Testimony of

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"Covered Bonds: Potential Uses and Regulatory Issues"

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Chairman Dodd, Ranking Member Shelby, and members of the Committee:

I appreciate the opportunity to testify before the Committee concerning the potential uses and regulation of covered bonds in the U.S. mortgage market. I am an economic historian who for the past two decades has studied the development of the U.S. mortgage market. Up until three years ago my specialty was relatively obscure even among other historians, but crisis always seems to enhance the value of looking back. The purpose of my testimony is to share with you some of the research I and others have done concerning the history of our mortgage market and the role that covered mortgage bonds have played within it. The hope is that the historical perspective will provide useful guidance as you consider whether and how to incorporate regulated covered bonds into the U.S. mortgage market.

Covered bonds are being recommended for the U.S. mortgage market at this time because they address weaknesses that we have observed over the past forty years in the two funding mechanisms that have dominated the U.S. mortgage market for the past century. One of these systems is what I refer to here as the traditional portfolio lender model in which an intermediary holds mortgage loans on its own balance sheet and funds them by issuing deposits. In the other funding mechanism that is used extensively in the U.S., called securitization, bonds are issued against a pool of mortgages that has been taken off the balance sheet of the intermediary that originated or assembled the mortgage loan pool. Covered mortgage bonds differ from both of these systems in that the intermediary issues debt that is secured by a pool of mortgage loans that it holds on its own balance sheet. Investors who purchase covered bonds are given senior claims on the designated mortgage cover pool, and also have recourse to the other assets held by the intermediary as security for the promised payments on their bonds. As a result of this structure, covered mortgage bonds can reduce the risks of funding long-term mortgages with short-term deposits that arise in the traditional portfolio lender model, while providing greater incentives to impose strict mortgage underwriting standards than are found in securitization.

Covered mortgage bonds are also being recommended at this time because of their popularity and record of success in Europe. The European record of covered mortgage bond success, in fact, stretches back over two hundred years. Although my own research is completely U.S.-centered, I became aware of the history of covered bond use in Europe two decades ago when I came across commentaries by late nineteenth century writers that complained bitterly about the absence of European-style covered mortgage bond programs in the U.S. These comments provided evidence that market participants in the U.S were well aware of covered mortgage bonds as early as 1870 and led me to question why the mechanism had not been implemented here. Further exploration revealed that covered mortgage bond systems actually had been introduced several times between 1870 and 1935. At that point the important question became why did covered mortgage bonds not become a permanent fixture in U.S. mortgage markets. It turns out that bad timing, poor implementation, and ineffective regulation all played roles, and my testimony briefly surveys that record to provide the committee with this historical perspective as you consider legislation to encourage the introduction of covered bonds into the U.S. mortgage market one more time.

The history of covered mortgage bonds in the U.S. is messy. It spans the farm and nonfarm residential mortgage market, state and federal regulatory structures and fundamental changes in mortgage contract design—all during a seven-decade period which saw three mortgage crises, including the most severe one in the 1930s. Before venturing more deeply into this chronology, a brief summary of its highlights and the lessons that I have drawn from it will be useful.

I divide the historical record into two parts. The first lies between 1870 and 1900 when covered mortgage bonds were introduced into the U.S. without the regulatory framework that was used in Europe. The covered mortgage bond had its greatest success during this period when western farm mortgage companies that normally brokered whole mortgage loans began to issue bonds secured by the mortgages instead of selling the loans outright. I have examined one of these companies in depth and found that the loans it placed behind its covered bonds were riskier than those that it brokered. That result appears to contradict the generalization that underwriting standards are strict inside a covered mortgage bond structure; but in this case the issuer could shift risk between two mortgage funding channels because of ineffective regulation. A more obvious lesson can be drawn from the way these companies failed during the general farm mortgage crisis of the 1890s. Serious malfeasance occurred throughout the covered mortgage bond sector during the crisis because there was no regulation in place to control the behavior of the mortgage companies after their financial capital dissipated. These failures affected the reputation of covered mortgage bond programs in the U.S. for decades.

