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**The
Housing Shortage
and the
Real Estate Boom**

The Housing Shortage and the Real Estate Boom

DURING 1946 and 1947, between five and six million homes in urban and rural nonfarm communities are estimated to have been bought by people in this country. Of these homes less than 1½ million were newly-built structures; the remainder were dwelling units already in existence and previously owned by someone else. The total amount paid for these homes is estimated to be in the neighborhood of \$30 billion. Of this amount, about 1/5 apparently was obtained from use of previously accumulated liquid assets—currency, deposits, savings accounts, and U. S. Government securities—about ¼ was obtained from liquidation of real estate and other assets, about 1/20 was furnished by payments from current income, and about ½ was borrowed on mortgages. Lenders loaned about \$20 billion on 1- to 4-family homes over the two-year period. Debtors made payments of about \$10 billion and outstanding debts showed a net growth of \$10 billion. More people have incurred mortgage debts than ever before, and the total amount of those debts is the greatest in our history. Most types of financial institutions that habitually finance real estate now have more money loaned on mortgages than ever before and the terms on which that money has been loaned are probably more liberal than ever before in our lifetime.

These developments have accompanied one of the greatest real estate booms in our history. Notwithstanding a supply of housing larger than ever before both in aggregate amounts and in proportion to population, housing has not been adequate to meet demand during the postwar period. Real estate prices and building costs have risen to very high levels.

Maintenance of demand at present levels will

EDITOR'S NOTE:—This analysis of the real estate situation was the basis of an address by Mr. Donald S. Thompson, Vice President of the Federal Reserve Bank of Cleveland, at the Cleveland Conference of the National Association of Bank Auditors and Comptrollers on

result in a further growth in mortgage debts of record proportions in 1948.

The purpose of this discussion is to examine the factors that have contributed to our postwar shortage of housing and the accompanying real estate boom and inflation, and to appraise the financial developments that have accompanied the boom.

Supply of Housing From April 1940 to April 1947, the number of occupied urban and rural nonfarm dwelling units increased by about 4.6 million. Since April 1947, nearly one million more nonfarm dwelling units have been added to the supply through new construction of permanent and temporary structures and through conversion or reconstruction. An unknown number of units have been demolished or otherwise taken out of use during the past year but the net increase in supply has been very large. Figures for farm and nonfarm dwelling units for each decennial census since 1900 and for November 1945 and April 1947 are presented in the following table:

TABLE A
OCCUPIED DWELLING UNITS
(In thousands)

Year	Total	Nonfarm	Farm
1900	15,964	10,274	5,690
1910	20,256	14,132	6,124
1920	24,352	17,601	6,751
1930	29,905	23,236	6,669
1940 (April)	34,855	27,666	7,189
1945 (Nov.)	37,600	31,281	6,319
1947 (April)	39,016	32,354	6,662

Source: U. S. Bureau of Census—Housing Census, 1940, Volume II, Part 1, United States Summary, Table II, p. 3; Special Reports Series H-46, No. 1; and Current Population Reports, "Housing" Series, P-70, No. 1.

The increase between 1940 and 1947 in number of occupied nonfarm dwelling units (4.6 million) is accounted for by some reduction in vacancies but chiefly by a net increase of about 4 million units from new construction, conversions and major repairs, offset in part by demolitions. The growth from new construction and conversions, including temporary structures, appears to have been greater than in any other 7-year period of record except the 7 years at or near the peak of the real estate boom of the Twenties.

Not only do we have more dwelling units now than before the war both in actual numbers and in relation to our population, but these units also appear to be in better repair and to be better equipped. Census reports show that in 1940 about 14 percent of the occupied nonfarm dwelling units needed major repairs; in 1947 only 7 percent needed such repairs. In 1940 about 16 percent of the occupied nonfarm units had no running water; in 1947 about 10 percent lacked such facilities. In 1940, $\frac{2}{3}$ of the units had private baths and flush toilets; in 1947 $\frac{3}{4}$ were so equipped. As compared with prewar, a higher proportion of the nonfarm dwelling units also now have electricity.¹

The dwelling units also now appear to average at least as large in number of rooms as compared with prewar. Proportionally the largest increases in dwelling units were in those of 4 to 7 rooms, inclusive, while the number of 1- and 2-room units appears to have increased not at all or to have been reduced slightly.

The increase in nonfarm dwellings was in owner-occupied dwelling units which increased by more than 5½ million; the number of rented units was reduced by about 1 million. The decline in number of tenant-occupied dwellings appears to have occurred chiefly during the war period, little change in number having occurred during the postwar period. Many rental units were sold for owner-occupancy during the war, more than offsetting the war housing projects that were made available for rent. In the postwar period the new units constructed have been primarily for home ownership; construction of new rental units was largely offset by sales for owner-occupancy of previously rented units.

