	1
		VA	1				
				PAC	7	CA	1
						WA	6
				ALL	187		

Source: Massachusetts: *Annual Report of the Commissioner of Foreign Mortgage Corporations*, First (1890) and Second (1891). New York: *Annual Report of the Superintendent of Banking, Relative to Foreign Mortgage, Loan and Investment Companies*, 1891.

Mortgage loan companies used sophisticated methods to originate, service and market farm loans. They developed networks of loan agents in the field (sometimes over 100 strong) who filled out standardized applications, including confidential recommendations, when submitting loan applications to the home office. The activities of the individual agents were monitored by a staff of traveling supervisors, who would also gather information concerning markets in which the company should expand or contract lending activities. The loan agents were paid a commission by the borrower for their services when the loan was closed, which was taken out of the principal of the loan. The home office made suggestions about the size of commissions, but the individual agents were often free to negotiate the fee for themselves. The home office, meanwhile, supervised the marketing of the western farm loans and all administrative tasks including drawing contracts, maintaining mortgage ledgers and receiving and disbursing funds. The loan agent and home office worked together in trying to cure delinquent loans.

We have a good idea of the size, organization and structure of these operations because the business ledgers of one company, the J.B. Watkins Company of Lawrence, Kansas, have survived and been carefully examined (Bogue 1955; Snowden 2010). Jabez Watkins had served as a loan agent when he established his business in 1873; over the next two decades, it became one of the largest and most successful firms in the industry. Table 3 shows how the business developed between 1880 and 1889. Watkins's scale of operation was much larger than the Davenports', with more than 1,000 loans made and sold each year, although with substantial year-to-year variation. At the beginning of the decade, the company's lending was concentrated in Kansas and western Missouri with a few other loans in Iowa, Nebraska and the Dakotas. Then, in 1882, the business expanded into Texas and, from then on, the company made loans only in three states. The company was involved in a large number of local markets within these states, however, as it made more than 100 loans in 40 counties and more than two dozen loans in another 57 counties.

To operate the loan business, Watkins employed two full-time traveling supervisors, an office staff of eight and a full-time lawyer. The office was organized into a security department (to make loans), an interest department (to collect interest payments from borrowers and forward them east) and a legal department (to handle foreclosures and foreclosed real estate). The company also had to establish a substantial marketing operation. To attract investors, the Watkins Company mailed circulars and placed advertisements in eastern newspapers to promote the general reputation of Kansas farm mortgages as safe and remunerative investments, and to sell their own loans. Watkins himself also corresponded tirelessly with prospective investors and even paid for some of them to visit Lawrence so they could personally inspect his lending operation. In addition to his home office staff, by 1880, Watkins employed a sales force that solicited funds from investors in 11 eastern cities and staffed company offices in New York and London (Bogue 1955, 86–90).

Table 3
Whole Farm Mortgage Loans Made and Sold by J.B. Watkins

Year	Total	Kansas	Missouri	Texas	Other	Reassigned
1880	1,550	1,333	183		34	291
1881	1,654	1,304	160		190	316
1882	841	431	282	123	5	69
1883	950	305	292	351	2	64
1884	1,255	606	234	412	3	59
1885	1,659	962	300	397		86
1886	2,083	1,440	115	528		151
1887	1,057	612	22	423		101
1888	547	102	31	411	3	48
1889	523	27	22	483		53
	Counties in which Watkins made:					
	100+ loans	29	5	7		
	25–99 loans	24	7	26		
	5–24 loans	34	11	35		

Source: J.B. Watkins Company business ledgers; see Snowden (2010).

Risks and "Guarantees" in Farm Mortgage Banking

The western mortgage company shared in the commission the borrower paid when the loan was closed. It also earned annual interest payments from the borrower based on a second-lien note that was written separately from the first lien that would be sold to the investor. Part of these payments compensated the mortgage company for the costs and risks associated with matching the volume of funds sent from the east to the flow of western loan applications. The Watkins Company, for example, began paying eastern investors interest two weeks after receiving their funds, even if there were no loans immediately available for assignment to those investors (Bogue 1955, 50–52). There were also problems matching specific investors to particular loan applications. In the 1870s, the Watkins Company mailed lists of pending applications back east and allowed investors to select their preferred investments. However, delays and complaints occurred under this system when two or more investors selected the same loan, so Watkins began to assign loans to investors from his Lawrence office in the early 1880s and then mailed the loan application and supporting documents back east for approval. Under this system, which became the norm in the western farm mortgage market, costs were generated if a loan had to be reassigned because the assigned investor refused it (Darrow 1892, 1–5). The number of such reassignments in each year for the Watkins Company is shown in the last column of Table 3. We shall see below that the problems and costs associated with the coordination function involved in marketing whole loans provided a strong impetus for Watkins and other owners of mortgage companies to develop mortgage debenture programs in the late 1880s.

To sell whole mortgage loans to investors, however, the mortgage company had to convince the investor that it would sell high-quality loans and not exploit the informational advantages it enjoyed over the investor. This is because the eastern investor holding a loan faced three sources of risk: a) the exogenous risk of the project being financed, b) the quality and intensity of the services provided by the loan agent and c) the company's own diligence and honesty in supervising the agent. If a mortgage loan went into default, an uninformed eastern investor could not determine which of these factors had been responsible, so a mortgage company could raise its own payoff by monitoring loan agents carelessly or underreporting loan payments made by the borrower and then attributing the outcome to the borrower's bad luck. The information asymmetry between the mortgage company and its investors was so profound, in fact, that risk sharing between the two had to be severely restricted. The arrangement the industry adopted to alleviate the concern of investors was explained a century ago by the Vice President of the Farm Mortgage Bankers' Association of America (FMBA):

> **The farm mortgage banking house… enables [the client] to invest with even greater assurance of safety and convenience in mortgages on lands thousands of miles away, than he could in a mortgage on his neighbor's home or farm… As a result, the farm mortgage banker… cannot allow his client to suffer the loss of a single dollar, for his client would make no allowances in the case of loss — he would lose confidence in his banker and would wholly discontinue buying from him… (Robins 1916, 82–4).**

The solution was for the mortgage company to insure investors against all losses. To do so, the company had to be willing to shoulder a set of costly services that firms like the Watkins Company regularly performed. To begin with, the company forwarded semiannual interest payments to investors and property tax payments to local authorities even when a borrower was late in remitting the funds to the office (Bogue 1955, 90–92). If the default then became persistent or serious, the company initiated collection activities at its own expense and, if necessary, began foreclosure proceedings. In the latter circumstance, Watkins either bought the troubled loan back from the investor or traded it for a new loan. When farms were taken, therefore, they belonged to Watkins, who then managed or rented the farm while attempting to sell it. Watkins foreclosed on fewer than two percent of its loans in the early 1880s but, by 1883, the company had acquired 52,000 acres of foreclosed farm land and had to hire a full-time lawyer to manage the properties and administer the land sales department (Bogue 1955, 122–3).

Some mortgage companies advertised explicit guarantees of interest payments and principal to underline their commitment to absorb credit risk. Others, including the most established and respected firms, considered their obligation to their investors to rest simply on the company's integrity, judgment and experience (Preston 1922, 282; Robins 1916, 86–69). In fact, practitioners like these often criticized competitors that advertised explicit guarantees because of the legal and practical uncertainties investors faced when trying to exercise them following a default or foreclosure (Darrow 1892, 29–38). Moreover, the value of the guarantee of an unincorporated company depended heavily on information about the private finances of the owner. Watkins, for example, advertised a guarantee of interest and principal early in his career, but discontinued doing so in the early 1880s when inquiries into his health and personal financial condition became too troublesome (Bogue 1955, 126).

Farm mortgage bankers who eschewed explicit guarantees emphasized that their pledge to absorb credit risk was a "moral guarantee," rather than an enforceable contractual pledge (Robins 1916, 101). Using both forms of capital — reputational and financial — provided the companies with discretion concerning which to dissipate in the event of financial impairment. The choice was particularly meaningful in the western farm mortgage market because a mortgage company that closed because it could not honor an explicit guarantee could no longer service loans for investors located hundreds of miles east. Within this environment, the more reputable mortgage companies repudiated the enforceable guarantee and, by doing so, retained the flexibility to avoid liquidation if large numbers of loans went into default at the same time (Robins 1916, 99–100). Within this environment, farm mortgage bankers invested heavily in reputational capital while remaining thinly capitalized relative to the total volume of mortgage loans that they sold and promised to insure against loss.

Experimentation with Covered Mortgage Bonds

The western farm mortgage companies channeled hundreds of millions of dollars of mortgage credit from eastern and European investors to farm borrowers throughout the American Great Plains in the 1870s and early 1880s. They did so, however, by selling whole mortgage loans through awkward and cumbersome marketing systems that required personal interaction with hundreds of investors. In this situation, some companies considered implementing an alternative arrangement that was enjoying success in European markets at that time. Rather than selling whole loans, mortgage banks in continental markets used the mortgage loans they made as collateral for mortgage-backed debentures that sold at similar yields and in comparable volumes to national government debt. The organizers of western mortgage companies understood that debenture-based funding could generate substantial cost advantages relative to selling whole loans, and broaden the number and types of investors willing to provide farm mortgage credit. So Watkins and owners of other western mortgage companies decided in the 1880s to innovate.[1]

The mortgage companies were not chartered to serve as mortgage banks, nor were they subject to regulation specific to that function.[2] Instead, debenture programs were established by the company implementing a trust agreement that stipulated the types of loans that could be deposited and the process through which debenture bonds could be issued against this collateral (Darrow 1892, 22). Watkins employed the Farmer's Loan and Trust Company of New York, one of the most respected

1 Europeans — and especially British — also attempted to bring the innovation to the United States in the 1870s and 1880s. See Preston (1922, 278), Kerr (1963), and McFarlane (1983).

2 Watkins chose to incorporate under the general laws of Colorado because that state did not demand double liability of stockholders (Bogue 1955, 126).

firms in the business, as his trustee (Bogue 1955, 131). The manager of Watkins's New York office was designated as mortgagee for loans selected for the trust account, and he forwarded the borrower's note, a description and appraisal of the property and the property's title clearance to the trustee, who verified that the loan met the criteria specified in the trust agreement. Approved mortgages were then assigned to Farmer's Loan and Trust, which, in turn, certified an equal amount of five-year debenture bonds against this collateral. The debentures were issued in series of $100,000 and sold through the company's London and New York offices.

Watkins's new debenture program grew rapidly (see Table 4). Watkins planned to issue a total of $10.2 million in mortgage debentures between 1887 and 1893, and most of these were issued before the company entered receivership in April 1894.[3] Watkins predicted that the debenture program would crowd out his whole loan sales business, and the latter did decline from nearly two-thirds of total loan volume in 1887 to less than 20 percent in 1891. This shift, as expected, significantly lowered marketing costs (Bogue 1955, 129–30). No longer did the company have to reassign loans that investors rejected for being too small, written for the wrong term or in an unfamiliar legal form; under the debenture system, these could be placed into trust, so long as they met the pre-specified underwriting standards. The trust account also provided an outlet for new loan applications when orders from the

Table 4
Loan Sales to Debentures: J.B. Watkins Company

Year	Whole Loans Sold		Loans placed in Trust[a]		Debentures	
	Number of Loans	Amount ($000s)	Number of Loans	Amount ($000s)	Number of Series Issued	Face Amount ($000s)
1880	1,126	635.6	—	—	—	—
1881	1,675	1,018.1	—	—	—	—
1882	859	607.8	—	—	—	—
1883	968	894.8	—	—	—	—
1884	1,278	1,105.2	—	—	—	—
1885	1,669	1,433.8	—	—	—	—
1886	1,970	1,685.3	231	182	—	—
1887	1,039	963.6	602	515	8	800
1888	540	557.5	381	605	10	1,000
1889	539	865.5	343	611	10	1,000
1890	329	447.4	326	739	10	1,000
1891	125	107.5	522	761	—	—
1892	91	100.0	375	409	64[b]	{6400}[b]
1893	208	299.0	108	165	—	—

[a] Mortgages in trust were valued at the original face value of the loan.

[b] The number of series Watkins planned to issue between 1891–1893. Uncertain how many were certified or sold to investors.

Source: J.B. Watkins Company business ledgers; see Snowden (2010).

3 The company's records leave it unclear as to precisely how much of the last $6.4 million of these planned issues was actually distributed.

east lagged behind, and could be written without generating the costs associated with "splitting" a whole loan into a first lien to be held by the investor and a second "interest only" commission note that was payable to the company.

Although issuing debentures lowered marketing costs, it also aggravated informational asymmetries with investors. An investor in the whole loan market directly observed information about each mortgage that was offered for sale and could decide to accept or reject the loan. An investor who purchased a debenture, in contrast, had to rely on the trustee to inspect the mortgage papers and assess its eligibility according to prearranged criteria. Even with this additional level of monitoring, the mortgage company had to agree to a different risk-sharing arrangement with investors. Investors in a mortgage debenture received legally enforceable, general obligations of the mortgage company rather than the "moral guarantee" the mortgage banker attached to whole loans.[4] The trustee for the debentures of the Watkins Company, for example, was empowered to take control of and liquidate the mortgage in trust on behalf of the debenture bonds 60 days after the company had defaulted on scheduled payments to investors.[5] So, even though a mortgage company gained marketing efficiencies by issuing debentures, it did so at the cost of issuing to investors for the first time liabilities that carried legally enforceable obligations.

Watkins was just one of dozens of mortgage companies that established debenture programs during the 1880s and, together, these covered bonds funded about one-tenth of the total outstanding farm mortgage debt in the Great Plains by 1890.[6] Table 5 provides a broad view of the impact of these programs by reporting balance sheet information for all mortgage companies licensed by New York and Massachusetts in 1890, whether they had issued debentures or not. Each line in the table reports the information for a different cohort of mortgage companies. For example, the fourteen oldest companies, including the Watkins firm, are grouped together in the top line. By 1890, all but three of these oldest firms had established debenture programs, and together they placed 30 percent of all their mortgages behind debenture bonds. At the other extreme were the youngest companies; 14 out of 37 companies under four years of age established debenture programs, but only $1 million of the $18.4 million in loans originated by this group were placed behind the securities. For the industry as a whole, 62 of 99 firms were issuing debentures by 1890, and together they had placed 19 percent of their outstanding loans behind securities representing a volume of debt ($48.7 million) greater than the total encumbrance on owner-occupied Nebraska farms (U.S. Census 1895, vol. 13, 59).

4 Although called debentures, the securities the companies issued were collateral trust obligations (Willis and Steiner 1927, 334; Chamberlain 1927, 96).

5 As a practical matter, these liquidations only occurred when all of the mortgage company's assets were being allocated under a general receivership.

6 The estimates for the volume of mortgage bonds issued by these companies can be found in Snowden (1995a, Table 1). The data behind these estimates were drawn from only New York and Massachusetts state reports — a few companies might not have operated in these most important states.

Using the firm-level data underlying Table 5, Snowden (2010) attempted to identify the factors that influenced a firm's decision to adopt a debenture program and how heavily to rely upon it. It turns out that debenture programs were most likely to be established by large and relatively well-capitalized firms. Firms that used the debenture programs most intensively, on the other hand, were generally older and more experienced. These patterns suggest that issuers with an established reputation for finding and servicing high-quality loans experienced more success with the innovation than did newer firms without that reputation. Together these results might explain why debentures came much later to the U.S. farm mortgage market than to the European — until the 1880s, most mortgage companies in this country were too small, too inexperienced or too financially weak to issue millions of dollars of debt on their own account.

Table 5

Loans and Debentures Issued by Western Mortgage Companies Licensed in Massachusetts and New York in 1890, by Age of Company

Age of Companies [Years Old] (Year Established)	Companies Licensed In		Debentures		Loans Outstanding ($ millions)	Paid-In Capital ($ millions)	Debentures	
	1890	1897	Companies Issuing	Amount Issued ($ millions)			Number of Series Issued	Face Amount ($000s)
[11–20] (1872–79)	14	4	11	16.4	54.5	5.6	30%	10%
[6–10] (1880–84)	23	3	19	24.2	136.6	10.8	18%	8%
[5] (1885)	15	1	9	5.5	26.1	3.6	21%	14%
[4] (1886)	12	—	9	1.7	14.9	2.5	11%	16%
[3] (1887)	13	1	5	0.4	8.4	1.5	4%	18%
[2] (1888)	11	—	4	0.2	5.1	1.3	4%	25%
[1] (1889)	13	—	5	0.4	4.9	1.4	8%	29%
Total	102	9	63	48.7	250.5	26.7	19%	11%

Source: Massachusetts: *Annual Report of the Commissioner of Foreign Mortgage Companies, First* (1890) and Second (1891); New York: *Annual Report of the Superintendent of Banking, Relative to Foreign Mortgage, Loan and Investment Companies*, 1891

To investigate how the new debenture programs were used, Snowden (2010) also examined a sample of 689 loans that J.B. Watkins had made in 1887. Watkins placed 224 of these loans behind debentures and sold the other 465 to investors as whole loans. Detailed information about both groups of loans was extracted from Watkins's mortgage ledgers. The evidence clearly shows that assignment of a loan to the debenture program was not random or arbitrary: Watkins consistently placed behind debentures loans that would have been difficult to sell outright because they were small in size, short in maturity or had relatively high levels of debt per acre. These patterns suggest that debentures improved access to the capital market for borrowers who had trouble raising funds through the whole loan market. Included in this group, however, were mortgages that carried higher risk than loans that were sold outright. This characteristic of the debenture programs became of great interest in the mid-1890s after nearly all companies that had issued debentures failed in a western farm mortgage crisis.

The farm mortgage crisis of the 1890s brought trouble to mortgage companies whether they had issued debentures or not. The third column of Table 5 shows that only nine of the 102 companies licensed to operate in 1890 continued to be licensed by 1897. A straightforward and obvious explanation of the industry's poor performance is weather — several years of abnormally low rainfall in the Great Plains led to a wave of farm defaults and foreclosures that hurt all of the mortgage companies. But many observers argued that the manipulation and abuse of debenture programs by the mortgage companies had aggravated, if not caused, the crisis. Among the most vocal critics were the regulators in New York and Massachusetts, who found and published evidence that mortgage companies had placed low-quality mortgage loans behind their debentures and had even violated their own trust agreements.[7] For the next few decades, observers used this evidence to suggest that debenture programs had been successful in Europe, unlike in the United States, because continental mortgage banks were publicly owned or sponsored and closely supervised and regulated (Palyi 1934). The lesson from this perspective was clear — European-type mortgage banking could be successfully imported into the United States only with stricter European-like regulation. It would take another two decades, but this approach eventually won out.

The Life Insurance-Mortgage Company Connection

Throughout the late nineteenth century, life insurance companies were an important source of mortgage credit, but much of the lending was local in character because of regulation or the attractiveness of lending opportunities close to the home office.[8] Before 1900, five companies were notable exceptions to this generalization — four Connecticut firms (Aetna, Connecticut Mutual, Phoenix and Travelers), and Northwestern Mutual of Wisconsin. By 1890, these five companies held 30 percent of the life insurance industry's mortgage loan portfolio and an even larger share of inter-regional lending in both the commercial and farm mortgage markets. Of particular interest here are the relationships most of these companies established with western mortgage companies to conduct their inter-regional farm mortgage lending. This framework turned out to be an effective and durable innovation, and the life insurance-mortgage company connection served as an important conduit in the inter-regional mortgage market for nearly a century in both the farm and nonfarm mortgage markets.

Given the long-term nature of their liabilities, it is not surprising that life insurance companies were drawn to the mortgage market. In the inter-regional mortgage market, moreover, these large, national companies also had experience in setting up and managing agency networks quite similar in structure and character to those used by mortgage companies. Life insurance policies, after all, are subject to severe informational asymmetries, and these companies had to set up elaborate systems to make sure that their agents did not shirk their responsibility to assess the quality of applicants or

7 For an example, see New York 1891, 6–9.

8 By 1870, New Jersey, Ohio, California, Iowa, Kansas, Kentucky, and, most notably, New York had prohibited companies headquartered in their states from lending out of state.

simply misrepresent their quality in order to increase commission income. To do so, the insurance companies appointed general agents to supervise sales agents in each regional market and set up elaborate monitoring divisions at the home office to evaluate applications and claims sent in from the field. These mechanisms were strikingly similar to those implemented by the western mortgage companies, and suggest that life insurance companies could have been attracted to inter-regional mortgage lending because they could use a single-agent network to both sell insurance policies and make mortgage loans.

Northwestern Mutual took this approach. Wisconsin was one of the first states to allow its insurance companies to lend in other states; the rule was that an insurance company could invest in real estate loans in any state where it wrote insurance policies. Northwestern Mutual began to lend on urban property throughout the Midwest by 1860 and shows up as a farm mortgage lender for properties as far away as Nebraska by 1889. In the early 1870s, the company allowed its policy sales force to solicit mortgage loan applications and submit them for approval to the investment committee at the home office (Williamson and Smalley 1957, 63–81). The sales agents pressed for this privilege in order to help sell insurance policies, but the company's investment committee insisted that loan applications had to be evaluated on merit and not on the applicant's status as a policyholder. In making this argument, committee noted that policy sales agents lacked specialized knowledge about real estate and had weak incentives to make only high-quality mortgage loans. The company's executive committee was ultimately convinced by this argument and, from then on, Northwestern Mutual sold insurance policies and made mortgage loans through their own separate agency networks. Its experience was not unusual.

During the 1870s, the Life Association of St. Louis also experienced difficulties when it attempted to employ its policy sales agents as mortgage loan agents. In this case, the company implemented a policy investing in mortgage loans in the same areas where it earned premiums. To do so, it divided the company into separate "state" departments, and each of these conducted both policy sales and mortgage lending. Servicing the loans and undertaking foreclosure actions proved to be time-consuming and expensive under this system, however, and contributed to the company's failure in 1878 (Zartman, 136). So, despite the apparent complementarity, life insurance companies learned that it was unwise to tie mortgage loan investment decisions too closely to insurance sales (Williamson and Smalley, 83).

To conduct its mortgage lending, Northwestern Mutual hired several salaried "mortgage loan agents," and assigned each one to set up an office of the mortgage lending division in a different regional market. These branch offices operated as internal mortgage companies and operated through loan agents and brokers who were hired and supervised by branch office staff. In contrast, the Connecticut companies, which were located hundreds of miles east, established long-term relationships with independent mortgage companies located in the west, midwest and south to negotiate and enforce loans for them. Connecticut was the first state to give insurance companies the freedom to lend wherever they pleased, and Aetna, Connecticut Mutual, Phoenix Mutual and Travelers pursued the opportunity aggressively. By 1889, these four companies held $59 million of mortgages, primarily in mideastern cities and on farms throughout the north Central region. Nearly all had been purchased for the same mortgage companies that served individual eastern investors.

There were differences, however, in the structure of these relationships. Travelers worked through several different companies in each state and purchased both urban and farm mortgages from them. Aetna, in contrast, selected one company in each lending region and relied exclusively on that relationship in order to strengthen the mortgage company's incentive to perform. Between 1868 and 1896, Aetna focused its mortgage lending on farm mortgages and purchased nearly 35,000 loans on property located in Indiana, Illinois, Iowa and Minnesota. Table 6 shows that more than 93 percent of these loans were purchased from six mortgage companies, one each in Iowa, Minnesota and Nebraska, and four companies that operated in distinct sections of Illinois and Indiana. Aetna's approach worked well. The company suffered only modest losses during the late 1870s, even though its real estate holdings reached five percent of total mortgage investment. Moreover, the firm acquired relatively little additional property during the severe mortgage crisis of the 1890s (Aetna 1947).

Table 6
Concentration of Aetna Lending through Lead Mortgage Companies, 1879–1896

	Loans in State	T.C. Day	Bourland & Bailey	Moore	Pearson & Taft	Atkinson	Wilcox	All Other Agents
Iowa	9,299						8,821	478
Illinois	8,995		5,298		3,092			605
Indiana	9,307	3,842				5,171		294
Minnesota	1,784				1,728			56
Nebraska	4,100			3886				214
Other States	664							
All Loans[a]	34,149							

[a] Includes 664 loans made in other states.
Source: Calculated directly from the mortgage ledgers of Aetna.

Travelers, in contrast, foreclosed on 650 of the 2,100 loans that it had made through just two of its many mortgage company correspondents and acquired $.6 million in western farm property as a result. Moreover, nearly all of its western correspondents failed during that decade and the company was left to manage the liquidation of this property on its own (Travelers 1890, 95).

Travelers's experience was not unique, however, and all life insurance companies had to deal with the risks and costs that were associated with mortgage lending. The companies first learned of these problems during the Depression of 1873, when eastern urban land values collapsed and 71 companies failed, due to mortgage-related problems (Zartman 1906, 133). These events captured the attention of Connecticut legislators, who were particularly concerned about life insurance companies that were active inter-regional lenders. The independent audit they demanded showed that Aetna, Connecticut

Mutual, Phoenix and Travelers together held $46 million in mortgages on western properties in 1873 and had acquired $8.1 million of real estate through foreclosure (Connecticut 1878). The auditors declared all of the Connecticut companies sound, however, because each of them had found methods of disposing of foreclosed real estate without absorbing substantial internal losses. This was a remarkable accomplishment, given that the companies had to manage and sell substantial amounts of property located far away from company headquarters.

The property management activities, however, were costly. Lester Zartman (1906, 119) calculated the ratio of management expenses to property value for the 29 largest life insurance companies between 1896 and 1904, and found that it was highest for three inter-regional lenders: northwestern (seven percent), Aetna (nine percent) and Travelers (17 percent). No other company had a ratio greater than 5.2 percent, and the New York companies, which were still lending almost exclusively within local markets, all had ratios under three percent. But relative to other investors, life insurance companies were particularly capable of absorbing the costs without generating large losses. With deep pockets, the insurance companies could hire their correspondents temporarily as salaried employees to service their loans and be patient in disposing of foreclosed real estate.

The life insurance-mortgage company connection of the late nineteenth century was a major contributor to the regional integration of the farm mortgage market. But it was also the first appearance of a general structure that shaped the mortgage banking industry for more than a century. This was because insurance companies were, in many ways, the ideal customer for independent mortgage companies. To begin with, their business model required long-term investments. In addition, their large scale and steady demand for loan investments provided a regular stream of commission to compensate and provide incentives for loan agent networks. Finally, in times of distress, insurance companies were capable of bearing the costs of distress that were all too common when investing in distant mortgage loans through the auspices of independent, but thinly capitalized, mortgage companies. It is no accident that relationships with life insurance companies appear in every phase of mortgage banking history examined here.

PUBLIC INTERVENTION AND FARM MORTGAGE BANKING, 1900–1930

The first three decades of the twentieth century was a turbulent period for U.S. agriculture. The period began with a recovery from the western farm mortgage crisis of the 1890s that was strong enough that the period between 1910 and 1914 became known as the "Golden Age" of American agriculture.[9] The situation actually improved from this high-water mark as war-time disruptions drove international farm prices even higher, farm income doubled and farm land values reached record highs. The economic benefits from the war dissipated immediately after hostilities ceased but, in a wave of postwar optimism, farmers increased the total mortgage debt on their properties by 60 percent between 1918 and 1922 (Johnson 1973). Although agricultural income remained above 1914 levels throughout the 1920s, it could not support the new, higher level of mortgage debt. The result was a farm crisis in which rates of mortgage foreclosure steadily increased, farmland prices fell back to prewar levels and thousands of small, rural banks were forced to close.[10] Then, in the late 1920s, farm prices, income and land values began to plummet as the nation entered its Great Depression.

Along with the booms and busts of these three decades, a watershed was reached in the long-run process of relative decline in U.S. agriculture. The agricultural labor force and the amount of land under cultivation increased steadily and rapidly throughout the nineteenth century, but not nearly as fast as the nation's urban population, manufacturing activity or service sectors. That pattern changed in 1910 when the absolute number of gainful farm workers in the United States reached its historic peak and began its long twentieth-century decline. Table 7 shows that the rapid deceleration also took place in the physical expansion of the farm sector, as the percentage growth of improved farmland after 1900 fell to one-quarter of its value before. Most important for purposes here is the unbalanced regional pattern of the deceleration. Between 1870 and 1900, all regions of the country except New England saw an absolute increase in the amount of improved farmland. The west north

9 Farm prices reached such favorable levels before World War I that they served as benchmark for measures of "parity" in farm price-support programs for decades (Libecap, 1998, 185).

