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CHAPTER 10

The Market for Residential Mortgages [1]

Character of the Market

1. The market for residential mortgages does not yet meet the theoretical requirements of a perfect market nearly as well as the markets for government and corporate securities. It is still largely an aggregation of local markets, in contrast to the securities markets which are predominantly national in character. The residential mortgage is as yet much less of a fungible capital market instrument than government securities or corporate bonds and stocks. This market, however, advanced considerably toward true market status during the postwar period, particularly in the case of federally insured home mortgages.

2. The market for residential mortgages, apart from its local segmentation, can be divided according to three criteria. On the basis of the character of the property, it is divided into the markets for home mortgages (one- to four-family dwellings) and multifamily-structure mortgages; on the basis of the insurance status, into the markets for federally underwritten and for conventional mortgages; and on the basis of the rank of the lien, into the markets for senior and

[1] The organization and developments of the market for residential mortgages during the postwar period is discussed in detail in Saul B. Klaman's monograph which has been utilized here at various points (*The Postwar Residential Mortgage Market,* Princeton for NBER, 1960).

While this chapter deals with the entire market for residential mortgages, the discussion is concentrated, particularly in the nonstatistical part, on the market for first mortgages on single-family homes, which accounted for approximately three-fourths of the total volume of residential mortgages outstanding at the end of the period. Some background data on mortgage interest rates, maturities, and loan-to-value ratios are shown on an annual basis in Table 108.

for junior mortgages. The six segments, however, are of very different size. The market for home mortgages is almost eight times as large as that for multifamily mortgages; that for conventional mortgages is half again as large as the market for insured mortgages; the market for senior mortgages finally is probably ten times as large as that for junior mortgages, which are limited to conventional mortgages. (The size of net flows during the postwar period is used as the basis of measurement in all cases.)

3. The market for residential mortgages operates almost exclusively with a fairly standardized instrument—the amortizable long-term mortgage, usually with a final maturity of between ten and thirty years, commonly repayable at the borrower's option in advance of final maturity. It is only among junior mortgages that short-term obligations or contracts not providing for amortization are of substantial importance. The amortization feature has the important effect that large amounts of repayments become available fairly regularly to lenders. Another effect is the automatic decrease in the loan-to-value ratio which results from amortization schedules that usually exceed depreciation; this decrease is even greater in periods of rising real estate prices.

4. New home mortgages are acquired by lenders either directly through their head offices or their own branch organizations, or indirectly through real estate brokers or mortgage companies. Large institutional lenders often use such intermediaries also for servicing their mortgage portfolios at a fee of usually 0.5 per cent per year of the face amount of the mortgages.[2]

5. The distinction between direct and indirect acquisition and servicing of mortgages partly overlaps with another distinction, between mortgage lending at retail, where loans are made individually on specific properties, and lending at wholesale, where arrangements are made between a financial institution and a contractor or developer for a large number of loans of similar character, although each loan is legally secured only by an individual piece of property. Saving and loan associations and commercial banks operate mainly at the retail level, while a substantial proportion of the residential mortgage loans of life insurance companies, mutual savings banks, and pension funds are made on a wholesale basis.

[2] *Ibid.*, p. 244.

6. Advance commitments have become an important new technique connected chiefly with the wholesale activities of institutional lenders, particularly life insurance companies. They are in essence promises by a lender to purchase from a developer or builder directly or through an intermediary, usually a mortgage company, a specified amount of mortgages of more or less specifically defined characteristics during a specified period of time in the future, usually the next six to eighteen months. This promise then enables the developer or builder to obtain intermediate financing and to start construction. One of the main effects of the widespread use of advance commitments has been the introduction of a lag in the changes in the actual volume of construction behind the current supply and demand for funds in the residential real estate market, and a lag in interest rates on mortgage loans being paid out behind the market rates for current commitments.

7. Another result of wholesale lending is the development of "warehousing" operations. Here an institutional investor, usually a commercial bank, extends credit against the pledge of a substantial block of mortgages held either by an intermediary or by another institutional lender. Warehousing operations are usually resorted to when some lenders are temporarily overstocked with mortgages due to overcommitment.

8. Most institutional lenders acquire mortgages only in their final form which presupposes completion of the underlying structure. The need for financing while construction proceeds is met by intermediate financing in the form of construction loans. These are extended primarily by commercial banks, mainly large metropolitan institutions, and secondarily by saving and loan associations, which are then paid off by the financial institution which acquires the permanent mortgage.

9. Since construction loans usually are granted only if there is a definite commitment on the part of a lender to provide permanent mortgage financing, the practice has developed of stand-by commitments, which is particularly important when commitments for permanent loans are difficult to obtain. Stand-by commitments are a form of underwriting whereby a lender, usually a life insurance company, undertakes to make a permanent loan on terms more favorable to the lender than those prevailing at the time the agreement is made, or is entitled to a fee if he is not called upon to take up the permanent loan on the stand-by terms.

10. Mortgage companies became an important link in the market mechanism, their assets increasing from less than $0.2 to $1.8 billion during the postwar period.[3] The main function of mortgage companies is to act as agents for large organizations, particularly life insurance companies, who do not have a nationwide mortgage lending organization, in making insured home mortgage loans. In that function, mortgage companies usually carry a substantial portfolio of mortgages in different stages of completion which they finance by borrowing from commercial banks until the mortgages are taken over by the ultimate lender.[4]

11. In periods of tight credit, the residential mortgage market can find support in two federal credit agencies, the Federal National Mortgage Association (FNMA) which is authorized to acquire insured mortgages and the Federal Home Loan Bank which extends temporary credit to saving and loan associations. Although the FNMA was originally intended to be only a temporary holder of insured mortgages it was, by the end of 1958, holding a portfolio of $4 billion of insured mortgages, equal to 7 per cent of all insured mortgages outstanding and 3 per cent of the entire residential mortgage debt (Table 99).

12. The postwar market for residential mortgages was strongly influenced by the underwriting and lending and other activities of the federal government.[5] The government guarantee of residential mortgages, extended through the FHA and the Veterans Administration, undoubtedly increased the supply of funds for residential mortgages and lowered the rates. No quantitative estimate of these differentials is possible. In addition to the existence of government insurance of governmental mortgages, the operations of the FNMA and the FHA and many other interventions of the federal government in the residential real estate market deeply influenced many of the terms of residential mortgages, the distribution of holding of mortgages among institutions, the distribution of the mortgage debt and of mortgage holdings among borrowers, and the character and location of residential dwellings erected during the postwar period. The effects of government participation in the residential mortgage market were so strong,

[3] *Ibid.*, p. 20.

[4] On these companies, see Saul B. Klaman, *The Postwar Rise of Mortgage Companies,* Occasional Paper 60, New York, NBER, 1959.

[5] See, e.g., Leo Grebler, *The Role of Federal Credit Aids in Residential Construction,* Occasional Paper 39, New York, NBER, 1953, and *Housing Issues in Economic Stabilization Policy,* Occasional Paper 72, New York, NBER, 1960.

pervasive, and intricate that it is impossible to visualize the form this market would have had in the absence of government intervention.

13. The market for residential mortgages showed substantial cyclical fluctuations during the postwar period. These fluctuations, however, did not always coincide with the swings in the general business cycle, but to some extent were countercyclical. For example, the residential mortgage market reached a trough in 1949 but a peak in 1955 rather than in 1957, and did not show any evidence of the cyclical decline of 1954. On the other hand, the market was relatively depressed in 1951–53, as a result of government intervention, at the time when the economy was generally in a marked upswing.

14. The secondary market in residential mortgages, i.e., the sale and purchase of existing mortgages not immediately or shortly after their creation, is still unorganized and small. It is estimated that the annual volume of trading in residential mortgages does not exceed 10 per cent of the total amount outstanding. The majority of all residential mortgages probably never changes hands between the time the loan is originally made and the time it is retired through amortization or through prepayment of the outstanding balance.

Developments During the Postwar Period

The market for residential mortgages during the postwar period is characterized by five developments: (1) the extraordinarily rapid rise of the volume of residential mortgage debt, slowed only from 1951 to 1953 because of the Korean War and government limitations on residential construction and mortgage lending; [6] (2) a persistent rise in interest rates; (3) a marked increase in the position of financial institutions as mortgage lenders; (4) the pervasive influence of the federal government on many aspects of the market, and the resulting tendency toward standardization of many aspects of the residential mortgage as a capital market instrument; and (5) the development of new techniques adapted to the special environment created by government interference and institutionalization.

The last two characteristics have already been touched upon in the preceding section. The first three will be discussed in this section.

[6] Raymond W. Goldsmith, Robert E. Lipsey, and Morris Mendelson, *Studies in the National Balance Sheet of the United States*, Princeton for NBER, 1963, Vol. II, Table VIII-b-11a.

THE ROLE OF RESIDENTIAL MORTGAGES IN THE MORTGAGE MARKET

Between the end of 1945, when the residential mortgage debt was no higher than in the mid-1920's, and 1958, the total mortgage debt on residential real estate increased by $110 billion. The rate of increase of 14.5 per cent per year was one of the highest, and the absolute increase was by far the largest among the main capital market instruments. Before briefly discussing some aspects of this immense increase, it is necessary to clarify the position of the market for residential mortgage within the total mortgage market, and of the main constituent of the residential mortgage market. The necessary data are shown in Table 97 and Chart 25.