In 1947, approximately 52 percent of the residential units were owner-occupied compared with 41 percent in 1940 and 1920 and 46 percent in 1930. The increase from 41 percent in 1920 to 46 percent in 1930 reflected the growth in ownership in the boom of the Twenties. The decline to 41 percent again in 1940 undoubtedly reflected the real estate

liquidation accompanying the crisis and depression of the Thirties. The rise in the home ownership rate to 52 percent in April 1947 reflects in part the war and postwar boom and inflation in real estate and in part the character of controls imposed on real estate over the past 7 years.

Causes of the Postwar Housing Shortage

Ordinarily the term "housing shortage" is used to describe a situation in which large numbers of persons are willing, able and anxious to buy or rent quarters but are unable to find them. In this sense, a housing shortage did not exist in 1940. In the succeeding 7 years the housing supply was increased at almost a record rate and more rapidly than our population has increased. And yet the postwar period has witnessed a serious housing shortage. The return of veterans to civilian life and the shifting of many workers and their families during the reconversion period have accentuated the shortage. Since the close of the war we have probably increased the nonfarm housing supply by more than 2 million units, but the shortage still exists.

The shortage has resulted from an unprecedented growth in demand for housing, a growth that has outstripped the increase in population, and which appears to reflect an advance in our general physical standards of living apparently to the highest levels we have ever known. The chief factors in the growth in demand for housing and in bringing about the shortage are:

1. Increased rate of family formation.
2. Changes in occupancy and use of housing.
3. High incomes—enabling more people to demand more and better housing.
4. Character of rent controls.
5. Large savings—enabling more people to buy homes.
6. Liberal credit,—making it easier for people to borrow in order to buy homes.

Increased Rate of Family Formation

In the 10 years between 1930 and 1940 the number of families² increased by about 6 million while the number of residential units, both farm and urban, increased by about 5

² The term family here is used to designate a group of related persons living together, usually a husband and wife with or without children, but also a father-child or mother-child group with the other spouse absent, or any other group of related persons occupying living quarters with facilities for preparing and serving meals or with separate entrances and baths. It also includes single persons and 2 or more unrelated persons occupying living quarters with cooking facilities or with separate entrances and baths. The U. S. Bureau of the Census generally uses the term "family" synonymously with "occupied dwelling unit" or "household". In this article, a "dwelling unit" or "household" may house more than one family.

¹ Differences in definitions and reporting may have resulted in the data overstating the extent of improvement; the changes shown by the data, however, appear to be too great to be accounted for solely by reporting differences.

million. The deficit in creation of housing units in the Thirties probably reflected doubling up due to lowered incomes as compared with the late Twenties. In the 7 years from 1940 to 1947 the number of nonfarm families increased by 5.6 million and the number of occupied nonfarm dwelling units increased by 4.6 million, increasing the deficit in housing by about another million. The deficit in these 7 years resulted not from lack of income but from the fact that the housing industry, operating under war and immediate postwar conditions, was unable to produce enough dwelling units to keep pace with demand.

In April 1947, about 32½ million urban and rural nonfarm dwelling units were occupied, of which about 29½ million, or 91 percent were occupied by single families with or without roomers or lodgers,

and not quite 3 million households, about 9 percent, were occupied by two or more families. These less than 3 million units housed about 6 million families.³ The 6 million families probably comprised slightly over 14 million persons, an average of 5 to 6 persons per dwelling unit compared with a general average for all other dwelling units of between 3.3 and 3.4 persons per dwelling. It is in these somewhat less than 3 million homes with their 6 million families and over 14 million persons that the problem of the housing-shortage appears to be most acute. The estimates are presented in the accompanying Table B.

³ About 1½ million households containing single families also housed probably about 2 million roomers and lodgers who were not domestic employes in those households. An additional one-half to two-thirds million roomers or lodgers lived in about 235,000 households which also contained doubled-up families.

TABLE B
NONFARM HOUSEHOLDS, FAMILIES AND POPULATION IN PRIVATE HOUSEHOLDS
1940 AND 1947
(In thousands)

	Number of Households ¹		Number of Families ²		Population ³	
	1947	1940	1947	1940	1947	1940
TOTAL.....	32,457	27,946	35,600	30,000	112,000	98,407
Households with no secondary or sub-families.....	29,608	26,250	29,608	26,250	97,500	89,700
Households with secondary or subfamilies.....	2,849	1,700	6,000 ⁵	3,750	14,500 ⁶	8,700 ⁷
With husband-wife secondary or sub-families only.....	2,127	1,287	4,450 ⁵	2,700 ⁵	n. a.	n. a.
With other secondary or subfamilies.....	722	430 ⁴	1,550	1,050	n. a.	n. a.
Number of secondary or subfamilies.....	.....	.....	3,150	2,050	8,400 ⁸	n. a.