The federal government takes center stage in the history of covered mortgage bonds between 1900 and 1935. Your predecessors in the 63rd and 64th Congresses benefitted from an extensive investigation of covered mortgage bond systems in Europe before creating the Federal Farm Loan Bank System in 1916. This system was comprised of both public and private institutions, and both relied on covered bonds to fund mortgages. The privately-financed, joint-stock land bank component within the system was structured and regulated just like institutions in Germany which led private farm mortgage companies to oppose and avoid the system because of the restrictions it imposed on activities that were standard practice in the U.S. farm mortgage market. Twenty years later the 73rd Congress authorized the creation of a privately-financed, federally-regulated covered residential mortgage bond program to provide a liquid market for the new FHA-insured mortgage loans. No private institution was ever chartered under this authority, and the discussion about introducing covered mortgage bonds to the U.S. went silent for decades.

In the final section of my testimony I provide an overview of the development of the institutional residential mortgage market over the past century to provide perspective on how the introduction of covered mortgage bonds at this time fits into its long-run pattern of development. I close this introduction, however, by summarizing three lessons I draw from the historical record:

1. Past failures of covered mortgage bonds in the U.S. are explained by a combination of bad timing, poor implementation, and ineffective regulation. We need to do a better job of incorporating covered bonds into the U.S. mortgage market, rather than abandon the effort.

2. A common failure in past attempts was to transplant elements of European covered mortgage bond systems without tailoring them to fit U.S. institutions. We need to identify features of the U.S. mortgage market that could be incompatible with European covered mortgage bond practice while, rather than after, regulation is being formulated.

3. Finally, history gives us a clear bottom line in this case. If it had been easy to incorporate covered bonds into the U.S. mortgage market, we would have already done so.

Unregulated Early Experiments with Covered Mortgage Bonds

By the mid-1800s covered farm mortgage bonds were trading in Europe in broad and active secondary markets with yields as low as those on government securities. These bonds were issued by mutually-owned institutions (*Landschaften*) and privately-owned, joint-stock mortgage banks in Germany, and by a national monopoly bank (the *Credit Foncier*) in France. The success of these programs attracted attention in the U.S. where the focus in the mortgage market during the late nineteenth century was on the spatial mismatch of mortgage credit between savings-rich, eastern urban areas and rapidly growing, capital-hungry areas in the Midwest and Great Plains (Davis, 1965). Several innovations appeared between 1870 and 1900 to facilitate the movement of mortgage credit from east to west to arbitrage the substantial differentials in mortgage rates that had appeared. Among these were attempts to establish covered mortgage bond programs patterned after European models, but not subject to the same strict regulatory oversight.

Henry Villard, who was German-born and traveled in Europe as a journalist, is given credit for initially advocating for the importation of the European mortgage system into the U.S. in the late 1860s (Herrick and Ingalls, 1915, 1-2). Villard's attempts to establish a mortgage bank failed, but in 1871 Pierpont Morgan and other respected American and European investment bankers organized a trust under New York law to implement a European-style covered mortgage bond business. The New York board of the U.S. Mortgage Company was charged with the task of assembling pools of high-yielding western mortgages, while the European board took charge of marketing and selling the covered bonds in their home markets (see Brewer, 1976).[1] The focus on continental markets led the firm to adopt the norms and even some of the language of European systems: outstanding bonds could not exceed twenty times paid-in capital and had to be fully secured by mortgages on improved farm and urban properties with low loan-to-value ratios.[2] The company was incorporated as a trust which meant that its covered mortgage

[1] Brewer (1976, 373-80) also examines the mortgage bond business of the Mercantile Trust Company of New York, a subsidiary of the Equitable Insurance Company,

[2] Brewer (1976, 363) provides a fuller description of the bylaws. Brewer (373-80) also examines the mortgage bond business during the 1870s of the Mercantile Trust Company of New York, a subsidiary of the Equitable Insurance Company. Mercantile acted as custodian and guarantor of bonds issued against mortgages that it had taken off of its own books. These, and similar structures discussed below that were issued in the 1920s are classified here as securitizations, not as covered bonds.

business was virtually unregulated relative to European standards. U.S. Mortgage issued securities successfully for two years, but its growth was soon cut short by the Panic and recession of 1873. The company never defaulted on its bonds, but gradually wound down its covered mortgage bond business because marketing western mortgage loans turned out to be too risky and time-consuming to command the attention and risk the reputation of its high-profile organizers (Brewer 1976, 380).