During the postwar period the share of residential in total mortgage debt increased sharply, residential mortgages accounting for four-fifths of the net flow of funds into the mortgage market during the period. The absorption of funds by the residential mortgage market was more than five times as large as that by nonresidential nonfarm mortgages and seventeen times as large as the increase in farm mortgage debt. The share of residential mortgages showed no marked changes among the three postwar cycles. The two other sectors, however, differed in the movement of their share in the total flow of funds into mortgages. The share of nonresidential nonfarm mortgages fell considerably between Cycles I and II and recovered incompletely in Cycle III, while that of farm mortgages advanced considerably between Cycles I and II and remained at slightly beneath the higher level in Cycle III.

More significant differences occurred in the shares of the main components of the residential mortgage market. Of the total net absorption of funds of $110 billion, at least 90 per cent were accounted for by one- to four-family dwellings. Of these, in turn, approximately nine-tenths were made on single-family homes, which thus absorbed about four-fifths of the total net flow of funds into residential mortgages, leaving about one-tenth for multifamily dwellings. Almost one-half of the total increase in mortgage loans was insured by the Federal Housing Administration or the Veterans Administration, the share being quite similar for one- to four-family and multifamily dwellings.

The division of the total flow of mortgage funds between one- to four-family and multifamily dwellings was similar in Cycles I and II, in both of which the former accounted for more than 85 per cent of

TABLE 97

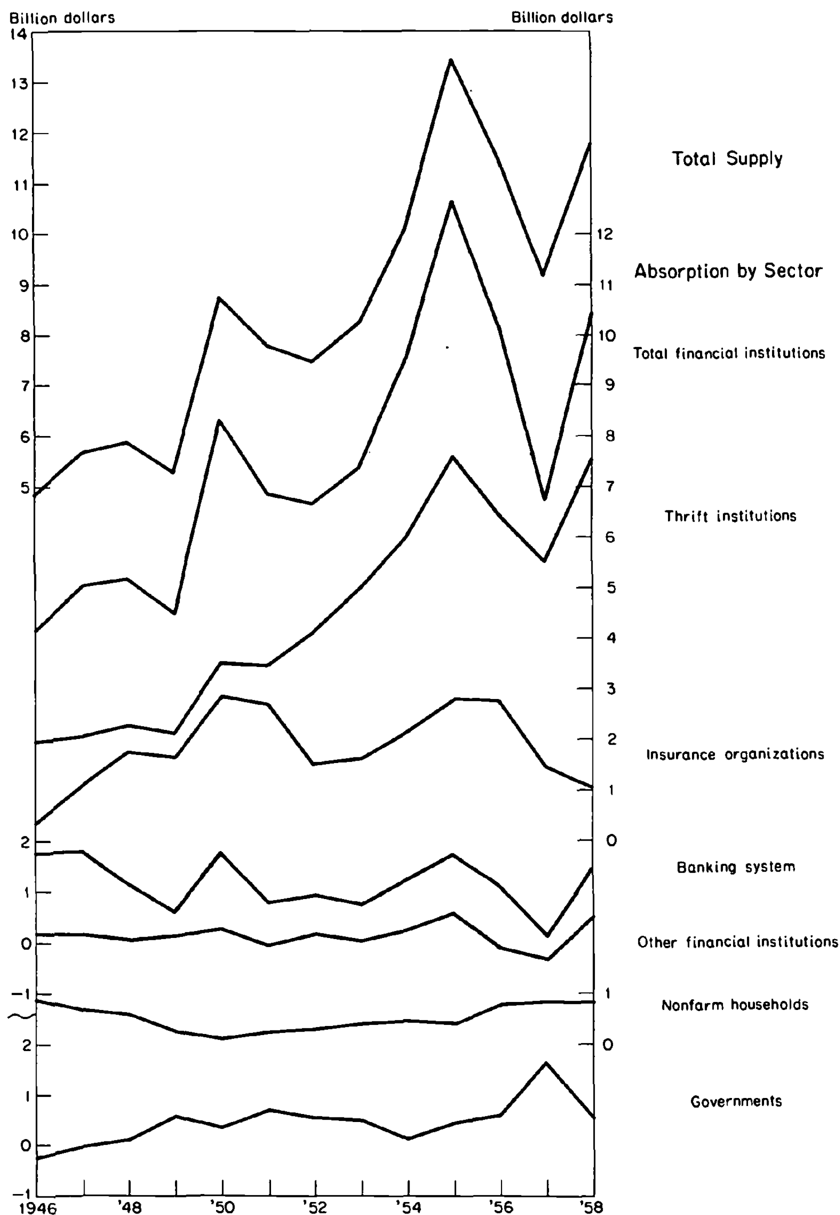
STRUCTURAL CHANGES IN THE MORTGAGE MARKET, BY TYPE, 1945-58

Type of Mortgage	Outstandings		Aggregate Net Flows, 1946-58	Net Flows (annual averages)		
	1945 (1)	1958 (2)	(3)	Cycle I 1946-49 (4)	Cycle II 1949-54 (5)	Cycle III 1954-58 (6)
			BILLION DOLLARS			
1. Residential, total	23.28	133.03	109.75	5.52	7.98	11.25
Homes	18.59	117.69	99.10	4.88	7.09	10.44
Government-insured	4.28	50.13	45.85	2.85	3.27	4.65
Conventional	14.31	67.56	53.25	2.02	3.82	5.80
Multifamily	4.69	15.34	10.65	0.64	0.89	0.81
Government-insured	0.24	5.03	4.79	0.47	0.48	0.16
Conventional	4.45	10.31	5.86	0.17	0.40	0.65
2. Nonresidential, nonfarm	7.50	27.63	20.13	1.21	1.12	2.22
3. Farm	4.76	11.25	6.48	0.20	0.52	0.71
4. Total	35.54	171.91	136.37	6.93	9.62	14.18
			PER CENT			
1. Residential, total	65.5	77.4	80.5	79.7	83.0	79.3
Homes	52.3	68.5	72.7	70.4	73.7	73.6
Government-insured	12.0	29.2	33.6	41.1	34.0	32.8
Conventional	40.3	39.3	39.0	29.2	39.7	40.9
Multifamily	13.2	8.9	7.8	9.3	9.3	5.7
Government-insured	0.7	2.9	3.5	6.8	5.0	1.1
Conventional	12.5	6.0	4.3	2.5	4.2	4.6
2. Nonresidential, nonfarm	21.1	16.1	14.8	17.5	11.6	15.7
3. Farm	13.4	6.5	4.8	2.9	5.4	5.0
4. Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Balance Sheet, Vol. II.
Cols. 1-2, lines 1 and breakdown: Tables IV-b-11a, IV-b-11a-2, IV-b-11a-6, IV-b-11a-5, IV-b-11a-1, IV-b-11a-4, and IV-b-11a-3.
Cols. 1-2, line 2: Table IV-b-11b.
Cols. 1-2, line 3: Table IV-b-12.
Cols. 3-6, lines 1 and breakdown: Tables VIII-b-11a, VIII-b-11a-2, VIII-b-11a-6, VIII-b-11a-5, VIII-b-11a-1, VIII-b-11a-4, and VIII-b-11a-3.
Cols. 3-6, line 2: Table VIII-b-11b.
Cols. 3-6, line 3: Table VIII-b-12.
Note: Components may not add to totals because of rounding here and elsewhere in this chapter.

CHART 25

MARKET FOR NONFARM RESIDENTIAL MORTGAGES: SUPPLY AND ABSORPTION BY SECTOR, 1946–58



Source: *National Balance Sheet,* Vol. II, Tables VIII-b-11a, VIII-c-11a, and VIII-c-11b.

the total; but in Cycle III they accounted for over 90 per cent. One reason for the decline in the proportion of funds by multifamily dwellings was the reduced availability of government insurance during the latter part of the period.

More pronounced differences appear in the distribution of funds among insured and noninsured (conventional) mortgages. While insured mortgage loans accounted for three-fifths of the total funds absorbed by residential mortgages in Cycle I, their share declined to slightly less than one-half in Cycle II and to just over two-fifths in Cycle III. The shift was much more pronounced for multifamily dwellings, for which the share of insured mortgages dropped from more than two-thirds in Cycle I and less than three-fifths in Cycle II to less than one-fifth in Cycle III. The decline of the share of insured mortgages reflects the failure of the maximum interest rates permitted by legislation on insured mortgages to follow the rising trend in mortgage interest rates promptly or fully. Notwithstanding the decline in the share of total insured mortgages in the net flow of funds into residential mortgages between the early and the late part of the period, their share in total outstanding residential mortgage debt increased sharply from one-fifth in 1945 to more than two-fifths in 1958.

An important characteristic of the residential mortgage market in the postwar period is the association of certain groups of holders with certain forms of residential mortgages, which is summarized in the two following paragraphs. The detailed relations can be studied in Tables 98 and 99 for the beginning and the end of the period, and in Table 100 for the aggregate net flow of funds during 1946–58.