10 Between 1920 and 1930, the farm foreclosure rate (per 1,000 farms) rose from 3.8 to 18.0. Over the same period, one in five of the nation's 30,000 commercial banks operating in 1921 suspended operations by 1929.

central region claimed one-half of the total national increase by itself, however, and, as we have just seen, became the epicenter of late nineteenth-century farm mortgage banking development. After 1900, total improved farm acreage stopped growing, or actually decreased, in all four regions that lie east of the Mississippi River, but continued to grow in the west north central, south west central and mountain areas. An important theme in this section, therefore, is to examine whether mortgage banking development continued to respond after 1900 to the changing regional pattern of farm growth.

Table 7

Improved Farm Acres by Regions, 1870–1930

	(Millions of Acres)			Percentage Increase	
	1870	1900	1930	1870–1900	1900–1930
U.S.	189.4	414.5	536.1	118.8%	29.3%
				Share of Increase	
				1870–1900	1900–1930
New England	12.0	8.1	5.1	–1.7%	–2.5%
Mid-Atlantic	29.1	30.8	22.2	0.8%	–7.1%
East North Central	54.9	86.7	83.7	14.1%	–2.5%
West North Central	24.0	135.6	185.5	49.6%	41.0%
South Atlantic	30.2	46.1	44.5	7.1%	–1.3%
East South Central	24.2	40.2	41.5	7.1%	1.1%
West South Central	6.9	39.8	82.8	14.6%	35.4%
Mountain	0.6	8.1	46.7	3.5%	31.5%
Pacific	7.5	18.8	24.1	5.0%	4.4%

Source: 1870, 1900: *12th Census of the U.S.,* Vol. V, Pt. 1, xviii–xix. 1930: *Tostlebe* (1957), 48.

Against this backdrop of volatility and unbalanced deceleration, the federal government, for the first time, intervened to reshape the structure and improve the performance of the nation's private mortgage market. The background for the intervention was an extended and well-organized campaign by farm interests who were upset with the high costs of and uneven access to mortgage credit in the United States This section begins with an overview of the "Rural Credit Movement" and the Federal Farm Land Bank (FFLB) system that was created in 1916 as a result of these efforts. The policy discussion was remarkably comprehensive as farm advocates proposed changes to both the fundamental structure of farm mortgage contracts and the institutional mechanisms that were used to fund them. Among all incumbent farm mortgage lending groups, none was more concerned about the proposed changes than the mortgage bankers. The industry created the Farm Mortgage Bankers' Association (FMBA) in 1914 to oppose the legislation, therefore, and continued to fight implementation of the FFLB system for several years. The discussion here focuses on the decision by private mortgage bankers not to join the federally sponsored, European-style private mortgage banking system created by the FFLB Act and to compete, instead, with federally subsidized lenders using their traditional lending practices and funding model. The section ends by examining how the FFLB system reshaped the overall farm mortgage market during the 1920s and the role that the competing public and private farm mortgage banking sectors played within it.

The Rural Credit Movement

Public concern and discussion about farm mortgage lending conditions in the United States began decades before the "Country Life Commission," appointed by Teddy Roosevelt in 1908, concluded that the "lack of any adequate system of agricultural credit, whereby the farmer may readily secure loans on fair terms" was a principal impediment to the development of a "highly organized rural society" (S. Doc 705, 60th Cong., 14–5). Two decades earlier, for example, Mappin (1889) pointed out that it was the high costs and risks involved in borrowing on mortgage credit that were most detrimental to that nation's farmers. The data collected the following year by the 1890 Census underscored his point (see Table 1): farm mortgage rates were high and variable across regions, while loan contracts were interest-only balloon loans with short durations (2–5 years). These contractual features meant that loans had to be renewed several times before most farmers could extinguish the debt, with each renewal imposing additional fees, costs and commissions on borrowers while exposing them to the risks associated with changing interest rates and locating new sources of credit.

The critics argued that there was available a relevant and practicable alternative. By the mid-nineteenth century, farm mortgages in Europe were being written as long-term (up to 50-year maturities), fully amortized loans that carried rates even lower than those available at the time in the savings-rich north eastern United States. These loans were written by public and private mortgage banks that funded them by issuing mortgage debentures. We saw in the last section that western farm mortgage companies in the United States had tried to emulate continental mortgage banks in the 1880s, but these intermediaries struggled, failed and finally disappeared in the farm mortgage crisis of the 1890s. At this point, the comparisons with European practice became more detailed and pointed (Frederiksen, 1894a and 1894b). Not only were the continental mortgage banks stable and sound, after all, but their debenture bonds also dominated bond markets and sold at yields comparable to government debt — low interest rates that they passed on to farm borrowers. The mortgage debenture companies in the United States, in contrast, had turned out to be fragile, even though they used debentures to fund the same type of short-term, balloon loans that the companies sold.

After the farm sector began to recover from the dislocations of the 1890s, public interest in European mortgage credit systems was rekindled by Roosevelt's Country Life Commission. This led to the emergence of a Rural Credit Movement with the goal of providing farmers in the United States with access to the same kind of long-term, amortized mortgage contracts available to their counterparts in Europe.[11] A presumption of the movement was that loans with these characteristics could only be

11 The literature on the rural credit movement is extensive. In this paragraph, I rely on contemporary accounts by Herrick and Ingalls (1915), Morgan (1916) and Putnam (1916).

funded by institutions that used them as collateral and were funded by long-term bonds.[12] The push for reform of this magnitude took a major step forward in 1912 when President Taft directed the State Department to prepare a report on European mortgage systems. The American Bankers Association and the southern Commercial Congress endorsed Taft's action, and the latter organization actually commissioned its own study of continental mortgage practices (Putnam 1936, 40–41). During the 1912 presidential election, moreover, all three national political parties endorsed the Rural Credit Movement and its goals. As a result, the movement scarcely lost a beat when Taft lost the election. One of his last acts in office was to sign an agricultural appropriations bill in March 1913 that funded a special U.S. Commission to study European farm mortgage systems and recommend proposals for the establishment of new systems in the U.S. (Herrick and Ingalls 1915, 3–4). After his inauguration, Taft's opponent, Woodrow Wilson, immediately followed through by appointing commission members and instructing them to work in concert with the "American Commission" that the southern Commercial Congress had organized and funded for the same purpose. The two groups embarked on a three-month tour and investigation of Europe mortgage markets in April 1913 and reported back to a joint Congressional Committee on Rural Credits in early 1914.[13]

It was clear by 1914 that federal legislation would reconfigure the farm mortgage market; the real debate focused on what type of institution would emerge.[14] The investigation of European practices revealed several different models: a quasi-public monopoly bank in France called the *Credit Foncier*, a cooperative land credit system in Germany called the *Landschaften*, and, also in Germany, a publicly regulated system of private joint-stock land banks.[15] Congressional hearings and debate examined the desirability and appropriateness of these different structures for the U.S. market for more than two years, and those discussions are well documented in a variety of sources.[16] But almost from the start, the argument was among three competing approaches that all garnered significant support. Farm groups favored the creation of an agency within the U.S. Treasury to lend directly to farmers and then issue federal mortgage bonds against this security. This idea was built into the Bathrick bill

12 The prevailing view was clearly articulated in Thompson (1916): "All these advantages are secured where the mortgage notes, instead of being marketed direct, are held as a collateral trust fund, and bond issues based thereon are placed on the market. To meet these requirements, institutions are needed, both to fix reliable and suitable standards for farm-mortgage loans, and to market them in the form of bonds. Such institutions cannot be properly established without suitable safeguards. It is necessary to profit by the lessons of past American experience, and avoid the mistakes made by the debenture institutions in this country in the eighties and early nineties. The almost complete failure of the farm-mortgage debenture business in 1893 affords ample warning. There is need to take stock of all the factors that contributed to that failure. The granting of loans out of proportion to protection funds, the failure to build up adequate reserves, the basing of loans on boom estimates of land values, the extension of loans on lands of uncertain returns, the substitution of inferior for standard collateral securities, the utter lack of inspection and supervision under State or Federal law — these practices quite naturally led to disaster. As a result there was an almost complete collapse of these early debenture companies.

13 "Rural Credits," Joint Hearings of the Senate and House Subcommittees on Banking and Currency, 63rd Congress, 2nd Sess., 1914, GPO. DC.

14 Mention needs to be made here that the concern with rural credits led to an end of the prohibition on real estate lending by national banks that was in the Federal Reserve Act of 1913. Congress took this opportunity to end the 50-year prohibition that was generally considered to be a constraint on local supplies of credit that kept mortgage rates high in some areas. It was hoped that the new permission to lend — along with the 1900 reduction in minimum capital to $25,000 for national bank charters in smaller, rural markets — would create a substantial new source of agricultural mortgage lending in some markets. But under the new rules, national banks were limited to lending no more than 25 percent of their capital or one-third of time deposits on real estate. They were also required to write loans no longer than five years in duration and for amounts no greater than 50 percent of the actual value of the farm property (Federal Reserve Act, Section 24).

15 See Herrick and Ingalls 1915, Ch. IV–V.

16 This formulation follows Schwartz (1938) closely, but see also Herrick and Ingalls (1915), Putman (1916), and Morman (1924).

(H.R. 11897, 63rd Congress, 2nd Sess.), introduced early in 1914. A second proposal favored cooperative lending arrangements similar to the German Landschaften system, and called for the creation of a federal farm loan bank system to charter small, local associations of farm mortgage borrowers and create a publicly sponsored entity to issue debentures secured by the loans the associations made. This solution was offered in the Hollis-Bulkley bill in May 1914 (H.R. 16478 and S. 5542, 63rd Cong., 2nd Sess.).

Of most interest here is the third alternative: the creation of a federally chartered, privately financed system of joint-stock land banks. This alternative was favored by those who supported "private enterprise — rather than state aid" as a solution to the rural credit problem.[17] The most important proposal along these lines was the Moss-Fletcher bill, introduced in January 1914 (H.R. 12585 and S. 4246, 63rd Cong., 2nd Sess.). The sponsors envisioned the creation of a network of mortgage banks that would gain stability and stature through federal supervision, along the lines used by the national banking system. It was believed that such oversight was required if investors were to set aside memories of the 1890s and have confidence in the privately issued, mortgage-backed debentures of these institutions. The Moss-Fletcher bill called for a minimum capital requirement of $10,000 for joint-stock banks and restricted these institutions to lending only to in-state farms. Advocates of cooperative associations and direct federal lending combined to attack the Moss-Fletcher proposal as a "banker's bill" that would continue to channel profits to private agents rather than lower the cost of funds to farmers. But critics arose to attack all three approaches and combinations of them, and no single proposal garnered enough support for passage in 1914 or 1915.[18]

During the Congressional debate, evidence continued to mount that access to farm mortgage credit and its cost remained uneven across the nation's regions. Table 8 provides a snapshot of the data on mortgaged farms from the 1910 Census and regional interest data that were presented to Congress in 1915.[19] The beginnings of the absolute decline in farming previously described are apparent in Table 8 — by 1910, the number of farms had virtually stopped increasing in New England and the Mid-Atlantic and grew between only five and 10 percent in the north central regions. The absolute expansion did continue, however, in the south central regions and the west. Although reliance on mortgage credit by 1910 remained lower in the southern and mountain regions than in the north and east, the gaps had decreased substantially over the two decades. But the bottom line — the reductions in interest costs — occurred only in the east and west north central regions, and remained just as high in the south and west. So too did the size of commissions, shown in the last column, which, according to the Rural Credit Movement, meant that farm borrowers throughout the country continued to operate under an inadequate mortgage system relative to their European counterparts.

17 This is the subtitle of Herrick and Ingalls, 1915.

18 Morgan (1916), xv–xvi.

19 The 1910 interest and commission data was published later in Thompson 1916.

Table 8
Number of Farms (000s), Percent Mortgaged and Interest Costs, 1890 and 1910

	Number of Farms		% Mortgaged		Total Interest Cost		Commission
	1890	1910	1890	1910	1890	1910	1910
New England	165.5	168.4	28.2	34.9	5.56[a]	5.7	—
Mid–Atlantic	353.3	355.0	37.0	38.3		5.7	0.23
East North Central	767.4	809.0	37.6	40.9	7.07	6.1	0.26
West North Central	687.2	758.9	48.0	46.1	8.55	7.0	0.83
South Atlantic	418.5	593.2	7.4	18.8	7.45	7.3	0.71
East South Central	362.6	510.5	4.5	22.7	8.55[a]	8.2	0.55
West South Central	251.0	440.9	4.8	30.6		8.9	0.85
Mountain	53.1	160.8	14.1	20.8	9.11[a]	9.5	0.74
Pacific	84.4	151.9	28.7	36.8		8.1	0.43
National Average	3142.7	3948.7	39.3	33.6	—	7.4	0.58

[a] 1890 data not reported at region level.

Source: Census of Agriculture, 1910, vol. 5, 159; Thompson, 1916, *USDA Bulletin* 384.

Farm Mortgage Bankers Enter the Discussion, 1914–1916

From the perspective of the Rural Credit Movement, farm mortgage bankers were part of the problem. Their role in the farm credit system, after all, was to earn commission income on short-term, balloon loans, by serving as the middlemen between farmers and eastern investors in markets where mortgage rates were highest. This position placed the farm mortgage banking industry at the center of the debate and gave it a large stake in its outcome. To enter the discussion, approximately 40 mortgage bankers met in New York in May 1914 and created a proposal to organize the Farm Mortgage Bankers' Association (FMBA) ("Farm Mortgage Men Organize," *New York Times*, May 8, 1914). Its constitution was adopted by a larger founding group later that year, and high on the FMBA's immediate agenda was the dissemination of relevant and "correct" information concerning the rural credit debate, and encouraging the development of "intelligent" legislation (Robins 1917). Within three years, the Association claimed nearly 200 members and had become a recognized voice in public debate.

A first challenge for this group of mortgage bankers was to differentiate themselves from the thousands of bankers, real estate professionals, and independent farm loan agents who located and arranged farm mortgage financing through a variety of institutional channels. Critics of the existing farm credit structure painted with a broad brush when characterizing such "middlemen," and the FMBA felt obliged to identify the distinctive characteristics of its members:[20]

20 Although Wright (1922, 101) argues that the distinction between mortgage broker and banker was not widely appreciated at the time, Pope (1914, 707) independently made the same distinction at the same time the FMBA was being organized.

> **The term 'mortgage banker' as distinct from 'mortgage broker' or 'dealer,' is deserving of special recognition and definition, because... the mortgage bankers of today conduct all of the operations of real estate financing, from the origin of the application for a loan to the final collection of the investment in behalf of the investor at the maturity of the loan... Since mere brokers or dealers, who assume no responsibility while the loan is outstanding, are not in any sense mortgage bankers, the distinction should be clearly made and the functions of the mortgage banker should be clearly understood by investors and borrowers, in order that they may avail themselves of this most valuable service.**
>
> **Kingman Robins, quoted in Wright (1922, 102)**

The Association reinforced this characterization by restricting membership to:

> **Any National or State Bank, Trust Company, corporation, partnership, or individual in good standing, having a paid-in capital stock and surplus of $50,000 or more, and which makes a practice of loaning money on the security of improved farm lands, and publicly offers such securities for sale, as a dealer therein.**
>
> **(Robins 1916, 98)**

The capital requirement was soon reduced to $25,000, the minimum required at that time for a rural national bank charter.[21] In 1917, the Association reported that admission of new members had been carefully guarded to exclude "undesirables," and that the firms who were accepted for membership represented "the best that the business of farm mortgage banking has to offer in personnel, organization and methods" (Robins 1917, 12).

By organizing the FMBA, the mortgage banking industry also characterized its regional distribution and the areas within the national market in which its members were most active. Table 9 shows the distribution for both 1917 and 1922 because, as we shall see below, it took several years to settle the final structure and organization of the FFLB system and, therefore, the membership roster of the oppositional FMBA. For purposes of comparison, the table also shows the distribution of the industry in 1890 that was shown earlier in Table 2. Only a handful of the 1890 firms show up as FMBA members at the two latter dates because, as we have seen earlier, so many mortgage companies failed during the farm mortgage crisis of the 1890s.

Despite the turnover in individual firms, however, the core of the farm mortgage banking industry remained located in the west north central states over the entire three-decade period, as more than one-half of these farm mortgage bankers were located there at all three dates. The dominance of the west north central region diminished over time, however, as its share of the industry decreased from

21 For purposes of comparison, $25,000 at that time is equal to nearly $6 million in 2013 dollars using the CPI as a deflator.

76 percent of all firms to just over 50 percent. Also in decline was whatever advantage northeastern mortgage companies gained from proximity to investors in 1890; by 1922, very few operating firms remained headquartered in New England.[22] The strongest expansion in terms of numbers of mortgage companies over the period, however, was centered in two regions where the use of mortgage debt and the growth in improved farmland increased most rapidly between 1890 and 1920: the south central and mountain regions.

Table 9
Number of Western Farm Mortgage Companies, 1890–1922

Region	State	1890	1917	1922	Region	State	1890	1917	1922
NE	CT	4	0	0	**ESC**	AL	0	0	2
	MA	3	1	1		KY	0	2	0
	NH	5	1	1		MS	0	1	1
	VT	1	1	1		TN	0	3	7
MA	NY	1	2	1		AR	0	0	2
ENC	IL	2	14	24	**WSC**	LA	0	4	4
	IN	0	6	8		OK	0	10	18
	WI	1	1	2		TX	6	20	19
WNC	IA	23	16	37		AZ	0	0	1
	KS	48	19	20	**MT**	CO	9	0	6
	MN	9	23	23		ID	0	0	2
	MO	21	29	24		MT	1	7	4
	NE	24	7	18		UT	0	2	3
	ND	10	7	2		WY	0	0	1
	SD	8	4	10	**PAC**	CA	1	2	1
SA	FL	2	0	0		OR	0	1	2
	GA	1	6	7		WA	6	4	9
	SC	0	0	2	**ALL**		187	190	259
	VA	1	0	2					

Source: 1890: Table 2 (above); 1917 and 1922, Farm Mortgage Bankers' Association, *Directory of Members*.

Beyond identifying and defining itself, the industry organized itself in order to participate in and "guide" the public discussion of the farm mortgage market and the legislation that was being proposed to restructure it (*New York Times*, May 8, 1914). The FMBA was coming late to the game, however. By spring 1914, Congress had already held its major hearings on the general topic of rural credits, the debate had largely ended and major legislation had already been proposed. Nonetheless, the Association and its officers used speeches, press reports and resolutions to explain its opposition to some elements of the proposals that had been made, and to advance their own view of how federal intervention could improve the operations of the farm mortgage market.[23]

22 The "urban core" of the farm mortgage banking industry may simply have migrated West over the period, as more than one-third of the companies located in Illinois by 1922 were in Chicago or its environs.

23 The FMBA was not alone in its opposition. Although it had endorsed the calls for investigations of European systems in 1912, by 1915, the American Bankers Association was publicly opposing elements of the proposed FFLB system. So too did some major life insurance companies.

The FMBA objected, for example, to the legislation most favored by the Rural Credit Movement, which called for a system in which all farm mortgage loans would be long-term, fully amortized contracts that were written and enforced within cooperatively owned lending structures. The mortgage bankers argued that such a proposal was based on a misguided belief that European lending practices would improve access to farm mortgage credit and lower its cost in this country. The Association did not argue that these practices were inherently undesirable, only that they were poorly suited to general U.S. conditions or impractical to apply universally in this country, given the marked variation in lending conditions across regions (Robins 1916, 20–37). According to the FMBA, farm borrowers in this country were more mobile and entrepreneurial than those in Europe, to begin with, and valued the opportunity that short-term, renewable loan contracts provided to increase borrowing when land property values increased and investment prospects improved, or to accelerate debt repayment when current income was high. Mortgage lenders, on the other hand, used these contracts to control and reassess credit risk by varying the duration of the balloon loans and building frequent renegotiations into the contract structure. The long-term, amortized loan contract used in Europe was best suited, in contrast, to environments in which land use patterns and agricultural techniques were mature, and farmers were committed to purchasing the particular land they worked by way of a long, gradual savings plan. Cooperative lending structures could also perform well in these social environments, whereas the U.S. farmer tended to be less willing to join cooperative associations in which borrowers mutually guaranteed their own long-term mortgage loans.

A more serious misconception of rural credit legislation, according to the FMBA, was its call for a national mortgage lending system in which all farm borrowers paid the same lending rate. That interest rate, moreover, was to be set at no more than one percent above the cost of funding the mortgages — the yield on the mortgage-backed bonds issued by the system — and no higher than six percent in any case. The FMBA pointed out that these requirements ignored the fact that mortgage rates and costs were high in the south and the west and, for some borrowers, everywhere because lenders on these properties were exposed to greater risks and costs where agriculture was relatively new and untested or where farmers, especially those in the south, relied too heavily on one crop. The FMBA pointed out that a system that equalized lending rates despite these differences would lead to a number of poor outcomes. First, it would force better-quality borrowers to cross-subsidize those who were less credit-worthy. Second, the low and equal rate and lending margins would jeopardize the viability of whatever lending structure policy was used to make and fund loans. An implication of this second outcome would be a third outcome that was particularly unattractive to the FMBA at this time — such a federal system could only operate with some form of public subsidization.

The FMBA also questioned whether the evidence indicated that the existing farm mortgage market performed as poorly as generally believed. The Association acknowledged that disparities persisted across regions in access to and the cost of mortgage credit, but could offer a more positive interpretation (Robins 1916, 34). The areas where mortgage bankers were most numerous, the east and west north central regions, saw the largest decrease in lending rates and commissions between 1890 and 1910 and, by the latter date, were converging on costs in the savings-rich northeast. This evidence showed that the existing farm mortgage industry could achieve, given enough time, the important goals of the Rural Credit Movement: broad access to mortgage credit at low cost by using the short-term, straight contracts that best fit the needs of both borrowers and investors in the U.S. case. The evidence in Tables 8 and 9 also suggest that the increase in the number of mortgage bankers before 1916 had been responsive to the rapid expansion of farming in the south and west and helped contribute to the much-increased proportions of farmers who had taken out a mortgage on their land.

Despite evidence that existing facilities had mobilized credit successfully within the farm mortgage market, the FMBA acknowledged that public policy could play a role in facilitating the marketing and funding of farm mortgage debt at rates comparable to "any other investment of equal intrinsic merit" (Robins 1916, 46). To accomplish this goal, in 1915, the FMBA proposed the creation of a system of private, joint-stock land banks that would be federally chartered and supervised within a structure similar to the national bank system.[24] These mortgage banks, just like those in the Moss-Fletcher bill, would be given authority to negotiate, buy and sell qualified farm mortgage loans and then to use these loans as collateral to issue debenture bonds.

An important difference from existing legislation, however, was the large minimum capital requirement ($500,000) that the FMBA proposed for these mortgage banks. This amount was 50 times larger than the minimum proposed in the Moss-Fletcher bill and twenty times larger than the Association's own membership requirement. The large size made sense because bonds issued by smaller entities would "fail to command the degree of confidence necessary to the investor" (Robins 1916, 48). To increase that confidence, the proposal also called for banks to hold a separate guarantee fund, to issue an amount of bonds and other liabilities no greater than twenty times unencumbered capital, and to submit mortgages that served as collateral to strict audits by a regulator to assure minimum quality standards. Because these national mortgage banks would be larger and, therefore, fewer in number than those proposed under the Moss-Fletcher bill, the FMBA proposed that these institutions should also be allowed to place behind bonds loans that were originated and serviced by and purchased from, "such individuals, partnerships or corporations as shall qualify under the provisions of the Federal Act" (Robins 1916, 49).

Compared to all other proposals, the FMBA specified few requirements that individual mortgage loans had to meet beyond the broad requirements regarding loan quality. There were, in particular, no restrictions proposed regarding the location of the encumbered property relative to the location of the bank, no requirement for straight or amortized loans and no cap on mortgage rates, commissions

24 The content of this paragraph is drawn from a resolution approved by the FMBA membership at its annual convention in St. Louis on October 7–8, 1915. That resolution was published in full in Robins (1916) and was repeated in many of the Association's publications. The description of the proposed system was included in the resolution approved in 1915 described above and repeated in Association documents for several years.

or the margin between loan and bond rates. This approach was consistent with the FMBA's view that the existing lending terms were not the fundamental problem in the U.S. farm mortgage market; the issue, instead, was to broaden the appeal of such mortgages in the long-term investment market.

Rather than fundamental structural change, therefore, the FMBA proposed that existing market arrangements be augmented by a federally sponsored and supervised covered mortgage bond program specifically designed for its own members. The FMBA's 1915 proposal could also be interpreted as an attempt to use the Rural Credit Movement to garner public support and sponsorship for the reintroduction of a valuable innovation — mortgage debenture programs — that had improved access to credit and reduced lending costs for some farmers during the 1880s before collapsing into public disfavor during the farm mortgage crisis of the 1890s. This explanation is not far-fetched: during the early 1910s, several reputable mortgage companies had already attempted, with little success, to introduce their own private debenture programs without public sponsorship or supervision (Putnam 1917, 67–71; Robins 1916; Woodruff 1937). Whatever its intentions in 1915, however, the FMBA's proposal was not seriously considered and, therefore, not implemented.

Mortgage Bankers React to the Farm Loan Bank Bill, 1916–1921

After more than two years of committee hearings, debate and legislative negotiation, the Federal Farm Loan Act was finally passed in July 1916. The final bill was a compromise measure that combined a publicly sponsored system of cooperative mortgage lending associations with a federally chartered system of private joint-stock land banks. Mortgages made within both systems were to be used as collateral for covered mortgage bonds that would be issued under the supervision of the newly created Federal Farm Loan Board.

The public, cooperative system was two-tiered. Its foundation was a system of locally based, voluntary cooperatives of at least 10 borrowers, called national farm loan associations, which made loans to their own members. These associations operated under the supervision of one of twelve district federal land banks that were chartered and organized like the district banks in the Federal Reserve System. Loans within this system could be approved only if they were written for less than $10,000 and used to purchase or improve farm land owned and operated by the borrower and located within the same federal land bank district.[25] These loans could be written for a maximum of 50 percent of the value of the encumbered land and 20 percent of its improvements. The loans could be prepaid in full after five years, but had to be repaid from the start by means of fixed annual or semiannual payments that fully amortized the loan over a period no shorter than five or longer than 40 years. The final bill contained the restriction described earlier that the interest rate charged on the loans could not be more than one percent higher than the yield on the district bank's most recent bond issue and could not be higher than six percent. The district land banks were charged with inspecting and appraising

25 Section 12 of the Federal Farm Loan Act enumerates the requirements for loans written by national associations. See 64th Cong., 1st Sess., S. Doc. 500, pp. 13–14.

the loans made by these associations and then issuing land-bank bonds against this collateral. The centralized Federal Farm Loan Board supervised the district land banks in their activities, but the bonds themselves were not federally guaranteed. They were, instead, the joint liability of the privately financed district land banks and the national farm loan associations using a cooperative structure similar in design to the German *Landschaften*.

The FMBA was most interested in the privately financed federal joint-stock land banks that were authorized as a second component of the new federal land bank system. These institutions were to be chartered by and operate under the direct supervision of the Federal Farm Loan Board in Washington. The minimum capital required for a charter was substantial ($250,000), but still only one-half the level that the FMBA had proposed in its resolution. Under the legislation, all of a bank's capital had to be paid in before it could issue bonds against mortgage loan collateral, and then only after the loans had been approved by the designee of the Federal Farm Loan Board. Federal joint-stock land banks could issue bonds and other liabilities up to 15 times unencumbered capital and surplus, which was less than the multiple of 20 that the FMBA had proposed. The Act required each bank to build up and then hold a reserve fund equal to 20 percent of its capital. The owners of federal joint-stock land banks were liable to bondholders for up to two times their capital contribution and enjoyed no implicit or explicit government guarantee. Private rating agencies graded the bonds of each joint-stock land bank separately.