Western farm mortgage companies, unlike U.S. Mortgage, were intimately involved in the western farm mortgage market and much more successful, at least at first, in establishing covered bond programs. Hundreds of these mortgage companies were organized in the Midwest and Great Plains during the 1860s and 1870s to broker and service individual whole farm mortgage loans for eastern and European investors. In the early 1880s several of these companies began to place whole mortgages that they had originated into eastern trust accounts and to issue covered bonds, then called debentures, against this collateral. The innovation enjoyed immediate popularity, and by 1890 two-thirds of the western mortgage companies that were licensed to operate in New York and Massachusetts were selling their own covered mortgage bonds. By that time the new securities were funding about one-tenth of outstanding western farm mortgage debt.

Investors were attracted to covered bonds because they offered less idiosyncratic lending risk and lower transaction costs than the brokered whole farm loans that the companies had been selling up to that time. In order to issue the bonds, however, the mortgage company had to issue its own debt obligations that exposed it to risk that brokerage did not impose.[3] Starting a debenture program also entailed the costs of incorporating the company and formulating a trust arrangement, most often with an eastern trust company. The trustee was required to evaluate mortgage loans designated for the trust account against criteria the company itself specified—they usually required mortgages written for no more than 40 or 50 percent of the value of the encumbered property. Debentures were issued and sold only after the trustee had certified the collateral. The trustee was also obligated to take control of the assigned mortgage loans on the behalf of the bondholders if the company defaulted on its obligations to them.

[3] The companies sold brokered loans with recourse, but the promise to buy back loans was not a formal, legal obligations as the companies could and did suspend recourse when in distress.

An interesting feature of the farm mortgage bond movement is that it provided investors with less information about mortgage loan quality than the brokered loan business it was intended to supplant.[4] In this environment investors who bought covered bonds could have relied on three mechanisms to assure that the bonds were well-secured: the trust arrangement through which debentures were issued, supervision by state regulatory authorities, and the mortgage company's own incentive to uphold underwriting standards in order to protect its own financial and reputational capital. Regulation and trust arrangements provided no effective hands-on supervision, however, so investors relied most heavily on the mortgage company's own "skin in the game."[5] This helps to explain why the debenture movement did not appear until the 1880s after some of the mortgage companies had become large enough and sufficiently well-capitalized in their brokerage businesses to credibly issue their own securities.[6] It also explains why not all western mortgage companies issued debentures; I have recently found that debentures were most likely to be adopted, and to be used more intensively, by older, larger companies with strong balance sheets and successful records of performance as mortgage brokers.

A second interesting feature of these covered bonds is that all of the companies that issued debentures continued to broker loans. Mortgage companies that operated these mixed brokerage-debenture businesses, therefore, had to allocate mortgage loans between the two funding channels. I recently examined how that allocation was made in 1887 in one large and highly respected Kansas mortgage company. The evidence shows that the loans placed behind the covered bonds were smaller in size, shorter in term and riskier than those that the company brokered. By packaging these types of loans behind covered bonds the mortgage companies improved the efficiency of the interregional mortgage market by creating a funding mechanism for loans that were difficult and costly to broker. This result provides an interesting counterexample to the generalization that the issuer's "skin in the game" in a covered bond structure

[4] Mortgage companies assigned loans to investors and then mailed applications and documents for investor approval. Loans that investors rejected had to be reassigned to another investor.

[5] Regulation came too late to be effective as western mortgage companies operating in Connecticut, New York and Massachusetts were not required to report even basic financial data to investors until 1889—years after the debenture movement began to expand rapidly. Even at this point the information was self-reported and the companies were not subject to on-sight examinations.(New York, *Annual Report* (1891), pp. 15-27.) The trustees who administered debenture programs for the mortgage companies were also did not monitor their western lending operations.