Saving and loan associations concentrated their mortgage investments to the extent of over three-fourths on unguaranteed home mortgages. Home mortgages also predominated, although in a less pronounced way, in the portfolios of mutual savings banks, but mostly insured mortgages since mutual savings banks were both authorized and willing to make home mortgage loans at considerable distances from their home offices where they did not need to investigate or directly supervise the loans if the loans were insured by the government. Mutual savings banks also invested in multifamily mortgages, about evenly divided between insured and conventional loans. Commercial banks and life insurance companies distributed their mortgage investments in about the same proportions, both putting more than two-thirds of total mortgage investments in home mortgages. Insured mort-

TABLE 98

DISTRIBUTION OF MORTGAGE LOANS AMONG HOLDER GROUPS,
END OF 1945
(billion dollars)

Type of Mortgage	All Groups (1)	Federal Government (2)	Finance: Total (3)	Finance: Four Main Insti-tutions (4)	Finance: Life Insur-ance (5)	Finance: Savings and Loan Associ-ations (6)	Finance: Commercial Banks (7)	Finance: Mutual Savings Banks (8)	Finance: Other (9)	All Others (10)
1. Residential	23.3	0.9	16.1	15.8	3.7	5.3	3.4	3.4	0.3	6.3
Homes	18.6	0.9	12.5	12.3	2.3	5.2	2.9	1.9	0.2	5.3
Government-insured	4.3	0	n.a.	3.6	1.3	0.5	1.5	0.3	0.6	
Conventional	14.3	0.9	n.a.	8.6	1.0	4.6	1.4	1.6	4.9	
Multifamily	4.7	0	3.6	3.5	1.4	0.1	0.5	1.5	0.1	1.0
Government-insured	0.2	0	n.a.	0.1	0.1	0	0	0	0	
Conventional	4.4	0	n.a.	3.4	1.3	0.1	0.5	1.5	1.1	
2. Nonresidential, nonfarm	7.5	0	4.1	4.0	2.2	0.1	0.9	0.8	0.2	3.4
3. Farm	4.8	1.5	1.3	1.3	0.8	0	0.5	0	0	1.9
4. Total	35.5	2.4	21.5	21.0	6.7	5.4	4.8	4.2	0.5	11.6

Source: See source to Table 97.

TABLE 99

DISTRIBUTION OF MORTGAGE LOANS AMONG HOLDER GROUPS, END OF 1958
(billion dollars)

			Finance							
Type of Mortgage	All Groups (1)	Federal Government (2)	Total (3)	Four Main Institutions (4)	Life Insurance (5)	Savings and Loan Associations (6)	Commercial Banks (7)	Mutual Savings Banks (8)	Other (9)	All Others (10)
1. Residential	133.0	5.1	113.5	110.0	25.9	44.7	18.4	20.9	3.5	14.4
Homes	117.7	4.6	101.3	98.4	22.4	42.9	17.5	15.6	3.0	11.8
Government-insured	50.1	3.6	n.a.	43.2	13.7	9.2	8.0	12.2	3.4	
Conventional	67.6	1.0	n.a.	55.2	8.7	33.7	9.4	3.4	11.4	
Multifamily	15.3	0.5	12.2	11.6	3.5	1.8	1.0	5.3	0.6	2.6
Government-insured	5.0	0.3	n.a.	3.6	1.2	0	0.7	1.7	1.1	
Conventional	10.3	0.2	n.a.	8.0	2.4	1.8	0.3	3.6	2.1	
2. Nonresidential, nonfarm	27.6	0	17.7	17.0	8.5	0.9	5.4	2.3	0.7	9.9
3. Farm	11.3	2.5	4.3	4.3	2.7	0	1.5	0.1	0	4.5
4. Total	171.9	7.6	135.5	131.2	37.1	45.6	25.3	23.3	4.3	28.9

Source: See source to Table 97.

TABLE 100

DISTRIBUTION OF MORTGAGE LOANS AMONG HOLDER GROUPS,
NET FLOW, 1946-58
(billion dollars)

Type of Mortgage	All Groups (1)	Federal Government (2)	Finance: Total (3)	Finance: Four Main Insti-tutions (4)	Finance: Life Insur-ance (5)	Finance: Savings and Loan Associ-ations (6)	Finance: Commercial Banks (7)	Finance: Mutual Savings Banks (8)	Finance: Other (9)	All Others (10)
1. Residential	109.8	4.2	97.4	94.3	22.2	39.4	15.0	17.6	3.2	8.1
Homes	99.1	3.7	88.9	86.2	20.1	37.7	14.6	13.8	2.7	6.5
Government-insured	45.8	3.5	n.a.	39.5	12.4	8.7	6.5	11.8	2.8	
Conventional	53.3	0.2	n.a.	46.6	7.6	29.0	8.1	1.9	6.5	
Multifamily	10.7	0.5	8.5	8.1	2.2	1.7	0.4	3.8	0.4	1.6
Government-insured	4.8	0.3	n.a.	3.4	1.0	0	0.6	1.7	1.1	
Conventional	5.9	0.2	n.a.	4.7	1.1	1.7	-0.2	2.1	1.0	
2. Nonresidential, nonfarm	20.1	0	13.6	13.1	6.3	0.8	4.5	1.5	0.5	6.5
3. Farm	6.5	0.9	2.9	2.9	1.9	0	1.0	0	0	2.6
4. Total	136.4	5.1	114.0	110.2	30.4	40.3	20.5	19.0	3.8	17.2

Source: See source to Table 97.

gages, however, accounted for more than three-fifths of the home mortgages of life insurance companies, but for less than one-half of those of commercial banks, the difference possibly reflecting the stronger local connections of the latter. Life insurance companies extended about one-tenth of their residential mortgages on multifamily properties, which played only a much smaller role in the portfolio of commercial banks. Nonresidential nonfarm mortgages accounted for more than one-fifth of total mortgage investments in both institutions, and in both cases farm mortgages constituted about 5 per cent of this total. The mortgage investments by individuals are characterized by the high share of conventional home mortgages and of nonresidential nonfarm mortgages, each accounting for about one-third of total mortgage investment,[7] and by the relative absence of federally insured mortgages, the result of the legislative arrangements which throughout the period in practice limit the insurance to mortgages held by financial institutions.

Looking at the situation by type of mortgages rather than by lenders, life insurance companies and mutual savings banks were the main buyers of insured home mortgages, each accounting for more than one-fourth of the total. Commercial banks and saving and loan associations were next with one-seventh and one-fifth, respectively, and federal agencies with about one-thirteenth, leaving not much more than 6 per cent for all other holders.

Saving and loan associations were by far the most important lenders on uninsured home mortgages, accounting for more than one-half of the total. Commercial banks and life insurance companies followed at a great distance, holding about 15 and 13 per cent of the total, respectively, while noninstitutional lenders are credited with not much more than one-tenth of all uninsured home mortgages, a considerable part of which was represented by junior liens.

Mutual savings banks were the most important factor in the market for multifamily mortgages, absorbing over one-third of the postwar period total. Life insurance companies absorbed one-fifth, saving and loan associations, and noninstitutional lenders divided the rest about equally.

The sources of funds are quite different in the market for nonresidential nonfarm mortgages. The two main suppliers were life insurance companies and noninstitutional lenders, with more than 30 per

[7] *National Balance Sheet,* Vol. II, Tables VIII-b-11, VIII-b-11a-3, VIII-b-11a-5, VIII-b-11b, and VIII-b-12.

cent each of the total, followed closely by commercial banks with more than 20 per cent. The market for farm mortgages, finally, relied on noninstitutional lenders which supplied two-fifths of the total net funds during the postwar period and on federal agencies who provided almost one-seventh. Among private financial institutions, only life insurance companies, with almost one-third of the total net supply, and at a considerable distance commercial banks, with more than one-sixth, were of substantial importance.

THE ROLE OF MORTGAGE CREDIT IN FINANCING RESIDENTIAL CONSTRUCTION AND TRADING

For residential mortgages, particularly those on single-family homes, the financing alternatives were simpler than for most other capital market instruments, particularly corporate stocks and bonds. The choice essentially is only between a mortgage loan and the owner's funds. There is no direct or comprehensive information on the share of these two forms of financing, but the order of magnitude can be ascertained with reasonable reliability (see Table 101).

During the postwar period, only a small proportion (around one-eighth) of all new residential structures was bought for cash.[8] In the remaining seven-eighths of purchases, mortgage credit constituted an essential part of financing, providing about seven-tenths of the purchase price, so that only about 30 per cent of the total cost of new residential structures was provided by owner's funds (current savings or realization of other assets).

The share of mortgages in financing is more difficult to determine, both for conceptual and statistical reasons, in the case of the change of hands of existing residential structures. It appears, however, that the contribution of buyers' own funds did not differ substantially here from the case of new residential structures. Mortgage loans, either new or in the form of the assumption of the mortgage outstanding on the property being acquired, apparently provided approximately 70 per cent of the funds needed by the buyers of existing residential real estate.

