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CHAPTER 2

THE PATCHWORK

MORTGAGE MARKET

IN THE 1920S

Home building added more than its fair share to the roar of the 1920s. A residential construction boom was fueled by rapid income growth and population expansion in urban areas, particularly in the South and West.¹ These new homes were funded by a historic expansion of residential mortgage debt through a diverse set of lenders using a variety of contracts. The boom led to peaks in nonfarm home ownership and mortgage debt.

Yet the boom did not obviously contribute to the subsequent mortgage crisis in the same way that the housing boom of the early 2000s did to the recent crisis. Although the volume of mortgage lending expanded to meet the intense demand during the 1920s, the structure of the contracts that were used ultimately proved to increase the fragility of the mortgage market more than any deterioration in lending standards. For this reason these loan practices generally disappeared during the crisis of the 1930s. In this chapter we describe the patchwork mortgage market of the 1920s and why it ultimately failed during the Depression. When the HOLC was created in 1933, it was created with the background of a generation of new borrowers and lenders who discovered that, after four years of devastating depression, their home investments were far more vulnerable than they could ever have anticipated.

The 1920s Boom

The United States entered the 1920s facing an acute demand for more housing that had appeared during World War I. The housing shortage was quickly

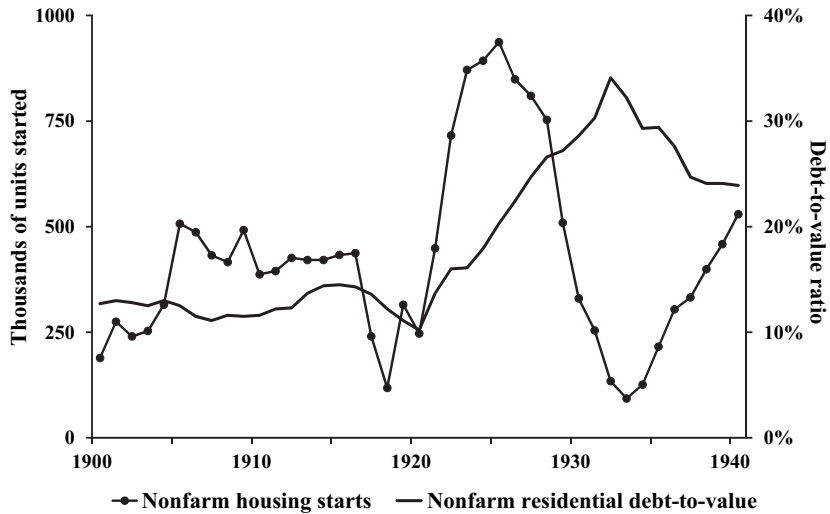


Figure 2.1. *Nonfarm residential housing starts and debt-to-value ratios for the United States, 1900–1940. (Data from Grebler, Blank, and Winnick 1956, table L.6.)*

relieved, however, by an unprecedented home-building boom. The volume of residential construction during the 1920s (figure 2.1) rose out of all proportion relative to earlier production levels and more than offset the impact of wartime dislocation. Annual nonfarm housing production during the 1920s nearly doubled its 1900–1910 level and sustained levels between 1922 and 1928 more than 50 percent higher than the peak in any previous year.² The volume of nonfarm mortgage debt that financed nonfarm residential construction rose even more rapidly than the rise in the nonfarm housing stock during the decade. As a result, the ratio of residential mortgage debt to residential housing wealth more than doubled, from 14 percent to nearly 30 percent in the 1920s.³

Although the growth rate of home mortgage lending was faster during the 1920s than in any other period of similar length in the twentieth century, the expansion took place within a market that was still financially immature relative to modern standards. Mortgages were not used nearly so widely in 1920 as they are today. Only 41 percent of the nation’s nonfarm housing units were owner-occupied in that year, and only 40 percent of those properties were

mortgaged.⁴ Individuals and other non-institutional investors held more than 40 percent of outstanding residential mortgage debt, compared to virtually none today, as shown in figure 2.2.⁵ Borrowers seeking second mortgages most often dealt with these non-institutional lenders. Further, the federal government played a very limited role in the 1920s markets. The only federally supervised mortgage lenders were national banks, and for most of the decade federal regulations prohibited them from holding more than a small portion of their assets in residential mortgage debt. The result was a patchwork of largely local mortgage finance institutions with fragmented regulation and supervision by state governments.