[6] The discussion here is summarizes evidence reported in Snowden (2010b).

necessarily leads to stricter underwriting standards. It also indicates that combining a covered mortgage bond program with another mortgage funding channel can create incentives to shift risks among the two.[7]

A third interesting feature of the farm debenture movement is its spectacular failure in the 1890s. The backdrop was a general farm mortgage crisis that generated substantial losses for farmers, investors and intermediaries in the western mortgage market. It was not surprising, therefore, that virtually all of the mortgage companies that had issued covered bonds, as well as most of the brokerage-only operations, failed. Many investors were shocked, however, when audits of the failed mortgage companies by eastern regulators found evidence of widespread and egregious violations of the company's own trust agreements within their covered mortgage bond programs.[8] The problem, of course, was that the incentives of the mortgage companies changed dramatically once the financial capital that supported their debenture programs had been exhausted in the broader mortgage crisis. Investors learned the hard way in the 1890s that the "skin-in-the-game" that promotes diligence within a covered bond structure is not the mortgage loans on the issuer's balance sheet, but the value of its capital.

Federal Sponsorship of Covered Bond Programs

The Federal Farm Loan Bank System

The spectacular failure of the covered bond programs of the western mortgage companies was remembered for decades as a cautionary tale. It also left a void in the market for farm mortgages that was filled by a new generation of mortgage companies that relied exclusively on the old system of loan brokerage. The typical farm mortgage contract at the time was a balloon loan with a term of three to five years that the borrower had to renew one or more times before extinguishing the debt. Between 1908 and 1912 a "Rural Credits Movement" called for federal intervention into the mortgage market so that farmers in the U.S. could benefit from the same type of long-term, low-cost

[7] Some of the western mortgage companies placed into trust mortgages written to their employees on property the company had acquired after buying back defaulted brokered loans.

[8] For accounts of similar abuses by other mortgage companies see New York (*Annual Report* (1891), pp. 16-9). Snowden (1995, pp. 279-81) summarizes regulators' findings and criticisms of both operating and failed farm mortgage debenture companies.

amortized mortgage loans that had been written for decades within European covered bond systems (Herrick and Ingalls, 1915a). The movement grew strong enough to pressure President Taft and the Congress to create a commission to investigate European mortgage banking systems and to make recommendations for a publicly-sponsored covered farm mortgage bond system. The commission reported back to a joint hearing before the Banking Subcommittees of the Senate and the House in 1914, and that testimony provides an exhaustive discussion of covered mortgage bond practices as it existed at that time in Europe (United States, 1914).

A heated debate arose about which one of several European models would be most appropriate in this country—a quasi-public monopoly bank like the *Credit Foncier*, a cooperative land credit system along the lines of the German *Landschaften*, or a regulated system of private joint-stock mortgage banks. The compromise that took shape in the Federal Farm Loan Act of 1916 was a mixed model that included a publicly-sponsored cooperative mortgage lending system alongside a federally-chartered system of private joint-stock mortgage banks. Both systems were to issue covered mortgage bonds under the supervision of the Federal Farm Loan Bank Board.

The public, cooperative system was two-tiered. The foundation of the system was locally-based, voluntary cooperatives that were authorized to make loans to members of the association that met underwriting standards established by the Federal Farm Loan Board. These included a maximum loan-to-value ratio of fifty percent, a term of thirty years, and full amortization with privilege to prepay. After the loans were made they were sent to one of twelve district Federal Land Banks for approval after which Federal Land Bank Bonds could be issued in equal amounts. The bonds were the joint liability of the Land Banks and the Farm Loan Associations in a structure similar to the German *Landschaften*.

We are more interested here in the privately-financed Federal Joint-Stock Land Banks authorized under the legislation because they shared several features with covered mortgage bond models being considered today. The joint-stock bank charter was designed to attract private lending agencies so that they could issue regulated covered mortgage bonds rather than broker or hold farm mortgage loans. To enter the system the owners had to satisfy the minimum capital requirement of $250,000 and operate under strict regulation borrowed from the German private mortgage bank model (Horton et al. 1941). Each bank could issue bonds in a volume no greater than fifteen times their capital if they were fully secured by long-term, amortized mortgage loans that met the same underwriting standards that were set for the cooperative farm loan associations. Examiners of the district Farm Loan Bank served as the pool monitors in these structures and examined and registered each loan that was approved as collateral. Each joint-stock bank was fully liable to its bondholders, and enjoyed no implicit or explicit government guarantee. Private rating agencies graded the bonds of each joint-stock bank separately.