There are, however, two additional occasions on which existing home mortgages are created. The first is the financing of additions to and alterations of existing residential homes. The amounts involved are not recorded separately, but it is likely that a large proportion

[8] Leo Grebler, David M. Blank, and Louis Winnick, *Capital Formation in Residential Real Estate: Trends and Prospects*, Princeton for NBER, 1956, pp. 454–455.

TABLE 101

ROLE OF MORTGAGE CREDIT IN HOME FINANCING, ANNUAL AVERAGES, 1946-58
(billion dollars)

	1946-58 (1)	1946-49 (2)	1949-54 (3)	1954-58 (4)
I. All homes				
1. Gross investment (line II-3 plus line III-1 plus line III-5)	15.5	9.3	15.4	21.1
2. Depreciation allowances	6.6	4.8	6.5	8.2
3. Net investment (line 1 minus line 2)	8.9	4.5	8.9	12.9
4. Mortgages incurred (line II-4 plus line III-6)	19.0	11.6	17.5	26.2
5. Mortgages repaid (line III-9)	11.3	6.7	10.5	15.8
6. Net increase in mortgage debt (line 4 minus line 5)	7.7	4.9	7.0	10.4
7. Net saving (line 3 minus line 6)	1.2	-0.4	1.9	2.5
II. New homes				
1. Cost of construction	10.3	5.7	10.4	14.1
2. Cost of land	1.5	0.8	1.4	2.3
3. Total purchase price	11.8	6.5	11.8	16.4
4. Mortgage loans	8.1	4.4	8.0	11.5
5. Financing ratio (line 4 divided by line 3)	0.69	0.68	0.68	0.70
III. Existing homes				
1. Cost of additions and alterations	2.7	2.0	2.6	3.5
2. Depreciation allowances	6.6	4.8	6.5	8.2
3. Net depreciation (line 2 minus line 1)	3.9	2.8	3.9	4.7
4. Purchases and sales	16.5	9.4	15.6	22.7
5. Cost of transactions	1.0	0.8	1.0	1.2
6. Mortgages made, total (line 7 plus line 8)	10.9	7.2	9.6	14.8
7. Mortgages made, additional financing	4.2	2.9	3.4	5.6
8. Mortgages made, refinancing	6.7	4.3	6.1	9.1
9. Repayments, total	11.3	6.7	10.5	15.8
10. Repayments, amortization	3.9	1.9	3.5	5.7
11. Repayments, partial prepayments	0.8	0.5	0.8	1.0
12. Repayments, full prepayments	6.7	4.3	6.1	9.1
13. Increase in mortgage debt (line 6 minus line 9)	-0.4	0.5	-1.0	-1.1
14. Financing ratio, gross (line 6 divided by line 4)	0.66	0.77	0.61	0.65
15. Financing ratio, net (line 8 divided by line 4)	0.41	0.46	0.39	0.40

Source: National Balance Sheet, Vol. I, Part Three.
Lines I-2, III-2: Table 72.
Lines II-1, II-2, II-3, III-1, III-4, III-5, III-9 through III-12: Table 88.
Lines II-4, III-7, III-8: Table 87.

of them, often very small in absolute amounts, were financed by the home-owners without borrowing or with nonmortgage credit, and that where mortgage credit was used the ratio of loan to value was smaller than in the acquisition of entire structures. Since additions and alterations are estimated to have cost $35 billion during 1946–58, it may be estimated very roughly that they required about $10 to $15 billion of mortgages, probably nearer the lower limit.

The second addition to the home mortgage debt occurred in borrowing on existing structures not connected with a change of hands or with additions and alterations. Such additional borrowings were possible because the increases in real estate values, and to a lesser extent the reduction of mortgage principal, often reduced the loan-to-value ratio well below the customary limit, and some owners of residential real estate took advantage of this margin to raise funds for other purposes. This type of mortgage loan has been estimated at nearly $55 billion during the postwar period, which would amount to almost one-fifth of the average value of homes.[9] If this estimate is of the right order of magnitude, the question immediately arises of the use made by mortgages of these large sums—much larger, for instance, than individuals' net purchases of stocks and bonds. Unfortunately, no data exist to help us to answer this question.

We thus find that home mortgage loans made during the postwar period totaled almost $250 billion, of which approximately 40 per cent was on new structures, 5 per cent on additions and alterations, and 55 per cent on existing structures, mostly in connection with changes of hands. There were, however, also substantial repayments. First, regular amortizations are estimated at about $50 billion, or about one-fifth of total gross borrowing. Secondly, partial prepayments totaled about $10 billion. Thirdly, prepayments in full are estimated to have amounted to nearly $90 billion, most of which probably occurred when homes changed hands.

As a result, the net increase in the home mortgage debt between 1945 and 1958 amounted to just under $100 billion, or two-fifths of the gross mortgage loans contracted during the period. From Table 101, which shows these relations for each of the three cycles, it can be seen that the relation of mortgage loans made to the purchase price of new homes showed no substantial variations from the average of about 70 per cent for the entire period. The same ratio for

[9] *National Balance Sheet,* Vol. I, Part Three, Table 70.

old homes, which is statistically more tenuous, exhibited an irregular tendency. The ratio of repayments to new loans made for all homes rose from 58 per cent in Cycle I to 60 per cent in Cycles II and III. Notwithstanding this increase, the proportion of repayments to total mortgage debt outstanding declined from 15 per cent at the end of Cycle I to 12 per cent at the end of Cycles II and III.[10]

On the basis of these estimates, and from other figures shown in Table 101, it is possible to calculate alternative aggregate financial ratios for homes, always realizing that these ratios are averages that comprise a wide range of values.

From the point of view of the entire economy, probably the most important ratio is that of the total net investment in homes (i.e., the cost of new structures and of additions and alterations less depreciation) to the net increase in the mortgage debt outstanding. For the entire period, net investment, calculated on the basis of depreciation at replacement cost, amounted to about $104 billion. This means that the increase in the mortgage debt of $100 billion was about equal to net investment calculated according to national accounting procedures. Even if depreciation had been allowed only at original cost, net investment of about $150 billion would be only by about one-half above the increase in the home mortgage debt.

This ratio, of course, is not relevant from the point of view of the home-owners themselves, who are primarily interested in what happened to the equity in their homes. It is then found that owners' equity in homes increased from 1945 to 1958 by more than $160 billion,[11] notwithstanding an increase in the net mortgage debt of nearly $100 billion, but that this increase represented almost entirely realized and unrealized capital gains. The increase in the prices of homes, which in turn primarily reflects the increase in construction cost and land values, permitted an increase in debt almost equal to the net investment in homes, calculated according to national accounting principles, without impairing owners' equity, even taking into account the increase in the cost of living during the period. Thus, part of realized and unrealized capital gains on homes led to a write-up of the home mortgage debt, which, together with the effect of amortizations, raised the loan-to-value ratio on all homes at the end of 1958 to close to 30 per cent—compared to 13 per cent in 1945—although home buyers originally borrowed fully two-thirds of the purchase price of new

[10] *National Balance Sheet,* Vol. II, Table IV-b-11a.

[11] *Ibid.,* Vol. I, p. 311.

as well as old structures acquired during the period.[12] These relationships can be followed in more detail in Table 102 for the entire period as well as for the three cycles.

DISTRIBUTION OF RESIDENTIAL MORTGAGE HOLDINGS AND INVESTMENTS

Annual changes in the distribution of the residential mortgage debt outstanding and in the flow of funds into it are shown for the main groups of investors in Tables 104 and 105,[13] while similar figures for the period as a whole and its three cycles are given in Table 103. The distribution between insured and noninsured mortgages is influenced to a considerable degree by the relation between the maximum interest rate permitted on insured mortgages and the market rate on conventional mortgages. When market rates are above the permissible maximum on insured mortgages, as has generally been the case in the late phases of cyclical upswings, there is some shift from insured to conventional mortgages, and the share in the total net flow of mortgages of institutions concentrating on insured mortgages tends to decline. This influence may, of course, be overridden by differences in the rates of growth of the total assets of different groups of institutional investors and by changes in their investment policies.

As a result of this relation, the share of insured mortgages showed a declining trend over the period, falling from three-fifths of all nonfarm residential mortgages in Cycle I to slightly under one-half in Cycle II and slightly more than two-fifths in Cycle III (see Table 97). The decline was considerably more pronounced in multifamily mortgages, from three-fourths to less than three-fifths and one-fifth, the particularly sharp fall in Cycle III being partly attributable to the cessation of insurance on new multifamily mortgages. Within the cycles the share of insured mortgages was usually highest in the middle phases of the upswing and lowest near its end (1952–53; 1956–57) when interest rates were generally highest. Fluctuations in absolute volume or in relative terms were more pronounced in the case of insured mortgages, and among them more for mortgages insured by the Veterans Administration rather than by the Federal Housing Administration. These differences in volatility can be explained by differences in permissible interest rates, other terms such as maturity, mini-

[12] *Ibid.*, Vol. I, Part Three, Table 69, and Vol. II, Table IV-b-11a-2.