During the 1920s, mortgage lending through mutual savings banks, commercial banks, and life insurance companies grew nearly as fast as the overall market, but there were important limitations on the lending activities of each of these groups. Mutual savings banks were heavily concentrated in New

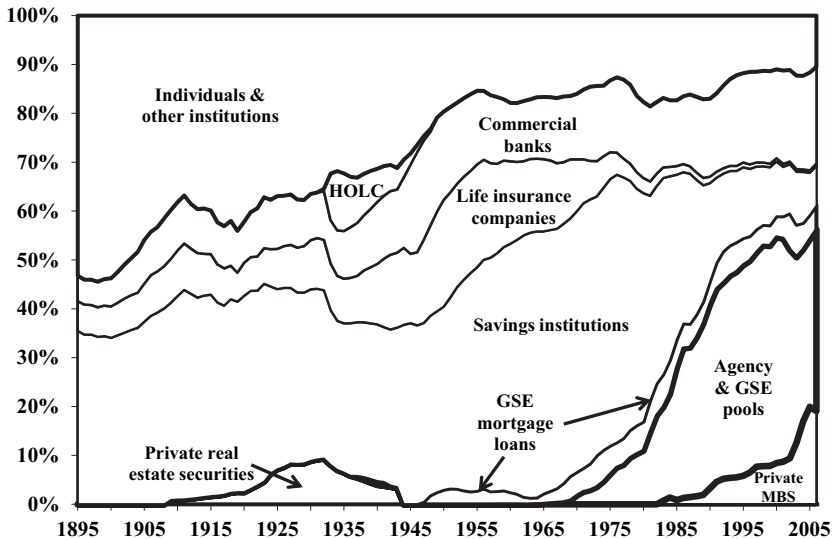


Figure 2.2. Sources of nonfarm residential mortgage debt, 1896–2007. Savings institutions include mutual savings banks, B&Ls, and savings and loans. GSE stands for government-supported enterprises, such as Fannie Mae and Freddie Mac, and MBS stands for mortgage-backed security. (Data for 1896–1944 from Grebler, Blank, and Winnick 1956, tables N.1, N.2. Data for 1945–2008 from Board of Governors of the Federal Reserve System, Z-1 statistical release.)

England and the mid-Atlantic region but virtually absent in the South and West, where state-chartered commercial banks and affiliated mortgage companies and brokers often served as significant lenders. Eastern life insurance companies, on the other hand, had been the largest interregional farm mortgage lenders for decades but had just started to expand into the residential field in the 1920s.

The fastest-growing and most active institutional mortgage lenders were the B&Ls. The typical B&L was a small, local institution owned mutually by members who contributed weekly or monthly dues that were pooled and lent to other members as home mortgages. By 1920 B&Ls were operating in every state. B&Ls were typically not constrained by the entry barriers facing most regulated financial institutions, because people seeking to organize new charters rarely needed to demonstrate to regulators that local credit needs were not being met by existing institutions. As a result, the number of B&Ls grew from eight thousand to thirteen thousand during the 1920s, B&L membership rose from four to twelve million people, and total assets rose from \$2.5 billion to \$8 billion. B&Ls also responded more aggressively than other lenders to the regional shift of population and home building to southern and western markets.⁶

Mortgage Contracts

A variety of different mortgage loan types were used in the residential mortgage market during the 1920s lending boom. None matched the thirty-year, amortized, fixed-rate mortgage that has dominated lending since World War II. The modern amortized loan contract specifies equal monthly payments with no balloon payment at the end, although amortization has a more general meaning of paying off debt over time with regular payments. Short-term balloon mortgages had long been the most common contract form, but the expansion of B&Ls led to a large number of borrowers with B&L-style contracts known as share-accumulation contracts, explained further below. To borrow more than 50 or 60 percent of the value of the home, borrowers had to take out second mortgages at much higher interest rates from nontraditional lenders. In the Chicago and New York metropolitan areas, mortgage guarantee companies followed the modern practice of developing bonds backed by mortgages. However, the bonds accounted for a relatively small share of mortgage funding, in contrast to the active market in mortgage-backed securities that developed at the turn of the twenty-first century. Each of the mort-

gage contracts contained specific design elements that were not problematic in normal periods but helped transmit and amplify the foreclosure crisis that developed in the 1930s.

