FEDERAL RESERVE BANK OF RICHMOND

MONTHLY REVIEW

Volume 58
Number 9

SEPTEMBER 1972

Structure of the RESIDENTIAL MORTGAGE MARKET

Introduction Widespread home ownership has long been regarded in this country as a source of social and economic stability as well as an indicator of a relatively high standard of living. Accordingly, the Federal government has made a substantial effort to encourage the building of privately owned homes by the nation's populace. Mortgage financing is typically used in the purchase of a home because the requisite cash outlay would be far beyond the means of most buyers. To make home ownership widely available, the Federal government has tried both to increase and to stabilize the flow of funds into mortgages and to ease the terms under which mortgages are available.

During the Great Depression of the 1930's, the Federal government undertook a number of actions to rebuild the struggling mortgage market. These measures led to the creation of various government operated agencies and to the encouragement of private financial institutions specializing in residential mortgages. On various occasions since the 1930's, particularly when the availability of credit has been limited and interest rates have been high, further government participation in the mortgage market has occurred. By mid-1972, a highly complex array of private, governmental, and semigovernmental institutions comprised the residential mortgage market. This article clarifies the structure of the mortgage market by describing the activities of the institutions channeling savings into mortgages.

The Flow of Funds To shed some light on the structure of the residential mortgage market, a flow diagram, depicting the various institutional channels a dollar of savings might travel on its way into a mortgage loan, has been developed. The supply of savings on the left side of the diagram represents only that portion of total savings (income minus consumption) that has been attracted into the residential mortgage market instead of the market for numerous other forms of financial and real investments also competing for the total supply of savings. The solid arrows indicate the flow of savings into mortgage loans rather than the movement of mortgage securities from originators of loans to possible secondary holders. Dashed arrows refer to insured or guaranteed arrangements in conjunction with flows of funds.

The institutions listed in the first column issue primary securities to savers and then use the funds to purchase mortgages originated by other lenders. Three of these agencies, the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), the Government National Mortgage Association (GNMA or Ginnie Mae), and the Federal National Mortgage Association (FNMA or Fannie Mae), are at least partially government sponsored. The fourth agency, the MGIC Mortgage Corporation (MGIC or Maggie Mae), is a completely private purchaser of mortgages in the secondary market.

The next column represents the depository and contractual savings institutions that engage in numerous mortgage lending activities. The depository institutions originate both conventional and government guaranteed mortgage loans and buy and sell mortgages in the secondary market. Life insurance companies, however, restrict their portfolio of mortgages to those acquired in the secondary market.

Mortgage companies do not hold a permanent portfolio of mortgage loans but instead resell nearly all of the mortgages they originate. Thus, in the diagram they are directly linked to mortgage borrowers but only indirectly linked to savers.

The most conspicuous form of Federal government participation in housing finance is shown at the bottom of the diagram. Using funds directly acquired from the U. S. Treasury, the Department of Housing and Urban Development—via the Federal Housing Administration and GNMA—subsidizes certain types of residential housing. Through a variety of projects, HUD and the FHA have combined to further slum clearance and make home ownership available to the urban poor.

The Depository Institutions Although the three types of depository institutions shown in the diagram are privately owned and operated, they are subject to certain Federal and state regulations. Savings and loan associations, for example, are restricted in that they must invest almost exclusively in mortgages. To enhance their ability to compete with commercial banks for savings deposits, savings and loan associations are allowed to pay a higher interest rate than banks on such deposits. Partially as a result of this regulation, total savings deposits at savings and loan associations are currently about 85% as large as

total savings deposits at commercial banks, even though there are less than half as many savings and loan associations. Fulfilling the role assigned them, savings and loan associations have regularly invested about 95% of their deposits in residential mortgages. Of the more than $160 billion in residential mortgage loans held by savings and loan associations at the end of 1971 (see Table I), nearly 88% were conventional loans. The remainder were either guaranteed by the Veterans Administration or insured by the Federal Housing Administration. A small number of these government-backed mortgages held by savings and loan associations were acquired through mortgage companies that had originated the loans. Each of these relationships is indicated by the appropriate arrows in the diagram.