[13] For separate data for one- to four-family and multifamily dwellings, on the one hand, and insured and noninsured mortgages, on the other, see *ibid.*, Vol. II, Tables IV-b-11a-1 through IV-b-11a-6 and VIII-b-11a-1 through VIII-b-11a-6.

TABLE 102

COMPOSITION OF CHANGES IN VALUE OF NONFARM PRIVATE RESIDENTIAL HOUSING, 1946-58

	Aggregate, 1946-58 (billion dollars) (1)	Annual Averages (billion dollars) 1946-49 (2)	1949-54 (3)	1954-58 (4)	Aggregate, 1946-58 (per cent) (5)	Annual Averages (per cent) 1946-49 (6)	1949-54 (7)	1954-58 (8)
I. All residential structures								
1. Increase in value during period	278.2	24.0	18.5	22.4	100	100	100	100
2. Net investment	104.8	4.2	8.2	11.4	38	17	44	51
Expenditures	191.1	9.0	14.7	19.6	69	37	79	87
Depreciation	86.3	4.8	6.5	8.2	31	20	35	37
3. Capital gains (+) or losses (-) (line 1 minus line 2)	173.4	19.8	10.3	11.0	62	82	56	49
4. Change in mortgage debt	109.8	5.5	8.0	11.3	39	23	43	50
5. Increase in owners' equity (line 1 minus line 4)	168.4	18.5	10.5	11.1	61	77	57	50
II. One- to four-family homes								
1. Increase in value during period	261.7	22.0	17.4	21.6	100	100	100	100
2. Net investment	103.7	4.1	8.0	11.4	40	19	46	53
Expenditures	182.8	8.5	14.0	18.9	70	39	80	88
Depreciation	79.1	4.4	5.9	7.6	30	20	34	35
3. Capital gains (+) or losses (-) (line 1 minus line 2)	158.0	17.9	9.4	10.2	60	81	54	47
4. Change in mortgage debt	99.1	4.9	7.1	10.4	38	22	41	48
5. Increase in owners' equity (line 1 minus line 4)	162.6	17.1	10.3	11.2	62	78	59	52

(continued)

TABLE 102 (concluded)

	Aggregate, 1946-58 (billion dollars)	Annual Averages (billion dollars)			Aggregate, 1946-58 (per cent)	Annual Averages (per cent)		
		1946-49	1949-54	1954-58		1946-49	1949-54	1954-58
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III. Multifamily structures								
1. Increase in value during period	16.5	2.0	1.1	0.9	100	100	100	100
2. Net investment	1.1	0.2	0.1	0.0	6	10	9	0
Expenditures	8.3	0.6	0.7	0.7	50	30	64	78
Depreciation	7.2	0.4	0.5	0.7	44	20	45	78
3. Capital gains (+) or losses (-) (line 1 minus line 2)	15.4	1.8	1.0	0.9	94	90	91	100
4. Change in mortgage debt	10.6	0.6	0.9	0.8	64	30	82	89
5. Increase in owners' equity (line 1 minus line 4)	5.9	1.4	0.2	0.1	36	70	18	11

Source: National Balance Sheet.

Lines I-1, II-1, III-1: Vol. I, Table 71.
Lines I-2, II-2, III-2: Vol. I, Table 72.
Lines I-4, II-4, III-4: Vol. II, Tables VIII-b-11a, VIII-b-11a-2, and VIII-b-11a-1.

TABLE 103

STRUCTURAL CHANGES IN OWNERSHIP OF NONFARM RESIDENTIAL MORTGAGES DURING POSTWAR PERIOD

	Outstandings (billion dollars)		Aggregate Net Flows, 1946-58 (billion dollars)	NET FLOWS (ANNUAL AVERAGES)					
				Amounts (billion dollars)			Distribution (per cent)		
	1945 (1)	1958 (2)	(3)	Cycle I 1946-49 (4)	Cycle II 1949-54 (5)	Cycle III 1954-58 (6)	Cycle I 1946-49 (7)	Cycle II 1949-54 (8)	Cycle III 1954-58 (9)
1. Nonfarm households	6.23	12.79	6.55	0.61	0.26	0.64	11.1	3.3	5.7
2. Finance	16.08	113.52	97.44	4.84	7.23	9.87	87.7	90.6	87.7
a. Government insurance and pension funds	0.02	0.40	0.36	0	0.04	0.04	0	0.5	0.4
b. Commercial banks	3.38	18.41	15.04	1.35	1.02	1.07	24.5	12.8	9.5
c. Mutual savings banks	3.39	20.94	17.56	0.56	1.42	1.93	10.1	17.8	17.2
d. Savings and loan associations	5.27	44.72	39.44	1.54	2.56	4.60	27.9	32.1	40.9
e. Investment companies	0.09	0.24	0.12	0.05	0.01	-0.01	0.9	0.1	-0.1
f. Credit unions	0.03	0.35	0.34	0.01	0.02	0.04	0.2	0.3	0.4
g. Life insurance	3.70	25.92	22.22	1.24	1.99	1.98	22.5	24.9	17.6
h. Fire and casualty insurance	0.02	0.05	0.03	0	0	0	0	0	0
i. Noninsured pension plans	0.02	0.65	0.63	0	0.03	0.10	0	0.4	0.9
j. Other private insurance	0.07	0.27	0.20	0.01	0.02	0.01	0.2	0.3	0.1
k. Finance companies	0.07	1.40	1.35	0.05	0.09	0.11	0.9	1.1	1.0
l. Other finances	0.02	0.18	0.17	0.02	0.01	0.01	0.4	0.1	0.1
3. State and local governments	0.06	1.61	1.55	0.02	0.09	0.21	0.4	1.1	1.9
4. Federal government	0.90	5.10	4.21	0.06	0.40	0.53	1.1	5.0	4.7
5. Total	23.27	133.03	109.75	5.52	7.98	11.25	100.0	100.0	100.0

Source: National Balance Sheet, Vol. II. Cols. 1-2 from Table IV-b-11a; cols. 3-9 from Table VIII-b-11a.

TABLE 104

DISTRIBUTION OF NONFARM RESIDENTIAL MORTGAGES, ASSETS, 1945-58
(per cent)

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
1. Nonfarm households	26.8	25.3	23.1	21.1	19.2	16.2	14.5	13.4	12.5	11.5	10.3	10.0	9.9	9.6
2. Finance	69.1	72.1	74.9	76.9	77.8	80.6	81.6	82.4	83.1	84.4	85.7	86.0	85.0	85.3
a. Government insurance and pension funds	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3
b. Commercial banks	14.5	18.2	20.4	20.2	19.2	19.3	18.2	17.5	16.6	16.1	15.6	15.0	14.0	13.8
c. Mutual savings banks	14.6	12.8	11.7	12.0	12.4	13.2	14.0	14.4	14.7	15.2	15.5	15.8	15.7	15.7
d. Savings and loan associations	22.6	24.9	25.7	25.5	25.4	25.0	24.8	26.2	27.9	29.3	30.6	31.2	32.3	33.6
e. Investment companies	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.2
f. Credit unions	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
g. Life insurance	15.9	14.3	15.0	17.1	18.7	20.7	22.2	21.8	21.5	21.3	21.1	21.2	20.6	19.5
h. Fire and casualty insurance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
i. Noninsured pension plans	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5
j. Other private insurance	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
k. Finance companies	0.3	0.6	0.7	0.6	0.7	1.0	0.7	0.9	0.8	1.0	1.4	1.1	0.8	1.1
l. Other finance	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
3. State and local governments	0.3	0.2	0.2	0.2	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.7	1.0	1.2
4. Federal government	3.9	2.4	1.9	1.8	2.7	2.8	3.4	3.7	3.8	3.4	3.2	3.3	4.1	3.8
5. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6. Total (billion dollars)	23.27	28.10	33.76	39.61	44.88	53.61	61.38	68.87	77.11	87.20	100.62	112.12	121.29	133.03

Source: National Balance Sheet, Vol. II, Table IV-b-11a.

