

## COMPARABILITY WITH MORTGAGE STATISTICS FROM OTHER SOURCES

### GENERAL

The data presented in this volume were collected as part of the program of the 1950 Census of Housing. Users of these statistics will naturally ask to what extent they are comparable with the statistics that have been available from a number of Federal agencies as by-products of the administration of programs relating to loans on residential properties. In line with good statistical practice the following statement has been prepared to indicate to what extent the data collected by the census are directly comparable with those available from other sources and at what points there are significant differences.

The census data were collected directly from the property owners and the lenders. They provide totals for each major class of mortgage holders and government insurance categories and make possible a detailed analysis of the characteristics of mortgaged properties, mortgage loans, and the borrowers. They also provide information on the mortgage holdings of individuals, as well as other holders, for which little information has been available in the past.

Basically the several sets of statistics deal with the same thing--debt secured by residential properties not on farms. However, the detailed handling of the concepts involved varies with the procedures of the agencies which collected the data. Estimates have been prepared for the several items which account for most of the differences. Each table indicates also the amount of the difference which could not be accounted for in the light of information presently available.

The Residential Financing Survey is a part of the 1950 Census of Housing; therefore, the coverage of the survey and the concepts used are consistent with those of the general housing census and the population census, in order to secure statistics for the properties and their owners on a comparable basis. For example, the definition of "farm" is the same for the residential financing statistics, the general housing statistics, and the population statistics. Further, the Residential Financing Survey was designed to include dwelling units enumerated in the general housing census, and not units completed after that enumeration.

Differences between the census and other sources arise largely from differences in the universe covered and from definitions of residential nonfarm property and other concepts. Such differences do not affect the reliability of data on the characteristics of permanent loans on properties of the type described in this volume as "residential" and as "nonfarm."

In general, comparisons can appropriately be made of the census data with (1) the figures regularly published by the Home Loan Bank Board (obtained or estimated from various Federal and private sources) on mortgages outstanding, by major types of holders, and (2) the administrative statistics issued by the Federal Housing Administration and the Veterans Administration showing mortgages insured or guaranteed under their respective programs.

### SOURCES OF DATA ON MORTGAGE HOLDINGS OF LENDERS

An annual series of statistics on the mortgage debt held by various types of lenders, secured by 1- to 4-family nonfarm properties, is published by the Home Loan Bank Board in the Savings and Home Financing Source Book. The 1952 issue contains statistics for the years 1925 to 1950. Revised figures for December 31, 1949 and 1950 (to be published in future issues) and an estimate for August 1, 1950, are presented in table N below. These estimates, together with figures on outstanding mortgage debt on 1-

to 4-dwelling-unit properties and on residential properties of all sizes from the Residential Financing Survey of the 1950 Census of Housing, are shown in this table. The sources for these estimated totals, described fully in the Source Book, need be indicated only briefly here. For financial institutions, the residential mortgage totals are based on reports covering a high percentage of their portfolios, while for other types of lenders, a large portion of the figure is estimated. The savings and loan association data are based on balance sheets from practically all associations; the life insurance company data are based on reports for companies which have 95 percent of the mortgages; the commercial bank data are from the "all bank" statistics prepared by the Federal Deposit Insurance Corporation based on the balance sheet reports by banks to the several bank supervisory agencies; statistics for mutual savings banks are from the same source, except that residential loans are not separated in some reports, which necessitates a greater degree of estimation; and the Federal National Mortgage Association data represent 100 percent coverage. Holdings of individuals and others are estimated by the HLBB, using figures from the Residential Financing Survey adjusted to a basis comparable with the other statistical series.