Mutual savings banks, most of which are located in Northeastern states, also engage heavily in residential mortgage lending. They are not, however, as restricted in their investment policies as are savings and loan associations, even though they have been given the same interest rate differential. Thus, only about 70% of their savings deposits have been invested in mortgages in recent years. Also, more than half of their mortgage portfolio consists of FHA and VA backed loans, reflecting the fairly large volume of mortgages purchased from mortgage companies. In recent years, nearly one-third of all residential mortgages held by mutual savings banks have been originated by mortgage companies.

Commercial banks have not traditionally been as active in the housing market as have nonbank thrift

Table I

RESIDENTIAL MORTGAGE LOANS

($ billions)

	December 1970		December 1971	
	Outstanding	Percent	Outstanding	Percent
Total	$338.2	100.0	$374.7	100.0
Savings and Loan Associations	138.8	41.0	159.7	42.6
Mutual Savings Banks	49.9	14.8	53.0	14.1
Commercial Banks	45.6	13.5	52.0	13.9
Life Insurance Companies	42.7	12.6	41.4	11.0
FNMA	15.5	4.6	17.8	4.8
Others	45.7	13.5	50.8	13.6

Source: Federal Reserve Bulletin, June 1972.

institutions. Instead, commercial banks have engaged primarily in commercial and consumer lending. Substantial increases in time deposits since 1960, however, have allowed banks to make more mortgage loans, especially during periods of easy money and low interest rates. Normally, most mortgages issued by banks have a lower loan to value ratio and a shorter maturity than those issued by nonbank thrift institutions. Only a little more than 20% of time and savings deposits at banks have found their way into residential mortgages. About 75% of these loans have been of the conventional type in recent years.

Life insurance companies participate in the residential mortgage market almost exclusively through

STRUCTURE OF THE RESIDENTIAL MORTGAGE MARKET

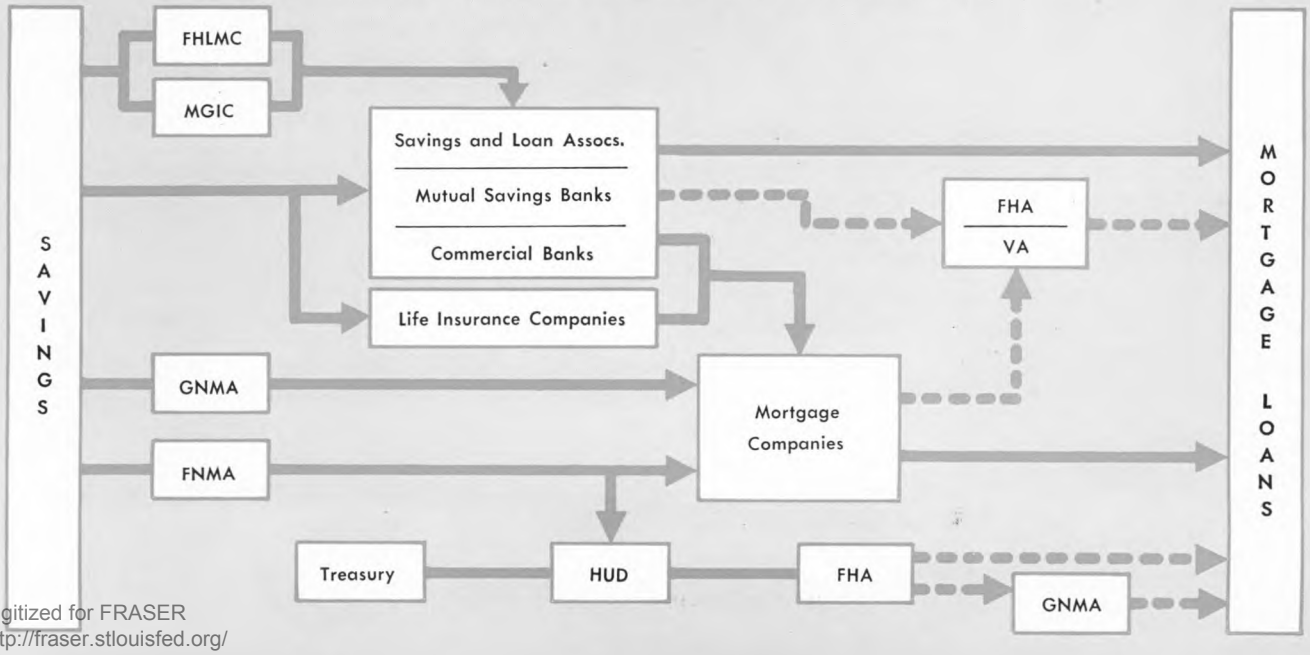

Table II

DISTRIBUTION OF VA AND FHA LOANS

December 1971
(estimated)
($ billions)