SHORT-TERM BALLOON LOANS

Short-term balloon loans were among the most common mortgages in use before 1930. They usually lasted for a short time, such as from three to five years, were written for no more than 60 percent of the property value, and required only interest payments during the life of the contract. At the end of the loan, a borrower repaid the principal in what is known as a “balloon payment” because the principal was typically more than one hundred times larger than the monthly payment. For example, under a five-year contract for a loan of \$1,000 at 6 percent interest, a borrower paid \$5 in interest to the lender each month for five years. At the end of the five-year period, the borrower then repaid the \$1,000 of principal.

These contracts had been used for decades in the farm and commercial mortgage markets in the United States, even though borrowers often complained bitterly about the short term of these loans relative to the long-term investments in land they were used to finance. The mismatch meant that borrowers normally had to renew or “roll over” the loan one or more times before they could afford to save enough to repay the entire principal. These renewals, borrowers alleged, opened them to risks regarding changes in interest rates, additional commission charges, changes in underwriting standards, and excessive legal fees. Farmers’ complaints about these mortgage contracts intensified in the decade before World War I. In 1916 the US Congress established the Federal Farm Loan System, which began offering farmers relatively long-term, amortized mortgages with equal payments throughout the loan term. No parallel system was set up for nonfarm residential loans, however.

Many lenders relied on these traditional renewable, short-term balloon loans during the 1920s. Mutual savings banks, for example, were some of the oldest mortgage-lending institutions in the nation and were heavily concentrated in large urban markets in New England and the mid-Atlantic states. A study of residential mortgage loans made by Massachusetts mutual savings banks between 1918 and 1931 found that only one-tenth of nearly ten thousand loans used amortization to even out the payments and reduce the size of the balloon payment at the end of the loan. Even then, the scheduled principal payments on the few loans that did use amortization were often unpaid.⁷

Commercial banks were most active as mortgage lenders in the South and West and were often required by regulation to hold only short-term loans. Mutual savings banks faced similar requirements. Two out of three loans in a national sample of home mortgages made by commercial banks during the 1920s were written for terms of four years or less. Eastern life insurance companies also served western and southern markets through interregional lending networks that they had developed over decades of activity as important farm mortgage lenders. Although the insurance companies relied heavily on straight mortgage loans during the 1920s, they offered longer repayment schedules and made more use of partial amortization than did savings and commercial banks. Individual investors, who held two-fifths of the residential mortgage debt in the 1920s, probably relied even more heavily on short-term balloon loans than these institutional lenders, because long-term amortized loans carried more lending risks and expenses.⁸

BUILDING AND LOAN SHARE-ACCUMULATION CONTRACTS

B&Ls were the most important institutional residential mortgage lenders in the 1920s. B&Ls relied most heavily on a “share-accumulation” mortgage contract that provided the borrower with the ability to make monthly payments that slowly added up, so that the principal debt could be repaid without a large payment at the end of the contract. This method was similar to amortization, but the difference lay in how the monthly payments were applied. An amortizing mortgage contract applies the non-interest portion of a monthly payment directly to reducing the principal debt at the time the payment is made. As a result, the amount of principal to be repaid is reduced each time a payment is made. In contrast, the B&L share-accumulation contract invested the non-interest portion of the monthly payment in the shares of the B&L association. Those shares constituted a “sinking fund.” Over time the payments into the sinking fund earned dividends and accumulated to the point at which the funds equaled the principal on the loan. At that time the sinking fund was then used to pay the principal of the loan in full, and the borrower received full title to his home. As a result, the borrower owed the entire principal throughout the period of the loan. If the sinking fund assets fell in value, the borrower would have to make additional payments until the assets in the sinking fund reached the amount of the principal.

Besides the simulation of amortization, there were several important advantages to the B&L loan contract. First, associations were truly mutual socie-

ties because both borrowing and nonborrowing members held full ownership stakes. The mutuality provided both types of members with higher returns on savings than they could obtain on savings accounts at commercial banks. After 1914 members received additional benefits because they did not have to pay federal income tax on deposit accounts, although this advantage accrued to only the small share of households that earned enough income to be required to pay income taxes. Finally, because the share-accumulation contract created a sinking fund, the incentive for the borrowing member to repay became stronger throughout the life of the loan. Failure to make payments and defaults on the loan meant that members lost not only the house but also the accumulated value in the sinking fund. In contrast, balloon loans gave no such incentive. With this additional security, B&Ls were able to offer borrowers not only longer maturities than other lenders but also larger loan amounts that ran up to 60 percent or even two-thirds of the property's value.⁹