Table N.—MORTGAGE DEBT ON NONFARM PROPERTIES, BY TYPE OF LENDER: 1949 AND 1950  
(Millions of dollars)

Source and report date	Type of mortgage holder						
	Total	Savings and loan associations	Life insurance companies	Mutual savings banks	Commercial banks	FNMA	Individuals and others (including HOLC)
1- to 4-dwelling-unit properties							
HLBB:							
December 31, 1949..	37,483	11,117	5,970	3,364	7,941	808	8,283
August 1, 1950 (estimated).....	41,459	12,229	7,170	3,837	8,841	1,064	8,318
December 31, 1950..	45,061	13,104	8,392	4,312	9,464	1,334	8,455
Census:							
August 1, 1950.....	37,086	9,692	6,611	3,570	7,646	1,049	8,518
Total residential							
HLBB:							
December 31, 1949..	( <sup>1</sup> )	<sup>2</sup> 11,616	8,232	5,569	8,661	828	( <sup>1</sup> )
August 1, 1950 (estimated).....	( <sup>1</sup> )	12,765	9,592	6,290	9,694	1,081	( <sup>1</sup> )
December 31, 1950..	( <sup>1</sup> )	<sup>2</sup> 13,662	11,035	7,054	10,414	1,347	( <sup>1</sup> )
Census:							
August 1, 1950.....	44,486	10,069	8,985	5,867	8,369	1,055	10,141

<sup>1</sup> Not available.

<sup>2</sup> Includes an amount estimated at about 1 percent for other than residential properties.

Source: Home Loan Bank Board, Operating Analysis Division.

The principal differences in definitions are:

1. The census data include no properties completed after April 1, 1950; the lender series include all debt held on the date of the report regardless of date of completion of the property.
2. The census data cover only "permanent" mortgage loans, excluding loans to finance construction; most of the lender series contain at least some loans to finance construction, including loans owed by builders as well as by eventual owners.
3. The census data include the unpaid balance under a contract to purchase as indebtedness of the purchaser, but exclude mortgage indebtedness of the seller where it exists behind such a contract; lender series, in general, exclude the contracts to purchase and include mortgage debts owed by the sellers.
4. The census data exclude properties in which 50 percent or more of the floor space is used for business purposes; in the lender series, lenders classify properties according to much more flexible and less easily stated definitions.
5. The census data exclude all properties for which the respondent in the general housing census answered "Yes" to the

question, "Is this house on a farm (or ranch)?" and structures included in a mortgage with a farm; in the lender series, the lender's judgment as to the primary security for the loan largely determines whether or not a mortgage is classified as a farm mortgage. Some of the properties reported as on a farm in the general housing census had little farm land or agricultural products, as evidenced by the fact that over 1,000,000 such properties were excluded from the Census of Agriculture.<sup>1</sup>

Differences in sources of the information also affect the data obtained. The census data represent a summation of mortgage debts as reported by owners of residential properties (checked to the records of the lenders); the series for financial institutions are derived from the accounting records of their total holdings of residential loans, including any accounting adjustments which may have been made in such records. In addition to the definitional differences already mentioned, accounting records for some institutions may include general or specific charge-offs for uncollectible debts, which are still carried as claims against borrowers, or premiums or discounts not reflected in the records of a particular borrower.

Census data represent a cross-section of residential nonfarm mortgages and mortgage debt, other than for construction purposes. The statistical series provided by other Federal agencies afford continuous coverage of residential mortgage holdings--construction, temporary and permanent.

The extent of the difference in the amount of debt caused by the differences in concept and coverage described above does not admit of exact measurement with the information presently available. To indicate the order of magnitude, tentative rough estimates have been made of the difference due to various factors for specific types of lenders.

The staffs of various interested Federal agencies have studied the influence on the data of these differences in definitions, coverage, and methods and have estimated some of the adjusting factors. This work has been done by persons familiar with both sets of data and with mortgage finance generally. They have drawn on such published and unpublished data as are available, but to a large extent the estimates represent informed judgements. Work is continuing on some phases of the analysis.

Adjustment figures in tables O through S are presented to permit a better understanding of the relationship between the statistical series published by other Federal agencies and the data based on the 1950 Census of Housing. In contrast with the statistical data from either the Bureau of the Census or other Federal agencies, these adjustments are tentative and cannot be used as exact measures of the categories themselves but only as approximations of the relative values.