The joint-stock bank system was designed to draw in existing private farm lenders, especially farm mortgage companies. But the mortgage companies, instead, ended up opposing the federal system before and even after it had been passed.[9] The companies were not opposed to covered mortgage bonds, but they argued that joining the system would force them to abandon important elements of their existing business because of specific requirements of the charter. These included a restriction to lend only in the state in which the bank was located and one more contiguous to it, the prohibition on selling loans with recourse, which would have eliminated their brokerage businesses, and a requirement to write only long-term amortized loans so that they could not deal in the standard short-term, balloon loan (Schwartz, 1938, 21-2). The final bill contained none of the modifications suggested by the mortgage companies. In response they then raised objection to another feature of the bill—the bonds of both the Federal District Land Banks and the privately-owned joint-stock banks were fully exempt from federal taxes. The companies pursued the issue after the bill had passed, and their challenge regarding the constitutionality of the tax exemption led to legal proceedings that lasted until 1921 and that retarded the early growth of the system.[10]

Eighty-eight of the privately-owned Federal Joint-Stock Land Banks were ultimately chartered under these provisions, most of them before 1925. From then on the banks began to experience difficulties because of general distress in American agriculture, and the system was particularly shaken when three of the joint-stock banks entered receivership in 1927. Once the Depression took hold the Treasury provided relief so that the District Farm Land Banks could manage and supervise the joint-stock banks that were forced to liquidate. Emergency farm mortgage relief legislation that

[9] The opposition to the Federal Farm Bill actually led to the formation of the Farm Mortgage Bankers Association—the precursor to the modern Mortgage Bankers Association (Robins, 1916).

[10] O' Hara (1983) argues that the FHLB 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.

was passed in 1933 placed the remaining joint-stock banks in liquidation and prohibited the establishment of any additional institutions. The six-decade experiment in the U.S. with privately-financed, European-style covered farm mortgage bonds had ended.

A Covered Mortgage Bond System for the Residential Market?

With the establishment of the Federal Farm Loan Act proposals soon appeared for the creation of a central residential mortgage bank. The discussion began in 1919, but took more than a decade to resolve. In 1929 the Brookings Institute produced an assessment of "First Mortgages in Urban Real Estate Finance" (Gray and Terborgh, 1929). The report focused on the stubborn disparity in mortgage rates across regions despite the interregional activities of life insurance companies, real estate bond houses and the mortgage guarantee companies during the 1920s. The recommendation, therefore, was to establish a public, European-style central mortgage bank—similar to the Federal Farm Loan Bank system—that could place pools of nonfarm residential mortgages made by local originators behind covered mortgage bonds.

By 1931, when President Hoover convened a conference on home building and ownership in the midst of the growing mortgage crisis, it had become clear that a liquidity facility for residential mortgage lenders would soon be created under one of three proposals (Jones and Grebler 1961, 113-4). The National Association of Real Estate Builders supported a federal system of mortgage banks and joint-stock banks similar to the one recommended by the Brookings Institute. The Hoover administration favored a federal facility that could discount mortgages for a wide variety of approved mortgage lenders. The U.S. Building and Loan League favored the most restrictive plan, a home loan discount bank for only its members. Its proposal was adopted when the Federal Home Loan Bank System was established in 1932 to serve what would become the modern S&L industry.

The possibility of a federally-sponsored covered bond mortgage system was revisited when provisions to create the Federal Housing Administration and its mortgage loan insurance program were proposed in the National Housing Act of 1934. Although FHA loans were insured by the federal government, there was considerable doubt whether private lenders would be willing to invest and hold any long-term, amortized mortgage loan. To encourage participation in the FHA program, Title III of the National Housing Act authorized the FHA to charter privately-owned facilities that could provide liquidity for FHA mortgages by issuing covered mortgage bonds that used the loans as collateral. This provision of the bill generated attracted strong objections from the United States Building & Loan League and life insurance companies (United States, 1934a and 1934b).[11] Both groups had reason to be concerned about the potential entrance of a new mortgage lending facility, but their testimony focused as well on the unhappy events associated with the farm mortgage debenture debacle of the 1890s and the ongoing liquidation of the joint-stock farm land bank system. Others witnesses doubted that private capital would be forthcoming given that the housing sector was at the lowest point of the crisis.