TABLE 105

DISTRIBUTION OF FLOW OF FUNDS, NONFARM RESIDENTIAL MORTGAGES, 1946-58
(per cent)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
1. Nonfarm households	18.5	11.8	10.1	4.4	1.0	2.8	3.7	4.9	4.3	2.8	6.5	8.8	6.9
2. Finance	86.3	88.9	88.2	84.6	95.1	88.3	89.0	89.2	94.5	93.9	88.5	73.4	88.6
a. Government insurance and pension funds	0	0	0	0	0.7	0.8	0.5	0.4	0.7	0.3	0.8	0.2	-0.4
b. Commercial banks	36.1	31.4	18.9	11.4	19.8	10.4	12.3	9.0	12.2	12.7	9.7	1.5	12.1
c. Mutual savings banks	4.1	6.2	14.0	15.4	17.0	19.8	17.2	17.6	18.6	17.6	18.6	14.3	16.4
d. Savings and loan associations	35.9	29.7	24.2	24.3	22.9	24.1	37.2	42.5	40.2	38.7	36.8	45.7	46.9
e. Investment companies	0.8	1.2	0.7	0.4	0.3	-0.1	0.1	-0.1	0	-0.1	-0.1	-0.2	-0.3
f. Credit unions	0.2	0.2	0.3	0.2	0.1	0.3	0.4	0.4	0.3	0.2	0.5	0	0.7
g. Life insurance	6.4	18.7	29.4	30.4	30.9	32.8	18.7	18.3	19.8	19.8	22.0	13.6	7.9
h. Fire and casualty insurance	0	0	0.2	0.2	0.1	0.1	0	0	0	0	0	-0.1	0
i. Noninsured pension plans	0.2	0	0	0.2	0.1	0.5	0.4	0.5	0.3	0.3	1.0	1.9	1.2
j. Other private insurance	0	0.2	0.2	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0	0
k. Finance companies	2.3	1.2	-0.2	1.7	2.4	-1.0	1.9	0.4	2.2	3.9	-0.9	-3.5	3.9
l. Other finance	0.2	0.2	0.5	0.4	0.2	0.3	0	0	0	0.1	0.1	0	0.3
3. State and local governments	0	0	0.2	1.7	0.6	0.9	1.1	1.7	1.0	0.9	1.0	3.9	3.6
4. Federal government	-4.8	-0.7	1.5	9.3	3.3	8.0	6.1	4.2	0.2	2.4	4.0	13.8	0.9
5. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6. Total (billion dollars)	4.82	5.66	5.86	5.27	8.73	7.77	7.48	8.24	10.09	13.42	11.50	9.17	11.74

Source: National Balance Sheet, Vol. II, Table VIII-b-11a.

mum down payment, extent of support by FNMA, and other special factors. They indicate that the lenders tended to regard FHA-insured mortgages as the closest substitute for conventional mortgages and VA-guaranteed home mortgages as marginal investments.

Disregarding minor variations, it is evident from Table 105 that the main changes in the sources of funds for residential mortgages are the high shares of life insurance companies during the first part of the period (particularly 1948–51), of commercial banks (particularly in 1946–47), and of savings and loan associations especially during the second part of the period. These movements reflect, in the case of savings and loan associations, primarily an increase of the growth rate of total assets, since these institutions have always invested most of their assets in home mortgages (Table 106). In the case of life insurance companies, the fluctuations are due largely to the part of available total funds allocated to increases in the portfolio of residential mortgages (see Table 107). While on the average more than one-half of the total net funds available were allocated to residential mortgages from 1948 to 1951, the proportion declined to about one-fourth during the latter part of the period, except in 1955–56. These allocations, in turn, were largely determined by interest rate differentials, primarily that between mortgages and corporate bonds. Considerations of continuity of operation, such as keeping intact the company's own nationwide mortgage department or its correspondent system, were important additional factors in the allocation of funds.

Mutual savings banks showed no similar fluctuations. From 1948 to 1958, they absorbed in each year with only small variations between 14 and 20 per cent of the annual net supply of residential mortgages. This regularity, however, involved considerable fluctuations in the share of residential mortgages in total uses of funds, although the share never fell below 70 per cent from 1948 on. In several years early in cyclical upswings (1950–51, 1955–56), net investment in residential mortgages was even in excess of total funds used so that the absolute volume of other assets held was reduced. The increase in the proportional allocation to residential mortgages was influenced by changes in the law in most savings bank states in 1950 permitting the acquisition of out-of-state federally underwritten mortgages. Mutual savings banks thus were, during most of the postwar period, primarily investors in residential mortgages insofar as the use of their funds is concerned. Their allocation of 84 per cent of total net funds to resi-

TABLE 106

SHARE OF NONFARM RESIDENTIAL MORTGAGES IN ASSETS OF EACH SECTOR, 1945-58
(per cent)

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
1. Nonfarm households	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
2. Finance	4.6	5.7	6.7	7.7	8.6	10.0	10.8	11.4	12.3	13.2	14.4	15.3	15.7	16.1
a. Government insurance and pension funds	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.6
b. Commercial banks	2.1	3.4	4.4	5.1	5.4	6.1	6.2	6.3	6.6	6.9	7.4	7.7	7.5	7.6
c. Mutual savings banks	19.9	19.1	19.9	23.0	25.5	31.0	36.3	38.8	41.4	44.7	49.3	52.6	53.6	55.0
d. Savings and loan associations	60.2	68.3	74.0	77.3	77.3	78.7	79.0	79.1	80.1	80.5	81.3	81.2	80.9	80.7
e. Investment companies	2.5	3.7	5.6	6.6	5.9	5.6	4.4	3.9	3.8	2.7	2.1	1.9	1.9	1.2
f. Credit unions	6.8	8.0	6.8	8.6	8.4	8.0	8.3	7.9	7.9	7.9	7.7	8.3	7.1	8.0
g. Life insurance	8.2	8.3	9.7	12.1	13.9	17.1	19.8	20.3	20.9	21.7	23.2	24.4	24.3	23.8
h. Fire and casualty insurance	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
i. Noninsured pension plans	0.9	0.9	0.9	0.8	0.8	0.8	1.2	1.4	1.5	1.4	1.4	1.7	2.3	2.3
j. Other private insurance	4.0	3.7	3.8	4.3	4.9	5.8	6.6	6.9	7.0	7.1	7.4	7.4	7.3	6.9
k. Finance companies	3.5	5.6	5.8	4.2	4.7	6.0	4.8	5.2	4.8	6.2	7.4	6.4	4.5	6.7
l. Other finance	0.3	0.6	0.9	1.1	1.4	1.5	1.8	1.7	1.6	1.3	1.6	1.7	1.5	1.5
3. State and local governments	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.5	0.6	0.8
4. Federal government	1.1	1.1	0.9	0.9	1.6	1.7	2.1	2.5	2.8	2.8	2.9	3.3	4.4	4.4
5. Total	1.5	1.7	1.8	2.0	2.2	2.4	2.5	2.7	2.9	3.0	3.2	3.4	3.5	3.6

Source: National Balance Sheet, Vol. II, Tables III-1, III-5, III-5b through III-5m, III-6 and III-7; line 5 from Table I.

TABLE 107

SHARE OF NET PURCHASES OF NONFARM RESIDENTIAL MORTGAGES IN TOTAL NET USES OF FUND OF SECTORS, 1946-58
(per cent)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
1. Nonfarm households	2.3	1.6	1.4	0.5	0.2	0.4	0.4	0.6	0.6	0.4	0.9	1.0	0.9
2. Finance	260.0	21.6	30.0	36.6	32.7	23.8	20.5	29.4	32.4	34.5	33.7	23.1	27.6
a. Government insurance and pension funds	0	0	0	0	4.6	1.5	0.9	0.9	2.6	1.2	2.5	0.7	-4.1
b. Commercial banks	-16.6	30.4	-317.1	19.2	15.1	7.6	9.9	16.5	13.0	20.1	15.9	2.6	9.0
c. Mutual savings banks	11.6	34.7	82.0	79.4	160.9	155.6	72.9	75.9	87.9	116.8	105.4	71.2	73.7
d. Savings and loan associations	114.6	109.8	102.2	81.0	87.0	78.9	81.3	85.6	83.2	86.5	81.3	80.3	79.6
e. Investment companies	33.3	33.3	25.0	7.7	10.7	-4.0	1.9	-2.4	0	-1.2	-1.4	-2.1	-2.3
f. Credit unions	16.7	10.0	18.2	7.7	5.9	10.0	9.1	7.9	8.1	6.4	11.3	0	13.8
g. Life insurance	8.4	29.4	45.9	40.4	62.2	60.3	28.3	29.2	37.0	47.4	43.9	23.1	16.8
h. Fire and casualty insurance	0	0	0.9	0.9	1.0	1.0	0	0	0	0	0	-1.0	0
i. Noninsured pension plans	1.1	0.6	0.6	0.8	0.7	3.1	2.1	1.9	1.6	1.7	4.2	5.9	4.5
j. Other private insurance	0	4.8	14.6	14.9	21.2	19.7	11.6	8.6	9.0	11.8	7.5	-12.1	1.2
k. Finance companies	9.2	6.2	-0.9	7.1	10.6	-12.8	7.8	1.5	38.6	10.9	-9.1	-24.7	-191.2
l. Other finance	-0.6	-1.2	5.1	3.4	2.8	200.0	0	0	0	10.0	-25.0	0	1.8
3. State and local governments	0	0	0.2	1.4	0.6	0.8	0.8	1.3	0.8	1.0	0.9	2.4	2.7
4. Federal government	1.1	-0.7	1.6	22.5	3.3	7.7	13.9	8.9	-2.8	5.3	83.6	84.1	4.8
5. Total	8.2	4.5	5.2	6.0	5.3	4.7	4.9	5.5	6.4	6.4	5.8	4.7	5.9

Source: National Balance Sheet, Vol. II, Tables VII-1, VII-5, VII-5b through VII-5m, VII-6, and VII-7; line 5 from Table V.

dential mortgages for the period as a whole is virtually as high as the comparable ratio for saving and loan associations (85 per cent), which are commonly considered as the typical investor in residential mortgages. The 1958 share of residential mortgages in total assets of mutual savings banks (55 per cent) was still considerably below that of saving and loan associations (81 per cent), but was far above that for all other major financial institutions such as life insurance companies (24 per cent) and commercial banks (8 per cent).