	FHA	Percent	VA	Percent
Savings and Loan Associations	$13.8	17.0	$10.8	27.3
Mutual Savings Banks	16.1	19.8	12.1	30.6
Commercial Banks	8.3	10.7	3.0	7.6
Life Insurance Companies	10.8	13.3	5.0	12.7
FNMA	12.7	15.6	5.0	12.7
Others	19.5	24.0	3.6	9.1
Total	$81.2	100.0	$39.5	100.0

Source: Federal Reserve Bulletin, June 1972.

the secondary market, relying largely on mortgage companies to originate the loans. Although both the yield and maturity of mortgages are attractive to life insurance companies, the process of originating them would require operational activities ill-suited to insurance companies. Recently, life insurance companies have been investing somewhat less than they once did, but they still hold over 20% of their total assets in residential mortgages, with about one-third of these backed by the FHA and VA.

Government Guarantees and Insurance Until the mid-1960's, most of the Federal government's overt efforts to improve housing finance were conducted through the Federal Housing Administration and the Veterans' Administration. To reverse the widespread foreclosures on mortgages during the Great Depression, the FHA was conceived in 1934 for the purpose of insuring residential mortgages made to individuals of modest economic circumstances. Insurable loans currently are limited to a maximum of $33,000 with down payments graduated from 3-15%, depending on the size of the loan. The property also must be appraised and approved by the FHA. In the 1960's, FHA programs to provide funds in the form of subsidies, as well as insurance, were introduced.[1] Typically, an FHA insured loan has an interest rate somewhat lower than rates on comparable conventional loans. The lower rate is acceptable to most mortgage lenders because of the reduced risk and better marketability of the loan, as can be seen from the wide ownership of such loans indicated in Table II. The cost of the insurance, one-half of one percent of the outstanding value of the loan, is paid by the borrower. In case of default, the lender may receive either cash or FHA debentures in exchange for the property. The debentures are fully guaranteed by the U. S. Treasury but carry a slightly higher yield than comparable Treasury securities.

During periods of tight credit and high interest rates, ceiling levels on FHA mortgages are usually below conventional mortgage rates. In this instance, most lenders are willing to engage in FHA financing only at a discount from the face value of the loan, thus raising the effective yield. Since 1961, the FHA has subsidized a variety of loans in addition to insuring them. Many of these programs call for the FHA to pay the difference between the reduced house payment a low income individual can afford and the fair market payment. This type of program has expanded considerably in recent years.

The VA operates under many of the same conditions as the FHA, except that its programs are restricted to qualified veterans. Also, loan to value ratios are usually about 98% but may run as high as 100%. On defaulted loans, the VA pays cash for a portion of the loan and exchanges its debentures for the remainder. The borrower pays no fee as in the case of an FHA loan. Most VA programs merely guarantee loans, although funds are available in some instances.

Mortgage Companies One important group of participants in the mortgage market often goes unnoticed, because its members do not hold a permanent portfolio of mortgages. These are mortgage banks or mortgage companies. The volume of mortgage activity conducted by these institutions is shown in Table III. Mortgage companies utilize short-term funds borrowed from commercial banks to originate and close mortgage loans that they eventually sell to other financial institutions, a process indicated by the relationships shown in the diagram. During most of the 1960's, mortgage companies sold to life insurance companies and mutual savings banks about 60-70% of the loans they originated. About 90% of the residential mortgages originated by mortgage companies are FHA insured or VA guaranteed, which enhances the marketability of the loans. Although the Federal National Mortgage Association bought a number of loans made by mortgage companies in the latter 1960's, this trend was substantially reversed in 1971 and, so far, in 1972.