#### SAVINGS AND LOAN ASSOCIATIONS

Table O contains approximations of the amount and kinds of differences between the estimates of mortgage debt held by all savings and loan associations on 1- to 4-dwelling-unit nonfarm properties and similar estimates obtained from the census.

The home mortgage debt held by savings and loan associations as of August 1, 1950, as estimated by the Home Loan Bank Board, is \$12,229 million. The census figure for indebtedness is \$9,692 million. Several adjustments can be made because of differences in coverage and concepts, the nature of which are explained below. One of the components of this amount not included in the census is construction loans. Although the amount of such

<sup>1</sup> It is estimated that 1,058,000 places were excluded from the Census of Agriculture even though they were reported as on a farm in the general population and housing censuses. Properties in this group are not represented in the Residential Financing Survey nor in the farm mortgage survey which was conducted as part of the Census of Agriculture. This group includes (a) 593,000 places of 3 or more acres which had a value of agricultural products in 1949, exclusive of home gardens, amounting to less than \$150, (b) 465,000 places of less than 3 acres for which the value of sales of agricultural products in 1949 amounted to less than \$150.

loans on the associations' books on August 1, 1950, cannot be accurately determined, tests of related data indicate that total outstanding commitments for construction loans as of August 1, 1950, may be estimated at \$1.150 million.

Table O.--COMPARATIVE STATISTICS ON OUTSTANDING DEBT ON MORTGAGES HELD BY SAVINGS AND LOAN ASSOCIATIONS: 1950

(1- to 4-dwelling-unit properties)

Subject	Total mortgage debt (millions of dollars)
Census:	
August 1, 1950.....	9,692
Standard error.....	172
HLBB:	
August 1, 1950.....	12,229
Adjustments--total.....	2,537
Construction loans and other temporary financing...	1,150
Purchase loans on new homes--April 1 to July 31, 1950.....	350
Loans on joint home and business properties and on properties classified by census as "on farm," and "concealed" mortgages in contract sales.....	650
Mortgages in associations in United States territories and possessions.....	25
Unidentified.....	362

Source: HLBB estimates.

The census statistics do not include home purchase loans on new dwellings completed after April 1, 1950. All home purchase loans made by savings and loan associations for April through July totaled \$804 million. It is estimated that, during this period, nearly 45 percent of such mortgages were on new properties. This would total \$350 million.

In addition to adjustments for construction loans, loans on new properties completed after April 1, 1950, and mortgages held by associations outside continental United States, there are several differences in concept which are factors in explaining the difference between the census and HLBB totals for savings and loan associations. In the aggregate, it is estimated that the various conceptual differences involved, which include the classifications of "farm" and "residential" loans; "business" and "residential" loans; and the difference effected by reporting of contracts to purchase, account for approximately \$650 million in mortgage debt. Further explanation of these differences follows.

Savings and loan associations make very few loans on properties that are primarily agricultural; this is by common practice and because of limitations in the amount that can be loaned on such properties. However, there are circumstances where loans commonly made by these associations on properties with incidental farming operations would not have been covered in the census. These associations include in their nonfarm total, loans which they make on properties which include some farm land and with incidental farm operations, when the house constitutes the major part of the value on which the loan is based. As indicated above, such properties are excluded from the Residential Financing Survey if the occupant gave an affirmative answer to the question, "Is this house on a farm?"

Properties with 50 percent or more of the floor space used for business purposes are excluded from the Residential Financing Survey statistics. For example, a two-story building with a dwelling unit on the second floor and business unit on the first would not be considered "residential" property by the census. Rooming houses with 10 lodgers or more also were excluded. In such borderline cases, however, the loans may be classified as home loans by the lender.

Savings and loan associations make few loans on properties which are predominantly nonresidential. It is believed, however, that loans by savings and loan associations on properties of the types which the census considered to be nonresidential may be of some significance in the country as a whole.