The basic organizational structure of the new federal joint-stock land banks was close to, although not identical to, the model that the FMBA had proposed. However, the legislation placed requirements on the terms of individual mortgage loans joint-stock land banks could write, that ignored the reservations that the FMBA had expressed about imposing European underwriting standards that were not generally used in the U.S. market and possibly ill-suited for it. Federal joint-stock land banks, in particular, were subject to most of the same requirements enumerated above for cooperative national associations: the loans had to be fully amortized over five to 40 years, carry an interest rate no greater than six percent, and have a charged interest rate no more than 1 percent above its current bond rate. In addition to these requirements, federal joint-stock land banks could only lend in the bank's home state and one other contiguous state, which was an obvious affront to the largest mortgage companies that had developed flourishing multi-state operations. Unlike the cooperative national associations, however, joint-stock land banks were allowed to write loans for amounts greater than $10,000 and for purposes other than the operation of a farm by an owner-operator. With this flexibility, it was hoped that the new federal joint-stock land banks would be a conduit for mortgage credit to large and tenant-occupied farms that would not be eligible within the cooperative land bank system.

We have seen above that the FMBA had argued strenuously that the new system should not adopt caps on mortgage rates or on the funding margins between loan rates and bond yields. The impact of these, it predicted, would be a threat to the viability of any lending mechanism chartered under such rules that would necessitate, in turn, some form of public subsidy. Just as predicted, the Federal

Farm Loan Act provided a subsidy to both the district land banks and the private joint-stock land banks by designating their bonds as "instrumentalities" of the U.S. Treasury and, therefore, exempt from all federal, state and local taxes.

By incorporating the tax emption on bonds, the Federal Farm Loan Act ignored the FMBA's stated opposition to any federal mechanism that would "lend to farmers… the credit of the nation or its moneys, either directly by government loans, or indirectly by subsidies or guarantees" (Robins 1916, 46). This was in addition to the restrictions on individual loan contracts that would have required existing mortgage bankers to change the location, terms and structure of their loan operations in order to join the new system as a joint-stock land bank. It seems clear, therefore, that the private joint-stock land banks proposed in the legislation were not intended to provide a comfortable home for FMBA members. Some two decades after the Federal Farm Loan Act was passed, in fact, one observer concluded that the joint-stock land bank provisions were a late addition to the final Federal Farm Loan Act as a political "expedient" that assured the passage of the more politically popular cooperative component of the system (Bennett 1938, 858). Consistent with this interpretation, the joint-stock land banks were sometimes referred to as "stepchildren" that had wandered into a system that was focused upon providing broad access and low-cost credit to farmers through the subsidized, cooperative, land bank system.

The members of the Federal Farm Loan Board regularly protested that they were not biased against the joint-stock land banks or uninterested in their growth and viability. In their First Annual Report to Congress, however, some ambivalence was clearly expressed:

> **The board has always been of the opinion that the business of making farm loans, as it existed at the time of the passage of the act, was an established and reputable business, and that it was not the intention of Congress to establish a system clothed with advantages which might enable it to drive the established agencies out of business without at least giving those agencies an opportunity to come under the operation of the act and avail themselves of the same privileges.**
>
> **First Annual Report of the FFLB, 1917, 21–22**

A member of the FFLB Board, Charles Lobdell, made the same point even more bluntly when he appeared before the Fourth Annual Convention of the FMBA in 1917 to invite them to join and inform them about the new system (Lobdell 1917, 47–68). Lobdell acknowledged at the beginning of his remarks that the FMBA continued to oppose fundamental elements in the bill, but he admonished the audience to accept that "the Federal Farm Loan Act has come to stay as a part of our fixed economic policy." This was important because "the fate of the joint-stock land bank… rests with the farm mortgage bankers of the country" and so it was important for the FMBA membership to focus their attention on making improvements in the joint-stock bank provisions that could make joining the system more palatable.

Lobdell's message was hardly conciliatory, however. He dismissed as "bunc" the assurances of some politicians who insisted that the new federal system of farm mortgage credit would not negatively affect farm mortgage bankers. Lobdell made clear, instead, that the new system was designed and intended to create competitive forces that would lower the mortgage rates and shrink the margins that the farm mortgage bankers had enjoyed for decades. He noted that the mortgage bankers should have already felt the impact of competition from the national associations and predicted that "10 years from now, when some successor of mine shall meet with this organization… he will be addressing an association of joint-stock land bankers."[26] Lobdell's simple message was that FMBA members had to join the federal joint-stock system and learn to operate under its rules or be driven out of business.

The FMBA adopted a two-track response. The Association followed Lobdell's advice by immediately sending a special committee to seek the Federal Farm Loan Board's endorsement for several amendments to the provisions in the legislation regarding the joint-stock land banks. The Board expressed support for three of these: 1) that the joint-stock land banks be allowed to make loans anywhere in the United States rather than in their home states and one contiguous state, 2) that the banks be allowed to issue bonds up to 20 times their capital instead of the multiple of 15 specified in the original act and 3) that the maximum loan rate charged by a joint-stock land bank be raised from 6 to 6-1/2 percent. The Board neither endorsed nor opposed the FMBA's fourth amendment that would have allowed joint-stock land banks to write straight as well as amortized loans and to both sell them as whole loans or place them behind bonds. These amendments were clearly intended to allow mortgage bankers to join the system and develop mortgage debenture programs without having to abandon traditional practices and current structure. Although the proposal left in place the tax exemption feature and the caps on mortgage interest rates and margins, leaders of the FMBA predicted that a "large proportion" of FMBA members would seek charters if these amendments were passed by Congress.[27] It turns out they were not adopted, despite the qualified support of the Federal Farm Loan Board.

The second line of attack that FMBA adopted in response to the passage of the FFLB Act was much more aggressive, which might explain why Congress did not look with favor on the proposed amendments. The FMBA gave its strong support to and produced and distributed several lengthy rationalizations for a legal challenge to the constitutionality of the tax exemption that the Act gave to the bonds of the federal land banks and the joint-stock land banks.[28, 29] This litigation threatened the viability of the entire system for more than two years and was alleged to have retarded the growth of the federal

26 This quotation was not in Lobdell's prepared speech, but was attributed to him in a reference to his visit that was made in Chassell (1920).

27 The FFLB's support was expressed both in its first annual report (FFLB 1917, 23) but also reported by the New York Times in the December 24, 1917 article, "Want Banks to Join Farm Loan System.

28 A pamphlet authored by the Chairman of the FMBA and advocating the removal of the tax exemption was presented as an example of the propaganda against the FFLB system in general and the joint-stock land banks in particular in a hearing before the Senate Banking Committee in 1920. Senate Hearings on S. 3109, 66th Cong., 2nd Sess., p. 10.

29 For extended versions of the FMBA argument against the tax exemption, see Chassell and Robins (1920) and Heindel (1921).

joint-stock loan bank system, until the Supreme Court affirmed the constitutionality of the Act and its tax exemption in February 1921.[30] By that time, the FMBA and most of its members had decided to challenge Lobdell's prediction and continued to operate outside the FFLB system.

Public and Private Farm Mortgage Banking in the 1920s

By 1921, the stage was set for what promised to be a historic transformation of the U.S. farm mortgage market. After a decade of investigation, hearings, legislative battles and court cases, the FFLB System was finally in place to deliver to farm borrowers the benefits of European-style lending practices that the Rural Credit Movement had been promoting for more than a decade. One component of this broad initiative involved competition between two different models of mortgage banking that both sides characterized as a battle of survival. The Federal Farm Loan Board believed that the combined influence of the federal land banks and joint-stock land banks would lower lending rates and lending margins below levels that could sustain the traditional farm mortgage banking sector represented by the FMBA. The FMBA, on the other hand, argued that the new federal institutions were shackled by European-style underwriting requirements and pricing policies that were a poor fit for the U.S. market and a threat to their viability. The incumbent mortgage bankers were so sure of this critique that they nearly all chose to continue operating their existing businesses and loan practices rather than join the FFLB by converting to the federal joint-stock charters that had been designed for them. At the same time, FMBA members were also concerned that the tax exemption on the bonds of the new federal joint-stock land banks could provide enough subsidy to turn a poor business model into a significant competitive threat.

With all these opposing views and predictions, the 1920s farm mortgage market turned into an institutional horse race between mortgage banking systems that were differentiated along several dimensions — covered mortgage bonds versus "originate, service and sell"; publicly subsidized, privately owned institutions versus purely private entities; and long-term, amortized mortgage contracts versus shorter-term, renewable balloon loans. Complicating the institutional experiment was the turmoil in the farm sector that was outlined briefly earlier — a substantial run-up in agricultural prices, income, land values and mortgage debt during World War I, a continued postwar surge in mortgage debt after the war and stress within the farm mortgage market throughout the 1920s, as a debt-laden sector reached a watershed in its long-run secular decline. With all of these different forces at work, it is not possible to answer many of the interesting questions raised by this natural experiment. We focus here, instead, on tracking three broad features of the farm mortgage market as the new federal system developed in the 1920s: changes in the distribution and access to farm mortgage credit regions, changes in the market's institutional composition and changes in the cost and terms on farm mortgage loans.

30 In *Smith vs. Kansas City Title and Trust Company, et al.*, an individual stockholder of the trust company challenged its right to invest in a federally tax-exempt land bank bond. See Preston 1921.

We have seen that the debate about farm mortgage conditions and innovation in the farm mortgage market was driven throughout the nineteenth and early twentieth centuries by regional segmentation. Table 10 shows the distribution of mortgage debt and the intensity of mortgage use across space at several benchmarks before and during the implementation of the new federal system. The regional distribution, shown for 1916 through 1930 in the left panel, shows surprisingly little change over the period. There was a modest rebalancing of debt between 1916 and 1930 as the share of the savings-rich and institutionally mature northeast and north central regions declined by 9.4 percent, with the gains going to the southern and western regions. But the entire decline for the New England, Mid-Atlantic and east north central regions occurred during the rapid wartime expansion of debt and before the new federal system had substantial impact. In contrast, most of the decline for the west north central area occurred in the late 1920s, as total mortgage debt was contracting. Between 1920 and 1925, when the federal system was growing most rapidly, this traditionally most important region in the mortgage market actually increased its share modestly. There appears little evidence, therefore, that the introduction of the Federal Farm Loan System had a substantial impact on the spatial distribution of farm mortgage debt.

Table 10

Distribution and Use of Farm Mortgage Debt by Region

	Regional Shares of Mortgage Debt				Owner-Occupied Farms w/Mortgage		
	1916	1920	1925	1930	1910	1920	1930
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
New England	**2.0**	1.4	1.4	1.8	34.7	37.9	43.5
Mid-Atlantic	**6.2**	4.8	4.5	4.7	38.0	38.0	40.3
East North Central	**22.5**	19.7	19.6	19.6	40.5	42.6	45.8
West North Central	**41.9**	41.5	43.2	37.1	45.6	51.8	54.7
South Atlantic	**3.8**	4.6	5.0	5.4	18.6	19.4	27.0
East South Central	**2.6**	4.2	3.8	4.5	22.4	23.7	31.1
West South Central	**9.1**	9.5	9.3	11.5	30.0	35.0	40.3
Mountain	**4.4**	7.0	5.9	6.0	20.6	47.9	47.7
Pacific	**7.5**	7.2	7.4	9.5	36.5	47.7	51.8
U.S.: Debt ($000,000)	**5,256.4**	**8,448.8**	**9,912.6**	**9,630.8**			
Percent					**33.2**	**37.2**	**42.0**

Source: Mortgage Debt: USDA (1921), Misc. Pub. No. 478; "Farm Mortgage Lending Facilities in the United States," Table 64, 219–222; Owner-occupied mortgage debt: *15th Census of the United States* (1930), Agriculture, Volume IV: General Report, Table 11, 458; *Fourteenth Census of the United States* (1920), Volume V, Ch. 6, Table 7, 486.

There were, on the other hand, substantial increases in rates of farm mortgage incumbrance during the 1920s that could have been connected to the development of the new federal system. The percent of owner-operated farms under mortgage, shown in the right panel of Table 10, increased by nearly nine percent for the nation as a whole between 1910 and 1930. All regions, save the Mid-Atlantic, saw substantial increases in mortgage use, but the time patterns varied among them. The west north central, mountain and Pacific regions experienced most of their increases before 1920, while the south Atlantic and south central regions saw larger increases after 1920. This provides some evidence that the new federal system improved access to mortgage credit, especially in the south.

Table 11 shows the institutional configuration from 1916 through 1930 in terms of both the volume of mortgage holdings and recordings. The table makes clear just how rapidly the spectacular growth of the farm mortgage market ended in the early 1920s; after doubling in size between 1916 and 1922, the total volume of farm mortgage debt decreased by more than one billion dollars over the remainder of the decade. The relative growth of both components of the Federal Farm Loan System was concentrated in the latter period as, together, the federal land banks and joint-stock land banks held just under five percent of total farm mortgage debt in 1922, some six years after the legislation creating the system was passed, but then increased their share to just under 19 percent by 1930.

Table 11

Institutional Distribution of Mortgage Debt and Mortgage Recordings, 1916–1930

	Total Farm Mortgage Debt	Federal Land Banks	Joint Stock Land Banks	Insurance Companies	Commercial Banks	Others	Federal Land Banks	Joint Stock Land Banks	Insurance Companies	Commercial & Savings Banks	Others (Inc. Mortgage Cos.)	Individuals
	($000,000)	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1916	5,256.4	—	—	14.6	14.8	70.7	—	—	14.3	24.2	11.5	50.0
1917	5,825.9	—	—	14.8	16.0	69.2	2.0	0.1	12.9	20.0	11.3	53.7
1918	6,536.9	0.6	—	14.6	15.4	69.3	5.8	0.4	8.3	16.3	10.4	58.8
1919	7,137.3	2.2	0.1	14.3	14.4	69.0	4.7	1.8	7.3	18.4	10.2	57.6
1920	8,448.8	3.5	0.7	11.5	14.3	70.0	1.7	0.5	10.7	18.3	9.5	59.3
1921	10,221.1	3.5	0.8	11.8	14.2	69.8	3.8	0.2	11.5	25.2	12.8	46.5
1922	10,702.3	4.1	0.8	13.4	14.4	67.3	9.0	5.7	13.5	23.0	11.3	37.5
1923	10,785.6	6.1	2.0	14.4	14.0	63.5	7.7	7.0	18.4	22.0	10.4	34.5
1924	10,664.9	7.7	3.7	16.8	13.0	58.8	7.8	3.5	16.7	23.0	11.8	37.2
1925	9,912.6	9.3	4.5	19.6	12.1	54.5	5.6	6.1	16.0	21.8	10.6	39.9
1926	9,713.2	10.3	5.6	20.9	12.1	51.1	6.8	5.8	16.5	21.3	10.2	39.4
1927	9,658.4	11.1	6.5	22.0	11.8	48.6	7.8	4.5	14.2	22.4	10.8	40.3
1928	9,757.0	11.7	6.8	22.3	11.2	47.9	6.2	2.2	13.4	23.9	11.4	42.9
1929	9,756.6	12.1	6.7	21.9	10.7	48.5	4.5	1.1	13.9	23.4	12.7	44.4
1930	9,630.8	12.2	6.5	21.9	10.4	49.0	4.0	0.4	12.9	25.8	12.0	44.9

Source: USDA (1921), Misc. Pub. No. 478, "Farm Mortgage Lending Facilities in the United States," Tables 2 and 6.

The cooperative land bank system got off to a rapid start as nearly 4,000 national associations had been established by 1919 and were recording nearly five percent of all farm mortgage loans. This expansion slowed a bit in 1920 but, by 1922, the land banks' share of recordings reached a peak of nine percent of the nation's total and, from there, their share of farm mortgage holdings increased throughout the decade to more than 12 percent in 1930. The expansion of the federal joint-stock land banks, on the other hand, was more uneven. Commentary at the time alleged that the constitutional challenge to the tax exemption on FFLB system bonds had a particularly chilling effect on the formation of the joint-stock land banks, and the data bear this out. Thirty one of these institutions were chartered between 1917 and 1919, but no more than 40 were chartered in 1922, the year after the court case was decided.[31] Mortgage recordings show the same pattern, as the existing banks appear to have severely curtailed lending operations in 1920 and 1921, and then expanded rapidly once their tax exemption was securely in place.

We are most interested here in how the growth of the federal system displaced other lending agencies and especially the traditional private mortgage banks. Because these intermediaries were not part of a clearly defined, regulated system at either the state or federal level, there are no reliable annual series that document the volume of the mortgage holdings or recordings. In Table 11, therefore, private mortgage bankers' holding of mortgage debt are included in the large and disparate "Others" category. The volume of their recordings is also measured on the "Others" category but, in this case, not with the categories of active and retired farmers or other individual investors.

Despite the absence of direct evidence regarding activities of the private mortgage banks over this time period, the evidence in Table 11 suggests they survived the expansion of the federal system largely intact. The broad compositional change within the farm mortgage market during the 1920s was the expansion of both the new federal system and life insurance companies that together increased their share of mortgage holdings from 15 percent to over 40 percent between 1922 and 1930. These increases came at the expense of commercial banks, which saw their share fall by nearly five percent, and the miscellaneous "Others" category. The somewhat finer mortgage recordings data indicate that it was individual investors, rather than the category of "Other Institutions" that included the mortgage companies, that lost substantial market share. Based on these data, therefore, it appears that the new federal system grew in importance in the farm mortgage market along with the life insurance companies during the 1920s, primarily at the expense of commercial banks and individual lenders and not private mortgage bankers.

This conjecture is well supported by other evidence. To begin with, it turns out that the business of the private farm mortgage bankers was tied more strongly than ever before to the farm mortgage activities of the life insurance companies. We saw in the last section that Northwestern Mutual of Wisconsin and four Connecticut companies had established substantial farm mortgage lending programs by 1890 and that the Connecticut companies had relied heavily on western mortgage companies to originate and service their farm loan portfolios. All of these companies weathered the western mortgage crisis of the 1890s but, in response, they reduced farm lending activities for nearly a decade.[32] By the time these five insurers resumed farm mortgage lending activities a decade later, there were aggressive new competitors in the market. Prudential of New Jersey established its farm mortgage lending operation in 1898 and Equitable of New York followed in 1912 (May and Oursler 1950, 213; Skogvold

31 Horton *et al.* 1942. Table 75, 242.

32 Between 1892 and 1902, mortgage loans decreased from 80 percent to 46 percent of total assets at Northwestern Mutual, from 60 percent to 37 percent at Travelers, and from 46 percent to 41 percent at Aetna (Williamson and Smalley 1957, 126).

1956, 114). The Metropolitan of New York established its farm mortgage division in 1916 and, within just two years, its farm mortgage portfolio swelled to $10 million and was spread over five states in the Midwest and the Plains and six states in the south (James 1947, 232–245). By 1929, the Metropolitan had become the second largest farm mortgage lender in the country with a portfolio of $196 million of farm loans spread over 25 different states (Woodruff 1937, p. 49).

Metropolitan's rise to prominence in the inter-regional farm mortgage business reflected a general trend within the insurance industry. Seven life insurance companies held more than $100 million of farm mortgages in 1929, and six of them were relative newcomers to the inter-regional market — Metropolitan, Equitable and Mutual of New York; Prudential and Mutual Benefit of New Jersey; and John Hancock of Massachusetts (Temporary National Economic Committee 1940a, 161). Together, these companies held $921 million of farm mortgage loans by the end of the 1920s, or 44 percent of the entire insurance industry's agricultural portfolio. All of the eastern companies that entered the market in the early twentieth century worked through exclusive relationships with mortgage companies, similar to those developed by Connecticut firms before 1900 (Woodruff 1937, 7–15). By the end of the 1920s, these relationships had become so important that 88 percent of all the farm mortgages originated by mortgage companies were purchased by their insurance company partners (Woodruff 1937, 9).

Table 12

Holdings of Principal Lending Agencies in 1928

	Total Farm Mortgage Debt, 1928	Federal Land Banks	Joint Stock Land Banks	Mortgage Companies	Insurance Companies	Commercial Banks	Retired/ Active Farmers	Other Individuals	Other Agencies
	($000,000)	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
New England	122.5	16.6	0.0	0.0	0.0	37.7	11.8	24.8	9.1
Mid-Atlantic	376.6	11.7	6.0	0.5	0.1	10.5	29.1	34.8	7.3
E.N. Central	1,950.1	8.2	7.7	5.8	19.4	14.0	19.3	17.2	8.4
W.N. Central	4,056.2	7.0	5.4	15.1	32.3	6.2	14.9	13.3	5.8
South Atlantic	491.9	21.7	16.4	1.5	12.5	10.7	6.4	23.8	7.0
E.S. Central	381.5	34.5	7.3	2.8	28.0	11.1	6.5	7.4	2.4
W.S. Central	901.3	23.7	11.3	14.9	25.0	4.1	5.4	7.6	8.0
Mountain	496.6	21.8	4.7	14.9	5.6	16.7	10.0	19.3	7.0
Pacific	691.9	11.4	6.2	5.3	7.7	28.1	12.2	15.2	13.9
U.S.	9,468.5	12.1	7.0	10.4	22.9	10.8	14.2	15.4	7.2

Source: Wickens (1932), Table 10, 26.

The distribution of farm mortgage holdings in 1928 shown in Table 12 provides additional evidence of the continuing vitality of the private mortgage banking sector after the introduction of the Federal Land Bank System. Although they were in business primarily to sell loans, in that year mortgage companies held 10 percent of the nation's mortgage debt. This was greater than the total amount of mortgage debt held by federal joint-stock land banks, and represents powerful evidence that Charles Lobdell of the Federal Land Bank Board was badly mistaken a decade earlier when he predicted the demise of the private mortgage banking industry. The regional data reveal, however, that the importance of the public and private mortgage banking sectors varied substantially across the space. The traditional private mortgage companies, along with their life insurance partners, had the strongest presence in the west north central region. The share of lending by mortgage companies in this largest and most important regional market, moreover, was three times larger than that of the joint-stock land banks, as it also was in the mountain region. The joint-stock land banks played a much larger role in the south Atlantic region than the mortgage companies, on the other hand, and held 16 percent of that region's outstanding debt. In the remainder of the regions, the shares of the two mortgage banking sectors were much more similar. The coexistence of these two very different types of mortgage banking sectors in so many markets suggests that farm mortgage borrowers were sufficiently diverse to borrow from both, even though they employed different underwriting standards, loan terms and lending rates.

The last observation brings us to an assessment of the issue which energized the Rural Credit Movement and generated the Federal Farm Loan Act — changes in the cost and terms of the individual mortgage loans in the 1920s as the federal system grew side-by-side with the existing private-market structures. Tables 13 and 14 provide insight into this issue by presenting the mortgage rates charged by joint-stock banks, mortgage companies and other major lending groups in 1928 and the duration of mortgage contracts across these same groups in 1924. The mortgage rate data establishes that the FFLB Act accomplished its goal of equalizing mortgage rates across the nation's regions. As required by the Act, there was striking uniformity across space in loan rates within both the federal land bank and federal joint-stock land bank systems, although the latter were, on average, 40 basis points higher. All other lending groups charged different mortgage rates across regions that ranged at least 150 basis points from low to high, with the high end predominant in the south and west. These patterns suggest that either the federal system was able to cherry pick the best quality borrowers in the high-rate regions or that the subsidy built into the tax exemption on their bonds was effective in lowering the costs to borrowers in those areas.[33] Surprisingly, life insurance companies charged lower rates than the federal banks in the north central regions, suggesting that the tax exemption did not price these lenders or their mortgage company correspondents out of these largest and most important markets.

A comparison of regional lending rates across all lenders in 1928, along with their 1910 levels, shown in the last column of Table 13, suggests that the introduction of the federal system might have lowered the average cost of mortgage credit to farm borrowers everywhere outside the northeast. The reductions in the south central, mountain and Pacific regions were more than 200 basis points, moreover, and so substantial in magnitude. The mechanism through which the federal banks were most likely to have contributed to these outcomes come into clearer focus by noting that, in each of these areas, commercial banks and individual investors remained the high-cost farm mortgage lenders in 1928. We have seen earlier that these same lending groups were also the ones that lost lending shares as

33 O'Hara (1983) argues that the FFLB tax exemption diverted credit into agriculture and made it more difficult for tenant farmers to purchase land, one of the system's intended goals, by capitalizing the subsidy in higher farm land prices.

Table 13
Average Interest Rate by Regions and Major Lending Groups, 1928

	All Lenders	Federal Land Banks	Joint Stock Land Banks	Mortgage Companies	Insurance Companies	Commercial Banks	Individual Investors	All Lenders in 1910
New England	5.8	5.4	6.0	—	6.0	5.9	6.0	5.7
Mid-Atlantic	5.7	5.5	6.0	5.2	6.2	6.0	5.6	5.7
E.N. Central	5.6	5.5	5.9	5.6	5.3	6.1	5.6	6.1
W.N. Central	5.5	5.4	5.8	5.7	5.3	6.2	5.6	7.0
South Atlantic	6.6	5.6	5.9	6.3	6.7	7.2	7.0	7.3
E.S. Central	5.9	5.6	5.9	6.2	5.7	6.6	6.5	8.2
W.S. Central	6.6	5.4	6.0	6.9	6.7	7.7	7.9	8.9
Mountain	6.7	5.6	6.0	7.3	6.8	7.6	7.4	9.5
Pacific	6.5	5.6	6.0	6.4	6.1	6.9	6.5	8.1
U.S.	5.8	5.5	5.9	6.1	5.5	6.7	2.2	7.4

Source: 1928: Wickens (1932), Table 29, 63; 1910: Table 8 (above).

the federal system expanded. Life insurance and mortgage companies, in contrast, charged lending rates at or below the regional average in each region and maintained or expanded their market shares as the Federal Land Bank System was implemented. The distribution of average maturities on farm loans shown in Table 14 supports this chain of reasoning. The federal land banks and joint-stock land banks certainly worked to increase the average length of farm mortgage contracts, as mortgages were uniformly written for very long maturities in each system. Their impact on contract maturity would have been particularly great because they disproportionately displaced lenders — commercial banks and "others" — that offered borrowers the shortest length contracts in the market. While life insurance and private mortgage companies began to write more 10-year loans during the period, they continued to rely most heavily on the five-year, renewable mortgage loans that had served them well for decades.

Table 14
Average Term on Farm Loans by Major Lenders, 1924

		Percentage of Loans For —					
		1 Year	2–4 Years	5 Years	10 Years	11–30 Yrs.	30+ Yrs.
Agency	Average Term in Years	Percent	Percent	Percent	Percent	Percent	Percent
Federal land banks	33.0	—	—	—	—	—	100.0
Joint stock land banks	33.0	—	—	—	—	—	100.0
Mortgage companies	6.2	0.3	2.8	74.5	20.6	1.8	—
Insurance companies	5.6	4.4	13.3	64.8	14.6	2.5	0.4
Other sources	4.7	20.1	13.5	53.6	11.1	1.7	—
Commercial banks	2.6	52.1	19.9	26.7	0.7	0.6	—
All agencies	8.5	17.5	11.7	46.5	9.6	1.5	13.2

Source: 1928: Wickens (1932), Table 33, 77.

The evidence presented here indicates that the introduction of the Federal Land Bank System in the 1920s generated outcomes that should have been both surprising and ironic to contemporaries. The private mortgage banking industry formed the FMBA to advocate for a federal system of private mortgage banks but, when their recommendations were rejected, they spearheaded a six-year campaign of opposition to the implementation of the federal system. While the industry might have grown faster and expanded further had its campaign succeeded, its position and vitality in the farm mortgage market grew anyway during the next decade. Rural Credit advocates and the Federal Farm Board predicted, on the other hand, that they would either drive out existing mortgage companies or force them to alter the structure of their lending operations and the terms of their mortgage loans. Neither of these outcomes came to pass. The lesson from this institutional experiment in farm mortgage banking seems to be instead that the segment of the farm mortgage market that was most vulnerable to the federal system was the set of high-cost lenders operating on the fringe — commercial banks and individual investors. These groups could not compete with either the existing life insurance-mortgage company network or the subsidized federal land bank and joint-stock land bank systems, and borrowing costs and terms improved for farmers throughout the nation as this displacement took place. The U.S. farm mortgage market turned out to be large and diverse enough, on the other hand, that the subsidized federal joint-stock land banks and the private mortgage companies both remained viable, even though they offered borrowers fundamentally different lending terms and pricing structures. The 1920s battle between public and private farm mortgage systems turned out to be a draw.