¹ Occupied dwelling units or private households.

² Primary, secondary and subfamilies occupying dwelling units or private households.

³ In private households only; for 1947, estimated by reducing total nonfarm population by an estimated 2,756,000 persons not in private households.

⁴ Estimated on basis of relationship of households with "other" (broken) secondary or subfamilies to those with "husband-wife" secondary or sub-families in 1947.

⁵ Estimated by multiplying households with 1 subfamily by two and households with 2 or more subfamilies by 3.4 and rounding up.

⁶ Estimated by multiplying number of nonfarm subfamilies by estimated average number of persons in both farm and nonfarm subfamilies (2.66) and adding thereto 2 persons for each primary family in a doubled-up household and rounding up the resulting figures.

⁷ Average of two estimates: (a) multiplying secondary and subfamilies by 2.66 (see footnote 6) adding double the number of households with secondary and subfamilies and rounding up, (b) multiplying number of households with secondary or subfamilies by 5.1 (average persons in 1947).

⁸ Estimated by multiplying number of families by 2.66. See footnote 6.

Note: The figures in this table do not always add to the total; nor do they necessarily agree precisely with figures shown in other tables. No attempt was made to bring the data into precise agreement because of the desire to warn the reader that the data by the very nature of the estimates can be considered to represent approximations only. However, they are believed to be sufficiently accurate to warrant the conclusions drawn in this report.

Source: U. S. Bureau of Census; 1947 data from Current Population Reports Series P-20, No. 10, Table 7, and No. 11, Tables 9, 10, and 11; 1940 data from 16th Census of the United States 1940. Population and Housing, "Families", "General Characteristics", Table 10 and Population Vol. IV, "Characteristics by Age", Table 10.

The number of doubled-up nonfarm families appeared to be slightly greater in the spring of 1947 than at the close of the war, or even in the spring of 1946, notwithstanding the large volume of building and conversion that took place in the postwar period. As compared with prewar 1940, the number of doubled-up nonfarm families appeared to be about 50 percent greater.

For the most part, the subfamilies or secondary families, that is the families living with the families containing the head of the household, are in the age groups under 35 years. About half of the secondary or subfamilies had veterans of World War II as heads.

Of the 3 million nonfarm subfamilies or secondary families, probably somewhat less than 2 million were actively in the market for additional housing, that is, were able, willing, and anxious to buy or rent at existing price levels but were unable to find the dwellings.⁴

This estimate is as of April 1947, about a year ago. Since that time nearly one million permanent and temporary units have been built or converted. Some housing, of course, has been lost through demolitions and conversions but the net addition to supply must have been substantial, and appears to have exceeded the rate of family formation for the first time in several years. The number of families had been growing by nearly one million per year, but over the past 6 to 12 months the growth appears to have slackened considerably and may well continue at a lower rate over the next few years.

Changes in Occupancy and Use During the war and postwar periods we experienced substantial shifts in large numbers of our people with consequent changes in occupancy and use of housing. The reduction in tenant occupancy,

the increase in owner occupancy and the increase in doubling up have already been discussed. Concurrently with these developments has been a tendency of other persons to spread out, thus probably aggravating somewhat the housing shortage.

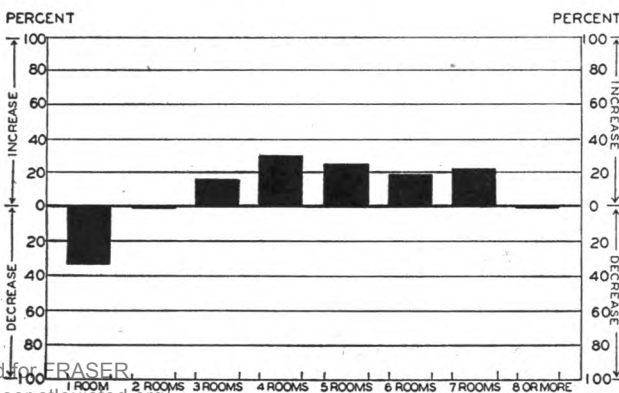
During the war and in the postwar period rents have been so controlled that the rental dollar has become the best or most valuable dollar we have. Incomes rose substantially during the war and postwar inflation. With wartime rationing and price control people were able to spend more on housing, and families acquired better quarters with more rooms as opportunities arose. These opportunities were provided by the reduction in size or the actual movement of families as a consequence of inductions into the armed services, and by the shifting of many more persons and families from place to place first into war industries and later back into peacetime pursuits. By the close of the war the effects of the apparent spreading out were quite noticeable.