Total purchase contracts with individual lenders (sellers) are reported in census figures as \$1,800 million. In such cases,

the contract debt is the only direct obligation of the buyer on the purchased property; any mortgage that may exist has not been assumed by the buyer. It is known that, in a large number of these cases, the seller had previously mortgaged the property. In such cases, a "concealed" mortgage exists which was not reported by the census, since the debt on the property was classified as a "purchase contract." This tends to understate the outstanding mortgage debt held by institutional lenders.

#### COMMERCIAL BANKS

Construction loans, loans to nonbank lenders, and a minor amount of loans on vacant lots--none of which is included in the census data--are included in the figures on loans secured by residential properties shown by commercial banks in their periodic reports of condition. A supplementary schedule to the report of condition as of June 30, 1950, however, showed these items separately as well as providing information on size of property and insurance status of loans. In large part, this supplementary schedule forms the basis of the comparison shown in table P.

Table P.--COMPARATIVE STATISTICS ON OUTSTANDING DEBT ON MORTGAGES HELD BY COMMERCIAL BANKS: 1950  
(Millions of dollars)

Subject	Total	1- to 4- Family	Multi- family
Census:			
August 1, 1950.....	8,369	7,646	723
Standard error.....	157	154	129
FHB:			
August 1, 1950.....	9,694	8,841	853
Adjustments--net total.....	1,325	1,195	130
Construction loans.....	925	430	495
Purchase loans on new homes, April 1 to July 31, 1950.....	333	298	35
Unidentified.....	67	467	-400

Source: Federal Reserve Board estimates based on reports of condition of all commercial banks; special supplement to reports of condition of all insured commercial banks, June 30, 1950; and reports of weekly reporting member banks.

The difference between the HLEB and the census figures on all loans secured by residential properties is fairly small, but this reflects larger offsetting differences in the figures for loans on 1- to 4-family and multi-family properties. A substantial part of these differences may arise from the differences in definition of properties discussed in an earlier section.

In addition, a difference in size classification of properties accounts, at least in part, for the offsetting differences. Classification of properties in respect to the number of dwelling units, 1- to 4-family or multi-family, is quite different in the commercial bank call report from their classification in the census. In the former, the classification was based on number of dwelling units in the structure regardless of whether the mortgage also covered additional structures. For example, the instructions given for the call report specifically state that a loan secured by a row of six one-family houses should be included in the 1- to 4-family category. In the census, the classification is based on total dwelling units on the entire property covered by the mortgage.

Other less important differences in coverage which may also contribute to the differences in the figures are: the commercial banks may include as residential properties rooming houses with 10 lodgers or more and government-owned properties, some properties with 50 percent or more of the floor space devoted to business uses and some properties classified in the Residential Financing Survey as farms and therefore not included in the census data.

#### LIFE INSURANCE COMPANIES

For life insurance companies the HLEB August 1, 1950, estimate of mortgage debt held on all residential properties is \$9,592 million and on 1- to 4-dwelling-unit properties is \$7,170 million--figures somewhat higher than census figures of \$8,985 million and \$6,611 million, respectively.

An adjustment should be made because of difference in coverage, due principally to the volume of mortgages on newly built homes completed and acquired between April 1 and August 1, 1950. This appears to result in substantial agreement of the HLEB and census data.

#### MUTUAL SAVINGS BANKS

For mutual savings banks, the HLEB estimates that, on August 1, total residential mortgage debt amounted to \$6,290 million, a figure closely related to June 30, 1950, call report data for all such banks. Although this is somewhat higher than the census estimate of \$5,867 million, an allowance for difference in coverage brings the two figures into substantial agreement as in the case of life insurance companies.