Despite the opposition, Title III of the National Housing Act authorized the creation of a system of privately-owned, federally-chartered National Mortgage Associations to buy and sell FHA loans from mortgage originators. These associations were to be locally-based institutions that would buy, hold and sell FHA loans (see Jones and Grebler 1961, 115-9). The legislation did not limit the number or regional distribution of the associations, but required a minimum paid-in capital of $5 million. The bonds issued by an association had to be secured by FHA-insured loans, cash or federal government securities, and the total volume of its bonds could not exceed ten times paid-in capital. By 1937 not one National Mortgage Association had been organized despite modifications to the original legislation designed to attract private investors (Jones, 1961, 116).

In order to demonstrate the viability of the proposed system the Federal Housing Administrator authorized the Reconstruction Finance Corporation to sponsor the National Mortgage Association of Washington in February 1938. It was soon renamed the Federal National Mortgage Association and its first issue of $25 million of debentures was heavily oversubscribed. Despite the success of this experiment, the FHA announced in May that it would no longer process applications for private National Mortgage Association charters so that not one privately-owned institution was chartered under Title II of the National Housing Act.[12] The FNMA went on, however, to create a secondary market for FHA loans and, somewhat later, VA guaranteed loans. What had been abandoned, however, were plans to create a federally-chartered, private system of institutions that could issue covered residential mortgage bonds.

[11] The FHA insurance program took up much more of the hearing than any testimony on the National Mortgage Association.

[12] 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.", p. 25. Jones and Grebler (1961, p. 115) refer to the NMA proposal as a "frustrating episode."

Covered Bonds and the Long-Run Development of the Market

Although most of our experience with covered bonds took place in the farm mortgage market, we end by focusing on the nation's nonfarm residential mortgage because it is there that the introduction of covered mortgage bonds in the U.S. today are most likely to affect the long-run development of the mortgage market. Figure 1 provides a view of changes in the structure of that market over the past century.

The turmoil of the past decade pales in comparison to events in the residential mortgage market during the 1920s and 1930s. The volume of nonfarm residential mortgage debt tripled during the home building boom of the 1920s and financed an increase in the rate of nonfarm homeownership from 41 to 46 percent. The noteworthy structural change in the mortgage market during the decade was the rapid growth of two forms of privately-issued real estate securities that by 1929 funded nearly 10 percent of nation's outstanding residential mortgage debt. These innovations—single-property real estate bonds and participation certificates issued by mortgage guarantee companies—financed commercial as well as residential development in the nation's largest urban areas and were primarily directed toward the individual investor who played a much larger role in the residential market at that time. Both of these securities were early forms of off-balance-sheet securitization and were not covered mortgage bonds.[13]

During the 1930s the U.S. experienced record levels of nonfarm foreclosures, widespread distress among mortgage lenders, a collapse and weak recovery in homebuilding, large decreases in home values and a complete reversal of the gains in homeownership made during the 1920s. Against this backdrop the Home Owners' Loan Corporation had a sudden and large impact on the structure of the residential mortgage market (refer to Figure 1). Between 1933 and 1936 this federal agency operated as both a "bad mortgage bank" (by purchasing distressed mortgages from private lenders) and a loan modification program (by refinancing the mortgages with long-term, high-leverage, amortized loans). In three short years it had refinanced mortgages on one out of every ten owner-occupied homes and held nearly 10 percent of the nation's home

[13] See Goetzmann and Newman (2010) and Snowden (2010a) for discussions of both instruments.

mortgage debt. HOLC's lending activities ended in 1936 after which the agency existed another fifteen years to service its mortgage portfolio.[14]

A second striking change in market structure during the 1930s was the disappearance of the private securitization structures that had grown so rapidly during the previous decade. Although the decline in the share of private real estate securities looks gradual in Figure 1, the actual process was not. Nearly all of the real estate bond houses and mortgage guarantee companies that had issued real estate securities during the 1920s failed during the early 1930s. From this point on investors holding these securities went through complicated and protracted proceedings in order to liquidate the underlying mortgage assets. Some of these resolutions took more than a decade during which state authorities had to act as receivers and modifications of state and federal law were required to help resolve conflicts among the parties who owned the loans. The failures of these securitization structures were so widespread, complex and costly that private mortgage insurance and privately-sponsored securitization disappeared entirely from the U.S. residential mortgage market for decades.