The return of veterans resulted in considerably more intensive use of facilities. Size of families increased and some families were forced to double up. However, the families that had been able to get good quarters during the war, either through renting or buying, and were not under the necessity of moving after the war, and in the case of rentals were protected by rent controls, for the most part kept their larger quarters and those who had to move or seek new quarters were forced in many instances to double up or use other less satisfactory housing.

Data comparing occupancy and use of housing in 1940 and 1947 show only net changes and fail to reveal fully shifts of the nature just discussed. The data, furthermore, do not readily lend themselves to very satisfactory generalizations. To the extent that they do show changes in occupancy and use they

⁴ The estimate of less than 2 million effective buyers among this group is explained in Appendix.

SIZE OF OCCUPIED DWELLING UNITS
Percentage Change 1940-1947



SIZE OF HOUSEHOLDS
Percentage Change 1940-1947

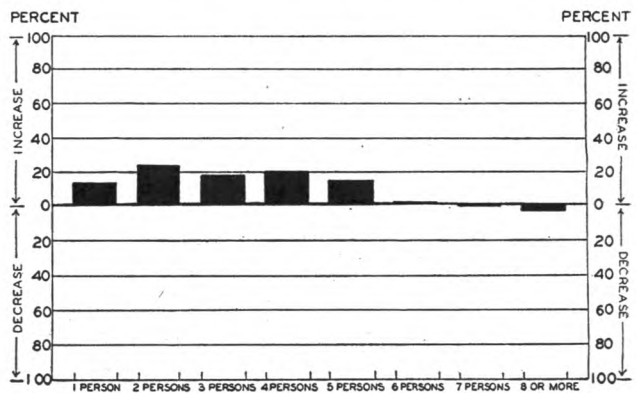


TABLE C
ESTIMATED VETERAN AND NONVETERAN FAMILIES, FARM AND NONFARM,
APRIL 1947 AND FEBRUARY 1946
(In Thousands)

	All Families		Veterans' Families		Nonveterans' Families	
	Apr. 1947	Feb. 1946	Apr. 1947	Feb. 1946	Apr. 1947	Feb. 1946
ALL FAMILIES ¹	42,900	41,025	7,893 ⁵	4,300	35,000	36,725
Households.....	39,138 ²	37,900 ⁴	6,023 ⁶	3,160 ⁹	33,100	34,740
Single families (including those with lodgers).....	35,726 ²	34,975	4,527	n. a.	31,200	n. a.
Primary families in households containing more than 1 family.....	3,412 ²	2,925 ⁴	1,496 ⁷	n. a.	1,900	n. a.
Secondary and subfamilies.....	3,800 ³	3,125 ⁴	1,870 ⁸	1,140 ¹⁰	1,900	1,985 ¹⁰
Total families in doubled-up households .	7,200	6,050	3,366	n. a.	3,800	n. a.

¹ Single families, and primary, secondary and subfamilies in households with doubled-up families.

² From P-20, No. 11, Table 9.

³ Computed from P-20, No. 11, Table 9, by assuming 2 secondary or subfamilies for the 2 or more category and rounding up, and from P-20, No. 10, Table 7.

⁴ From P-S, No. 15, Table 1.

⁵ From P-20, No. 10, Table 11. Total married veterans; probably understates number of families. See also footnote 8.

⁶ From P-20, No. 11, Table 7.

Note 1: The references in the above footnotes are to publications of the U. S. Bureau of the Census. The P-20 series are Current Population Reports and the P-S series are Special Population Reports.

⁷ Number of households containing a veteran whether or not head of family which also contain husband-wife family. Understates by omission of broken families, overstates by inclusion of primary families with a veteran member but nonveteran head. From P-70, No. 1, Table 20.

⁸ Difference between 7,893,000 married veterans and 6,023,000 households with veteran head. Understates number of veteran secondary and subfamilies because some veteran household heads are not married.

⁹ From P-S, No. 13, Table 3, Households with male head.

¹⁰ From P-S, No. 15, Table 2.

Note 2: The figures in this table do not always add to the total; nor do they necessarily agree precisely with figures shown in other tables. No attempt was made to bring the data into precise agreement because of the desire to warn the reader that the data by the very nature of the estimates can be considered to represent approximations only. However, they are believed to be sufficiently accurate to warrant the conclusions drawn in this report.

appear to lend some support to the conclusions reached above.