A revision has been made in the HLEB estimate of the 1- to 4-dwelling-unit portion of this residential debt, based on information which has become available in the past few years. Supplemental data to the June 30, 1950, call report on insured mutual savings banks, estimates of insurance status of mortgages of all such banks published in 1951 by the FDIC, and more detailed estimates by the National Association of Mutual Savings Banks provide much better material for estimating the level of home mortgages held than was previously obtainable. Using these sources and the census results as bases of revision, total home mortgage debt held by mutual savings banks is estimated at \$3,837 million by the HLEB. This compares with the total of \$3,570 million reported in the census. The differences between census figures and the HLEB revised estimates for both "total residential" and "1- to 4-dwelling-unit properties" are accounted for by the variation in concepts of the two series. The differences in figures for both in the "total residential" and the "1- to 4-dwelling-unit properties" appear to be reasonable considering the variations in concepts of the two series, and in light of all other information now available.

#### FEDERAL NATIONAL MORTGAGE ASSOCIATION

Outstanding debt on FHA-insured and VA-guaranteed mortgages held by FNMA, as of July 31, 1950, is shown in table Q, together with the census figures for FNMA holdings. The adjustment shown in the table is for mortgage loans purchased by the FNMA on new homes completed after April 30, 1950, since such loans are not included in the census figures.

Table Q.--COMPARATIVE STATISTICS ON OUTSTANDING DEBT ON MORTGAGES HELD BY FEDERAL NATIONAL MORTGAGE ASSOCIATION: 1950  
(Millions of dollars)

Subject	Mortgages held in FNMA portfolio		
	Total	FHA-insured	VA-guaranteed
Census:			
August 1, 1950.....	1,055	194	861
Standard error.....	164	124	156
FNMA:			
July 31, 1950.....	1,081	216	865
Adjustments--net total.....	26	22	4
Loans purchased by FNMA on new homes completed after April 30, 1950.....	71	4	67
Unidentified.....	-45	18	-63

Source: Housing and Home Finance Agency.

#### INDIVIDUALS AND OTHERS

Home mortgages held by individuals are combined with those of "nonsupervised" lenders in the annual debt estimates prepared by the Home Loan Bank Board. The classification "individuals and others," therefore, includes total debt on nonfarm 1- to 4-dwelling-unit properties held by mortgage companies and all other lenders not covered in the discussions up to this point.

Prior to the 1950 Census, there was only meager information obtainable on the level of home mortgage debt held by the "individuals and others" group. However, the data could be roughly approximated, principally by reference to the current volume of mortgages being recorded by these lenders, to estimated sales of

mortgages and to imputed rates of repayment which were assumed to be similar to those of savings and loan associations, for which reliable information is available. Contracts to purchase, however (mostly held by individuals) are included in the census figure but are excluded from that of the Home Loan Bank Board.

The census data have been used by the Home Loan Bank Board as a basis for revising its estimates of home loans held by individuals and others, by deducting from the survey total of \$8,518 million, the \$1,800 million reported in the census as being in the form of contracts to purchase, and adding back \$1,600 million of mortgages which represent the sum of estimated adjustments for other differences in scope, and for timing, as presented in the following table:

Table R.—COMPARISON OF HOME MORTGAGE DEBT OF INDIVIDUALS AND MISCELLANEOUS LENDING INSTITUTIONS REPORTED IN CENSUS RESIDENTIAL FINANCING SURVEY, AND AS RE-ESTIMATED FROM THIS SURVEY BY THE HOME LOAN BANK BOARD: 1950 (1- to 4-dwelling-unit properties)

Subject	Total mortgage debt (millions of dollars)
Census.....	8,518
Standard error.....	±155
HLBB: August 1, 1950.....	8,318
Adjustments—net total.....	-200
Contracts to purchase.....	-1,800
Construction loans held.....	700
Purchase loans on new homes.....	300
Other loans out of scope of Census.....	600

Source: HLBB estimates.

The annual estimates of debt held by individuals and others, which will be published in the future by the Home Loan Bank Board, will use the \$8,318 million estimate as a benchmark, as of August 1, 1950.

FHA-INSURED MORTGAGES

Statistics on the number of home and rental project mortgages insured by the Federal Housing Administration which were in force as of July 31, 1950, and the estimated amount of outstanding debt involved, are shown in table S. These data exclude property improvement loans and production credit loans insured under pertinent sections of the National Housing Act.