As we have seen earlier, the prospects for a covered residential mortgage bond system in the U.S. also diminished severely in the 1930s. But traditional portfolio mortgage lenders sought and received several regulatory interventions during the decade that strengthened their mortgage lending operations. The Building & Loan industry, which had been the nation's largest source of home mortgages before 1930, was transformed into the modern Savings & Loan sector with the creation of the Federal Home Loan Bank System's discounting facility in 1932, a new system of Federal S&L charters, and an insurance program for S&L share accounts. A second important development was the creation in 1934 of the FHA mortgage loan insurance program that was discussed above. Although the companion covered mortgage bond system authorized by the legislation never materialized, FHA loans became important to the lending activities of mortgage companies, commercial banks, mutual savings banks and life insurance companies—none of which participated in the FHLB system. After the Federal National Mortgage Association was established to serve as a dedicated secondary market facility for FHA loans in 1938, therefore, all of the traditional mortgage portfolio lenders were supported by new federal structures.

[14] HOLC is currently drawing substantial attention in the academic literature. See Fishback et al (2010), Rose (2010) and Courtemanche and Snowden (2010).

Traditional portfolio lenders performed well within their new federal structures during the immediate post-World War II period. The S&L industry focused on local mortgage markets and small-scale builders; commercial banks and mortgage companies used FHA and VA loans to finance large tract builders and multifamily projects; and life insurance companies and mutual savings banks used insured and guaranteed loans to serve the interregional residential mortgage market through networks of closely-affiliated mortgage companies. With all of this activity supported by the FHLB and FNMA secondary market facilities, the share of the nation's residential mortgage debt that was held by the portfolio lenders swelled to eighty percent and financed a historic surge in homebuilding and homeownership during the 1950s and early 1960s (see Figure 1).

Despite the accomplishments, there were several disadvantages associated with relying so heavily on portfolio lenders. Strict regulatory boundaries, for example, limited competition and discouraged innovation. The more telling weakness, however, was the inability of portfolio lenders to profitably underwrite the risks of funding long-term, fixed-rate mortgages when nominal interest rates, driven by inflation, became variable around high levels in the 1970s. Institutions that relied on short-run deposits were particularly vulnerable, but even the life insurance companies, which had been successful farm and residential mortgage lenders for more than a century, dramatically reduced their portfolio of residential mortgage loans. It took more than a decade, and a full-blown thrift crisis, for the depression-era S&L industry to do the same.

Securitization reappeared in the U.S. in the 1970s to supplant the failing mortgage system that had been forged during the 1930s mortgage crisis. Securitization was not sponsored this time by private entities, as it had been in the 1920s, but by a federal agency (Ginnie Mae) and federally-sponsored GSEs (Fannie Mae and Freddie Mac) that had been carved out of the FHLB and FNMA secondary market facilities that had been created four decades earlier to support portfolio lenders. Agency- and GSE-sponsored securitization made modest inroads at first, but captured virtually all of the mortgage business lost by insurance companies and savings institutions during the 1980s.

During this period private agencies began to repackage the cash-flows from federally-sponsored mortgage securities in order to offer investors other securities that offered different exposures to the prepayment and interest rate risks that had proven to be so troublesome for portfolio lenders. The trajectory and composition of securitization then changed in the 1990s, however, as the GSEs began to hold large volumes of mortgages and securities within their own portfolios, and private issuers began to securitize mortgage pools that contained the types of loans that the GSEs, at least at first, would not. We continue to debate the role that the GSEs played in our recent crisis, and changes in their structure and mission are sure to play a decisive role in the future development of the residential mortgage market.

But the topic of this hearing is the potential role that covered bonds will play in the future, and the chronology we have just reviewed reveals some striking similarities between the decisions Congress faces now and the ones that it confronted in the 1930s. Then, like now, it was responding to a mortgage crisis which had brought into focus severe problems with the private securitization structures that had grown so rapidly in the previous decade. Then, like now, it considered establishing a covered mortgage bond market to serve as a new funding channel for a housing market in distress. The legislation authorizing a covered mortgage bond system passed in the 1930s, but the system failed to materialize. What followed is the pattern of development and chain of events that has brought us here today. I hope that recounting this history provides some assistance to the committee as it helps to shape the next chapter.