Notwithstanding a substantially greater combined increase in number of families with two or more children under 18 years of age and in doubled-up families, the number of households with four or more persons showed a net increase of only 1 1/3 million. Households with less than four persons increased by 3/4 million over the seven-year period. The chart on page 6 shows the changes from 1940 to 1947 in the distribution of occupied non-farm dwellings according to number of persons housed therein.

The chart shows that over the seven-year period the net growth in households was chiefly in those with two to four persons. The companion chart shows that the increase in number of occupied dwelling units was primarily in those with 4 to 7 rooms. The additional units appear to have averaged at least as large in number of rooms as those in existence in 1940. As a consequence, and notwithstanding the increase in doubling up, there appears to have been some net reduction in over-crowding. The number of

dwelling units with 1 1/2 or less persons per room increased while the number with more than 1 1/2 persons per room decreased by about 14 percent between 1940 and 1947.

The doubling up has been relatively heavier among veteran than among nonveteran families. This reflects in part the tendency for many newly-married couples not to establish separate homes for more than a year after marriage,⁵ in part the fact that some veteran families being newly formed and in the younger age groups lack incomes sufficient to establish and maintain separate homes under existing costs, and in part inability to find quarters. In April 1947, six million dwelling units were occupied by families, the head of which was a veteran. Close to 1 1/2 million of these units probably housed two or more families each. This compares with nearly 2 million nonveteran households with two or more families each, out of a total of 33 million nonveteran households. The data are shown in the accompanying Table C.

⁵ See Appendix.

TABLE D
DISTRIBUTION OF FAMILY UNITS
BY SIZE OF INCOME

Annual Income (before taxes)	1946 ¹	1945 ¹	1943 ²	1941 ³	1935-36 ⁴
Under \$1,000.....	15%	18%	15%	29%	42%
\$1,000- 1,999.....	20	22	23	31	37
2,000- 2,999.....	22	22	21	23	13
3,000- 3,999.....	18	17	14}	12	{ 4
4,000- 4,999.....	10	9	10}		{ 1.3
5,000- 7,499.....	9	8	11}	5	{ 1.1
7,500 and over.....	6	4	7}		{ 1.6

¹ From Survey of Consumer Finances, Part III, Table 1, appearing in Federal Reserve Bulletin, July 1947, page 791.

² Computed from data prepared by OPA Research Division, published in The Economic Almanac for 1946-47, page 58.

³ BLS "Survey of Spending and Saving in Wartime", published in the Statistical Abstract of the U. S. 1944-45, Table No. 443, page 406.

⁴ National Resources Committee—Report on "Consumer Incomes in the United States—their distribution in 1935-36", published in part in the Statistical Abstract of the U. S., 1941, Table No. 374, page 348. These data include certain nonmoney income, such as the occupancy of an owned home, and food produced by rural families for their own use.

Note: While the figures for 1935-36, 1941 and 1943 are not strictly comparable with each other and with the figures for 1945 and 1946, the general trends revealed by the data are probably valid.

High Incomes In combination with rent controls, probably the most important factor contributing to the spreading out of families has been the growth of incomes. Today, the total of personal incomes is over \$200 billion per annum, more than 2½ times as great as in 1940. Not only is the aggregate of incomes higher but that income is more widely distributed than in prewar years. The

growth in incomes has been greatest in the lower income groups, enabling more people to demand better housing than ever before.

In 1947 about 1/3 of the family units reported incomes of less than \$2,000 compared with nearly 2/3 in 1941 and 3/4 in 1935-36. Nearly 1/4 reported incomes of from \$2,000 to \$3,000 in both the prewar and postwar periods. The proportion of families with incomes of \$3,000 or more in 1946—slightly over 2/5—was more than 2½ times that of prewar 1941 and was more than 5 times that of 1935-36. The figures are shown in the accompanying Table D.

Rents and Tenancy The growth in incomes has enabled people to increase expenditures for rent or other housing expenses. Aggregate consumer expenditures for rent have increased over the war and postwar years notwithstanding (a) the existence of strict rent controls, (b) a reduction in number of tenant occupied units, and (c) a reduction in number of persons in rented quarters not only in total but also in relation to number of dwelling units and number of rooms occupied.