The Legacies of Public and Private Farm Mortgage Banking

The federal joint-stock land banks and the private farm mortgage banking industry may have successfully coexisted during the 1920s, but could they both remain viable over the long run? We will never know. The 1930s brought unprecedented and protracted distress to U.S. agriculture, and instructs us much more about how farm mortgage lending structures failed-during the crisis, than whether and how they could have succeeded in its absence.

The number of operating federal joint-stock land banks reached a peak of 70 in 1923 but, by 1929, that number had shrunk, primarily through voluntary liquidations and mergers, to a total of 48 banks that had more than $600 million of bonds outstanding.[34] None of these four dozen banks stopped operating over the next four years, but the numbers of loans they made and their bonds outstanding declined precipitously while the delinquency rate on the banks' remaining loan portfolio increased to more than 40 percent. In May 1933, the Emergency Farm Mortgage Act was passed, which prohibited the joint-stock land banks from making new loans or issuing tax-exempt securities. The liquidation process that followed eventually took more than a decade to complete. By 1939, however, the system's loan

34 This very brief account is based on detailed examinations of the demise of the joint-stock land banks found in Schwartz 1938, Bennett 1938, and Horton *et al.* 1942, Chapter 8.

portfolio had been reduced to $65 million, although 20 percent of those loans remained delinquent. By the same year, the federal system's holdings of foreclosed farms had decreased to 5,000 from its peak of more than 9,000, reached in 1935.

The fate of the private farm mortgage companies during the 1930s was no better. We know most about their experience through the accounts of the life insurance companies that purchased so many of their loans. The founders of the FMBA had emphasized that the reputable mortgage banker was differentiated from a broker because the former would "not allow his client to suffer loss of a single dollar" on any mortgage loan sold (Robins 1916, 84). By the 1920s, a "right of reinspection" had been added to this open-ended moral commitment in the relationships between mortgage and life insurance companies, so that a poorly performing loan could be returned to a mortgage company during its first year even without a default (Woodruff 1937, 12). The mortgage companies could simply not honor these commitments as delinquencies and defaults mounted in the early 1930s (Woodruff 1937, 78–79; Saulnier 1950, 30–31). Attempts were made to salvage these networks by first releasing correspondents from the obligation to repurchase poor loans and by directly compensating them for servicing outstanding loans and foreclosed property, since the mortgage companies no longer earned commissions by making new loans.

By the mid-1930s, however, all of the major insurance companies discharged their mortgage company correspondents and internalized their farm loan and property management. These activities grew to staggering proportions and took years to resolve. The industry's farm mortgage portfolio decreased from its peak of $2.2 billion in 1929 to $0.9 billion in 1938 but, by then, the companies owned more than $0.6 billion of farmland (Temporary National Economic Commission 1940a, 174–84). The insurance companies received some relief through the emergency refunding operations of the Federal Land Bank Commissioner. But even with this "bail-out" of $0.3 billion, the companies were forced to undertake mortgage enforcement activities on a monumental scale (Temporary National Economic Commission 1940b, 347). Forty-nine percent of Equitable's loans went into "serious default," and the company eventually acquired 5,035 farms and employed a force of 400 men to make repairs on them (Skogvold 1956, 114–119). Prudential's Foreclosure and Property section acquired and was managing 46,159 farms by 1939 and still held 2,000 of them in 1945 (May and Oursler 1950, 206). Metropolitan's "Department of Agriculture" ended up managing 13,290 farms that represented the security on 58 percent of the loans it had held in its portfolio (James 1947, 294–305).

When one considers the events of the 1930s from the perspective of contemporaries, the differences in how and why the federal joint-stock land banks and private mortgage companies failed in the 1930s probably paled compared to the costs of resolution that both systems left behind. It is important to keep in mind the lessons that contemporaries drew in the 1930s about the FFLB experiment, because it occurred at the same time that the nation engaged in policy debates concerning the mix of public and private sponsorship of urban mortgage banking facilities. The evidence presented here suggests that the publicly chartered, privately owned and federally subsidized joint-stock land banks within the FFLB system made successful inroads during the 1920s, but did not displace or expand at the expense of a robust private mortgage banking sector. The private mortgage companies, on the other hand, had succeeded in competing with the new federal structures, but proved to be unable to honor their commitments to protect investors from losses on the loans that they originated, serviced and sold. By the 1930s, the urban mortgage banking sector had its own history of successes and failures to consider, and these certainly shaped much of the public debate during the 1930s that led to its restructuring. But we make a mistake if we do not also consider how the history of the farm mortgage banking industry presented here influenced that outcome.

URBAN MORTGAGE BANKING, 1900–1940

At the same time public debate and policy was focused on federal intervention into the farm mortgage market, the urban mortgage market in the United States was growing rapidly in size and changing in structure. The urban mortgage banking industry grew along with it, and in this section we examine the development of this sector between 1900 and 1940. While mortgage banking activities were certainly part of the urban landscape before 1900, there are few primary or secondary sources available from which to build a coherent account of historical development. But beginning in 1900, the urban mortgage banking sector follows a chronologically broadly similar pattern to its farm counterpart — decades of private innovation and experimentation, ending in fundamental restructuring through the intervention of the federal government. During the first three decades of the twentieth century, urban mortgage banks experimented with securitization and correspondent relationships as farm mortgage bankers did in earlier decades. But their activities took place in complex urban markets, took on a variety of names, employed fundamentally different methods and were rarely subject to regulation. In addition, there is surprisingly little quantitative information available about their activities.

There is enough evidence, however, to sketch out the major trends in the urban mortgage banking sector and how these were transformed by federal intervention in the 1930s. To provide a broad framework for this chronology, the discussion begins with a brief overview of the growth and basic structure of the nonfarm mortgage market between 1890 and 1940, and the role played by intermediaries within it. The focus then turns to the appearance of a variety of urban mortgage banking models between 1900 and 1920, with special emphasis on the large and particularly innovative New York metropolitan market. The 1920s represent an important transitional era during which some forms of mortgage banking, which incorporated private mortgage insurance and securitization, expanded rapidly before collapsing and disappearing in the 1930s, while others, such as interregional residential mortgage lending, developed along lines that continued to grow in importance for decades. The chronology ends with a selective account of the Depression-era regulation that transformed the residential mortgage market, in order to create a framework to explain how the modern mortgage banking industry in the United States emerged between 1935 and 1939.

Table 15
The Growth and Regional Composition of the Urban Population, 1900–1940

	1900	1910	1920	1930	1940
U.S. Population (000's)	76,212	92,228	106,022	123,203	132,165
Percent Urban:					
United States	39.6	45.6	51.2	56.1	56.5
Northeast	66.1	71.8	75.5	77.6	76.6
North Central	38.6	45.1	52.3	57.9	58.4
South	18.0	22.5	28.1	34.1	36.7
West	39.9	47.9	51.8	58.4	58.5
Percent of Urban Population in:[a]					
Northeast	46.0	44.1	41.3	38.6	36.9
North Central	33.6	32.1	32.8	32.3	31.4
South	14.6	15.7	17.1	18.7	20.5
West	5.7	8.1	8.8	10.4	11.3

Source: http://www.census.gov/population/www/censusdata/hiscendata.html, *1890 Population Census*, Vol. I, p. lxvii
[a] The Census currently defines urban residence as living in a municipal area with greater that 2,500 in habitants. This definition has been projected back to 1790 for national figures and are shown for the "United States". The figures for regional percent urban and shares of urban population for 1880 and 1890, however, are based on a definition that includes only inhabitants of cities with population greater than 8,000 and so these figures are not comparable with post-1900 shares.

The Growth and Development of the Urban Mortgage Market, 1890–1940

The growth and structure of the nonfarm mortgage market in the United States between 1890 and 1940 was driven by urbanization and the demands it generated for investments in new living arrangements, employment opportunities and production centers. Table 15 shows the broad process that was at work. During each decade between 1900 and 1930, the share of the population living in urban areas in the United States increased significantly.[1] The cumulative impact increased the share of the nation's population living in cities from 39 to 56 percent before coming to a near standstill during the 1930s. Similar pressures were felt in all regions of the country, but were strongest in the south and west, where the urban share increased by about 20 percent from low 1900 levels. Because total population also grew much faster in these areas, the share of total urban population living in the south and west grew from one-fifth in 1900 to just under one-third four decades later. We shall see that this uneven regional pattern of urbanization created persistent imbalances between local savings and demands for urban mortgage finance, just as it did in agriculture.

1 The Census defines the urban population as those living in cities or civil divisions with population of at least 2,500.

Financing urban real estate development changed the size and structure of the nonfarm mortgage market during the period. Table 16 shows the total volume of farm and nonfarm mortgage debt in the United States between 1890 and 1940, and displays breakdowns of the holdings of three major components of nonfarm debt. By 1890, the nonfarm sector claimed just under two-thirds of the nation's total mortgage debt, even though the smaller farm market attracted a disproportionate share of public attention. The urban market also grew much faster from that point on and, by 1930, more than 80 percent of the nation's real estate debt was written on nonfarm properties. However, the three major components of the nonfarm market grew at different times and at different rates during the period. Nonresidential urban mortgage debt, such as office buildings, hotels, and retail buildings, represented just under 40 percent of the nonfarm total in 1890. It gradually lost share over the next four decades, and then declined rapidly in importance during the 1930s. Nonfarm residential mortgage debt, on the other hand, was already equal in size to the farm mortgage market in 1890 and, by 1940, represented three-fourths of the nonfarm market and 63 percent of the nation's entire mortgage debt. Moreover, although mortgage debt on one-to-four nonfarm family "homes" was less than one-half of total residential debt in 1890, it grew in importance throughout the period (except for a pronounced, but temporary, surge in the multifamily component during the mid-1920s). By 1940, just under 70 percent of nonfarm residential mortgage debt was on small, owner-occupied residential dwellings.

Table 16

Structure of Urban Mortgage Markets, 1890–1940

	Total Mortgage Debts	Nonfarm Share of Total Debt	Residential Share of Nonfarm	Home Loan Share of Residential
	$ Billions	Percent	Percent	Percent
1890	6.013	63.4	60.1	45.6
1910	10.113	68.3	64.4	—
1920	22.548	62.5	66.3	64.1
1925	37.502	73.6	66.7	70.6
1930	53.675	82.1	68.5	62.6
1940	39.695	82.6	76.0	69.6

Source: th Census of the United States (1890), Vol. 12 and 13; 1910–1940, Horton *et al.* (1942), Table 64; Grebler *et al.* Table L-3, L-4.

Mortgage bankers became more focused on the home mortgage market as it grew in importance. It will be useful for purposes here to have a feel for its development over time. Table 17 shows the nonfarm homeownership rate, the percent of owned homes that were mortgaged and the average interest rate on home mortgages across regions between 1890 and 1940. For the entire nation the nonfarm homeownership rate surged by nearly 10 percentage points between 1890 and 1930 before falling back during the Depression nearly to the low levels seen in 1920. During the same period, the share of owned homes that were under mortgage grew even faster, which indicates that the connection between access to mortgage finance and homeownership has been at work in the United States for well more than a century. We cannot assess with any precision how the rapid expansion of mortgage debt during the 1920s (shown in Table 16) contributed to the national surge in homeownership during that decade because the 1930 Census did not ask homeowners about their mortgage status for the first time in 40 years.[2] However, the available evidence suggests that the link was just as strong, or even stronger, than in previous decades.[3] In any case, we can see in Table 17 that the historic disruptions in the home mortgage market during the 1930s were not strong enough to reverse the reliance on mortgage finance among homeowners to below 1920 levels. We shall see that the Depression-era home mortgage loan programs, and the participation of mortgage bankers within them, contributed to that accomplishment.

Table 17

Nonfarm Homeownership Rate, Mortgage Use and Mortgage Rates, 1890–1940

	Nonfarm Home Ownership Rate				Percent of Owned Nonfarm Homes Mortgaged				Interest Rate on Mortgaged 1-Family Owned Homes			
	1890	1920	1930	1940	1890	1920	1930	1940	1890	1920	1930	1940
	Percent				Percent				Average Rate on 1st Liens[a]			
New England	35.1	35.4	44.3	39.5	36.5	51.7	—	57.6	5.50	5.80	—	5.38
Mid-Atlantic	32.2	33.7	42.8	34.9	36.2	51.3	—	52.0	5.50	5.70	—	5.47
East North Central	46.7	47.7	51.5	45.9	29.3	41.6	—	47.3	6.80	6.10	—	5.45
West North Central	45.5	52.2	53.1	47.5	31.9	32.4	—	38.0	7.80	6.50	—	5.48
South Atlantic	26.9	36.7	40.2	37.3	12.2	29.3	—	39.1	6.30	6.30	—	5.68
East South Central	27.5	35.6	40.1	36.5	5.3	22.7	—	33.5	7.00	6.40	—	5.64
West South Central	31.6	40.9	42.9	42.1	4.3	26.0	—	33.5	9.00	7.90	—	5.97
Mountain	49.1	44.9	48.0	48.5	11.6	29.5	—	35.0	9.30	7.50	—	5.79
Pacific	40.8	43.4	47.5	45.1	23.0	38.9	—	45.8	8.60	6.80	—	5.73
U.S.	36.9	40.9	46.0	41.1	27.7	39.7	—	45.3	6.10	6.20	—	5.55

[a] The 1920 and 1940 rates do not include commissions or additional fees. The 1890 Census tried to capture all charges, but these were probably understated. See *Mortgages on Homes*, 1923, p.50.

Source: 1890–1920: *Mortgages on Homes*, Census Monograph II, 1923, Tables 5, 6, 12; 1930–1940: Bureau of the Census (1943), Housing, Vol. II, Pt. 1, Table 26 and Vol. IV, Pt. 1, Tables 14 and 27.

Homeownership rates in the regions tracked the overall national trend, as they increased everywhere before 1930 and then fell substantially during the 1930s. However, the pace of change varied enough across regions that rates in the southern and mountain states reached levels comparable to those in the northeast by 1920. One reason for convergence was the importance of large, dense cities in the northeast, in which multifamily housing and low rates of homeownership persisted. But increased access to home mortgage credit appears to also have played a role, as the very low percentages of homes under mortgages in the south and mountain regions in 1890 increased rapidly over the next four decades.

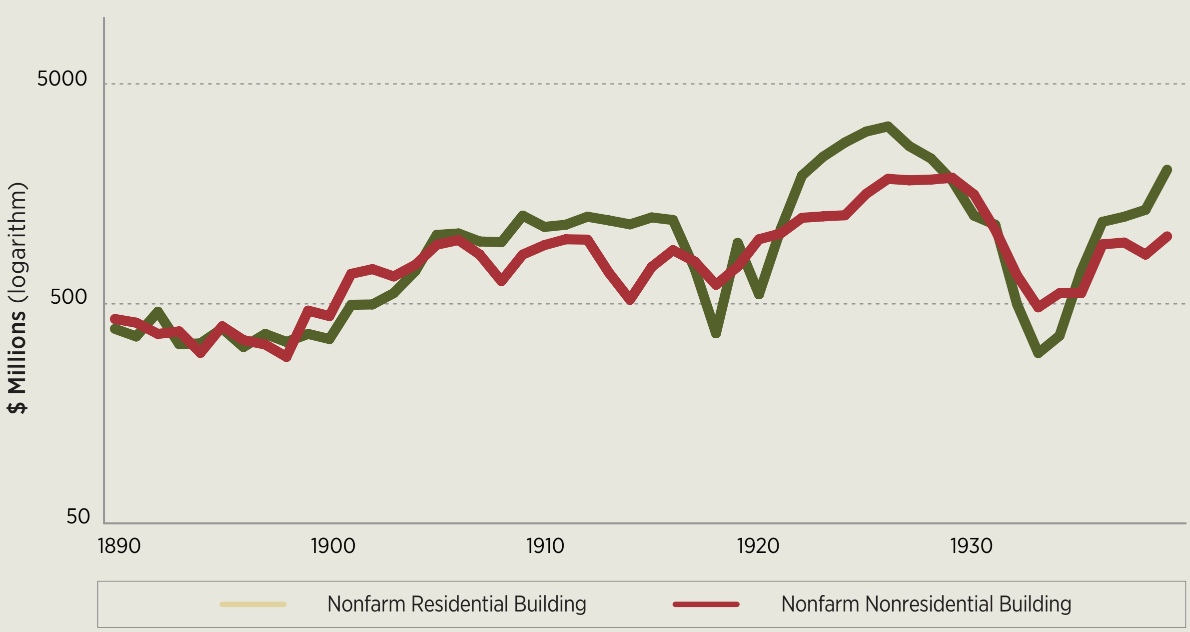
2 In 1890 and 1920, the Census conducted special surveys of homeownership and mortgage indebtedness — Table 17 includes these results. In 1900 and 1910, the population census form asked whether a home was mortgaged.

3 Grebler *et al.* (1956, 168) estimate that the ratio of debt to residential wealth doubled from 14 to nearly 30 percent during the decade.

Access to mortgage credit can be measured by cost as well as usage, and the last panel of Table 17 shows a pattern of interest-rate differentials in 1890 similar to the one we have seen in the farm mortgage market. I examined the determinants of these spatial differentials in home mortgage rates and concluded that regional segmentation was even more severe within the urban mortgage market in the late nineteenth century than in the farm component (Snowden, 1988). Although Table 17 shows progress toward an equalization of regional home mortgage rates by 1920, as we saw earlier, the balance of evidence suggests that these differentials might also have been more persistent than they were in the farm market. Recall that, by 1928, substantial regional differentials had largely disappeared in farm mortgage rates (see Table 13). In the very next year, in contrast, a Brookings Institution report on mortgage lending conditions in urban markets concluded that:

> **The present distribution of interest rates in the United States indicates that the inter-regional flow of urban mortgage money is as yet inadequate to compensate for the relative insufficiency of local funds in areas where capital is scarce. If, as we believe, one of the tests of a well-organized mortgage loan is the equalization of rates on a given quality of security in all parts of the country… we may say emphatically that the present organization is seriously defective.**
>
> **Gray and Terborgh 1929, 54–55.**

Figure 1
Indexes of Nonfarm Residential and Nonresidential Building 1890–1939



Source: Gottlieb (1965).

As shown in the last column of Table 17, this all seems to have changed during the 1930s, at least in the home mortgage component of the nonfarm market. We shall see below that New Deal policies and the mortgage banking industry played important roles in that process.

Reference has already been made to the impact that the Depression had on the urban mortgage market and, in fact, volatility was a persistent feature of nonfarm real estate development and finance between 1890 and 1940. For example, underlying the residential construction expenditure index shown in Figure 1 is an equally volatile housing start series. We do not know precisely by how much, but housing starts decreased rapidly from high levels in the 1880s to about 200,000 during the Depression of 1893, and then took nearly two decades to recover to 400,000 units by 1915. At this point, wartime dislocations first cut housing production in half and then ushered in a building boom, during which housing starts exceeded 700,000 units for seven consecutive years, and exceeded 900,000 units per year at its mid-1920s peak. During the contraction that followed, housing starts fell to only 93,000 by 1933 and did not reach 600,000 units for the remainder of the decade. These contractions and expansions in building activity were, of course, also felt in the urban mortgage market and were important to the growth, development, and failure of firms within the mortgage banking industry.

Change in the sources of urban mortgage finance over time is a final important feature of the landscape in which the urban mortgage banking industry developed during the early twentieth century. Table 18 provides a broad view of the issue by capturing nonfarm residential and nonresidential mortgage debt and non-intermediated, as well as intermediated, lending. Also shown in the table is the volume of real estate bonds that became an important source of urban real estate finance during the 1920s. The last four columns of the table show the shares of the four major intermediaries that were active in the nonfarm market throughout the period: commercial banks, mutual savings banks, building-and-loans (known as savings-and-loans by 1940) and life insurance companies. These four grew rapidly and became important sources of funding early in the period, as the combined share of mortgage debt that they held increased from 40 to nearly 60 percent between 1896 and 1910. At

Table 18
Intermediation in the Nonfarm Mortgage Markets, 1896–1930

	Real Estate Bonds	Nonfarm Mortgage Debt (Excl. Real Estate Bonds)	Other Lenders	Principal Institutional Lenders				
				Total	Commercial Banks	Mutual Savings Banks	Building & Loans	Life Insurance Cos.
	$ Billions	$ Billions	Percent	Percent	Percent	Percent	Percent	Percent
1896	0.015	4.400	59.3	40.7	7.6	16.0	9.8	7.3
1900	0.035	4.611	57.9	42.1	8.2	18.2	8.0	7.7
1910	0.100	6.806	41.1	58.9	15.5	21.7	10.1	11.5
1920	0.584	13.516	46.6	53.4	14.1	17.5	13.8	8.0
1930	6.318	37.726	45.3	54.7	13.5	14.9	11.6	14.7
1940	2.800	29.986	40.0	60.0	13.4	16.0	13.6	16.9

Source: Grebler *et al.* (1956), Tables L-2, L-3, N-8, N-9, N-10 the latter date, the growth in intermediated lending stalled in the urban mortgage market for two decades, as the volume held by institutional lenders did not keep up with the overall expansion of debt, and the market for real estate bonds also grew rapidly. It was within this environment that the urban mortgage banking industry emerged and took shape.

Urban Mortgage Banking, 1910–1930

As urbanization drove the demand for nonfarm real estate development higher between 1910 and 1930, household income and savings in urban areas also increased. The result, as noted by a New York real estate practitioner in 1910, was that "the title companies, the savings banks, insurance companies and a multitude of estates and individuals, represented by attorneys or agents, are constantly looking for [mortgage] investments" (Davis 1910, 185). A Miami mortgage banker emphasized the same trend 15 years later when he noted that "doctors, school teachers, and trades-people (brick layers, carpenters, mechanics, etc.) are the ones who usually buy small mortgages" (Parker 1925, 119). These observations provide context for the decline in the share of lending by intermediaries in the nonfarm mortgage market between 1910 and 1930 that is shown in Table 18. During this period, individual investors, on their own or through trust accounts, became increasingly important sources of mortgage funds and, within this environment, the urban mortgage banking industry emerged to repackage mortgage loans into safe, convenient and liquid investments for both institutional and individual investors.

Before explaining how this occurred, some additional discussion of the structure of the nonfarm mortgage market at the time will help to clarify the mortgage banker's role within it. First, the "real estate bond" category reported in Table 18 was actually a heterogeneous aggregate of securities that were issued against real estate mortgage collateral under a variety of names and by a variety of institutions.[4] Some of these firms were the mortgage companies that we will discuss in detail below. But a large share of these securities were issued by specialized real estate bond houses and by bond departments at investment banks to finance large single-property projects, such as hotels, office buildings, apartment buildings and retail structures, in Chicago, New York and other major metropolitan centers.[5] The expansion of these bond houses during the 1920s has been called "one of the most dramatic episodes in the history of real estate finance" after many of them failed in the early 1930s, and their activities were then investigated by Congress as federal regulation of the corporate securities market was being written and implemented (Fisher 1951, 29).[6] We will not focus

4 For an overview of this market, see Fisher 1951, 29–35.

5 Halliburton (1941) provides the most comprehensive analysis of the real estate bond mortgage houses. See also Johnson (1936a) and Johnson (1936b) for a quantitative analysis of the sector's structure and performance. For a modern treatment, see Goetzmann and Newman (2010).

6 The real estate bond houses were investigated by the Sabath Committee. See *Investigation of Real Estate Bondholders' Reorganizations,* H.R. Rep. No. 74–35 (1935).

on this segment of the real estate bond market here because other firms in the market referred to by contemporaries as "old-line mortgage companies" were more similar to and more directly the antecedents of the post-World War II mortgage company.[7]

It also needs to be noted that the share of intermediaries in the urban mortgage market between 1910 and 1930 did not decline because they grew slowly. In fact, the nonfarm mortgage portfolio of all four intermediaries increased rapidly between 1910 and 1930: by 280 percent for mutual savings banks, by nearly 400 percent for commercial banks, by about 600 percent for life insurance companies and by just less than 800 percent for building-and-loans (Building & Loans).[8] Despite this robust growth, each of these intermediaries was hampered by regulatory or institutional constraints that restricted their ability to keep pace with the expansion of the total market. Mutual savings banks grew rapidly in size and importance within urban areas in New England and the Mid-Atlantic regions, but did not take root in any of the regions where the urban population was growing fastest.[9] In contrast, the Building & Loan industry expanded aggressively in all areas of the country including along the urban frontier in the south and west (Snowden, 1997). However, the Building & Loan funding model was designed to finance only home mortgage loans and employed a unique contract that was attractive only to borrowers who were willing to join and invest in a cooperative lending organization for 10 to 12 years (Snowden 2003). Nationally chartered commercial banks were prohibited from holding real estate loans before 1913 but even after this date were constrained by restrictions on the length of the mortgages they could write and the amounts of mortgage debt that they could hold.[10] Life insurance companies faced fewer regulatory restrictions on mortgage lending than the others, and we have seen that even the large eastern firms became important lenders in the western farm mortgage market by 1920. But, as we will discuss in greater detail in the next section, up until that time, many of these companies continued to focus their urban lending activities on local markets, and most of them kept administrative costs low by financing large urban projects rather than smaller loans.

These external and self-imposed constraints created a complex pattern of variation in access to intermediated mortgage finance within the urban mortgage market. Mortgage companies and other mechanisms arose to fill in these gaps. Commercial banks, mutual savings banks, and especially

7 This distinction was made by Samuel Untermeyer in his criticism of the newer real estate bond houses that appeared in "Urge State Inquiry into the Inflation of Building Bonds," in the *New York Times*, Dec. 17, 1925: "My observations do not refer to the old line mortgage investment and lending organizations. They have from the beginning realized the danger in this inflation and have been ultra conservative in their loans." The article states that others critical of the new real estate bond business at the time were "careful to exempt from their discussion those old established houses which stood behind their loans with the integrity of their organizations and which have continued for scores of years without loss to any of their investors." Untermeyer gained fame as counsel for the 1912 Pujo Committee, helped draft the Federal Reserve Act and, in 1920, served as counsel to the Lockwood Committee that investigated for the State Legislature the building industry in New York. Paradoxically, as we shall see below, many of these old line mortgage companies also failed with notoriety in the 1930s.

8 All percentage changes are calculated from the data underlying Table 18.

9 Ninety-six percent of the deposits of mutual savings banks were located in the Northeast by 1910, although the share of the nation's urban population living in these areas, as we have seen above, was 44 percent and falling. See Lintner (1948, Chapter III) for an extensive discussion of the determinants of the limitations on the geographic spread of mutual savings banks.

10 National banks were allowed to hold urban mortgages in 1916, but only with maturities of one year until 1927. The size of their mortgage portfolios was also limited to one-half of time deposits (Behrens 1952, 17–21).

Building & Loans, confined their lending to small geographic areas within local urban markets.[11] But there was no mechanism at this time that could transfer funds within or between these institutional groups, and so there were incentives for alternative mechanisms to emerge that could address local mismatches of mortgage demand and supply. The problem was particularly acute for small businesses and owners of specialized real estate who were not served at all by Building & Loans, only reluctantly by large insurance companies and only in the northeast by mutual savings banks. Also falling outside the boundaries of the institutional lenders were borrowers who did not satisfy their relatively strict underwriting standards — to write only first mortgage loans on improved property for no more than 50 percent of its value. Other mortgage lenders, including mortgage companies, recognized the demand for more liberal mortgage terms and wrote first loans for amounts up to two-thirds or three-fourths of property value, and second mortgages to increase the leverage of borrowers who had taken out a first loan from a more conservative lender.[12]

Mortgage companies emerged in the first two decades of the twentieth century in this highly differentiated market to originate, service, hold and sell mortgage loans. Adding to the complexity, the practices used by mortgage companies appear to have varied significantly across local markets. In his description of the private mortgage company in 1922, Chester Crobaugh of the Mortgage Association of Cleveland proclaimed that:

> **… Cleveland became known nationally as the center of a new type of financial institution. Inquiries on the manner of conducting the business of a private mortgage company now come almost daily from cities near and far.**
>
> **Crobaugh 1922**

Crobaugh was referring to institutions that first appeared in 1912 and had grown quickly in size and number in his city after World War I. These Cleveland mortgage companies were organized like private banks and used equity to make and hold urban mortgages. Three years later, the president of a large Chicago mortgage banking company explained to attendees at the 1925 annual convention of the National Association of Real Estate Boards how his company used trust deeds to make and sell real estate loans, because this technique enhanced the negotiability of the loans in the secondary market (Kanaley 1925). However, he cautioned the audience that the system his firm had developed "may not be applicable except under the laws of Illinois." At the same conference, a mortgage banker from Miami, explained that, in his market, companies issued bonds in small denominations against mortgage collateral held in trust, and even sold these bonds to smaller investors on the installment plan (Parker, 1925).