Government Agencies and the Secondary Market In the latter half of the 1960's, rapid economic expansion laid the groundwork for substantial housing demand. More people were earning higher incomes

[1] See "FHA Mortgage Insurance and Subsidies," *Business Conditions*, Federal Reserve Bank of Chicago (March 1972), pp. 8-15 and John H. Hand, "Government Lending Agencies," *Financial Institutions and Markets*, ed. Murray E. Polakoff (Boston: Houghton Mifflin Co., 1970), pp. 230-236. The Hand article also describes VA, FNMA, and GNMA.

and aspiring to higher standards of living, including ownership of attractive homes. In addition, greater attention was given by the government to the housing problems of the urban poor. This growing demand for housing created a strong demand for mortgage funds at a time when other participants in the capital market were also aggressively seeking funds. These factors, in conjunction with various economic and stabilization policy forces, eventually produced historically high interest rates and a limited availability of credit, which severely reduced the flow of funds into mortgages. One of the reasons that the mortgage market was unable to attract its customary share of funds was the relatively underdeveloped state of the secondary market for mortgages. Many suppliers of funds to the capital markets had avoided investing in mortgages because these instruments limit portfolio flexibility. Most mortgage loans are characterized by such features as appraisal standards, loan to value ratio, and certain local variations, all of which reduce the marketability of mortgage securities.

Given the high social and political priority accorded housing in this country, the Federal government has moved to strengthen the secondary mortgage market. In 1968, legislation was enacted converting the Federal National Mortgage Association into a government-sponsored private agency, whose primary function was to purchase FHA and VA mortgages from originators of loans. As a semi-private agency, FNMA's operations are not financed through the Federal budget. Thus, FNMA now has a much greater freedom to borrow in the capital markets and to purchase mortgages. Since 1968, FNMA has rapidly increased its purchases, raising its holdings over $10 billion by the end of 1971, as shown in Table IV. FNMA obtains the funds used to purchase mortgages by selling securities directly to the public as shown in the diagram. Because these securities are explicitly not guaranteed by the U. S. Treasury, they are traded in the market

Table III

ACTIVITY OF MORTGAGE COMPANIES

($ billions)

Residential Mortgages

	Loans Closed	Loans Serviced
1965	$10.9	$47.9
1966	9.3	51.1
1967	9.7	54.4
1968	10.4	58.4
1969	11.6	63.0
1970	13.0	68.5

Source: **Mortgage Banking 1970.**

Table IV

FNMA ACTIVITY

($ billions)

Year	Purchases	Sales	Year-End Loan Portfolio
1968	$1.9	$.....	$ 7.2
1969	4.1	.....	10.9
1970	5.1	.....	15.5
1971	3.1	.3	17.8

Source: **Savings and Loan Fact Book, 1972.**

for government agency securities. "Agencies" are regarded as having a slightly greater degree of risk than Treasury backed securities and consequently carry a slightly higher yield.

As a private corporation, FNMA is profit oriented as well as an official supporter of the secondary mortgage market. Beyond normal expenses, the size of its profit margin depends on the spread between yields earned on mortgages purchased and the interest costs of borrowing. When interest rates are generally high the spread narrows, and when they are low it widens. FNMA's debt is primarily short- and intermediate-term as opposed to the long-term nature of its mortgage holdings. Thus, the return on FNMA's assets remains fairly stable, while its interest costs fluctuate in step with the movement of interest rates in general. As interest rates have retreated during the last two to three years from historical highs, FNMA has lengthened its debt structure in preparation for future tight money periods. The greatest need for extensive purchases of mortgages by FNMA of course comes when interest rates are high, which is also the time when its profit margin is being squeezed.

In 1968, FNMA began acquiring mortgages via the auction procedure. As it now stands, biweekly auctions are held on Mondays at the FNMA headquarters in Washington. One week FNMA buys only VA and FHA backed loans and in the next only conventional loans.[2] Actually, existing mortgages do not directly enter into the auction process. Instead, FNMA offers a four month commitment to purchase a given volume of mortgages at a stated price. After all bids have been received, FNMA accepts a quantity of commitments whose yield is commensurate with current market conditions. The bidder pays a nonrefundable fee of one-quarter of one percent of the value of the loan. The bidder, however, is not required to honor the commitment. If interest rates fall, and the value of the mortgages

[2] In 1970, Congress authorized FNMA to purchase conventional, as well as FHA and VA backed, mortgage loans.