From 1940 to 1947 the number of tenants was reduced by 7 million or from about 57 million to 50 million; a reduction of about 12 percent. The number of dwelling units occupied by tenants was reduced by about one million or 6 percent. The size of families or number of persons occupying the rented quarters was generally smaller in 1947 than in 1940. The reduction in number of tenants' households from prewar to postwar was particularly marked in households containing 5 or more persons. Tenant households with 1 to 3 persons showed little net change. The changes are shown in the accompanying Table E.

The reduction in rental units on the other hand was chiefly in the large units. The number of 1-

TABLE E
SIZE OF URBAN AND RURAL NONFARM HOUSEHOLDS OCCUPIED BY TENANTS
AS MEASURED BY NUMBER OF PERSONS PER HOUSEHOLD

	1947	1940	Increase		Percent	
			Number	Percent	1947	1940
All tenant households.....	15,329,000	16,335,000	-1,006,000	- 6.2	100.0	100.0
Household with:						
1 person.....	1,530,000	1,478,000	+ 52,000	+ 3.5	10.0	9.0
2 persons.....	4,542,000	4,358,000	+ 184,000	+ 4.2	29.6	26.7
3 persons.....	3,713,000	3,788,000	- 75,000	- 2.0	24.2	23.2
4 persons.....	2,664,000	2,902,000	- 238,000	- 8.2	17.4	17.8
5 persons.....	1,429,000	1,714,000	- 285,000	-16.6	9.3	10.5
6 persons.....	672,000	953,000	- 281,000	-29.5	4.4	5.8
7 persons.....	365,000	518,000	- 153,000	-29.5	2.4	3.2
8 or more persons.....	414,000	624,000	- 210,000	-33.7	2.7	3.8

Source: 1940—U. S. Bureau of the Census, 16th Census of the U. S. 1940, "Housing", Volume 2, General Characteristics, Part 1, Table 9, page 32.

1947—Current Population Reports, "Housing", Series P-70, No. 1, Table 16, p. 20.

TABLE F
MONTHLY RENTALS OF TENANT OCCUPIED NONFARM DWELLINGS, 1940 AND 1947

	1947	1940	Increase		Percent	
			Number	Percent	1947	1940
<i>All Tenant Occupied Units</i>	15,329,000	16,335,000	-1,006,000	- 6.2	100.0	100.0
With monthly rental:						
Under \$10.....	1,102,000	2,862,000	-1,760,000	-61.5	7.2	17.5
\$10 — 19.....	3,038,000	4,543,000	-1,505,000	-33.1	19.8	27.8
20 — 29.....	3,585,000	3,885,000	- 300,000	- 7.7	23.4	23.8
30 — 39.....	3,442,000	2,546,000	+ 896,000	+35.2	22.5	15.6
40 — 49.....	2,260,000	1,310,000	+ 950,000	+72.5	14.7	8.0
50 or more.....	1,902,000	1,189,000	+ 713,000	+60.0	12.4	7.3

Source: U. S. Bureau of the Census: 1940—Housing—Special Reports, Series H-46, No. 1, "Characteristics of Occupied Dwelling Units, for the U. S.; November 1945", Table 13, Page 13. 1947—Current Reports, "Housing", Series P-70, No. 1, Table 22, Page 24.

and 2-room units was reduced somewhat while the number of rental units of 5 rooms or more was reduced sharply. The latter reduction undoubtedly reflected chiefly the sale for owner occupancy of many houses or units previously held for rent.

The net result of these changes was to leave tenants with relatively more rooms and with more expensive quarters than in prewar years, even though in general more persons per room continued to be housed in tenant-occupied than in owner-occupied residential units. The number of tenant-occupied units, housing less than 1/2 person per room, increased slightly from 1940 to 1947, while the number of units with more than 1/2 person per room was reduced. Units with from 1/2 to 1 1/2 persons per room were reduced by roughly 10 percent while those with more than 1 1/2 per room, generally considered a measure of overcrowding, were reduced by somewhere between 1/4 and 1/3.

The accompanying Table F shows that the net reduction in tenant-occupied dwelling units was in those renting for less than \$30 per month. The number of units renting for \$30 or more increased in number.

Large Savings High wartime incomes coupled with shortages of goods, with rationing, price controls, and patriotic appeals for financing the war resulted in a sharp increase in the rate of savings during the war. From an average of about 3 percent of income before the war, the rate of savings in the form of cash, deposits and Government securities rose to about 16 percent per annum in the war years 1943, 1944, and 1945. Changes in the rate of saving in the form of liquid assets for recent years are shown in the accompanying chart.

As a consequence of the accumulation of savings during the war, consumers entered the postwar period with the largest volume of savings and liquid

assets on record. Liquid asset holdings of individuals rose from \$40 billion in early 1940 to about \$120 billion at the close of the war and to about \$140 billion in early 1947. These holdings consist of currency, demand deposits, time deposits, savings accounts, and U. S. Government securities.