---

11 Lintner (1948, 406–408) reports evidence of much higher loss rates for loans made between 1918 and 1931 by Massachusetts mutual banks just a few miles outside of the city where the institution was located. He concluded that "[t]he results clearly point up the greater hazard of lending outside the area with which the bank is most familiar and within which its lending facilities are most adequate." Snowden (1997) documents and explains the very narrow lending areas in which B&Ls operated.

12 See Crobaugh 1922, 10; Moulton 1930, 664.

With all this variation in practice, the definitive history of the urban mortgage company in the early twentieth century will have to be built on detailed local case histories. The discussion here will focus instead only on the growth and development of the mortgage company in New York, the nation's largest urban mortgage market. We know a great deal about the development of these companies between 1900 and 1920 because they were regulated, unlike mortgage companies in other states. The regulation arose because the New York companies grew out of the regulated industry for title insurance. Title insurance was an innovation of the late nineteenth and early twentieth centuries that facilitated the development of secondary mortgage markets in general and mortgage companies in particular by protecting investors against financial losses due to defects in the title to the encumbered property.[13] Title insurance companies were first permitted by New York law in 1885, and their powers were then expanded in 1892 to include the guarantee of merchant credits.[14] Sometime in the next decade, several of these companies began to insure payments of interest and principal to owners of mortgages, as well as the titles to the encumbered land. In 1904, the law was amended to allow this broader mortgage guarantee (Alger 1934, 8). For the next several years, the mortgage companies guaranteed only loans that were owned by an applicant for insurance but, in 1911, the law was amended again to permit companies to "invest in, purchase or sell" mortgages they had guaranteed for payment or title.[15]

At this point, the guaranteed title and mortgage companies could provide the complete complement of mortgage banking services.[16] When the companies made loans, they charged lending and title fees and extension fees if the loan was a renewal. They also received remuneration by charging an ongoing guarantee fee of one-half percent of the loan's principal. In practice, this meant that the investor, purchasing a loan from a company that had been written for an interest rate of six percent, would receive 5-1/2 percent on a guaranteed basis. The companies received interest and principal payments from the borrower and passed them through to the investor. Any default on interest payments had to be forwarded immediately to the investor at the company's expense, and the company also had to execute and pay the expenses associated with foreclosure. In the latter case, the company was required to repay the principal to the investor within 18 months of taking the property.

We know quite a bit about the early history of one of these New York firms, the Home Title Insurance Company.[17] The company was incorporated in 1906 and, in its early years, it insured titles and sold both guaranteed and unguaranteed whole mortgages, although the business soon sold only guaranteed loans. Ninety-nine percent of the loans the company insured were in the immediate New York metropolitan area. Between 1906 and 1920, the company sold an average of 433 mortgage loans each year, that were

13 Kanaley (1925, 4–6) explains in detail the importance of title insurance to the mortgage loan business in Chicago. Lindow (1925) provides an extended discussion of the history of the industry and its rapid adoption in Detroit in the early 1920s.

14 Alger (1934, 7–8, 13–14) provides the authoritative account of the development of the title guarantee industry in New York.

15 Alger (1934, 9). Lipshutz (2004, 9) labels the 1911 amendment a "catastrophic legislative error."

16 Alger (1934, 12) provides this description.

17 Lodge (1935). Edgar A. Lodge was comptroller of the subsidiary Home Title Guaranty Company, and the study of its insured mortgage portfolio was done at the request of the brand new Federal Housing Administration for its nationwide study of losses realized on mortgage loans. At the time, the Home Title Insurance Company was in receivership and being liquidated by the New York Department of Insurance.

guaranteed for an averaged, combined value of $1.7 million. Fifty-seven percent of this mortgage debt was written on one- and two-family dwellings, and another 13 percent on multifamily structures with three or more apartments. The remaining 30 percent of the mortgage debt was secured by stores, office buildings, special purpose structures and vacant land. The average loan size before 1920 was just below $4,000, which was a relatively modest amount, given that the average mortgage on encumbered homes in Brooklyn, the company's most important market, was $4,140 in 1920.[18] Finally, fewer than 200 of the 6,400 loans the company guaranteed before 1920 became seriously delinquent or required foreclosure.

To provide a more complete picture of the early New York title and mortgage guarantee industry, Table 19 reports selected balance sheet items for all companies that operated in the state between 1910 and 1920. Three of the 11 — the two Buffalo companies and the Title Guaranty and Trust — show either zero or minimal amounts in the "Principal and Interest Guaranteed" column; these firms concentrated exclusively or primarily on the title insurance business. The Home Title Company discussed above, with $17 million of outstanding guarantees in 1920, turns out to have been a relatively small firm within the industry during this early period.

Table 19

Title and Mortgage Guarantee Companies in New York, 1910 and 1920

	1910						1920					
	Mortgages Held	Assets	Capital & Surplus	Principal & Interest Guar.	Reserves	Certificates Issued	Mortgages Held	Assets	Capital & Surplus	Principal & Interest Guar.	Reserves	Certificates Issued
	($ Million)						($ Million)					
Bond and Mortgage Guar. Co.	6.0	8.6	7.5	197.1	nr	0.0	7.7	14.5	12.5	253.8	4.0	0.0
Buffalo Abstract & Title Co.	0.2	0.3	0.3	0.0	nr	0.0	0.2	0.4	0.3	0.0	0.2	0.0
Home Title Ins. Co. of N.Y.	0.6	0.8	0.6	3.6	nr	0.0	0.6	1.7	1.3	17.6	0.4	0.0
Lawyer's Mortgage	5.4	7.0	6.2	108.2	nr	0.0	7.5	10.3	9.6	137.8	6.3	0.0
Lawyers Title Insurance & Trust Co.	7.4	24.0	9.5	0.0	nr	0.0	8.6	30.4	10.0	33.5	2.7	1.1
Lawyer's Westchester Mortgage & Title Co.	0.3	0.4	0.3	1.7	nr	0.1	1.0	1.4	0.4	4.2	0.3	0.8
New York Title & Mortgage	1.5	3.7	3.6	0.0	nr	0.0	1.1	5.8	5.1	50.8	2.0	0.0
Home Title Insurance Co. of N.Y.	—	—	—	—	—	—	0.8	1.0	0.6	0.5	0.5	0.3
Lawyer's Mortgage	—	—	—	—	—	—	10.9	55.3	18.3	0.0	0.6	0.0
Lawyers Title Insurance & Trust Co.	0.3	1.5	1.1	2.3	nr	0.0	0.4	1.4	1.0	17.9	0.9	0.0
U.S. Title Guar. & Indemn. Co.	1.2	1.6	0.9	6.3	nr	0.4	3.3	4.2	1.1	13.0	1.0	2.8
Westchester Title & Mortgage Co.	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Total	**22.9**	**48.0**	**30.1**	**319.1**	**nr**	**0.5**	**42.0**	**126.4**	**60.2**	**529.1**	**18.8**	**5.0**

Source: 1910: New York State (1921). Senate Doc. No. 20, *52nd Annual Report of the Superintendent of Insurance*, Part III, J.B. Lyon, Albany, N.Y. ; 1920: New York State (1921). Leg. Doc. No. 46, *62nd Annual Report of the Superintendent of Insurance*, Part III, J.B. Lyon, Albany, N.Y.

In contrast, by 1920, the four largest companies had written more than $470 million of the $520 million guarantees written by all of the firms in the industry. But, regardless of size, all of the companies that insured payments on mortgages held small volumes of mortgage debt relative to the amount they had guaranteed. These firms were in business to sell the loans they made, serviced and guaranteed.

Two elements show up in the balance sheets of these companies in 1920 that are worth further discussion because they become troublesome to the companies and their investors over the next decade. First, as the mortgage guarantee business grew out of title insurance companies, no provision was added to the law that linked a company's capital, surplus or reserves to the amount of guarantees on mortgage payments that it wrote. The companies, as a result, were poorly situated to manage serious downturns in the mortgage market. Already by 1920, the ratio of guarantees to capital and surplus ranged from 10 to 20, while the ratios to legal reserves were even higher. The situation became much more dire in the 1920s. The entries that appear under "Certificates issued" for two companies in 1910 and four in 1920 also turned out to create problems. These were participation certificates that the companies wrote on mortgages placed in trust rather than sold outright. Certificates like these were not unique to New York guarantee companies — mortgage companies throughout the nation used similar arrangements to split large loans into shares for several investors or so that small investors could purchase as little as $100 of mortgage debt.[19]

Most participation certificates issued by the New York companies before 1920 were written against single mortgages. But, early on, companies also experimented with certificates issued on groups of mortgages and, as we will see in the next section, these "group series certificates" turned into the industry's blackest eye in the 1930s. Of more interest here is the close functional relationship between the group series certificates of the urban guarantee mortgage companies and the mortgage bonds issued by the federal joint-stock land banks in the Federal Farm Loan system at the same time. They differed from each other legally because the securities of the land banks were collateral trust bonds that provided investors with joint ownership of the underlying mortgage collateral.[20] The group certificates, in contrast, were collateral trust certificates that provided their owners with assigned shares of the income generated by the loan pool. However, the issuer of both types of securities had the power to withdraw mortgages from the group and substitute new mortgages equal or greater in face value (Alger 1934, 10; north *et al*. 1928, 90–91). So, although the group series certificates created rights for investors that turned out to be most difficult to resolve under default, these instruments showed that mortgage companies recognized that mortgage-backed securities had value within the urban as well as the farm mortgage market.

19 Beginning in the 1920s, mortgage certificates issued as guaranteed for payment in other states by mortgage companies and others but, in these cases, the loans were insured by one of six national surety companies that took up the business. See McKenna (1927). Moreover, because certificates did not represent ownership of the underlying mortgage, which was retained by the trustee, it could be written by issuers to assign shares in the income from the loan that varied in seniority as well as amounts — so certificates were used to tranche mortgage loans at this time (North *et al.*, 1928, p. 85).

20 For an excellent discussion of all the instruments used during this period see North *et al*. 1928, 82–94.

Before leaving this early period of urban mortgage banking development, it is important to note that the discussion here, by focusing on the New York companies, has emphasized the innovations in financial engineering that mortgage companies introduced between 1900 and 1920. A contemporary treatment of the "classes of indirect mortgages" that were introduced during the period noted that:

> **It is difficult, in fact nearly impossible, to adopt any rigid classification of the types of indirect mortgage securities. The varieties seem to be measured by the possible combinations of the words guarantee, participation, bond, [and] certificate...**

This observation underscores the point made at the beginning of this section: in a market where there were gaps in the lending networks provided by institutional lenders, there was demand for mortgage bankers that not only originated and serviced mortgages, but also repackaged them in forms that were attractive to individual investors. But, during this same period, the market for whole mortgage loans continued to represent an important component of the urban mortgage market. In the next section, we shall see that the mortgage banking industry began to shift its attention there just as the urban market for indirect mortgage instruments was collapsing.

Urban Mortgage Banking in the 1920s

We have seen earlier that disruptions due to World War I caused a severe decrease in residential construction. In fact, local shortfalls in housing became so severe during the war that the federal government began building housing for defense workers (Wood 1931, 76–78). After the war ended, Congress created the Calder Committee to investigate the nation's housing situation and to recommend actions the federal government could take, and legislation it could adopt, to help address the acute excess demand for housing.[21] The Committee's first observation in its final report was that private enterprise, rather than public intervention, should be relied on to alleviate the imbalance. This declaration took off the table proposals from housing advocates to transform the war-time federal housing programs into a broader federal initiative of direct investment in housing similar to those that were being implemented in Europe at the time.[22]

In the end, the federal war-time housing programs were discontinued, and most of the Calder Committee's recommendations for federal action, such as compiling statistical records of building activity and establishing a clearing house to provide information about local zoning ordinances, assisted rather than replaced initiatives from the private market and local governments.[23] The one area where the Calder Committee suggested direct federal involvement was the residential mortgage

21 The committee was created by S. Res. 350, 66th Cong., passed on April 17, 1920.

22 The Calder Committee's report was presented as S. Rep. 66–829, dated March 2, 1921. See Wood (1931, 76–78) for a discussion of the proposals for federal housing programs. See S. Rep. 66–829 (1921) at 13–16 for the Calder Committee's negative assessment of the European initiatives.

23 The Committee's recommendations were taken up when the Bureau of Labor Statistics established its program to collect annual building permit series from local governments in 1921 and when the Division of Building and Housing in the Department of Commerce began to publish *Zoning Progress in the United States* in 1926 as a guide to new and best practices within the urban planning community (Hubbard *et al.*, 1929, 162–63).

market. It recommended a relaxation of strict prohibitions on urban mortgage lending by nationally chartered commercial banks, which was gradually accomplished during the 1920s. The committee also recommended the establishment of a Federal Home Loan Bank system to create a discount facility that could provide liquidity to residential mortgage lenders. This idea was championed by the Building & Loan industry, but opposed by the other leading institutional residential mortgage lenders, and was not enacted at that time. So, despite the Committee's recommendation, the federal government continued to play a small role during the 1920s in a residential mortgage market that, as we have seen, remained fragmented in structure and subject to a patchwork of state regulation.

The Calder Committee's confidence in the productive capacity of the private housing sector turned out to be well-founded, as the nation's postwar housing demands were soon satisfied by the historic residential building boom of the 1920s, described earlier. Eight million new housing units were added to an initial stock of 24 million during the decade, the nonfarm homeownership rate surged from 41 to 46 percent, nonfarm residential debt tripled in volume and the ratio of debt to residential wealth doubled to nearly 30 percent (Snowden, 2010).

In this section, we examine the development of the mortgage banking industry over the decade, by focusing on two distinct trends: the rapid growth and subsequent collapse of the mortgage guaranty industry in New York, and the emergence of life insurance-mortgage company connections in the nonfarm residential market. While there were other developments in the decade that influenced mortgage companies and mortgage banking more generally, the two examined here are most important in understanding how federal policy transformed the mortgage banking industry during the 1930s into its modern, post-World War II configuration.

In the last section, we left 11 New York title and mortgage companies with $528 million of guarantees outstanding that secured the payments of principal and interest on mortgage loans in 1920. As shown in Table 20, the New York industry grew rapidly over the next 10 years, as 38 new firms entered the market, and the volume of guarantees increased by a factor of five. The mortgage guarantee business was nowhere as large as in the New York metropolitan area but, by 1930, some 21 title and mortgage guarantee companies were active in New Jersey; 17 were spread between California, Oregon and the state of Washington; and another dozen were writing guarantees in the north and south central regions of the country (Lipshutz 2004, 8). Taken together, these 50 firms appear to have written only about one-half the volume of insurance as the New York companies, but recall from the last section that, at this same time, six national surety companies were also insuring mortgage participation certificates and real estate bonds.[24] Some of these companies operated in more than 30 states and 300 cities and, by 1927, a few of them had stopped writing new policies because demand was so great, they had reached their underwriting capacity (McKenna 1927, 131). We have seen that members of the FMBA argued in the early twentieth century that the most reliable farm mortgage bankers relied on

24 Lipshutz (2004, 8) uses the firm's surplus to measure size.

their reputation for standing behind their loans, rather than explicit guarantees, to sell mortgages. In contrast, within the urban market at the same time, there were a variety of vendors, such as the New York title and mortgage companies, that grew rapidly by providing private mortgage insurance to facilitate secondary market activity, including their own, in these dense, highly differentiated and institutionally complex mortgage markets.

The last column of Table 20 compares the volume of guarantees outstanding to the companies' capital and surplus. We saw earlier broad ranges of these ratios for individual companies in 1920; here, we see that the industry-wide ratio varied substantially during the 1920s. On the one hand, this level of variation is not surprising because, as we saw above, the New York law did not require the companies to hold capital or reserves in amounts that depended on the volume of guarantees outstanding. However, it is noteworthy that investors were willing to purchase and rely upon insurance written by so many new companies as the volume of guarantees, and their ratio relative to capital, peaked in 1930. In fact, when the Depression and the urban real estate crisis struck with force, it became painfully clear that most of these companies had been operating on thin and fragile margins, when nearly all of them began to delay repayment of principal to investors in 1931 (Alger 1934, 59). These firms all operated under the supervision of the Insurance Department and were subject to annual examinations, but none of the companies were closed in 1932. The forbearance was justified by the clause in the guarantee contracts that allowed all of the companies 18 months to repay the principal to investors after a serious default on the loans they had purchased. The idea was to provide time for the company to foreclose upon and dispose of the encumbered property, and they used this provision in 1931 and 1932 to delay action in the hope that the companies would recover.

Table 20

Number and Activity of Companies Guaranteeing Mortgages in New York, 1921–1932

	Number of Companies	Capital and Surplus	Guarantees Outstanding	Ratio of Guarantees to Capital and Surplus
1921	12	64	548	8.6
1922	14	71	652	9.2
1923	15	55	781	14.2
1924	20	64	981	15.3
1925	26	93	1,214	13.1
1926	28	121	1,522	12.6
1927	37	141	1,837	13.0
1928	45	183	2,169	11.9
1929	47	200	2,407	12.0
1930	50	204	2,867	14.1
1931	50	200	2,851	14.3
1932	47	184	2,823	15.3

Source: Alger (1934), p. 9.

Forbearance ended with the national bank holiday in March 1933 when state regulators ordered the mortgage guarantee companies to stop selling guarantees and distributing dividend payments. Five months later, the Department of Insurance seized 18 of the largest mortgage guarantee companies in order to rehabilitate or liquidate them (Alger 1934, 63). At this time, these companies together had $1.8 billion of guarantees outstanding. Just less than $1 billion of guarantees had been written on whole loans, and $.8 billion written on loans that had been certificated. About 80 percent of the participation certificates guaranteed single loans that were held in trust; these were called "specific certificate issues." The other certificates were referred to as "group series issues" because they were written against two or more mortgages. More than 200,000 investors held certificates issued by the companies when the Insurance Department took them over.[25]

The Department of Insurance found that $1.1 billion of the guaranteed mortgages were in default. Table 21 shows how these problem loans were distributed in December 1933 among the three categories of guarantees: those that backed whole loans, those that secured specific certificates and those written for group issues. The default rate was higher and potential losses larger, for the two categories of certificated loans. One-third of the 121,063 guaranteed whole loans were in default — a strikingly high default rate, but not when compared to the 57 percent rate for both types of certificated loans. For all three groups, defaulted loans were larger in average size than those that remained current, and so the share of total face value for defaulted loans was even higher: 46 percent for the whole loans, 74 percent for those behind specific certificates and no less than 82 percent for group-issue loans. The variation in average loan size within and across the categories indicates that most of the whole loans and many of the loans behind the group certificate that were not in default were on one-to-four family residential structures. This pattern comports with the lending experience of one of these 18 companies — the Home Title Insurance Company — whose early history was examined in detail in the last section.[26] The company's own post-mortem revealed that default rates on its loans and losses borne from them were lowest for single-family residential loans (Lodge 1935, 58–66).

We actually know more about the certificated loans than about those that were sold whole, because the New York state legislature created a special Mortgage Commission in 1935 to take over the resolution of certificates. This action followed two difficult years during which the Department of Insurance made little headway.[27] Certificate holders did not own the underlying mortgages jointly, so the court could not simply assign a receiver to act in the common interest of any group of certificate holders (north *et al*. 1928, 93–94). Instead, the legal issues involved had to be resolved for each series separately either through unanimity, adjudication in court or, in some cases, under special legislation enacted by the

25 In describing the task facing the regulator, the Moreland Commissioner — a special investigator appointed by the Governor — noted that the assets of the guarantee companies represented more than forty times the volume of all liquidations the Department of Insurance had handled since its inception in 1859 (Alger 1934, 2).

26 When it was taken over, Home Title still had $49 million of guarantees outstanding with $10 million on specific certificates and the remainder on whole loans (Alger 1934, Appendix Tables III–IV).

27 Posner (1948) provides a brief overview of the mortgage commission's experience. He served as one of its three commissioners.

Table 21
Status of Mortgages Guaranteed by New York Title and Mortgage Guarantee Companies December 31, 1933

	All Mortgage		Mortgages not in Default		Mortgages in Default	
	Number	Amount	Number	Amount	Number	Amount
Whole Loans	121,063	$972.3	79,548	$520.5	41,515	$451.8
Percent of Total	—	—	66%	54%	34%	46%
Average Size		$8,031		$6,543		$10,883
Specific Certificates	8,535	$664.3	3,650	$169.6	4,885	$494.8
Percent of Total	—	—	43%	26%	57%	74%
Average Size		$77,832		$46,466		$101,290
Group Certificates	11,428	$173.4	4,866	$31.2	6,562	$142.2
Percent of Total	—	—	43%	18%	57%	82%
Average Size		$15,173		$6,412		$21,670
Total	**141,026**	**$1,810.0**	**88,064**	**$721.3**	**52,962**	**$1,088.8**

Source: Alger (1934), Appendix, Tables III–V.

legislature.[28] The Mortgage Commission was staffed by 500 employees organized into six departments, and faced the task of resolving claims on 15,000 loans with a combined face value of $686 million.[29] The Commission found that 99 percent of the loans behind the certificates were made in New York City or adjoining counties and that 59 percent of them had been made on dwellings. However, the combined amounts of those home loans represented only eight percent of the total face value of the certificated loans, while two-thirds were secured by multifamily properties and the remaining 25 percent on a mix of office buildings, hotels, special properties and vacant land. The Commission disbanded in March 1939, leaving only 600 mortgages written for $25 million unresolved.[30]

It took state agencies more than a decade to deal with the failure of the New York mortgage guarantee companies. During this period, the structure of the industry and its practices were examined in detail by the Insurance Department, the Governor's Moreland Commissioner and the Mortgage Commission.[31] These investigations all found that the companies had violated underwriting standards, substituted bad loans for performing mortgages behind certificates and maintained inadequate guarantee funds to support their insurance policies. Some of these abuses were the result of gaps in the regulatory and legal structure, and others were due to lack of oversight by the Insurance Department. But, by 1937, there was little appetite for reform or remediation, and the Joint Legislative Committee to Investigate

28 Cramp (1940) provides a detailed account of the laws and court actions that were required to resolve the certificated loans.

29 New York. 1936. *Annual report of the Mortgage Commission*. The Commission's structure is explained on pages 6–14 and the information on the location and types of loans can be found on pages 29–32.

30 New York 1939. *Annual report of the Mortgage Commission*, 17.

31 New York 1933. Pending rehabilitation proceedings in the title and mortgage company field. The Moreland Commissioner is reported in Alger (1934).

the Guaranteed Mortgage Situation concluded "that the business of guaranteeing mortgages should be prohibited entirely."[32] It was, and an active private mortgage insurance industry did not reappear in the United States until the 1950s (Rapkin 1967).

For purposes of understanding the history of mortgage banking, there is much to be learned by considering the parallels between the New York title and mortgage companies and the western farm mortgage companies that failed after beginning to use debentures to fund mortgages in the 1880s. Both types of mortgage companies began by originating, servicing and selling whole mortgage loans. To do so, the farm companies invested in reputation, while the urban group offered investors a written guarantee — but both were actually thinly capitalized relative to the volume of the explicit or implicit promises that they made. During rapid expansions in their markets, both introduced new securities to market their loans: covered mortgage bonds in the farm market and participation certificates in the urban. While doing so, both worked under poorly designed systems, weak regulation and loose supervision, and ended up violating standard underwriting requirements and even their own trust agreements. Both also used their security programs to market loans they could not sell whole and to fund loans that were already in default.

The 1920s ended the development of the mortgage guarantee company model, but ushered in another development in urban mortgage banking that would have impacts for many years. During this decade, life insurance companies began to make substantial investments across long distances in home mortgage loans through correspondents. Over time, mortgage companies perfected and came to dominate in that role. We have seen earlier that the large New York companies entered the western farm mortgage market before and during World War I by implementing the same kind of mortgage bank correspondent networks that the Connecticut companies had been using for years. From this perspective, the application of the lending model to the home loan market in the next decade is hardly surprising — both farm and home mortgages were small loans, were made to individual owner-occupiers and offered investors high potential returns when the insurance companies entered the market, through substantial interest-rate differentials across regional markets.

The transition between the two was not straightforward. There were important differences between lending inter-regionally in the farm and home mortgage markets. To begin with, Building & Loan associations represented a competitor in the national home mortgage market unlike any intermediary operating in the farm mortgage market.[33] These organizations were not regulated depositories and were organized under standard corporate charters in many states. In addition to the low entry barriers, the Building & Loan industry also benefitted from a strong trade group that educated the public and potential organizers about the cooperative Building & Loan lending model, and advocated for its spread and adoption. It is no accident, therefore, that the number of B&Ls in the United States increased

32 New York State (1937), Report of the Joint Legislative Committee to Investigate the Guaranteed Mortgage Situation, Albany: J.B. Lyon Company.

33 Snowden (1997, 2003) discusses the geographic expansion of the B&Ls extensively. See Snowden (2003) for the 1920s data.

by 67 percent during the residential building boom of the 1920s, while membership in associations tripled and assets grew by a factor of four. Moreover, the growth was not geographically limited, as Building & Loans held 50 percent of the nation's intermediated home mortgage debt in 1930 and loans on between 15 and 17 percent of owner-occupied housing in all regions of the country.

In addition to competition from Building & Loans, life insurance companies also had to deal with commercial banks, trust companies, individual investors and the institutional complexity described above, when they entered a new urban market. Prior to 1920, many insurance companies responded simply by avoiding the small home market. In 1910, for example, 60 percent of the urban mortgage portfolio of the Metropolitan of New York was composed of loans with face values greater than $500,000, with 96 percent of these written on in-state properties (James 1947, 245). In contrast, the northwestern of Wisconsin was an active interregional urban lender but, between 1924 and 1932, it added to its portfolio $110 million of urban loans from six different cities with a staff of one full-time and five part-time agents (Williamson and Smalley 1957, 216). The reason for this economy was simple: its $192 million urban mortgage portfolio contained only 552 loans with an average size of $348,000 (Williamson and Smalley 1957, 246).[34] Showing a similar attitude, an official of the Connecticut General Life Insurance Company observed in 1925, that insurance companies preferred "large loans not readily subscribed by private investors, but especially attractive to the companies from the administrative point of view" (Smith 1925, 39).

It is difficult to generalize about the investment policies of insurance companies because there was real variation within the industry. Equitable Life Assurance, for example, started a Home Purchase Plan in 1911 to provide its policy holders with home mortgages (Buley 1967, 770). Well before others in the industry, the Prudential of New Jersey made substantial numbers of home loans in the Midwest in the 1880s (May and Oursler 1950, 203–204). Even the Metropolitan began to "experiment" on small home loans in 1911 (James 1947, 246). But attitudes within the industry changed dramatically in the early 1920s. The increased attention to the inter-regional home loan market might have been in response to the postwar housing shortage, or to a deeper recognition that life insurance companies were truly national businesses.[35] Whatever the reason, change in behavior occurred.