The predominance of the "big four" as suppliers of funds to the market for residential mortgages is evident from the fact that in no year of the postwar period did their combined share in the net flow fall below 75 per cent, and that it exceeded 90 per cent in two years (1950 and 1954). The only other investor groups of substantial importance at some periods were federal credit agencies who absorbed 9 per cent of the net supply of residential mortgages in 1949, 7 per cent in 1951–52, and 14 per cent in 1957; the years 1951, 1952, and 1957 were boom periods when market conditions were tight (see Table 108).

Historical Background

The discussion of the developments in the market for residential mortgages during the postwar period has already indicated most points in which it differed from earlier periods, particularly in market organization and techniques. These differences may now be summarized and supplemented by indicating the main differences in the distribution of residential mortgages among holders and their relative importance in the portfolios of the main investor groups. The comparison will be made mostly with the period before 1929.

In market techniques, the basic difference between the postwar and the predepression periods, of course, is the substitution of the amortized long-term mortgage, often guaranteed by the federal government, for the unamortized, uninsured mortgage which was nominally short-term (three to five years) although in practice was often renewed. Other technical changes of importance are the development of advance commitments by large institutional lenders, the rise of mortgage companies, and the increasing importance of wholesale lending operations.

The first point where an important structural difference exists between the postwar and predepression periods is the role of mortgage credit in financing residential real estate, particularly one- to four-family structures. The postwar ratio for new homes of over two-thirds

TABLE 108

CREDIT CONDITIONS IN THE HOME MORTGAGE MARKET, 1946-58

	Interest Rates (per cent)				Maturity (years)		Loan-to-Value Ratio (per cent)	
	Conventional Home Mortgage (1)	FHA Contract Rate (2)	VA Contract Rate (3)	FHA Secondary (4)	FHA New Homes[a] (5)	VA (6)	FHA New Homes[a] (7)	VA (8)
1946	4.30	4.50	4.00	n.a.	21	19	84	93
1947	4.37	4.50	4.00	n.a.	20	20	81	90
1948	4.50	4.50	4.00	4.24	20	20	80	84
1949	4.61	4.50	4.00	4.28	23	21	84	86
1950	4.58	4.31	4.00	4.20	24	23	85	92
1951	4.64	4.25	4.00	4.36	23	24	83	90
1952	4.81	4.25	4.00	4.43	22	23	80	87
1953	4.93	4.44	4.38	4.74	22	23	83	89
1954	5.02	4.50	4.50	4.61	23	26	82	93
1955	4.92	4.50	4.50	4.70	26	27	85	95
1956	4.96	4.54	4.50	4.97	26	27	83	93
1957	5.88	5.08	4.50	5.65	26	27	82	92
1958	5.70	5.25	4.69	5.76	27	28•	89	94
Averages								
1946-49	4.44	4.50	4.00		21	20	82	88
1949-54	4.75	4.35	4.13	4.44	23	23	83	90
1954-58	5.28	4.75	4.52	5.13	26	27	84	93
1946-58	4.86	4.55	4.24		23	24	83	91

Cols. 1, 4: See source to Table 48.
Cols. 2-3, 1946-55: Klaman, Postwar Residential Mortgage Market, Tables A-4 and A-5, p. 285.
Cols. 2-3, 1956-58: Annual Report of Housing and Home Finance Agency: Tenth, p. 5; Eleventh, p. 4; Twelfth, p. 20; and Thirteenth, p. 19.
Col. 5, 1946-49: Third Annual Report of HHFA, p. 204, Table 16.
Col. 5, 1950-54: Eighth Annual Report of HHFA, p. 186, Table 59.
Col. 5, 1955-58: Twelfth Annual Report of HHFA, p. 105, Table III-39.
Cols. 6, 8: Unpublished data in letter from VA.
Col. 7, 1946-49: Third Annual Report of HHFA, p. 204, Table 16.
Col. 7, 1950-52: Sixth Annual Report of HHFA, p. 273, Table 21.
Col. 7, 1953-54: Eighth Annual Report of HHFA, p. 193, Table 61.
Col. 7, 1955-56: Tenth Annual Report of HHFA, p. 105, Table III-43.
Col. 7, 1957-58: Twelfth Annual Report of HHFA, p. 107, Table IV-42.

[a] Arithmetic mean for new one-family houses.

(Table 101), implying that less than one-third of the purchase price is provided by the owner, is higher than the ratios prevailing before World War II. The contribution of mortgage loans toward the financing of new residential housing has been estimated at about three-fifths for the 1930's and 1920's, and at slightly more than two-fifths in 1911–18,[14] compared to over two-thirds in 1946–52. This is an important shift, since it means that the same dollar value of residential construction required about two-thirds more mortgage financing in the postwar period than before World War I, although only one-tenth more than in the 1930's.

[14] Grebler, Blank, and Winnick, *Capital Formation*, pp. 454–455, cols. 5 and 12.

TABLE 109

DISTRIBUTION OF NONFARM RESIDENTIAL MORTGAGES AMONG HOLDER GROUPS, 1900-58
(per cent)

	1958 (1)	1945A (2)	1945B (3)	1939 (4)	1929 (5)	1912 (6)	1900 (7)
1. Nonfarm households[a]	9.6	26.8	29.8	28.2	34.2	37.6	54.3
2. State and local governments	1.2	0.3	0	0	0	0	0
3. Federal government	3.8	3.9	3.7	10.5	0	0	0
4. Financial institutions, total	85.3	69.1	66.5	61.3	65.8	62.4	45.7
a. Commercial banks	13.8	14.5	15.0	13.5	13.3	11.9	6.6
b. Mutual savings banks	15.7	14.6	12.1	15.3	14.1	21.2	17.9
c. Savings and loan associations	33.6	22.6	22.2	18.0	24.8	17.0	12.6
d. Life insurance companies	19.5	15.9	15.8	12.3	10.9	9.4	6.2
e. Fire and casualty insurance	0	0.1	0.2	0.2	0.4	0.8	0.9
f. Noninsured pension plans	0.5	0.1	0	0	0		
g. Other private insurance	0.2	0.3	0.5	0.4	0.3	0.1	0
h. Investment companies	0.2	0.4	0.3	0.4	0.1		
i. Mortgage companies	1.1	0.3	0.5	1.3	1.9	2.0	1.5
j. Credit unions[b]	0.3	0.1	0	0	0	0	
k. Government insurance and pension funds[b,c]	0.3	0.1	0	0	0		
l. Other finance	0.1	0.1	0	0	0	0	0
5. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6. Total (billion dollars)	133.0	23.3	23.3	20.8	24.9	5.0	3.0

Source: National Balance Sheet, Vol. II. Cols. 1-2 from Table IV-b-11a; cols. 3-7 from Table IV-b-11-c-1.
For notes a-c, see notes to Table 110. Also, see note to Table 55.

The distribution of residential mortgages among the main investor groups, as seen in Table 109 and Chart 26, is characterized by a substantial, although not continuous, increase in the share of financial institutions. Financial institutions accounted for more than four-fifths of the increase in residential mortgage debt between 1900 and 1912, but for only two-thirds of the growth between 1912 and 1929. In the 1930's, when total residential mortgage debt shrank by about one-sixth, the holdings of private financial institutions declined by almost one-fourth. However, federal credit agencies, first entering the market during this decade, held one-tenth of the total residential debt in 1939, and the share of all financial institutions was three-fifths. The holdings of other investors, mostly individuals, declined from more than one-half in 1900 to two-fifths or less between 1912 and 1945. Thus the shrinkage in individuals' share in the residential mortgage debt and the concomitant rise in the share of financial institutions have been much sharper in the thirteen postwar years than in the preceding fifty years.

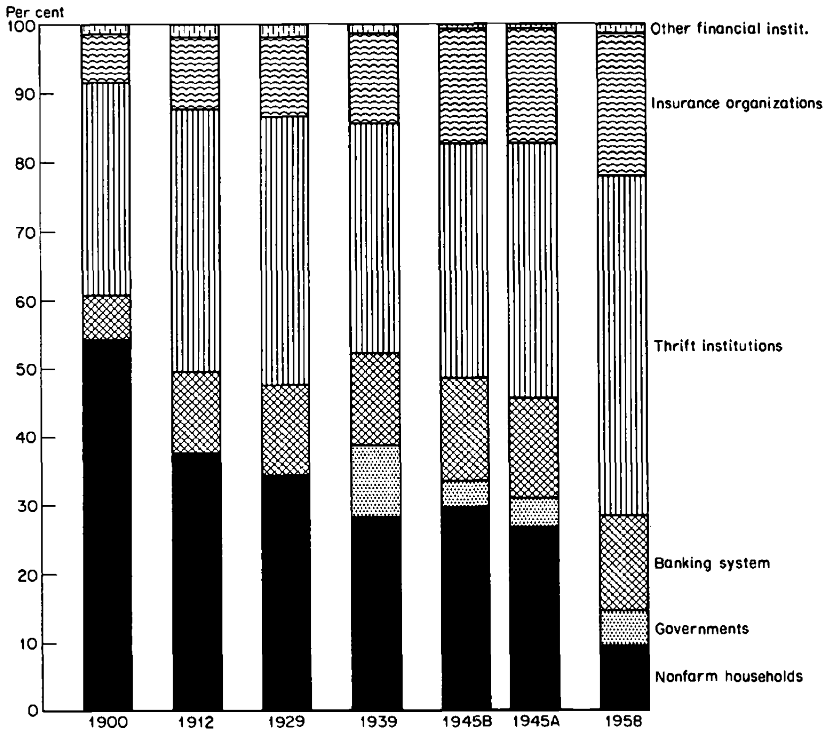
Among financial institutions, the main difference between the postwar and predepression periods is the sharp increase in the proportion of residential mortgages held by life insurance companies and saving and loan associations, and, to a much lesser extent, by commercial banks, and the decline in the share of mutual savings banks. The reasons for these shifts become clearer in Table 110 and Chart 27 which show the share of residential mortgages in the total assets of the main holder groups.[15] The share of residential mortgages in the total assets of financial institutions passed the highest prewar mark in 1953–54, and by 1958 was one-quarter higher than that.