Not only was the volume of savings and of holdings of liquid assets greater, but the holdings appeared to be more widely distributed than before the war. By the end of the war, a much higher proportion of families held liquid assets than presumably was the case in prewar days. Large gains in income and thus in opportunities for increased savings occurred most frequently among the middle and low income groups where liquid assets presumably had been small or even nonexistent before the war. In 1946 and 1947, from 1/6 to 1/5 of all liquid assets (exclusive of currency) were held by "spending units" with incomes under \$2,000, while nearly 2/3 were held by spending units with incomes under \$5,000. The absence of currency holdings from these data probably results in a proportionally larger understatement of savings in the lower income groups. The figures are shown in the accompanying Table G.

TABLE G
PERCENTAGE DISTRIBUTION OF LIQUID ASSETS¹
BY INCOME GROUPS, EARLY 1946 AND EARLY 1947

	Early 1947	Early 1946
<i>All spending units</i>	100%	100%
Spending units with incomes of		
Under \$1,000.....	5	7
\$1,000- 1,999.....	11	14
2,000- 2,999.....	17	17
3,000- 3,999.....	16	16
4,000- 4,999.....	12	10
5,000- 7,499.....	13	13
7,500 and over.....	26	23

¹ Other than currency.

Source: Board of Governors of the Federal Reserve System.

Many families came out of the war with backlogs of savings available for down payments on houses. As rental housing has become progressively scarcer and more expensive, more and more families have found it necessary to buy homes, using their savings for down payments. Probably more than \$6 billion of liquid assets may have been used to finance purchases of homes over the past two years. Surveys of consumer finances and data on mortgage loans indicate that in 1946 and 1947 about 5½ million spending units bought homes for an aggregate of between \$28 and \$35 billion. About half of this amount was borrowed on mortgages, about 1/5 was obtained through use of liquid assets, about 1/4 was obtained from sale of real estate and other non-liquid assets, and about 1/20 was furnished by payments out of current income.

Liberal Credit During the postwar period mortgage credit has been available on more liberal terms than ever before. Appraisals and valuations have been very high so that loans have been made on existing properties in amounts that in many instances have exceeded the depressed prices at which the properties sold ten years earlier. Rates of interest on loans secured by mortgages on residential properties have ranged as low as 4 percent and maturities have been arranged for as long as 25 years. In many cases the amounts loaned have amounted to as much as 100 percent of the price of the property.

The extension of loans for longer terms of years, for a higher proportion of the value of the property, and at low rates of interest enable the borrower or home purchaser to capitalize given amounts of savings and income into higher and higher values. Occurring at a time when incomes have been high and rising, liberalization of credit terms has increased the buying power of potential home owners. Effective demand for real estate has been intensified and real estate prices have risen.

The volume of debts on nonfarm homes has increased more rapidly during the postwar period than at any time in our history. A higher proportion of homes than ever before probably now are mortgaged. The debts secured by these mortgages probably average larger than at any previous time and the total volume of nonfarm residential debt outstanding at the close of 1947 was the greatest on record. Debt service appears also to absorb a higher proportion of income than before the war, at least for large numbers of home owners.

During the past two years the volume of loans made on 1- to 4-family houses has approximated \$20 billion, about \$4 to \$6 billion may have represented construction and other temporary loans and \$14 to \$16 billion, the amount borrowed by the purchasers of the 5 to 6 million houses acquired in the two years. Retirements or repayments amounted

TABLE H
MORTGAGE DEBT ON 1-TO-4 FAMILY HOUSES
(In millions of dollars)

Period	Loans made (during period)	Apparent retirements (during period)	Change in outstandings (during period)	Outstandings (end of period)
1941.....	3,810	2,818	+ 992	20,095
1942.....	3,155	3,342	- 187	19,908
1943.....	3,183	3,549	- 366	19,542
1944.....	3,830	3,844	- 14	19,528
1945.....	4,701	4,238	+ 463	19,991
1946r.....	9,458	5,023	+4,435	24,426
1947 ¹	10,500	5,226	+5,274	29,700

¹ Estimated by Board of Governors of Federal Reserve System from preliminary data.

r Revised

Source: U. S. Housing and Home Financing Agency, Housing Statistics Handbook, Table 91.

to about \$10 billion and the volume outstanding increased by about another \$10 billion over the two-year period, as indicated in Table H. Of the \$20 billion of loans made, about \$7 billion or more than 1/3 were insured or guaranteed by the Federal Housing Administration or the Veterans' Administration.