Table V

ESTIMATED OWNERSHIP
OF GNMA PASS-THROUGH SECURITIES
FEBRUARY 1972
($ billions)

	Outstanding	Percent
Total	$3.7	100.0
Savings and Loan Associations	1.7	46.9
Mutual Savings Banks	.7	19.2
Commercial Banks	.1	4.0
Insurance Companies Corporations and Partnerships	.3	9.2
Pension Funds	.2	5.7
Mortgage Companies*	.3	8.6
Credit Unions	.2	5.7
Individuals	**	.6

*Held for future sale.
**$22 million.
Source: **Weekly Bond Buyer**, March 27, 1972, p. 6.

rises, he is free to sell them elsewhere. Almost all of the loans purchased by FNMA in the auction process come from mortgage companies.

Part of FNMA's mortgage holdings in recent years has come from a source other than the weekly auctions. FNMA's charter requires it to buy a reasonable amount of subsidized loans made to low-and moderate-income families. So FNMA has provided a substantial volume of funds to support a number of the HUD programs, as indicated by the arrow from FNMA to HUD in the diagram.

To provide savings and loan associations with their own secondary outlet for mortgages, Congress created the Federal Home Loan Mortgage Corporation in 1970. This agency sells securities to the public and uses the proceeds to purchase mortgages from Federally insured savings and loan associations. Specifically, FHLMC engages in purchases and sales of FHA and VA backed loans, participates in conventional loans, and purchases conventional loans outright. These operations, like those of FNMA, are conducted on a forward commitment basis. Another objective of FHLMC is to standardize loan documents, appraisals, and other aspects of the mortgage lending process in order to enhance the marketability of the typical mortgage security. Since 1970, FHLMC has obtained enough funds in the capital markets to purchase over $1 billion of mortgages in 1971.

The other government agency actively participating in the residential mortgage market, the Government National Mortgage Association, engages in a much wider variety of programs than does either FNMA or FHLMC. GNMA was created in 1968 to assume several functions previously performed by FNMA. To allow FNMA to operate freely as a semiprivate organization, GNMA was given its special assistance fund and its management and liquidation fund. These two funds mostly contain loans made prior to 1954 or loans made on a one-time basis to serve a specialized need. GNMA's major function has emerged in two other areas, which are delineated in the diagram. First, it subsidizes and underwrites many of the programs run by HUD. Second, it has participated in the development of a new mortgage security, known as a pass-through.

The pass-through program was initiated in 1970. Any mortgage lender authorized to make FHA loans may put together a package of FHA and VA backed loans. Once the contents of the package or pool have been approved by GNMA, it guarantees them, pledging the full faith and credit of the government to insure the timely payment of both principal and interest.

Pass-throughs apparently have been quite attractive to a large bloc of investors, as shown in Table V, and may now be purchased in amounts as small as $25,000. The return on a pass-through takes the form of a monthly payment consisting of both interest and principal.

A private organization that performs a function similar to that of FNMA and FHLMC is the MGIC Mortgage Corporation, which is a subsidiary of the privately-owned MGIC Investment Corporation, a long-time insurer of mortgages. MGIC, which began doing business in March 1972, intends to establish a secondary market for the mortgages it insures. It is especially interested in the new 95% conventional loans that savings and loan associations have been allowed to make since August 1971. As shown in the diagram, MGIC sells securities to the public to provide capital for mortgage purposes.

Conclusion The common characteristic among these organizations (FNMA, GNMA, FHLMC, MGIC) is that they have provided a more effective channel between the typical mortgage loan and the highly competitive capital markets than existed in the past, especially during tight money periods. For years, the traditional mortgage loan, with all of its unstandardized features, has had great difficulty competing for funds whenever credit conditions tightened. Although the institutional structure of the mortgage market has grown to be extremely complex, largely as a result of Federal government participation, the development of an effective secondary market has helped to channel more funds into residential mortgages than ever before.

Philip H. Davidson