The FHA figures differ from the census figures in several ways. The census figures exclude mortgages on structures completed after April 1, 1950, while Federal Housing Administration statistics include outstanding debt and number of mortgages on rental projects not fully complete or not yet started as of July 31, involving an estimated \$1,326 million of mortgage debt.

Another source of the difference between the FHA and census figures on project mortgages may be the difference in the size classification of the projects. The census included in the project mortgage category all properties with 5 or more units, while properties with 5 to 7 units are not included in the FHA project mortgage data. Presumably some of the FHA properties which were in the 1- to 4-family home category at the time of FHA insurance endorsement, were found to have 5 to 7 dwelling units at the time of the census. It is estimated that about 1,000 properties with an aggregate mortgage debt of about \$6 million fall in this 5 to 7 unit size group.

In addition to this difference in size classification, there is a time lag in reporting terminations of FHA mortgages (primarily on homes), which would make FHA figures relatively higher than census figures.

rily on homes), which would make FHA figures relatively higher than census figures.

Adjustments can be made for mortgages on newly completed structures insured from April 1 to July 31, for mortgages on projects insured but not completed as of July 31, for the estimated lag in the reporting of home mortgage terminations, and for mortgages on properties with 5 to 7 units. All adjustments shown in table S are rough approximations since exact amounts are not available.

Table S.—COMPARATIVE STATISTICS ON NUMBER AND OUTSTANDING DEB. ON FHA-INSURED MORTGAGES IN FORCE, BY SIZE OF PROPERTY: 1950

Subject	Total		1- to 4-family homes		Project housing <sup>1</sup>	
	Number of mortgages	Out-standing debt <sup>2</sup> (millions of dollars)	Number of mortgages	Out-standing debt <sup>2</sup> (millions of dollars)	Number of mortgages	Out-standing debt <sup>2</sup> (millions of dollars)
Census:						
August 1, 1950.....	1,328,941	8,533	1,323,396	7,179	5,545	1,353
Standard error.....	±23,000	±156	±23,000	±150	±1,050	±41
FHA-insured mortgages in force July 31, 1950..	1,426,260	10,596	1,420,096	7,789	6,164	2,807
Adjustments—net total...	97,319	2,063	96,700	610	619	1,454
Mortgages insured, April 1 to July 31 on properties not completed as of March 31, 1950.....	64,217	518	64,147	469	270	49
Mortgages on projects not completed as of July 31, 1950.....	21,819	1,326	...	...	21,819	1,326
Mortgages on properties with 5 to 7 units.....	...	...	-1,000	-6	1,000	6
Terminations not reported as of July 31, 1950.....	211,000	60	211,000	60	...	...
Unidentified.....	20,283	159	20,553	75	-270	85

<sup>1</sup> FHA project mortgages cover properties containing 8 or more dwelling units; census data for this category cover properties with 5 or more units.

<sup>2</sup> FHA figures are estimated.

Source: Federal Housing Administration, Division of Research and Statistics, December 4, 1952.

VA-GUARANTEED MORTGAGES

Although the number of VA-guaranteed mortgage loans in force is not published by the Veterans Administration, an estimate of the total number can be derived by deducting from the number of "loans closed" the number of mortgages which have been terminated ("claims paid" and "loans paid in full"). In order to obtain a figure comparable to that of the census, three other groups should be excluded, namely, the alteration and repair loans not classed as mortgages, loans outside continental United States, and mortgages made from April through July 1950 on structures not completed before April 1.

After making the adjustments named above and allowing for a 5-month lag in reporting terminations, the number of mortgages outstanding, as of August 1, 1950, is estimated to be approximately 1,636,000. The comparable census figure for total loans outstanding is 1,590,000. The standard error of estimate on this figure is 25,000. The difference of 45,000 between the Veterans Administration estimate and the census figure may be due, in part, to terminations not reported by the end of 1950 and not allowed for in the estimate.

Although estimates of the amount of debt outstanding on VA-guaranteed mortgages are made periodically by the Veterans Administration for operating purposes, these are not published.