In 1920, the Prudential held 7,500 city mortgages with face value of $90 million. 10 years later, the number of loans had grown to 116,000, and investment had soared to $872 million (May and Oursler 1950, 209). By 1925, the Metropolitan alone was investing $6 million each month into the home loan market and, during the decade, placed a total of $477 million, or nearly one-third of its gross investments, into mortgages on dwellings (Cody 1925, 111; James 1947, 256). During the 1920s, the size of the Equitable's Home Purchase Program increased from $40 million to $70 million and its holdings

34 For example, the Northwestern added $110 million of urban loans drawn from primarily from six different cities to its portfolio between 1924 and 1932. The increase was almost all accomplished by one full-time and five part-time agents (Williamson and Smalley 1957, 216)

35 In 1925, one out of every six Americans held a Prudential insurance policy, engendering in company officials a "broadening consciousness of social responsibility" (May and Oursler 1950, 202).

of urban residential mortgage debt grew from $4 million to $124 million. To provide a broader picture of the changes at work, Table 22 shows the share of assets that the nation's ten largest life insurance companies held in urban mortgages during the decade. When one considers that many of the same companies also expanded farm mortgage lending during the early years of the 1920s, the increased focus on city mortgage loans was impressive — the Prudential and Mutual Benefit quadrupled their shares; N.Y. Life, the Equitable, John Hancock and Mutual Life doubled theirs, and the shares of the Metropolitan and Penn Mutual increased to about 40 percent. The Travelers and, not surprisingly, the northwestern did not participate, and much of this lending went to multifamily and commercial lending. But it was the new commitment to home mortgage lending on a national basis that drove most of these shares higher.

Table 22

Urban Mortgage Loans of 10 Largest Life Insurance Companies, 1919–1930

	As Share of Total Assets In:			Assets in 1930
	1919	1924	1930	
	Percent	Percent	Percent	$ Millions
Metropolitan	31.5	33.6	38.1	3310
Prudential	9.3	25.9	36.6	2492
N.Y. Life	12.8	21.8	30.7	1789
Equitable N.Y.	12.9	15.2	25.6	1284
N.Y. Mutual Life	15.2	19.2	28.5	1052
Northwestern	16.2	11.9	20.5	938
Travelers	7.3	4.8	6.4	636
John Hancock	6.8	46.0	19.8	584
Mutual Benefit	2.4	2.6	13.0	572
Penn Mutual	2.9	37.7	40.5	459

Source: Williamson and Smalley (1957), 219.

We know the increase in home mortgage lending was substantial because of the scale of the new lending networks that the companies built and used. As in the early days of the industry's farm mortgage lending programs, two different models were used (north *et al.* 1928, 35). New York Life and the Equitable employed agents, usually lawyers or bankers, to serve as direct salaried representatives of the company. The Prudential and the Metropolitan, in contrast, followed the model that the Aetna had introduced decades before in the farm mortgage market: these companies appointed representatives in specific geographic areas and paid them by commission to originate and service loans. The Metropolitan, for example, made its first home loan in Kansas City in 1920 through a banker who soon became its first correspondent. Within just three years, the company boasted 66 more residential mortgage loan correspondents, and they were supervising 163 agents in 37 states (James 1947, 251). Included among them were agencies in Chicago through which $. 5 million were placed each month, and correspondents in Detroit that placed even greater sums (Cody 1925, 111).

The shift by the insurance companies, as well as the general expansion of urban mortgage lending throughout the 1920s, had an impact on the composition and location of the mortgage banking industry. In 1926, in fact, the board of governors of the FMBA voted to drop its agricultural moniker (Hall 2013, 11). Table 23 shows the impact of urbanization on the industry by showing the distribution of new members across regions and metropolitan size for three periods: before 1917, between 1918 and 1922, and between 1922 and 1926. In the first two periods, the importance of the opposition to the Federal Farm Loan Act discussed earlier is apparent, as new members from large and small metropolitan areas in the area of intense agricultural expansion — the north and south central regions — dominated the growth of the association. During these early periods, in fact, more than one hundred new members were located outside even the small metropolitan areas in these regions. But, by 1922, the challenge to the FFLB had been resolved and, with it, as we have seen, active opposition to the new system had transformed into competition with it. At this point, new members in the organization started to be drawn in a more regionally balanced profile and increasingly from large urban areas along the Atlantic and Pacific Coasts. Just like the nation, the Mortgage Bankers Association of America (MBA) became an urban-centered organization.

Table 23

Region and Metro-size of Members Joining the (Farm) Mortgage Bankers Association

	Pre-1917 in Metro-Size:				1918–22 in Metro-Size:				1923–26 in Metro-Size:			
	None	Small	Medium	Large	None	Small	Medium	Large	None	Small	Medium	Large
New England	3	0	0	0	0	0	0	0	1	2	1	0
Mid-Atlantic	0	1	0	1	0	0	0	0	2	2	1	4
E.N. Central	9	6	1	5	6	7	0	3	5	6	0	12
W.N. Central	51	16	29	6	38	25	14	1	16	9	12	4
South Atlantic	2	4	0	0	1	5	0	0	11	17	2	3
E.S. Central	0	3	0	0	2	7	0	0	5	15	0	0
W.S. Central	10	20	3	0	9	16	2	0	10	6	1	0
Mountain	7	2	0	0	7	7	0	0	1	4	0	0
Pacific	0	5	0	2	0	10	0	0	3	10	0	8
Total	82	57	33	14	63	77	16	4	54	71	17	31

Source: Farm Mortgage Bankers' Association, Directory, 1916, 1917, 1922. Mortgage Bankers Association of America, Directory, 1926

At the end of the 1920s, the urban mortgage banking industry had been fundamentally changed by three decades of growth and development. Those parts of the industry that had embraced private mortgage insurance to improve the liquidity and marketability of their loans were poised to collapse. Another segment had become closely tied to a dramatic expansion of home mortgage lending by life insurance companies. We shall see that these preconditions helped shape the impact of the Great Depression and the federal policies that transformed the industry in the 1930s.

The Federal Transformation of the Residential Mortgage Market

Two decades after the farm mortgage bankers confronted the creation of the FFLB system, federal policymakers transformed the structure of the nation's residential mortgage market and its mortgage banking industry. Despite the obvious parallel, the two episodes differed in important ways. To begin with, the FFLB system was enacted during the "golden age" in U.S. agriculture and implemented during a wartime farming boom. In contrast, federal intervention in the residential market occurred during the Great Depression and the worst residential mortgage crisis in U.S. history. Second, the farm bill implemented a complete and fully integrated "European" mortgage lending system that changed the structure of mortgage contracts and the channels through which they were funded. In marked difference, federal policy toward the residential market during the 1930s was improvisational and tailored both to repair existing mortgage lending channels and to stimulate homebuilding and employment. Third, while farm mortgage bankers organized to play an important role in the debate about the FFLB system, urban mortgage bankers did not actively participate as a group in most policy debates during the 1930s. Finally, we have seen that the FFLB system had smaller impacts than predicted on market outcomes and the mortgage banking industry. Paradoxically, policies that were enacted in the 1930s as temporary measures designed to repair and stimulate the residential housing and mortgage markets turned out to have impacts on the development of the nation's residential mortgage market and the role of mortgage bankers within it for decades.

The focus on residential housing during the 1930s involved the administrations of both Hoover and Roosevelt, with most major proposals receiving broad general support, despite infighting over substantive details by interest groups. This environment was markedly different from the one facing the Senate's Calder Committee just 10 years earlier, in 1920, that recommended a decidedly limited role for the federal government in the face of the severe post-World War I housing shortage. Much had changed during the 1920s, however. We have seen that residential construction and the mortgage debt that financed it increased rapidly during the 1920s and, along with them, the rate of nonfarm homeownership. Harris (2010) argues that these trends reflect a shift from indifference toward homeownership in urban areas before World War I to the "own your own home" movement of the 1920s. Weiss (1987) dates the "rise of the homebuilders" to the 1910 to 1920 era, as residential developers and urban planning professionals organized under the auspices of the National Association of Real Estate Boards to gain prominence and a voice at all levels of government (Harris 2012, Weiss 1987). Against this backdrop and the severe distress spreading through housing and mortgage markets, in September 1931, President Hoover invited 500 housing professionals, experts and practitioners to collect and assess information on the general state of housing policy, and to report their findings in December of that year at the President's Conference on Home Building and Home Ownership.

The investigation into housing conditions was wide-ranging, comprehensive and forward-looking.[36] In his welcome to participants, Hoover stressed the centrality of residential housing to the nation's well-being:[37]

> **You have come from every state in the Union to consider a matter of basic national interest. Your purpose is to consider it in its long view rather than its emergency aspects... This Conference has been called especially to consider one great segment of that problem that is, in what manner can we facilitate the ownership of homes and how can we protect the owners of homes?**
>
> **President Herbert Hoover, December 1931**
> **(Gries 1932b, 1)**

Table 24

County-Level[a] Homeownership Rates, Median Home Values, and Homebuilding Recovery, 1930–1940

	Change in Homeownership Rate, 1930 to 1940 National Average –4.7% (45.9% To 41.2%)			
Change of:	< –10%	–10% to 0%	0% to +10%	> +10%
Number of Counties:	301	2,035	703	102
	Percentage Change in Median Home Values U.S. Average –39.6%			
Percentage Change in Median Home Values	< –50%	–50% to –25%	–25% to 0%	> 0%
U.S. Average –39.6%	549	1,865	473	58
	Percentage Change in Housing Units Built 1925/29 to 1935/40 U.S. Average –38.2%			
Percentage Change of:	< –50%	–50% to 0%	0% to 100%	> 100%
Number of Counties:	397	726	1143	799

[a] 3065 counties for homeownership rates and changes in housing units built, 2965 for median home values.

Source: Sixteenth Census of the United States—1940: Housing: Volume II, Parts 1–5, Tables 22 and 24.

Although conference participants focused on the technical, organizational and regulatory issues of interest to real estate practitioners and local government officials, they also showed concern over the deteriorating state of housing and mortgage markets. In this area, their judgment was specific,

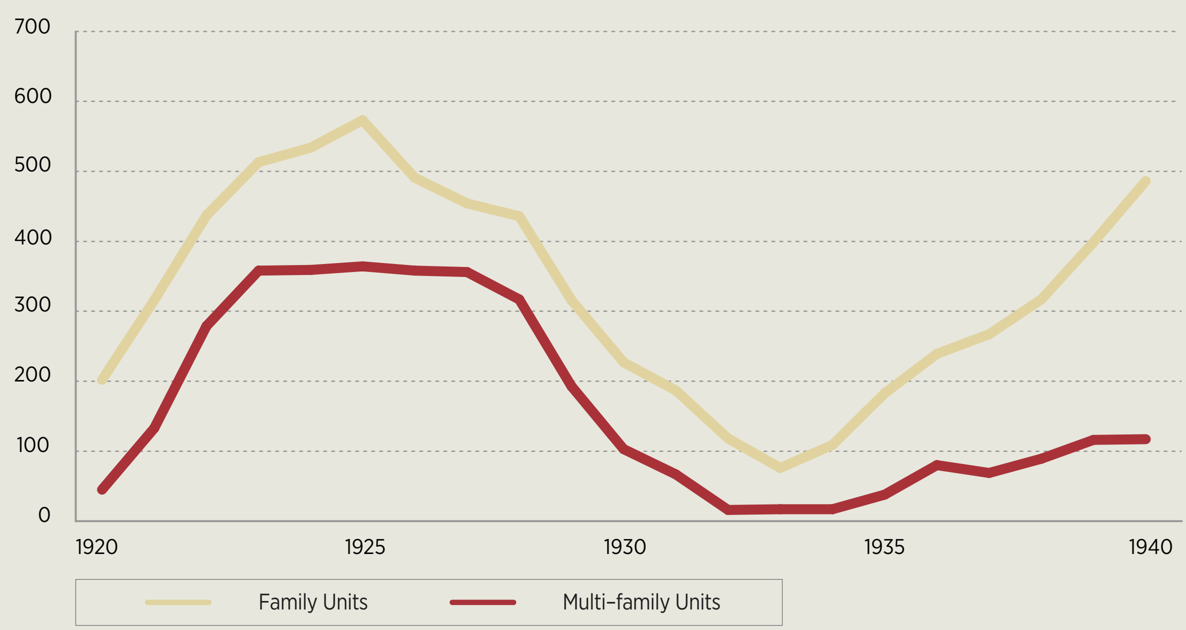
36 The work of these committees covers 25 topics, including planning and zoning, house design and construction, slums and large-scale housing, and home improvement and repair, and these reports comprise the 11 volume final report of the Conference on Home Building and Home Ownership.

37 Hoover's rationale for intervention was passionate: "The purpose of this Conference is to study and advise upon the very practical questions of community or neighborhood layout... yet behind it all every one of you here is impelled by the high ideal and aspiration that each family may pass their days in the home which they own; that they may nurture it as theirs; that it may be their castle in all that exquisite sentiment which it surrounds with the sweetness of family life. This aspiration penetrates the heart of our national wellbeing. It makes for happier married life, it makes for better children, it makes for confidence and security, it makes for courage to meet the battle of life, it makes for better citizenship. There can be no fear for a democracy or self-government or for liberty or freedom from home owners no matter how humble they may be." (Gries 1932b, 2).

practical and direct. The conference identified structural and institutional weaknesses in the nation's residential mortgage market as "the greatest hindrance" to achieving success in homeownership, and voted to endorse Hoover's proposal for direct federal action to address the problem (Gries 1932a, 9).

Before examining the structure and impact of the residential mortgage policies in the 1930s, it will be useful to have a feel for the outcomes felt in the market during the decade. The data in the top panel of Table 24 show that policy was largely a failure if its goal was to preserve homeownership at its 1930 level. Instead, the unweighted average of homeownership rates across more than 3,000 counties fell by 4.7 percent between 1930 and 1940. The decrease was widespread, moreover, as the rate declined in three out of four counties and by more than 10 percent in one out of 10 of them. The balance sheets of homeowners were also not successfully protected, as the average nominal home value across counties decreased by nearly 40 percent and fell in all but 58 out of 2,965 local markets over the entire decade. Moreover, one out of every six local markets saw decreases of home values of more than 50 percent. Despite the efforts of federal policymakers, major decreases occurred in homeownership and the nominal value of the existing housing stock during the 1930s.

Figure 2
Nonfarm Housing Starts, 1920–1940



Source: U.S. Bureau of the Census, *Housing Construction Statistics: 1889 to 1964*, A-2, A-5.

Homebuilding did better during the 1930s. The third panel of Table 24 shows that, in nearly two-thirds of the counties, more housing units were built between 1935 and 1940 than had been built between 1925 and 1929 — housing production in the second five-year period, in fact, was actually twice its 1925–1929 level in one out of every four counties. Figure 2 shows that the surge in production occurred after 1935, largely in the single-family market. The paths of single- and multifamily construction had first begun to diverge in 1923 when small home construction surged quickly to a 1925 peak and then fell for the remainder of the decade, while multifamily building remained at its 1923 value until late in the 1920s. Production in both sectors began to collapse in 1928, and the recovery in multifamily building remained weak throughout the 1930s. In contrast, single-family home construction rebounded strongly after 1934.

This brief review of housing and mortgage market conditions suggests that federal policy, if effective at all, may have been more successful in generating a recovery in homebuilding during the Depression than in preserving household ownership and residential wealth at their 1930 levels. It turns out that mortgage bankers were heavily involved in the policy most likely to have contributed to this recovery in housing production — FHA mortgage insurance. To examine the contribution of mortgage bankers to that program, and its effect on them, we need to first consider the impacts of two earlier Depression-era mortgage programs.

Federal Home Loan Bank System

The intervention that Hoover proposed in December 1931 was a federal home loan bank system "not only to relieve the present financial strain… but [to] have permanent value… as a means of promoting home ownership in the future" (Gries 1932b, 22). The short-run goal was to provide liquidity to financial institutions that were under stress so that they could increase home mortgage lending, stabilize home prices and increase production and employment in the homebuilding industry. As a permanent measure, on the other hand, the creation of a discount bank was promoted as a means of strengthening the mortgage lending system so that it could better promote homeownership and provide a safeguard against further mortgage crises (Bodfish and Theobald 1938, 289). In proposing the home loan bank system, Hoover was reviving the recommendation of the Calder Commission that failed to be implemented in 1921 and had been actively promoted since then by the trade group of the Building & Loan industry, the United States Building & Loan League. Hoover forged a close relationship with the USBLL during his tenure as commerce secretary and during the 1928 election, and turned to this organization to help draft the Federal Home Loan Bank Act (FHLB) in 1931 (Bodfish 1930, 163; Bodfish and Theobald 1938, 290; Ewalt 1962, 87).

Hoover had envisioned a federal home loan bank that would serve all institutional residential mortgage lenders, including commercial and savings banks, insurance companies and mortgage companies. The USBLL did not, however, and, in the end, Hoover's reliance on that organization limited the breadth and effectiveness of the FHLB system during the 1930s. Building & Loans saw themselves as unique among institutional home mortgage lenders at the time because they specialized in home mortgage lending, they were active in every state and most cities and they relied on an unusual sinking-fund mortgage contract that provided a form of amortization. The USBLL drafted an FHLB Act that was customized to Building & Loan lending standards and procedures, and all the other lending groups, fearing that Building & Loans would continue to have disproportionate influence within the new system, opposed passage of the bill. Included among the opponents was the MBA.[38] Despite the opposition, the FHLB Act passed in June 1932 and was implemented later that year and in 1933.

As a virtually exclusive Building & Loan facility, the FHLB system had a limited impact as a general emergency measure. Not only did very few institutions other than Building & Loans join, but thousands of Building & Loans themselves could not join because they were too distressed to meet its eligibility requirements.[39] As a result, more than 3,000 Building & Loans closed after the FHLB system opened in 1933 and, by 1940, only 3,300 of the 10,600 Building & Loans that were in operation in 1932 had joined.[40] The FHLB system also failed to pursue a provision included in the legislation that permitted the twelve regional FHLB banks to make mortgage loans directly to the public. No direct loans were ever made, which supported the arguments of skeptics that the direct-loan provision had been included as an amendment simply to gain legislative support for the FHLB Act as an emergency measure.[41] As a result of all these factors, the share of institutional home mortgage debt held by Building & Loans and the FHLB regional banks actually decreased from 43 to 29 percent between 1929 and 1935 and recovered slowly from that point during the remainder of the 1930s (Snowden 2003).

The FHLB system was much more successful in the long run in converting the Building & Loan sector into the modern savings-and-loan industry, and establishing for those lenders a separate, and in many ways dominant, presence within the conventional mortgage market during the post-World War II era. But the FHLB system did not become the broad foundation of a sound mortgage system that Hoover envisioned, and it failed to deliver effective emergency relief promised in the early 1930s. As this latter failure became more obvious, the new administration recognized that additional intervention was required to stem, if not reverse, the deepening mortgage crisis (Wallace 1938, 489).

The Homeowners' Loan Corporation (HOLC)

The HOLC was a remarkable federal initiative in at least four respects. First, the agency organized and began to operate a national lending network just a few months after being created in May 1933 at the end of the first hundred days of the Roosevelt administration. Second, over the next three years, the HOLC used these facilities to refinance more than one million delinquent home mortgages so that, by 1936, the HOLC held mortgages on one out of every 10 owner-occupied nonfarm homes in the United States and 20 percent of the nation's residential mortgage debt. A third remarkable feature of the program, is that HOLC dissolved as intended in 1951, after servicing the entire mortgage

38 Thomas Clark, president of the MBA, testified in March 1932 against passage of the FLB Act. See page 585 of Hearings before the U.S. Senate Subcommittee on Banking and Currency, S. 2959, Part 3, 72nd Congress, Sess. 1).

39 See Ewalt (1962, 50–54) for the legislative history of the FHLB Act. Colean (1944, 263) reports that only one percent of FHLB members were mutual savings banks and life insurance companies in 1941; all others were Building & Loans or, by then, Savings & Loans.

40 Snowden (2003) argues that influence over membership criteria to the new FHLB system provided the USBLL with a tool to rid the industry of what they viewed as its weakest elements.

41 See Fishback *et al.* (2013), pp. 34–35.

portfolio it had written between 1933 and 1936. The final remarkable element of the HOLC story is that it combined the functions of a "bad mortgage" bank — it purchased distressed assets from private investors — and a loan modification program — it refinanced those mortgages for the homeowners.

For purposes here, the success in the fourth area is the most important contribution of the HOLC. To begin with, it succeeded in convincing more than one million lenders to sell defaulted mortgage loans by offering them, generally, the amount of principal still outstanding — it did not ask lenders to take haircuts. On the other side, borrowers agreed to these loan sales because the HOLC offered them a new loan on their outstanding principal, that was written on more liberal lending terms than their original loan. This was the first widespread use of the contract Charles Haar (1960, 56–73) refers to as the "credit trio" — mortgages with combinations of low down payments, long terms to maturity and low interest rates. The revised terms offered by the HOLC included not only a lower-than-market interest rate, but also an 80 percent loan-to-value ratio, a 15-year term and full monthly amortization. The application of this familiar modern contract worked in the early 1930s because the combination of low down payments, long terms to maturity and low interest rates could be used to successfully refinance homeowners who could not qualify for extensions of their short-term, balloon mortgages.[42]

Under its charter, the HOLC could demonstrate the advantages of the new loan contract only if lenders agreed to accept HOLC bonds in payment for their defaulted loans. Under the original legislation, the federal government guaranteed the interest on the HOLC bonds, but not their principal. Under this regime, lenders hesitated to accept HOLC bonds and, in the secondary market, the securities themselves began to trade at a discount (Harriss 1951, 25–29). In light of this evidence, Congress extended the guarantee to include the bond's principal in April 1935 and, from then on, the HOLC grew rapidly, even though the HOLC was refinancing only severely distressed borrowers. The HOLC experience demonstrated, however, a reluctance of private investors to fund mortgages that met only modern and more liberal underwriting standards without some protection from default risk. This precedent was not soon forgotten.

A literature has appeared recently that examines the impact of the HOLC program and concludes that its impact as an emergency measure was mixed. To begin with, Fishback *et al.* (2010) and Courtemanche and Snowden (2010) both found that HOLC lending increased median home values and the rate of homeownership within local markets. These results suggest that the program was successful in cutting off deflationary forces that were at work in housing and mortgage markets during the early 1930s but, as we have seen in Table 24, not by enough to reverse all of the damage. Courtemanche and Snowden (2010) also found that the volume of HOLC refinancing did not have a significant impact on new homebuilding or construction activity. This was an expected result because the HOLC was limited by law to refinance loans only on existing homes — it could not compete with private lenders

42 During the early 1930s, Savings & Loans also began to offer the modern, amortized contract in the conventional mortgage market as a replacement for the share accumulation contract that they had used for decades. See Rose and Snowden (2012).

in the new loan market. Given this restriction, and the early ineffectiveness of the FHLB system, by 1934, there was a call for a program that could address the deep and continuing depression in residential construction.

FHA Mortgage Loan Insurance

President Roosevelt submitted the National Housing Act (NHA) for the consideration of Congress on May 14, 1934, and it was passed by both houses just five weeks later, on the last day of the second session of the 73rd Congress.[43] Title I of the Act established the Federal Housing Administration (FHA) and gave it authority to insure small, short-term loans for the purpose of financing the repair, alteration, or improvement of homes or other urban properties. Title II gave the FHA authority to establish a mutual insurance program for mortgage loans written on one-to-four family homes (Section 203) and larger multifamily projects (Section 207) that provided housing for low income populations. Under the original language of the Act, to be eligible for the home loan insurance program, a mortgage could be written for no more than 80 percent of the property's value, for an amount no greater than $16,000, and had to be fully amortized over terms no longer than 20 years. Title III of the NHA authorized the FHA to charter privately financed mortgage banks called National Mortgage Associations (NMAs) that were empowered to issue debentures that were secured by Title II loans, which they could buy and sell from approved institutions. Title IV created the Federal Savings and Loan Insurance Corporation to establish deposit insurance system, comparable to the FDIC for banks, for the share accounts of S&Ls.[44]

The legislation moved quickly through Congress, but not without extensive debate and revision. The speed of the process can be explained by the sense of urgency to "improve nationwide housing standards, provide employment and stimulate industry…" as the Act was described in the introduction to the legislation when it was first submitted to the Senate.[45] The emphasis on construction and employment attracted broad support for the Act from building material suppliers, labor organizations, finance agencies and local real estate associations.[46] On the other hand, debate about the Act and revisions to it resulted from concerns that the legislation contained "the most far-reaching proposal… that has ever been laid before Congress as regards home finance and how it should be conducted."[47] Most of this opposition came from the Building & Loan industry, which had been the focus up to that point of federal policy toward the residential mortgage market.[48] By spring 1934, Building & Loans had been

43 See PL 73–479, introduced as H.R. 9620.

44 During the 1930s, the Building & Loan industry transformed itself into the modern Savings & Loan industry (Snowden, 2003). In this section, the names B&L and S&L are used interchangeably.

45 See "Hearings on the National Housing Act," May 16, 1934, S. 3603, 73rd Congress, 2nd Sess., (hereafter "NHA hearings").

46 Testifying in favor of the bill were representatives from national lumber manufacturing and retail organizations, brick manufacturers, the Johns-Manville Corporation, the building industries group of the American Federation of Labor, and four national and local groups from the National Association of Real Estate Boards. See NHA Hearings.

47 The quote is from the testimony before the House by Morton Bodfish of the United States Building and Loan League. See NHA Hearings, 255, and Snowden (2003).

48 Ewalt (1962, 134–45) provides an excellent discussion of the reaction to the FHA program within the B&L industry. The primary, and effective, spokesman for the U.S. Building & Loan League during the 1930s was Morton Bodfish. For his entire testimony on the NHA Act, see NHA Hearings, 237–320.

successful in creating a FHLB that was specifically designed for their business model and supervised by an FHLB Board whose members were closely aligned with or sympathetic to the industry.[49] Although congressional disappointment with the new FHLB system led to the creation of the HOLC program in 1934, it was not viewed as a threat by Building & Loans because it was temporary in nature, bought defaulted loans from Building & Loans as well as all other lenders, was restricted from originating new loans and operated under the supervision of the FHLB Board.

The mutual insurance program of the National Housing Act (NHA), in contrast, represented a serious competitive threat.[50] Building & Loans had become the predominant source of local home mortgage finance before 1930 by offering borrowers a unique, sinking-fund loan contract that provided a longer terms than other lenders (11–12 years) and a form of amortization. Although the traditional Building & Loan contract ran into difficulties during the housing crisis, by 1934, the industry was quickly converting to the modern "direct reduction" method of amortization in their conventionally financed mortgage contracts (Rose and Snowden, 2012). A successful FHA mortgage insurance program, therefore, was likely to empower other lenders so that they could compete with Building & Loans on a more equal footing than ever before.

The effect of the opposition of the Building & Loan industry and the FHLB Board can be gauged by the impact it had on the basic institutional structure of the FHA mortgage insurance program. The administration's original proposal called for the creation of two government-sponsored corporations: an independent, temporary entity called the "Home Credit Insurance Corporation" to administer the small loan program for repairs, and a larger "Federal Mutual Mortgage Insurance Corporation" to operate the mutual mortgage insurance program.[51] This second corporation was to be similar in structure to the HOLC; all of its capital would be subscribed by the U.S. Treasury, and it would be supervised by the FHLB Board. The Chairman of the FHLB Board at the time, John Fahey, was so opposed to the program that the bill had to be revised to create an independent agency, the Federal Housing Administration (FHA), rather than a corporate entity within the FHLB system. This single decision played out for decades as the residential housing system in the United States became built around the two poles of the thrift-dominated FHLB system and the FHA program of mutual mortgage insurance.[52]

---

49 Two of the first five members of the Federal Home Loan Bank Board had been executives of the USBLL — the B&L's national trade group. The federal Savings & Loan charter created in 1933 followed a "model design" promulgated by the USBLL, and one of its officials was the first director of the FSLIC insurance program. See Snowden (2003).

50 Ewalt (1962, 137–142).

51 Marriner Eccles, then Assistant Secretary of the Treasury, recounts the original proposed organizational structure in NHA Hearings, 184–6.

52 Colean (1975, 31) recounts that "the problem was that Fahey could not see the this plan as a broad type of mortgage investment or mortgage stimulation. Under the influence of Bodfish of the U.S. League, Fahey was devoted entirely to the savings and loan industry as the source of home mortgage funds. So the idea had to be switched quickly from that of a corporation under the jurisdiction of the Home Loan Bank Board to an independent administration... [which] created a situation that has, I think, plagued the whole housing setup ever since."