THE PROLIFERATION OF SECOND MORTGAGE LOANS

The 50 to 60 percent loan-to-value ratio requirement for first mortgage loans kept many potential home owners of good character from purchasing homes because they had not yet saved enough for a down payment. As lenders and borrowers looked for methods to relax the high down-payment requirements, the use of second mortgage loans proliferated in the 1920s. H. Morton Bodfish, one of the leading chroniclers of housing markets at the time, provided a snapshot of how extensively second mortgages were used in Chicago. He collected public records on the original financing of sixty-nine homes purchased over a three-month period in 1925. One-half of the transfers were financed with only first mortgages with an average loan-to-value ratio of about 50 percent. The remaining loans were financed with both first and second mortgages and had average loan-to-value ratios of 64 percent; the ratios were 41 percent on the first mortgage and 23 percent on the second. For both groups, on average, the first mortgage loans had five-year maturities, interest rates of 6 percent, and commissions and fees that added 1.2 percent to the annual effective interest rate. The second loans, on the other hand, carried much higher effective interest rates of 11.6 percent with an added requirement that each borrower pay 2 percent of the second loan principal every month so that it would be fully repaid over just five years. There were substantial costs, therefore, associated with the use of second mortgage financing.¹⁰

A 1931 investigation also shows how deeply second mortgage loans had

become embedded in the mortgage market by the end of the 1920s. A survey of lenders in West Coast cities indicated that two-thirds to three-quarters of borrowers used first and second mortgages. The average loan-to-value ratio for homes that combined the two ranged between 70 and 75 percent. As in Chicago, interest rates on second mortgage loans were substantially higher than on first mortgage loans. Second mortgage lenders held junior liens on the home, which meant that in a foreclosure, the first mortgage lender received full compensation before the second mortgage lender received any payments. The greater risk from the junior lien contributed to the higher interest rate on the second mortgage loan.¹¹

The investigation also reported that the second mortgage loan market was institutionally immature. Most of these loans were made by the previous owner for existing homes and by home builders and building-material suppliers for newly constructed homes—the large set of non-institutional investors in figure 2.2. Relatively few financial firms specialized in second mortgages, even in the largest urban centers.

MORTGAGE GUARANTEES AND EARLY MORTGAGE-BACKED SECURITIES

Mortgage guarantee companies brought two innovations to the residential mortgage market in the 1920s—private mortgage insurance and the creation of a form of mortgage-backed securities. At first the companies offered mortgage insurance as a stand-alone product, but in the 1910s some guarantee companies began to combine it with mortgage banking by originating, selling, and servicing loans that they had insured. In 1921 only twelve companies in New York were active in this business, but by 1930 some fifty guarantee companies in the state had written insurance on \$3 billion in loans, equal to one-tenth of all outstanding residential mortgage debt, on mortgages that they had originated and marketed.

The guarantee companies helped develop a secondary market for loans by selling them to investors. They sold about \$2 billion in insured loans as whole loans to investors. When marketing the remaining \$1 billion in insured loans, they also created two types of mortgage-backed securities by placing mortgages in trust accounts against which the companies issued “collateral trust certificates of participation.” Some of the trusts contained only a single insured mortgage, and certificates were issued to several investors. Other trusts

contained pools of insured mortgages, and “group certificates” were issued in a manner similar to modern mortgage-backed securities.¹²

The Beginnings of a Decline

By 1929 the forces that had been driving the housing and mortgage boom of the 1920s had about played out. The peak of the housing production boom had occurred in 1925, although housing starts continued to exceed prewar levels. The ratio of mortgage debt to home values, on the other hand, continued to climb into the early 1930s to levels never seen before. Part of the reason for the rise was the decline in housing values that began sometime between 1925 and 1930. Nonetheless, there was little concern expressed at the time that mortgage indebtedness represented a danger. By modern standards the debt-to-value ratios, known as “leverage,” were not excessive, even in hindsight. The mortgage lending contracts seemed to be working reasonably well despite the declines in housing prices and building activity in the late 1920s.

But each of the mortgage contracts in the 1920s turned out to be much more fragile to the shocks associated with the Great Depression than borrowers or lenders could have imagined a few years before. The short-term balloon loan was so common during the 1920s that millions of home owners were stuck trying to renew their mortgages in the early 1930s just as the Great Depression and the foreclosure crisis began to accelerate. Many lenders came under pressure at the same time. Households were drawing down savings and thus withdrawing deposits and cashing out life insurance policies, while lenders’ investments were failing. As a result, funds available for loans declined sharply.