In the period 1900–29, the increase in the share of assets allocated to residential mortgages was particularly marked for commercial and mutual savings banks. This was to a considerable extent the result of the relaxation of the statutory limits on holdings of mortgage loans, but it also reflected the residential building boom of the 1920's. In the case of life insurance companies, the increase in the share of residential mortgages was limited to the 1920's. Property insurance companies, in contrast, sharply reduced their share after 1900 and had almost liquidated their holdings by 1945.

[15] If federal corporations and credit agencies are included, the 1939 share of financial institutions is 8 instead of 7 per cent (see Table 110; Goldsmith's *A Study of Saving in the United States*, Princeton, 1956, Vol. III, Table W-40; *National Balance Sheet*, Vol. II, Table IV-b-11c-1).

CHART 26

DISTRIBUTION OF NONFARM RESIDENTIAL MORTGAGES AMONG MAIN HOLDER GROUPS, 1900–58



Source: Table 109.

TABLE 110

SHARE OF NONFARM RESIDENTIAL MORTGAGES IN TOTAL ASSETS OF HOLDER GROUPS, 1900-58
(per cent)

	1958 (1)	1945A (2)	1945B (3)	1939 (4)	1929 (5)	1912 (6)	1900 (7)
1. Nonfarm households[a]	0.8	1.0	1.1	1.6	1.9	1.6	2.6
2. State and local governments	0.8	0.1	0	0	0	0	0
3. Federal government	4.4	1.1	1.1	8.5	0	0	0
4. Financial institutions, total	16.1	4.6	4.5	7.4	12.4	8.7	8.0
a. Commercial banks	7.6	2.1	2.2	4.2	5.0	2.7	1.9
b. Mutual savings banks	55.0	19.9	16.5	26.9	35.6	26.4	21.8
c. Savings and loan associations	80.7	60.2	60.0	69.7	83.4	89.0	75.7
d. Life insurance companies	23.8	8.2	8.2	8.8	15.5	10.6	10.5
e. Fire and casualty insurance	0.2	0.3	0.5	1.0	2.1	4.0	5.8
f. Noninsured pension plans	2.3	0.9	0	0	0		
g. Other private insurance	6.9	4.0	6.2	6.3	8.4	4.3	4.0
h. Investment companies	1.2	2.5	3.0	5.0	0.5		
i. Mortgage companies	87.5	70.3	71.3	64.5	61.7	27.3	24.2
j. Credit unions	8.0	6.8	0	0	0	0	
k. Government insurance and pension funds[b,c]	0.6	0.1	0	0	0		
l. Other finance	1.5	0.3	0	0	0	0	0
5. Total	3.6	1.5	1.5	2.4	2.6	1.6	1.9

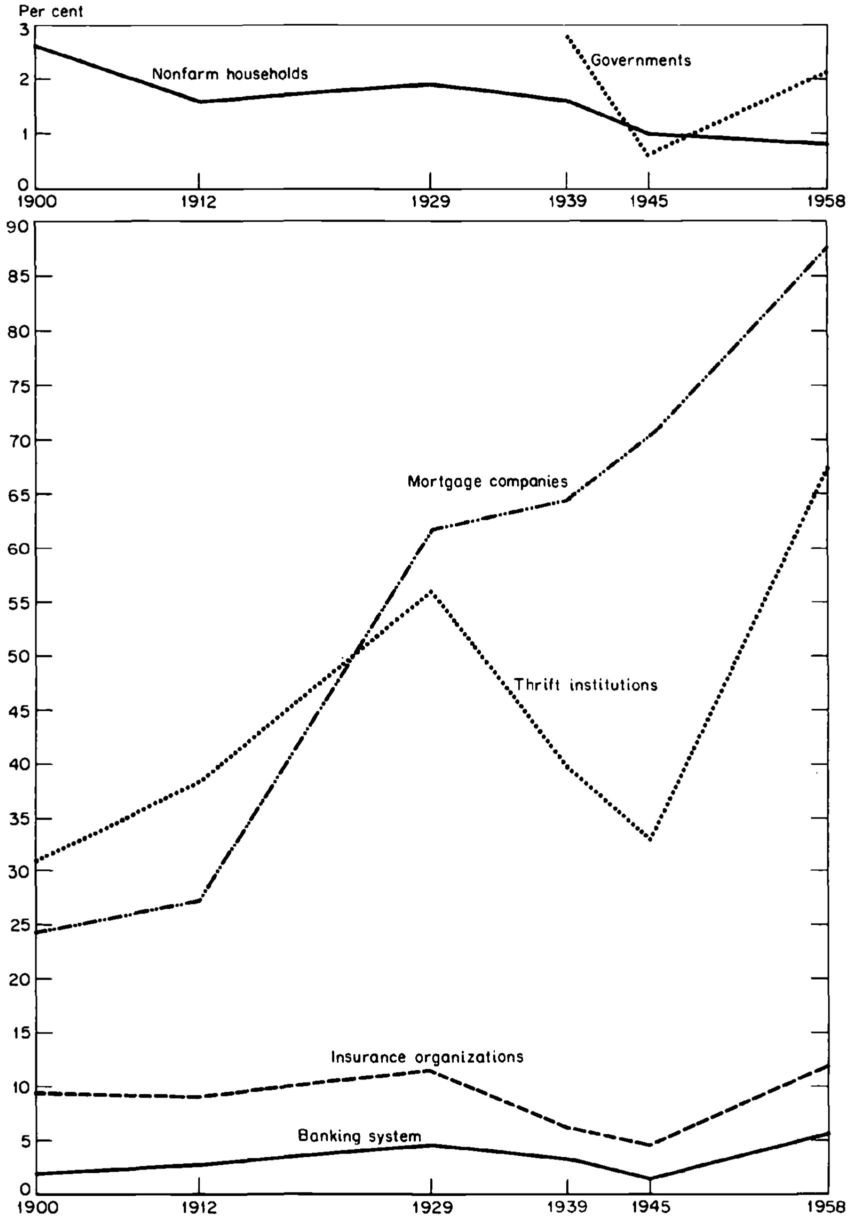
Source: National Balance Sheet, Vol. II, unless otherwise indicated.
Lines 1-4, 5: Tables I and Ia.
Lines 4a-4h, 4j-4l, cols. 1-2: Tables III-5a through III-5k and III-5m.
Lines 4a-4h, 4j-4l, cols. 3-7: Numerators from Tables IV-b-11c-1; denominators from Financial Intermediaries, Tables A-3, A-4, A-5, A-19, A-8, A-12, A-13, A-9, A-10, A-11, A-14, and A-21.
Line 4i, cols. 1-2: FRB unpublished worksheets.
Line 4i, cols. 3-7: Study of Saving, Vol. I, Table M-20 (numerator from col. 3 and denominator from col. 1).

[a] Cols. 1 and 2 include all nonfarm residential mortgages not included elsewhere.
[b] For cols. 3-5, small amounts of mortgages held by these groups are included in line 1.
[c] For 1929-45, mortgages held by government trust funds were recorded in Financial Intermediaries, Table A-11, but the figures were not comparable to the figures of the postwar period.

See note to Table 55.

CHART 27

SHARE OF NONFARM RESIDENTIAL MORTGAGES IN TOTAL ASSETS OF MAIN HOLDER GROUPS, 1900–58



Source: Table 110.

Noninstitutional investors, whose holdings must be estimated as a residual and are therefore subject to a particularly wide margin of error, seem to have accounted for a relatively high share in the total increase of residential mortgage debt in 1900–29. For this period, a third of the total increase in residential mortgage debt is held by households, probably to a substantial extent in the form of junior mortgages. This compares with estimated shares of only about 15 per cent in 1900–12 and 40 per cent during World War II. Noninstitutional investors apparently also were heavily affected by the shrinkage in the volume of residential mortgages between 1929 and 1939. They are estimated to have borne more than one-half of the aggregate shrinkage, and they contributed to the decline in their share of total outstanding mortgage debt.