Given the complexity of the NHA and the speed with which it was enacted in Spring 1934, it had to be amended many times in the first few years so that the insurance program could better accommodate borrowers, lenders and multifamily developers.[53] Two legislative developments during the first decade of the FHA program deserve particular emphasis, however, because of their long-run impact on the structure of the program and its role in the mortgage finance system.

The first concerns the federal guarantee that supported the mutual insurance program. A lender filed a claim on a defaulted loan within the system by foreclosing on the property and delivering its title to the FHA. The FHA then paid the claim by issuing its own three-year debenture in an amount equal to the outstanding balance on the failed home loan.

The original NHA stipulated that the payment of interest and principal on the FHA debentures was fully guaranteed by the U.S. Treasury — but only on loans that had been insured before July 1, 1937. The need for a federal guarantee to support the new federal mortgage insurance program must have seemed obvious in Spring 1934 for reasons that we have already seen — at that time, the private mortgage insurance programs of the New York mortgage guaranty companies were all being liquidated, and Congress had just extended the guarantee on HOLC bonds to payments on principal as well as interest in order to improve their acceptability in the securities market. The rationale for a sunset provision, on the other hand, was the expectation that the FHA mutual insurance program would soon establish its credibility as a secure, credit-worthy program in its own right.[54]

Although the insurance program performed well over the next several years, the federal guarantee was never removed. Instead, it was extended for two years in 1937 and amended again in 1938 to make the Treasury guarantee permanent on debentures issued for defaulted loans that had been made on new homes.[55] The same legislation actually provided that loans on existing homes would not be eligible for FHA insurance after July 1, 1939, but that was soon reversed, and the guarantee on debentures issued for loans on existing homes was extended every two years until it was made permanent in 1946.[56] By the end of World War II, federally guaranteed home mortgage insurance had become a permanent and broad feature of residential mortgage finance, even though it was designed a decade earlier to be a stand-alone insurance fund that was supported by guarantees only temporarily in order to stimulate home construction.[57]

53 In 1938, for example, the rules on Section 203 loans were changed for loans on new housing under $5400 so that these could be written for up to 90 percent of property value, for terms as long as 25 years, and paid an insurance premium of ¼ percent per year of the outstanding loan balance instead of ½ percent on the original principal over the entire life of the loan. Amendments that year also extended the program to farm homes and broadened the eligibility and lowered the cost of insurance on multifamily residential projects. (Fifth Annual Report of the Federal Housing Administration 1939, 12–14, 22–24.)

54 See statement by Assistant Secretary of the Treasury Marriner Eccles, May 29, 1934, NHA Hearings,195.

55 Fifth Annual Report of the Federal Housing Administration (1939), p. 13. The Conference Report on the 1938 Amendments provides the details: H.R. Rep. No. 75–1705, 75th Congress, 3rd Sess., January 20, 1938.

56 See *Hearings on Amendments of 1939 to the National Housing Act,* 76th Congress, sess. 1, H.R. 3232 (H.R. 5324) (February 15–March 19), 1939, p. 1.

57 The Title I loan program for repair, alterations and improvement that was originally supposed to expire in 1936, but was extended several times by Congress and survives to this day.

The fate of NMAs authorized under Title III of the NHA represents a second post-legislative development that had important long-run impacts. We have seen that the implementation of a European-style mortgage bank in the United States was nothing new by 1934: the western farm mortgage banks had experimented with covered mortgage bonds in the 1880s, and the Federal Farm Loan Bank (FFLB) system had followed this up by establishing a two-tier system of farm mortgage banks — twelve district land banks that issued bonds on the security of the loans made by the local cooperative farm associations and dozens of private joint-stock land banks that issued bonds secured by the loans they made. The proposed NMA mortgage banks had some features in common with and some quite different from the two FFLB models. Like both of them, the NMAs were designed to create a broad secondary market in which long-term, fully amortized loans could be funded but, unlike the joint-stock land banks, they were prohibited from originating these loans — they could only buy and sell them. In addition, unlike either FFLB facility, the NMAs were created to fund insured mortgage loans, as did many of the participation certificates issued by the New York mortgage guaranty companies. Like the joint-stock land banks in the FFLB system, the capital of the NMAs had to be fully subscribed by private investors. But the legislation imposed a large minimum capital requirement — $5 million, which was more than six times larger than the minimum for the district land banks in the FFLB and just equal to the minimum for each of the district home loan banks within the FHLB system.[58]

The latter difference mattered because the U.S. Treasury could not jump-start the development of NMAs with initial capital as they had for the district banks within both the FFLB and FHLB systems. But this proposal was just as ambitious as the two earlier ones. The large capital base of the proposed NMAs, combined with the authority to issue 10 times that amount in debentures, meant that Title III was designed to create a major funding mechanism for federally insured residential mortgages. This led Representative Brown of Michigan to ask during the 1934 hearings if it made sense in the rush of late spring 1934 to consider an "attempt to set up a permanent system of mortgage banks… comparable in size to the entire national banking system?" (NHA Hearings, 187). The House Committee on Banking and Currency voted no and removed the proposal for the NMAs from the NHA. It was restored in conference, however, as Title III.[59]

By January 1935, no applications had been submitted for an NMA charter, which prompted an investigation by a working group of the administration known as the Interdepartmental Loan Committee. The Committee's findings were written up in a memo entitled "Reasons Why Present Operation of Title III is Impractical."[60] The Committee identified several contributing factors. To begin with, the overall size of the Title II program was still too small to generate sufficient numbers of secondary market transactions, especially inter-regional transactions where the prospective growth of the insured loan program was thought to be greatest. Second, the FHLB District Banks, the RFC Mortgage

58 All $750,000 of the minimum capital requirements for the district land banks was subscribed by the Treasury and was the capital for the FHLB district banks.

59 H.R. Rep. No. 73–1922 (1934).

60 A copy can be found in the on-line archive of the Marriner Eccles Document Collection at fraser. stlouisfed. org/eccles/.

Corporation and the Federal Reserve all were, or would soon be, accepting Title II loans for discount credit, which reduced the value of the secondary services that the NMA would provide. Finally, the most important impediment to investment in an NMA charter identified by the committee was the 1937 sunset provision on the federal guarantee on FHA debentures. This was because the guarantee on debentures also guaranteed the bonds of the NMA. Investors were reluctant, therefore, to invest in an NMA charter because of uncertainty over the future marketability and value of its bonds.

Amendments to the original provisions of Title III were passed to address some of these impediments, but nothing succeeded in attracting private capital.[61] The idea of creating a publicly sponsored urban mortgage banking facility had appeal far beyond the architects of the NHA, however. The New York state legislature responded to the failure of the mortgage guaranty companies by passing a proposal for the state to establish its own urban mortgage banking system.[62] Then, in early 1936, the Senate considered a bill sponsored by Duncan Fletcher of Florida to establish a single federal corporation known as the Federal Mortgage Bank that could lend, buy and sell insured or uninsured urban mortgages and issue debentures against this collateral.[63] The proposed New York system was never enacted, the Fletcher bill was not passed and, by 1937, not one NMA had been organized.

Finally, the Federal Housing Administrator, in order to demonstrate the viability of the NMA charter, authorized the Reconstruction Finance Corporation to capitalize, under the provisions of Title III, the National Mortgage Association of Washington in February 1938. It was soon renamed the Federal National Mortgage Association (FNMA), and its first issue of $25 million of debentures was oversubscribed by a factor of 50. Despite the success of this experiment, the FHA announced in May that it would no longer consider applications for additional mortgage associations.[64] Instead, the FNMA functioned for the next three decades as a discount facility serving institutional investors and not as a broad-based mortgage banking facility as had been envisioned. The final piece of the postwar residential mortgage system was in place.

61 In 1937, Congress increased the ceiling on debentures issued by NMAs to 20 times their capital stock and, in 1938, NMAs were given authority to make direct Section 207 multi-family loans. The Eccles archives also include correspondence between Eccles and a private individual he enlisted in 1938 to gauge the interest of New York investment banking houses in establishing an NMA.

62 New York State Mortgage Commission (1936), *Recommendations as to Proposed Legislation Pursuant to Subsection 21 of Section 4 of Chapter 19 of the Laws of 1935*, Albany: J.B. Lyon Company.

63 *To Provide for the Establishment of a Federal Mortgage Bank*, Hearing on S. 2914, 74th Cong (1936).

64 The *New York Times* (May 28, 1938) reported that applications for new NMAs increased after FNMA's successful bond offering, but that, with the FHA decision, "private interests planning to take advantage of this potential market… appear doomed to disappointment or at least considerable delay." Jones and Grebler (1961, 115) refer to the NMA proposal as a "frustrating episode."

The Modern Urban Mortgage Banking Industry Emerges, 1935–1940

Mortgage bankers were very vocal and active in their opposition to the FHLB legislation. The membership of the MBA numbered around 400 in January 1932, according to its president, and were handling on the order of $8 to $10 billion in mortgages.[65] While acknowledging that the home mortgage market was largely "frozen" at that time, the president and other representatives of the MBA insisted that a new permanent federal system of home loan banks would not help the market recover. Even worse from the MBA perspective was that the new lending and construction that proponents of the new system predicted the federal system would generate, were likely to be inflationary and "dangerous," given that housing markets were actually overbuilt throughout the nation.[66]

The mortgage bankers were unequivocal in their opposition. In its summary of the hearings on the Home Loan Bank bill, the House Committee on Banking and Currency reviewed the results of a survey of 8,000 financial institutions of all kinds, including mortgage bankers, that the Department of Commerce had conducted in January 1932 to assess the need for, and likely impacts of, the proposed home loan bank system.[67] Forty-eight percent of all respondents thought that there was demonstrable need for additional home construction in their local areas, and 77 percent believed that home loan banks would help increase the flow of credit in their local markets for that purpose. In contrast, only 14 percent of the mortgage bankers surveyed saw evidence that more construction was needed in early 1932, and a majority of them (56 percent) did not believe that the proposed home loan system would increase the availability of mortgage credit, in any case. Moreover, although 73 percent of all surveyed institutions thought that the home loan banks would help reduce foreclosures, 74 percent of mortgage bankers thought they would not. Finally, 76 percent of all respondents believed that the discount facility of the proposed home loan bank system would provide them with greater flexibility and security; an equal percentage of mortgage bankers thought it would not. In testimony before the Senate Subcommittee on the FHLB bill, MBA representatives underscored their central argument that there was no pressing need at that time for additional mortgage credit to finance home construction, by presenting the results of their own survey of 272 "members and non-members" from 116 cities in 37 states.[68] Each of the mortgage bankers or related real estate specialists were asked to assess the condition of housing supply in their local communities; 75 percent responded that their markets were overbuilt, and all but one of the remaining respondents characterized their local situation as "normal."

---

65 *Creation of a System of Federal Home Loan Banks: Hearings Before the United States Senate Committee on Banking and Currency Subcommitee on S. 2959, a bill to create federal home loan banks, to provider for the supervision thereof and for other purposes.* 72nd Cong. (1932); hereafter "Senate Hearings on FHLB." (Testimony of Hiram Cody, Part 1, at 139). See also "Mortgage Bankers Hit Home Loan Bill," New York Times, February 15, 1932.

66 Senate Hearings on FHLB, Testimony of Hiram Cody, Part 1, at 139, and Further Testimony of Thomas Clark, Part 3, at 585.

67 H.R. Rep. No. 72–1418, at 3–4 (1932).

68 Senate FHLB Hearings, Part 3, Testimony of Thomas Clark, at 502–506.

Life insurance companies joined the MBA in its opposition to the FHLB Act. The House Committee on Banking and Currency heard from 10 representatives of large eastern life insurance companies, and they all opposed the legislation.[69] Several of these representatives were affiliated "mortgage lending agents," and one proponent of the legislation, a vice president of the U.S. Building and Loan League from Louisiana, made sure that Congress was aware of the coalition that was at work. In communicating what was intended as an unflattering characterization of the opponents' mutual self-interests, his observation underscored the strength of the relationships between life insurance companies and their mortgage banking correspondents.

> **Now, what is the object of these life insurance companies and the mortgage bankers? The reason the so-called mortgage bankers are against the bill is because they are the principal correspondents of the life insurance companies. And the reason the life insurance companies are against the bill is because they are trying desperately to get hold of the major portion of the home-financing business of the Nation.**
>
> **Philip Lieber, 1932**[70]

Although their skepticism about the need for a home loan bank system turned out to be well-founded, the mortgage bankers lost the 1932 debate about federal legislation to the Building & Loan industry, just as they had lost two decades earlier to The Rural Credit Movement. Neither they nor the life insurance companies expected to benefit from the FHLB system, in any case, and they did not.[71]

The MBA was active during debates over the FHLB system, but not during the 1934 congressional hearings on the NHA, which created the FHA program. Nonetheless, the FHA program turned out to be an excellent fit for the combined business model of the mortgage bankers and life insurance companies after some important changes had been made to the correspondent relationship between the two.

To begin with, FHA insurance protected lenders from losses generated under foreclosure and ended the mortgage bankers' traditional practice of having to buy back and hold all defaulted loans.[72] Origination and servicing responsibilities, on the other hand, became more complex, risky and costly. FHA underwriting standards were developed not only to ensure sound mortgage lending, but also to improve home design, building standards and housing quality. The mortgage banker correspondent had to deal with the associated paperwork and inspections and bear the risk that the property or the applicant would not be approved for insurance.[73] The servicing requirements on an FHA loan

69 H.R. Rep. 72–1418, at 2 (1932).

70 Senate FHLB Hearings, Part 3, Testimony of Philip Lieber, at 596.

71 Mortgage companies or bankers were not enumerated among the list of institutions eligible for FHLB membership, and none joined. The 1937 FHLB membership roster shows 13 life insurance companies as members, nearly all located in the South and West. None of the large Eastern companies were members (Fifth Annual Report of the Federal Home Loan Bank Board 1937, p. 54–129).

72 The mortgage banker was still exposed, however, to any uncompensated costs associated with foreclosure.

73 In 1938, approximately one-third of applications examined by the FHA were either rejected or withdrawn (Fifth Annual Report of the Federal Housing Administration 1938, 61).

were also much more demanding for the correspondent than they had been for the popular short-term, renewable balloon loans of the 1920s. The loans were much longer in duration, to begin with, which encouraged mortgage bankers and insurance companies to maintain more extended and stable relationships. So also did the increased administrative infrastructure required to collect and account for monthly payments of principal, interest, insurance premium and tax and property insurance escrows that were required under the program. Income from servicing, therefore, became a more important element of the correspondent relationship for FHA-insured loan.

Despite these changes in the relationship between mortgage bankers and insurance companies, the basic function they performed stayed the same. In its second annual report, the FHA articulated nine broad goals for the program (FHA 1936, 2–7). The second, third and fourth of these have been emphasized throughout this history of the mortgage banking industry: to encourage private investment in the mortgage market, to secure a uniform and wider distribution of the nation's mortgage funds and to secure a more uniform pattern of interest rates on mortgage loans. The concordance in purpose between the FHA and the mortgage bankers, combined with the increased focus of life insurance companies on the residential market during the 1920s, provides context for the transition of the mortgage banking industry between 1935 and 1940 and its contribution to the national mortgage market. The first director of the FHA's technical division was in a position to see the events first-hand:

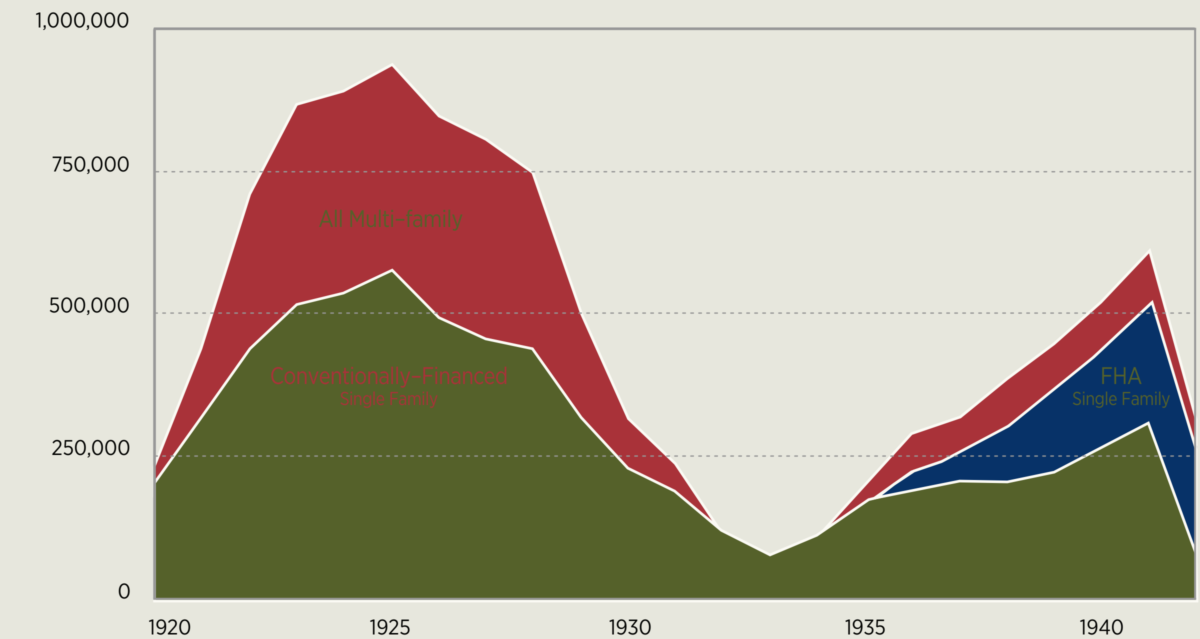
> **Consequently, instead of savings and loans being pivotal to the [FHA] plan, it was the insurance companies, acting through their correspondent mortgage bankers, that finally made the thing work. The insurance companies were the only lending group at that time who could make mortgages in any state… provided that some instrumentality could be created for handling the dispersal of those funds. It was the mortgage banking group that in the end fulfilled that function.**
>
> **Miles Colean (1975, 31)**

The historical evidence confirms Colean's observation. The first of the nine goals that the FHA enumerated for itself in its second annual report was "to expedite the recovery of the building and allied industries" (Federal Housing Administration 1936, 2). This priority was consistent, of course, with the original motivation for the NHA, and Figure 3 shows that FHA financing was used to build 350,000 new single-family homes between 1936 and 1940. Throughout its early years, the FHA used its share of building starts within states, metropolitan areas and cities as a measure of its effectiveness in stimulating home construction. However, we still do not know how many of these homes would have been built in the absence of the FHA program.

Table 25 begins to make Colean's case for the importance of mortgage bankers to the early success of the FHA by showing the rapid increase in their share of home loan originations within the program between 1935 and 1939. Equally striking, however, is the early take-up of the program among commercial banks. There was good reason for them to do so because, even after the Banking Act of 1935 further loosened the terms under which national banks could lend on real estate, conventional loans from this sector could not compete with the terms offered on the FHA product. The Federal Reserve, in addition, decided to accept FHA-insured loans as discount collateral, so commercial banks took advantage of this new and attractive investment. The banks lent primarily in local markets, however, and did not help nationalize the flow of mortgage credit within the FHA program. It was in these inter-market activities, as Colean emphasized, that insurance companies and their mortgage banking correspondents made their most important contribution. Evidence of this can be seen in Table 25

Figure 3

Housing Starts in the U.S., 1920–1942



Source: Carter (2006) Series Dc511–513, Dc1119–1120.

Table 25

FHA Title II Originations by Institutions, 1935–1939

	Institutions Originating Loans			Share of Originations:				
	1937	1938	1939	1935	1936	1937	1938	1939
	Number	Number	Number	Percent	Percent	Percent	Percent	Percent
Commercial Banks	3163	3298	3188	70%	57%	54%	53%	47%
Building & Loans	1083	1062	969	16%	16%	14%	10%	10%
Mortgage Comp.	156	204	233	4%	11%	14%	21%	23%
Insurance Comp.	113	185	219	7%	7%	11%	8%	11%
Savings Bank	96	104	118	2%	4%	3%	2%	4%
Others	32	42	29	10%	5%	4%	5%	5%
Originated ($million)				$176.6	$382.7	$449.6	$650.2	$741.1

Source: Sixth Annual Report of Federal Housing Administration (1940), Table 11, p. 41.

— the share of originations by mortgage companies increased rapidly between 1935 and 1939 just as mortgage bankers became the most important sellers, and insurance companies the largest purchasers, of FHA loans.[74]

The 1930s was a turbulent period for the mortgage banking sector and, as we have seen, also required significant modifications, due to the FHA program, in its correspondent relationships with insurance companies. But there was also continuity with all the change. The first and fourth columns of Table 26 show the regional distribution of MBA members in 1926 and 1935. The level of turmoil within the industry is clearly understated by the 20-percent decrease in membership between the two dates as can been seen in the two intervening columns. Only 49 of the 273 members in 1935 were in the Association in 1926, so more than 80 percent of the 1935 membership had joined the Association and, in most cases, the industry, during the nine previous years. The 1945 regional distribution is for all operating mortgage companies, rather than MBA members, and indicates that the industry grew rapidly after the introduction of the FHA program. Given all the change in the industry over the two-decade period, the regional distribution of mortgage bankers shown in the right panel of the table for all three dates shows a striking pattern of geographic stability. Despite the severe booms and busts and the federal interventions designed to ameliorate them, the same areas of the nation continued to have the greatest need for inflows of residential mortgage credit, and the mortgage bankers emerged to serve them.

Table 26
Location of Mortgage Bankers Association Members (1926 and 1935) and Mortgage Companies (1945)

	Number of Members					Share of Members		
	1916	1935 and		1935	1945	1926	1935	1945
	Total	in 1926	New	Total	Total	Percent	Percent	Percent
New England	6	1	4	5	10	2%	2%	2%
Mid-Atlantic	10	1	17	18	65	3%	7%	14%
East North Central	42	6	50	56	97	12%	21%	21%
West North Central	123	14	51	65	102	36%	24%	22%
South Atlantic	39	4	29	33	58	12%	12%	13%
East South Central	27	7	15	22	35	8%	8%	8%
West South Central	42	6	29	35	32	12%	13%	7%
Mountain	22	3	8	11	19	6%	4%	4%
Pacific	28	7	21	28	46	8%	10%	10%
Total	339	49	224	273	464			

Source: 1926, 1935 MBA Membership Directories; 1945: Klaman (1959), table 6, p. 26.

74 Between 1935 and 1939, mortgage companies were responsible for 42 percent of all sales of FHA loans, and life insurance companies were the purchasers in 31 percent of the transactions. (Sixth Annual Report of the Federal Housing Administration 1940, 45).

Table 27 identifies the areas of the country where mortgage bankers were most important, by showing the share of originations for three lending groups across regions, inside and outside major metropolitan areas, and for new and existing homes. For purposes here, the important data in the table is the combined shares of mortgage and insurance companies in each of the four panels, and the asterisks next to those shares that identify the market segments in which mortgage companies accounted for more originations than any other intermediary. The dollar amounts of lending in each of the four panels also deserve attention because they show that four-fifths of FHA lending was concentrated in large metropolitan markets, and that lending on new home construction represented two-thirds of program lending both within and outside these dense markets.

Table 27

FHA Insured 1–4 Family Loans Originated in 1940 by Intermediary Group[a]

	Inside Metropolitan Areas							
	New Homes				Existing Homes			
	Loans Insured ($mil.)	Mortgage & Life Ins. Comps.	Commercial Banks	Savings & Loan and Savings Banks	Loans Insured ($mil.)	Mortgage & Life Ins. Comps.	Commercial Banks	Savings & Loan and Savings Banks
New England	40.5	22%	**36%**	35%	23.3	13%	35%	**50%**
Mid-Atlantic	377.3	**38%***	36%	25%	139.8	34%	**55%**	9%
East North Central	414.6	**45%***	39%	12%	261.0	37%	**46%**	14%
West North Central	88.0	**51%***	33%	10%	53.1	**53%***	37%	6%
South Atlantic	179.7	**50%***	23%	14%	48.6	**50%**	31%	9%
East South Central	54.7	**65%***	21%	7%	21.3	**69%**	18%	7%
West South Central	133.1	**62%***	11%	10%	21.1	**53%***	16%	9%
Mountain	30.3	34%*	**38%**	23%	14.7	37%*	**45%**	17%
Pacific	384.1	11%	**74%**	6%	180.2	13%	**71%**	10%
Totals	$1,702.3				$763.1			
	Outside Metropolitan Areas							
	New Homes				Existing Homes			
New England	7.9	6%	**61%**	32%	12.3	2%	**72%**	26%
Mid-Atlantic	25.2	16%	**70%**	7%	21.8	7%	**85%**	6%
East North Central	62.6	34%	**51%**	10%	41.4	28%	**60%**	10%
West North Central	36	40%	**49%**	9%	23.1	39%	**53%**	7%
South Atlantic	75.6	**48%**	33%	9%	24.9	**42%**	40%	4%
East South Central	29.5	**51%***	30%	7%	10.8	**50%***	**44%**	4%
West South Central	55.2	**52%***	24%	11%	12.9	**41%***	33%	13%
Mountain	41.5	15%	**63%**	14%	20.7	15%	**74%**	9%
Pacific	51.9	15%	**75%**	5%	180.6	16%	**73%**	8%
Totals	$385.4				$186.5			

[a] Shares do not add up to 100% because "other category is not shown. Shares shown in bold are for the group with the highest share of originations for that market and region. Shares denoted with (*) designates markets in which mortgage companies by themselves have the larget share of originations among all types of insitutions.

Source: Federal Housing Administration (1942), FHA Homes in Metropolitan Districts, pp. 20–28.

Fifty-six percent of FHA originations in 1940 were on new homes in the nation's metropolitan areas, and mortgage banks and life insurance companies had their greatest impact within this largest and most important segment of the program. Their combined shares of new home originations were greater than 50 percent throughout the metropolitan areas of the south and in the west north central states, but mortgage companies taken alone were the largest institutional source of FHA financing for metropolitan residential building in all areas of the country except for New England and the Pacific states. Mortgage and life insurance companies together also originated most of the FHA debt on existing homes in southern and west north central metropolitan areas, but commercial banks were the most important FHA lenders on older homes in nearly all other major urban markets. Less than 20 percent of all FHA originations in 1940 were made outside metropolitan markets and, in these areas, FHA mortgage banking activity was concentrated in the south central states, just as it had been in the farm mortgage market during the 1920s.

The data confirm Colean's generalization — mortgage bankers and life insurance companies were critical to the early success of the FHA mortgage insurance program. Within a few short years, FHA business would grow into the lifeblood of the mortgage banking industry as well. As shown in Table 28, in fact, by the late 1930s, there was still plenty of headroom for FHA lending by the life insurance companies to grow. Consistent with this observation, Colean emphasizes that only a small number of insurers pioneered the FHA lending model (Colean 1975, 38). Two that he mentions by name — Lincoln National of Indiana and National Life of Vermont — had more than one-third of their entire urban mortgage lending portfolio allocated to FHA loans in 1938. Most of the other companies that appear in the left panel of the table as active FHA lenders held much smaller shares of their urban mortgage portfolio, and even their residential mortgage portfolio, in insured FHA loans. Moreover, 13 of the largest 26 life insurance companies — those that appear in the right panel of the table — held no FHA loans in 1938, even though seven of them allocated more than one-third of their urban mortgage portfolio to residential lending. Together, these companies did one-half of the industry's nonfarm mortgage lending, and represented a growth opportunity for both the FHA program and mortgage banking correspondents. By 1940, the stage had been set.