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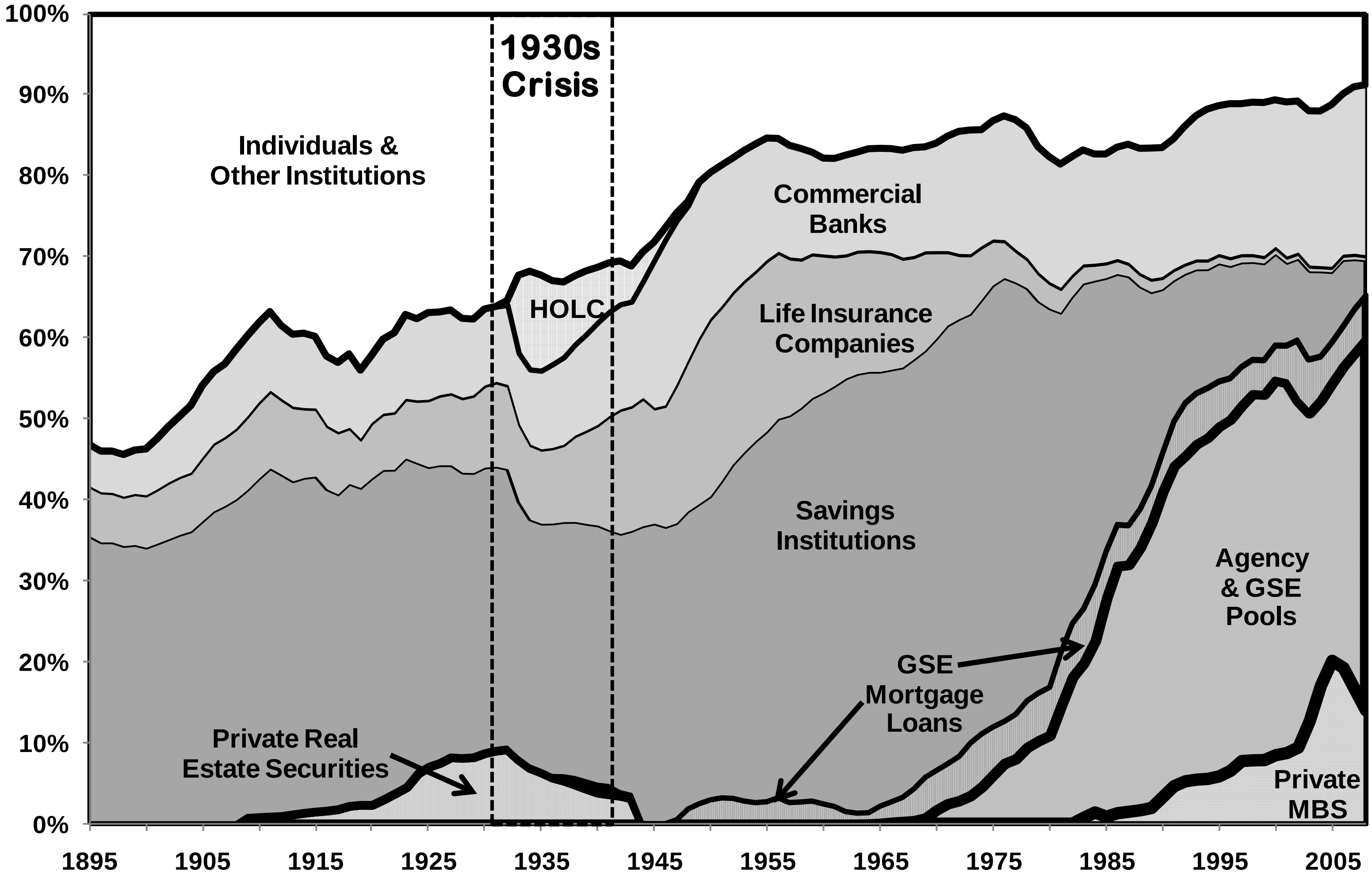
FIGURE 1
Shares of Nonfarm Residential Mortgage Debt, 1896-2009



Source: 1896-1944: Grebler, 1956, N-1, N-2; 1945-2009: Board of Governors, Z-1.