When balloon payments came due, a number of lenders allowed borrowers to continue making interest payments in hopes that the borrowers could regain footing and repay the principal. Even in cases where lenders were willing to renew, borrowers found it increasingly difficult to pay the fixed administrative costs of the renewal process because of reductions in work hours or job loss. The problem was exacerbated further as home values fell and borrowers had to come up with extra funds to ensure that the loan-to-value ratio on the loan stayed below 60 percent.

If a borrower could find a lender willing to roll over the loan or temporarily allow a continuation of the loan at the same nominal interest rate, the situation was still dire. The annual average 6.7 percent rate of deflation between

1929 and 1933 meant that each dollar repaid was more valuable than the dollar the home owner originally borrowed. Irving Fisher, an economist widely renowned for his work on interest rates, provided the basic framework that is still used today for thinking about these issues. Fisher defined the “real” rate of interest as the interest rate after adjusting for the percentage changes in the price level. In his simplest calculations, the real rate was defined as the “nominal” interest rate on a loan contract minus the growth rate of the price level. In the late 1920s, when interest rates on mortgage loans averaged around 6 percent and the price level grew 1 percent, the real rate of interest was around 5 percent. In the 1930s the nominal rate on mortgage loans stayed around 6 percent, but the deflation of 6.7 percent meant that the price level was growing at -6.7 percent. After subtracting the -6.7 percent inflation rate from the 6 percent nominal rate, the real rate of interest had grown to 12.7 percent. This real rate of interest was roughly double the level of the highest real mortgage loan rate the United States has seen since, and quadruple the typical real rate over the century before this book was written. The problems of renewing the mortgage loans combined with the extraordinarily high real costs of loans placed home mortgage borrowers at greater risk of default and foreclosure as the economy sank deeper into the Great Depression.¹³

Some lenders, like Citizens Savings and Loan Society in dealing with Joshua in chapter 1, waited to foreclose even though borrowers were making no payments. After some time, however, lenders chose to foreclose, often because they faced their own liabilities to depositors, shareholders, or the insured. Too large a share of unpaid mortgages on a lender's books could lead to the failure of the lender.

There was also an important weakness in the share-accumulation mortgage loan contract that eventually caused severe distress among thousands of B&Ls and their members when the housing crisis expanded. Borrowing and nonborrowing members in a B&L shared in the association's losses as well as its profits. Sharing of profits during the 1920s was quite popular, as it meant that sinking funds accumulated at even faster paces. But when profits turned to losses, sinking funds shrank. During the mortgage crisis of the 1930s, many borrowers in B&Ls saw their share accounts decrease in value as other members in their association defaulted on their own payments on the mortgage loans and B&L memberships. The decrease in the accounts meant that the borrowers had to increase the total amount that they paid into their

sinking funds before they could fully pay off their debts and take full ownership in their homes. In this way the disadvantage of investing principal payments in a sinking fund was exposed. This problem is one reason why modern mortgages are constructed so that principal payments are used to directly pay down the debt immediately. The interplay between borrowing members and losses at B&Ls led to widespread failures within the B&L industry, thousands of protracted and complex B&L liquidations, and the complete abandonment of the share-accumulation contract by World War II. The once quite popular share-accumulation contract is now a historical curiosity.

The proliferation of second mortgages just made the foreclosure crisis worse when borrowers fell behind on their home payments or could not pay the principal when a balloon loan came due. In normal times these situations could often be resolved, but the presence of second mortgages during the Depression greatly complicated the negotiations between borrowers and lenders. Even though the contracts specified the procedures for foreclosure in these cases, often lenders were not anxious to incur the costs and losses of foreclosure. Yet the negotiations for modification were more complicated because two lenders were involved. Guaranteed mortgages and mortgage-backed securities created similar problems because the presence of the underwriting house in these transactions represented a third party in all attempts to deal with delinquent mortgages. The problem was similar, but far less serious in volume, to the problems that have arisen in the modern era with mortgage-backed securities.

These weaknesses in mortgage contracts increased pressures within lending markets that helped amplify the foreclosure crisis that accompanied the Great Depression. Simultaneous declines in income and housing prices during the early 1930s led a large number of home owners to default on their loan payments and lenders to foreclose on them.