Table 28

Residential Lending and FHA Participation of the 26 Largest Life Insurance Companies in December, 1938

Companies Holding Fha Title Ii Loans								Companies Not Holding Fha Loans			
		Urban Mortgages	Share Residential	Fha Loans		Fha Share All Urban			Urban Mortgages	Share Residential
				Amount	Loan					
State	Company	$ Million	Percent	$ Million	Number	Percent	State	Company	$ Million	Percent
NJ	Prudential	766.6	69%	34.1	5114	4%	NY	Metropolitan	902.0	42%
NY	N.Y. Life	428.7	65%	51.0	7119	12%	NY	Mutual NY	221.8	31%
WI	Northwestern	225.9	6%	1.0	2	0%	NY	Equitable NY	212.1	62%
MA	John Hancock	94.9	81%	0.4	68	0%	MA	Mass. Mutual	106.2	0%
CA	Pacific Mutual	69.5	16%	3.9	925	6%	PA	Penn Mutual	102.3	39%
OH	Union Central	65.9	64%	14.0	2008	21%	CT	Conn. Mut.	93.9	8%
VT	National Life	62.7	84%	29.0	5650	46%	OH	Mutual Benefit	74.5	19%
NY	Guardian Life	44.4	65%	1.2	173	3%	OH	Western & So.	67.5	36%
CT	Travelers	37.9	54%	2.6	464	7%	PA	Provident Mut.	56.3	42%
CT	Conn. Gen'l	36.6	46%	0.2	32	1%	MA	N.E. Mutual	42.3	0%
IN	Lincoln Nat'l	32.3	69%	10.6	2162	33%	CT	Aetna	40.4	62%
IA	Equitable Iowa	14.9	59%	5.3	1097	35%	MA	State Mutual	35.2	26%
IA	Bankers Life	12.8	82%	2.2	206	17%	CT	Phoenix Mut.	34.6	50%
Total		**$1893.3**	**58%**	**155.4**	25,020.0	**14%**			**$1989.3**	**32%**

Source: Temporary National Economic Committee, Investigation of Concentration of Economic Power, Part 10–A, Life Insurance, February 12, 1940.

CONCLUSIONS

And so it is as one looks back at these three decades, the 20s, the 30s, and the 40s, one… would characterize the five years from 1946 to 1950 as constituting the Golden Age of Mortgage Banking in the United States.

G. Rowland Collins, April 1952
6th Annual Conference,
Mortgage Bankers Association of America

Since the early 1930's, after the Home Loan Bank Act and the National Housing Act were passed, there has been very little original thinking done about the mortgage system. Since that time, we have proceeded on a crisis-to-crisis basis, improvising as we went along until our sense of direction has been blurred if not actually lost.

Miles Colean, January 1953
8th Annual Conference
Mortgage Bankers Association of America

One of the goals of this project is to provide historical perspective on the post-World War II mortgage banking industry as described by Klaman (1959) and Kidd (1977). The quotes above suggest that mortgage bankers themselves could have benefitted from historical perspective 60 years ago as they considered which of these contradictory assessments better characterized their own industry. The analysis presented here turns out to support both viewpoints, not only as accurate descriptions of the mortgage banking industry in the early 1950s, but also as predictions of its future prospects. Something paradoxical was at work in the postwar mortgage banking sector.

The historical evidence presented here, combined with the work of Klaman and Kidd, places mortgage banking in the 1950s in the middle segment of an unusual, hourglass-shaped pattern of development. During the 1920s, urban mortgage banking was a diverse, entrepreneurial sector that used different methods to make and service different kinds of loans, which they packaged and sold to different types of investors. The mortgage bankers Klaman found just 25 years later were strikingly uniform in size and structure, and were focused narrowly on originating and servicing federally insured and guaranteed home mortgage loans for large, national portfolio lenders. Kidd completes the chronology by describing how mortgage bankers transitioned back to a more diverse business model in the 1960s, as the immediate postwar structure eroded. We have seen here that the forces responsible for this 50-year cycle were disruption to the industry caused by the mortgage crisis of the 1930s, and the impact of the policies that were designed to ameliorate the crisis.

Collins was commenting on the first five years of the postwar housing expansion that defined the middle segment of the hourglass. This golden age for mortgage bankers lasted nearly another decade, as an unusual set of influences that had converged in 1945 worked themselves out — a homebuilding industry that had been depressed for 10 out of the last 15 years, a cohort of individuals aged 25 to 45 who had faced weak labor market conditions for most of their working lives and a financial sector loaded with Treasury debt and looking for new investment outlets. All that was required for a historic surge in homebuilding and homeownership was a housing finance system. Local institutional portfolio lenders, now buttressed by deposit insurance and, in the case of S&Ls, the FHLB's lending facilities, took up most of the business. But the inter-regional flow of credit that arbitraged imbalances across local markets was dominated by life insurance companies and their mortgage banking correspondents. Through 1952, most of these loans were insured under the FHA program, and for good reason — that program had worked well for these intermediaries in the late 1930s. The federally insured and guaranteed home mortgage loan business for life insurance companies and, later in the decade, mutual savings banks preoccupied mortgage bankers until the unusual conditions that fostered the expansion finally ran out in the 1960s.

Colean was dismayed, on the other hand, at the role some of the federal housing programs were playing in the expansion. In particular, he had helped implement the FHA insurance program, and was well aware that it had been created with some features, such as the explicit Treasury guarantee on FHA debentures, that were temporary and included only to help the new program revive homebuilding quickly during the Depression. Other features, such as the proposed system of NMAs, were designed to permanently improve the liquidity and performance of the home mortgage finance system. However, by 1953 the federal guarantee had been made permanent and the provisions for chartering NMAs removed with only one institution — the FNMA — having been chartered under them. So the FHA turned out not to be a self-supporting, mutual insurance program supported by an active secondary loan market that the authors of the NHA had envisioned. It had become, instead, a government-backed program that insured loans for institutional portfolio lenders who relied on the FNMA facility for liquidity and flexibility. Colean looked out on a housing finance system that no one had actually planned or proposed, and was concerned how the jury-rigged structure would hold up after the ideal, but unusual, post-World War II influences had played out.

Beyond adding new perspective on the post-World War II era, the history examined here has identified features of mortgage banking development before 1930 that deserve more attention and study. Why, for example, did urban mortgage bankers write explicit mortgage insurance policies to support whole loan sales while at the same time, their farm mortgage counterparts relied only on informal recourse agreements secured by reputation? Possible explanations include differences in property value risks in farm and urban areas, higher fixed costs in farm mortgage banking or greater access to capital in the urban market to support a private mortgage insurance business. We also need to explore why participation certificates were commonly used in repackaging urban mortgage loans, but not farm mortgages. An obvious explanation is the greater heterogeneity in urban loan size, but this should be tested against other plausible explanations.

It is also important to get more specific detail about some of the elements of mortgage banking history that have been examined here. We know, for instance, that insurance companies experimented with different types of relationships with their farm mortgage correspondents in the late nineteenth century, but not how this experience was applied when the same companies developed correspondent relationships with urban mortgage bankers in the 1920s. We also need to understand more about the pattern of survival among traditional farm mortgage bankers in the 1920s as the federal FFLB system was being implemented. Were the successful incumbents somehow favored by local conditions, or did the more flexible contract terms and underwriting standards they offered relative to federal competitors have greater value in some agricultural markets? My hope is that the discussion here will reveal other important and interesting questions so that this manuscript becomes a first step, and not the last, in the exploration of mortgage banking history between 1870 and 1940.

REFERENCES

Abramovitz, Moses. 1964. *Evidences of long swings in aggregate construction since the Civil War. NBER* Occasional Paper 90. New York: National Bureau of Economic Research.

Aetna Life Insurance Company. 1862–1899. Company Mortgage Ledgers. Hartford, CT.

—. 1947. *A record of mortgage loan experience*. Hartford, CT.

Alger, George. 1934. *Report on the operation, conduct, and management of title and mortgage guarantee corporations*. New York.

Behrens, Carl. 1952. *Commercial bank activities in urban mortgage financing.* New York: National Bureau of Economic Research.

Bennet, Victor W. 1938. Joint stock banks in retrospect. *Journal of Farm Economics* 20, no. 4: 857–65.

Benson, Philip A., and Nelson L. North. n.d. "Mortgage loans," 174–192. In *Real estate principles and practice*. New York: Prentice Hall.

Bodfish, H. Morton. 1931. *History of the building and loan in the United States*. Chicago: United States Building and Loan League.

Bodfish, H. Morton and A.D. Theobald. 1938. *Savings and loan principles*. New York: Prentice Hall.

Bogue, Allan. 1955. *Money at interest*. Ithaca, NY: Cornell University Press.

Boot, Arnoud W.A., Stuart I. Greenbaum, and Anjan V. Thakor. 1993. Reputation and discretion in financial contracting. *American Economic Review* 83, no. 5: 1165–83.

REFERENCES (CONT.)

Buley, R. Carlyle. 1967. *The equitable life assurance society of the United States*. New York: Meredith Publishing Company.

Chamberlain, Edward and G. Edwards. 1927. *The principles of bond investment*. New York: Henry Holt.

Chassell, E.D., and Kingman Nott Robins. 1920. *The case for and against tax exemption of U.S. Government bonds and federal farm loan bonds*. United States. http://catalog.hathitrust.org/api/volumes/oclc/7582264.html. Cited in Farm 2, p. 18, fn 21.

Chassell, E.D. 1920. *Past and future of the farm mortgage business. Annual report*. Kansas City, MO: Farm Mortgage Bankers Association of America. http://catalog.hathitrust.org/api/volumes/oclc/43561421.html.

Clark, Horace and Frank A. Chase. 1925. Elements of the modern building and loan associations. New York: Macmillan and Co.

Colean, Miles. 1962. *Mortgage companies: Their place in the financial structure*. Englewood Cliffs, NJ: Prentice Hall.

Courtemanche, Charles, and Kenneth Snowden. 2010. Repairing a mortgage crisis: HOLC lending and its impact on local housing markets. *NBER Working Paper* 16245, National Bureau of Economic Research.

Cramp, Ralph E. 1940. Guaranteed mortgage companies in review — A program for the future. *Contemporary Law Pamphlets of the New York University School of Law*, Series 4, no. 6.

Crobaugh, Chester. 1922. Function of private mortgage companies. *United States Investor*, July 15, 1922.

Darrow, Edward N. 1892. *A treatise on mortgage investments*. Minneapolis: W.A. Edwards.

Davis, G. Richard. 1910. “Mortgage loans on real estate.” In *Practical Real Estate Methods*. New York: Doubleday, Page & Co.

Davis, Lance. 1965. The investment market, 1870–1914: The evolution of a national market. *Journal of Economic History* 33, no. 3: 355–93.

Eichengreen, Barry. 1984. Mortgage rates in the Populist Era. *American Economic Review* 74, no. 5: 995–1015.

Ewalt, Josephine H. 1962. *A business reborn*. Chicago: American Savings and Loan Institute Press.

REFERENCES (CONT.)

Field, Alexander James. Uncontrolled land development and the duration of the depression in the United States. *The Journal of Economic History* 52, no. 4: 785–805.

Fishback, Price V., Alfonso Flores-Lagunes, William C. Horrace, Shawn Kantor, and Jaret Treber. 2011. The influence of the home owners' loan corporation on housing markets during the 1930. *Review of Financial Studies* 24, no. 6: 1782–1813.

Fishback, Price, Jonathan Rose, and Kenneth Snowden. 2013. *Well worth saving: How the New Deal safeguarded home ownership*. Chicago: University of Chicago Press.

Fisher, Ernest. 1951. *Urban real estate markets: Characteristics and financing*. New York: National Bureau of Economic Research.

Frederiksen, D.M. 1894a. Mortgage banking in America. *Journal of Political Economy* 2, no. 2: 203–34.

—. 1894b. Mortgage banking in Germany. *Quarterly Journal of Economics* 9, no. 1: 47–76.

Gottlieb, M. 1965. New measures of value in nonfarm building for the United States, annually 1850–1939. *Review of Economics and Statistics* 47, 412–419.

Goetzmann, William N., and Frank Newman. 2010. Securitization in the 1920's. *NBER Working Paper* 15650.

Gray, John H., and George W. Terborgh. 1929. First mortgages in urban real estate. *The Brookings Institute Pamphlet Series* 1, no. 2.

Grebler, Leo, D. Blank and L. Winnick. 1956. *Capital formation in residential real estate*. Princeton: Princeton University Press.

Gries, J.M. and J. Ford (eds.). 1932a. *President's conference on home building and home ownership*. Washington, D.C.: National Capital Press.

—. 1932b. *Home finance and taxation: Reports of the Committees on Finance*. Washington, D.C.: President's Conference on Building and Home Ownership, Vol. II.

Haar, Charles M. 1960. *Federal credit and private housing: The mass financing dilemma*. New York: McGraw-Hill.

Hall, Lesley. 2013. The first century. *Mortgage Banking's centennial special edition*: 6–31.

Halliburton, Robert A. 1939. *The real estate bond house*. Franklin, IN.

REFERENCES (CONT.)

Harris, Richard. 2012. Building a market: The rise of the home improvement industry, 1914–1960. Chicago: University of Chicago Press.

Harriss, C. Lowell. 1951. *History and policies of the Home Owners' Loan Corporation*. New York: National Bureau of Economic Research.

Heindel, George F. 1921. The case against tax exemption. *United States Investor* XXXII, no. 40, October 1, 1921: 14–17.

Herrick, Myron, and R. Ingalls. 1915. *Rural credits*. New York: D. Appleton.

Hinman, Elanor, and J.O. Rankin. 1933. *Farm mortgage history of southeastern Nebraska townships, 1870–1932*. Research Bulletin Number 67. Lincoln: University of Nebraska Agricultural Station.

Horton, Donald, H. Larsen, and N. Wall. 1942. *Farm mortgage credit facilities in the United States*. Washington, D.C.: Miscellaneous Publication 478, USDA.

Hubbard, Theodora Kimball and Henry Vincent Kimball. 1929. *Our cities today and tomorrow*. Cambridge: Harvard University Press.

James, Marquis. 1947 *The Metropolitan Life*. New York: Viking Press.

Johnson, H. Thomas. 1974. Postwar optimism and the rural banking crisis of the 1920s. *Explorations in Economic History* 11, no. 2: 173–92.

Johnson, Earnest A. 1936a. The record of long-term real estate securities. *Journal of Land and Real Estate Economics* 12, no. 1: 44–48.

—. 1936b. The record of long-term real estate securities: By cities of issue. *Journal of Land and Real Estate Economics* 12, no. 2: 195–97.

Jones and Grebler 1961. Cited in fn 65 on p. 41 of ArticlePt2.

Kanaley, Byron V. 1925. The position of mortgages in the investment field, security provisions and amortization, 1–112 in *Real Estate Finance,* Vol. IV. Chicago: National Association of Real Estate Boards.

Kerr, W.G. 1976. *Scottish capital on the American credit frontier.* Austin, TX: Texas State Historical Association.

Kidd, Phillip E. 1977. *Mortgage banking 1963 to 1972: A financial intermediary in transition*. Washington, D.C.: Mortgage Bankers Association.

REFERENCES (CONT.)

Klaman, Saul. 1959. *The postwar rise of mortgage companies*. National Bureau of Econmic Research: New York.

Klaman, Saul. 1961. *The postwar residential mortgage market*. Princeton: Princeton University Press.

Libecap, Gary D. 1998. "The Great Depression and the regulating state: Federal government regulation of agriculture: 1884–1970." In *The defining moment: The Great Depression and the American economy in the twentieth century*, edited by Michael D. Bordo, Claudia Goldin, and Eugene N. White. Chicago: Chicago University Press.

Lindow, Edwin H. 1925. Title insurance. Real Estate Finance Vol. IV. Chicago: National Association of Real Estate Boards.

Lintner, John. 1948. *Mutual savings banks in the savings and mortgage markets*. Boston: Harvard University.

Lipshutz, Nelson R. 2004. The role of the monoline requirement in assuring title insurance effectiveness. Unpublished report to the American Land Title Association.

Lobdell, Charles E. 1917. The joint stock bank as a part of the Federal Farm Loan System. *Proceedings of the 4th Annual Conference of the Farm Mortgage Bankers' Association*.

Lodge, Edgar A. 1935. A mortgage analysis: *A twenty-eight year record of the mortgages of the Home Title Insurance Company, 1906–1934*. Washington, D.C.: Federal Housing Administration.

Mappin, W.F. 1889. Farm mortgages and the small farmer. *Political Science Quarterly* 4, no. 3: 433–51.

May, Earl Chapin, and Will Oursler. 1950. *The Prudential: a story of human security*. Garden City, N.Y. : Doubleday.

McFarlane, Larry A. 1983. British investment and the land: Nebraska, 877–1946. *The Business History Review* 57, no. 2, British Business History: 258–72.

McKenna, Edward L. 1927. The guarantee of mortgage bonds by surety companies. *Annals of the American Academy of Political and Social Science*. Vol. 130, 131–36.

Morgan, Dick T. 1915. *Land credits: A plea for the American farmer*. New York: Thomas Y. Crowell Company.

Morman, James Bale. 1924. *Farm credits in the United States and Canada*. New York: Macmillan.

REFERENCES (CONT.)

Moulton, Harold G. 1930. *The financial organization of society*, 3rd ed. Chicago: University of Chicago Press.

Murray, W.G. 1933. *An economic analysis of farm mortgages in Story County, Iowa, 1854–1913*. Research Bull. 156, Agricultural Economics Section, Iowa State College, Ames.

North, Nelson L., DeWitt Van Buren, and C. Elliott Smith. 1928. *Real estate financing*. New York: Prentice Hall.

O'Hara, Maureen. 1983. Tax exempt financing: Some lessons from history. *Journal of Money, Credit and Banking* 15, no. 4: 425–41.

Olmstead, Alan L. 1976. *New York City mutual savings banks*, 1819–1861. Chapel Hill: University of North Carolina Press.

Palyi, Melchior. 1934. *Principles of mortgage banking regulation in Europe*. Chicago, IL: The University of Chicago Press.

Parker, Marcus A. 1925. Creating a local market for small mortgages, 119–121. In *Real Estate Finance*, Vol IV. Chicago: National Association of Real Estate Boards.

Pope, Jesse E. 1914. Agricultural credit in the United States. *The Quarterly Journal of Economics* 28, no. 4: 701–746.

Posner, Louis. 1948. The lessons of guaranteed mortgage companies. *Harvard Business Review* 26, no. 5.

Preston, Howard H. 1921. The Federal Farm Loan case. *Journal of Political Economy* 29, no. 6: 433–54. Cited in Farm 2, p. 19, fn 22

—. 1922. *History of banking in Iowa*. Iowa City: University of Iowa Press.

Putnam, George E. 1916. *The land credit problem*. Bulletin of the University of Kansas Humanistics Studies, 2.

Rapkin, C. and J. Ferrari, R. Blood and G. Milgram. 1967. *The private insurance of home mortgage*, Philadelphia: University of Pennsylvania.

Robins, Kingman. 1916. *The farm mortgage handbook*. New York: Doubleday.

—. 1917. Farm Mortgage Bankers Association — Original purposes and brief review of its accomplishments. *Proceedings of the 4th Annual Conference of the Farm Mortgage Bankers' Association*.

REFERENCES (CONT.)

Rose, Jonathan, and Kenneth A. Snowden. 2012. The New Deal and the origins of the modern American real estate loan contract. *NBER Working Paper* 18388, November 2012.

Rosenthal, Henry Samuel. 1888. *Manual for building and loan associations, embracing the origin and history of co-operative societies*. Cincinnati: S. Rosenthal & Co.

Saulnier, Raymond. 1950. *Urban mortgage lending by life insurance companies*, New York: National Bureau of Economic Research.

Schwartz, Carl Herbert. 1938. *Financial study of the joint stock land banks; a chapter in farm mortgage banking*. Washington, D.C. : [Takoma Park, Md., Printed by Washington College Press].

Severson, Robert F., James F. Niss, and Richard D. Winkelman. 1966. Mortgage borrowing as a frontier developed: A study of mortgages in Champaign County, Illinois, 1836–1895. *The Journal of Economic History 26*, no. 2: 147–168.

Skogvold, F.J. 1956. Farm loans and farm management by the Equitable Life Assurance Society of the United States. *Agricultural History* 30, no. 3: 114–19.

Smith, R. Grame. 1925. Do insurance companies favor investment mortgages? *Real Estate Finance*: 13–29.

Smith v. Kansas City Title and Trust Company, *et al.*, 225 U.S. 180 (1921).

Snowden, Kenneth. 1987. Mortgage rates and American capital market development in the late nineteenth century. *The Journal of Economic History* 47, no. 3: 671–92.

—. Snowden, Kenneth. 1988. Mortgage lending and american urbanization, 1880–1890. *The Journal of Economic History* 48, no. 2: 273285.

—. 1995a. Evolution of interregional mortgage lending, 1870–1940: The life insurance-mortgage company connection. In *Coordination and information: Historical perspectives on the organization of enterprise*, edited by N. Lamoreaux and D. Raff, 209–47. Chicago: University of Chicago Press.

—. 1995b. Mortgage securitization in the United States: Twentieth-century developments in historical perspective. In *Anglo-American financial systems: Institutions and markets in the twentieth century*. Edited by M. Bordo and R. Sylla. New York: New York University.

—. 1997. Building and loan associations in the U.S.: The origins of localization in the residential mortgage market. *Research in Economics* 51, no. 3: 227–50.

—. 2003. "The transition from building and loan to savings and loan, 1890–1940." In *Finance, intermediaries, and economic development*, edited by S.L. Engerman, P.T. Hoffman, J.L. Rosenthal, and K.L. Sokoloff. New York: Cambridge University Press.

REFERENCES (CONT.)

—. 2010. "The anatomy of a residential mortgage crisis: A look back to the 1930s." In *The Panic of 2008: Causes, consequences and proposals for reform*, edited by Lawrence E. Mitchell and Arthur E. Wilmarth. Northampton, MA: Edward Elgar.

Thompson, C.W. 1916. Costs and source of farm-mortgage loans in the United States. Bulletin No. 384. Washington, D.C.: U.S. Department of Agriculture.

Tostlebe, Alvin. 1957. *Capital in agriculture: Its formation and financing since 1870*. Princeton: Princeton University Press.

Travelers Life Insurance Company. 1887–1900. *Complete history of real estate loans*. Hartford, CT.

Wallace, E.S. 1938. Survey of federal legislation affecting private home financing since 1932. *Law and Contemporary Problems 5*, no. 4: 481–509.

Weiss, Marc A. 1987. *The rise of the community builders: The American real estate industry and urban land planning*. New York: Columbia University Press.

Wickens, David. 1932. *Farm–mortgage credit*. USDA Technical Bulletin 288. Washington, D.C.: U.S. Government Printing Office.

Williamson, Harold and Orange Smalley. 1957. *Northwestern Mutual Life: A century of trusteeship*. Evanston, IL: Northwestern University Press.

Willis, H. Parker, and William H. Steiner. 1926. *Federal Reserve banking practice*. New York: D. Appleton & Co.

Wood, Edith. 1931. *Recent trends in american housing*. New York: Macmillan Company.

Woodruff, Archibald M., Jr. 1937. *Farm mortgage loans of life insurance companies*. New Haven, CT: Yale University Press.

Wright, Carroll. 1893. *Ninth annual report of the Commission of Labor—Building and loan associations*. Washington, D.C.: U.S. Government Printing Office.

Wright, Ivan. 1922. *Bank credit and agriculture, under the national and federal reserve banking systems*. New York: McGraw-Hill Book Co.

Zartman, Lester W. 1906. *The investments of life insurance companies*. New York: H. Holt.

Government Publications

Holmes, George K., and John S. Lord. 1890. *The report on real estate mortgages in the United States at the th census*. Department of the Interior, Census Office. Washington, D.C.: Government Printing Office.

Massachusetts. 1890–1895. *Annual Reports of the Commissioner of Foreign Mortgage Corporations*. Boston, MA.

New York State. 1891–1897. *Annual Report of the Superintendent of Banks Relative to Foreign Mortgage, Loan, or Investment Companies*. Albany, NY.

New York State. 1921. 52nd *Annual Report of the Superintendent of Insurance*, Part III. Senate Doc. No 20. Albany, NY: J.B. Lyon.

New York State. 1933. *Report to the Governor of the Superintendent of Insurance in reference to pending rehabilitation proceedings in the title and mortgage company field*. November 11, 1933.

New York State. 1936. *Annual Report of the Mortgage Commission*. Legislative Document no. 60, December 31, 1935.

New York State. 1937. *Report of the joint legislative committee to investigate the guaranteed mortgage situation*. Albany, NY: J.B. Lyon Company.

New York State. 1939. *Annual Report of the Mortgage Commission*. Legislative Document no. 94, April 1, 1939.

United States. Census Office. 1890. *th census of the United States, 1890*. Washington, D.C.

—. 1901–1903, *Census reports: Twelfth census of the United States, taken in the year 1900*. Washington, D.C.

United States. Bureau of the Census. 1923. *Fourteenth census of the United States, taken in the year 1920*. Washington, D.C.

—. 1923. Mortgages on Homes. *Census Monograph II*. Washington, D.C.

—. 1931–33. *15th census of the United States: 1930*. Washington, D.C.: U.S. Government Printing Office.

—. 1943. Housing. *Sixteenth census of the United States:* 1940. Washington, D.C.: U.S. Government Printing Office.

REFERENCES (CONT.)

United States. Census Office. 1890. *Report on Class A insurance companies*. Washington, D.C.: U.S. Government Printing Office.

—. 1890. Farms and Homes: Proprietorship and Indebtedness. *Compendium of the th census: 1890*. Washington, D.C.: U.S. Government Printing Office.

—. 1895. *The report on real estate mortgages in the United States*. Vol. 12. Washington, D.C.

—. 1895. *The report on farm and home proprietorship and indebtedness*. Vol. 13. Washington, D.C.

—. *Exemption of Federal Farm Loan Bonds from Taxation: Hearings on S. 3109 Before the Committee on Banking and Currency*. 66th Cong. (1920).

United States. Congress. *Rural Credits: Joint Hearings Before the Subcommittees on Banking and Currency of the Senate and of the House of Representatives*. 63rd Cong. (1914).

United States. Congress. House of Representatives. 1935. H.R. Rep. No. 74–35. *Investigation of Real Estate Bondholders' Reorganizations*.

United States. Congress. Senate. 1918. *First annual report of the Federal Farm Loan Board covering the period from the organization of the board up to November 30, 1917. January 3, 1918.—Referred to the Committee on Banking and Currency and ordered to be printed, with illustration*. 65th Cong. Washington, D.C.

—. 1936. *To Provide for the Establishment of a Federal Mortgage Bank: Hearing Before a Subcommittee of the Committee on Banking and Currency of the United States Senate on S. 2914*. 74th Congress (1936).

United States. Congress. Senate and W.W. Flannagan. 1916. *The Federal farm loan act, approved July 17, 1916... with marginal notes and index*. 64th Cong., S. Doc. 500. Washington, D.C.: U.S. Government Printing Office.

United States. Department of Agriculture. 1921. *Farm Mortgage Lending Facilities in the United States*. Misc. Pub. No. 478.

United States. Temporary National Economic Committee. 1940a. *Life insurance: Operating results and investments of the twenty-six largest life insurance companies domiciled in the United States*. Part 10-A. Washington: U.S. Government Printing Office.

—. 1940b. *Study of the legal reserve life insurance companies*. Monograph 28. Washington: U.S. Government Printing Office.

AUTHOR BIOGRAPHY

Kenneth A. Snowden

Kenneth A. Snowden is Professor of Economics at the University of North Carolina Greensboro and a Research Associate with the National Bureau of Economic Research in Cambridge, Massachusetts. He has written extensively on the development of the U.S. mortgage market before 1940 and is co-author (with Price Fishback and Jonathan Rose) of *Well Worth Saving: How the New Deal Safeguarded Homeownership* (University of Chicago Press, 2013) and co-editor (with Eugene White and Price Fishback) of the forthcoming volume *Housing and Mortgage Markets in Historical Perspective* (NBER and the University of Chicago Press, 2014). He is currently working on issues related to the mortgage crisis of the 1930s: the transition from Building & Loans to Savings & Loans, the impacts of New Deal housing programs, and the historical development of the mortgage banking industry. Snowden earned a Ph.D. in Economics from the University of Wisconsin-Madison.

MBa
MORTGAGE BANKERS ASSOCIATION

1919 M STREET NW, 5th FLOOR
WASHINGTON, DC 20036