This rapid growth in real estate debts indicates that people are taking more money out of real estate than they are putting in and that lenders are putting up the difference. We generally say that people are putting their money into real estate during a boom, and that is correct. However, if the volume of borrowing increases, more money is being taken out than is being put into real estate by investors. A lot of people are buying real estate; but they are borrowing to do it. The persons to whom the buyers pay the money are taking the money out of real estate. The seller may put his money back into real estate, but that only means that someone else takes the money out. Some of the money may be used to pay off a previous mortgage. From \$2 to \$3 billion may have been so used in 1946 and 1947. However, if the total of mortgage debts increases that excess is being taken out of real estate by somebody.

If the expansion in mortgage loans accompanies the financing of new properties then the money that is "taken out" of real estate may be used directly to pay for wages, for materials and for the enterprising effort that produced the structures. However, when the expansion in loans is predicated on transfers of existing properties at ever higher prices, the money that is "taken out" of real estate may not be used directly for productive purposes. The real wealth of our nation has not been increased, but the lenders have been assuming greater and greater proportions of the risks that attend any boom.

The net increase in loans on 1- to 4-family houses was about \$10 billion for the two years. The value of new 1- to 4-family homes constructed in that period was probably about \$8½ billion. The value of the land on which the new residences were built may have ranged from \$1 to \$1½ billion.

Housing Costs Next to income and savings, the most important factor affecting the demand for housing today is the cost of that housing and the burden of that cost on income and savings.

Housing costs can be broken down into three parts—cost of construction or purchase price, cost of financing, and cost of operating. All three segments of cost have shown substantial increases as compared with prewar levels. While interest rates have declined, financing costs have increased substantially because of the growth in real estate debts. Financing costs have increased both in absolute terms and in terms of incomes of borrowers, notwithstanding the fact that aggregate individual incomes are 2½ times prewar and income is more widely distributed than in prewar years. The heavier burden of housing costs is illustrated in the accompanying Table I which compares annual mortgage and annual over-all housing costs of FHA mortgagors borrowing on existing houses in 1946 and 1940.

The table shows that mortgage payments on FHA loans are considerably larger in proportion to incomes in the postwar period than in the prewar period. While a larger proportion of FHA mortgagors had incomes above \$3,000 in 1946 than in 1940, their mortgage payments and their housing expenses absorbed a much higher proportion of their incomes than was the case with mortgagors in 1940 receiving incomes in excess of \$3,000. For people with incomes below \$3,000, the increase in burden of mortgage payments per dollar of income was more than 40 percent. On the average, these people have committed from ¼ to ⅓ of their incomes for their housing expense, most of which involves fixed costs. These increases have occurred notwithstanding the fact that the houses on which FHA mortgages were placed averaged about ½ room smaller in 1946 than in 1940. The table overstates the increased burden somewhat because of the general shift of individuals into higher income groups between 1940 and 1946, and because of the tendency for the proportion of income used for housing expense to be less in the higher income groups. Examination of the table reveals, however, that even after making allowance for such shifts the increase in burden must be substantial.

The chief factor in the rise in housing costs has

TABLE I
AVERAGE CHARACTERISTICS OF FHA INSURED MORTGAGES MADE ON EXISTING HOMES IN 1940 AND 1946
Grouped According to Income of Mortgagors

	Percentage distribution of mortgagors		FHA Valuation ¹		Mortgage Principal		Total annual mortgage payment as percent of income ²		Total annual housing expense as percent of income ³
	1946	1940	1946	1940	1946	1940	1946	1940	1946
All mortgagors.....	100.0%	100.0%	\$6,217	\$5,121	\$4,936	\$3,869	14.3%	10.8%	20.3%
Mortgages with income of:									
Less than \$1,500.....	.3	5.2	.....	3,135	.....	2,258	.....	15.5	.....
\$ 1,500- 1,999.....	4.2	20.5	4,229	3,701	3,271	2,762	19.6	13.6	31.9
2,000- 2,499.....	19.4	25.0	4,900	4,333	3,828	3,259	17.9	12.5	26.5
2,500- 2,999.....	14.8	13.9	5,502	4,894	4,308	3,688	16.7	11.6	24.6
3,000- 3,499.....	19.3	11.6	5,891	5,399	4,630	4,129	15.9	11.0	22.4
3,500- 3,999.....	14.5	6.9	6,360	6,153	5,089	4,653	14.5	10.5	20.4
4,000- 4,999.....	13.8	7.1	6,964	6,734	5,553	5,159	13.0	9.7	18.4
5,000- 6,999.....	8.7	5.8	8,144	8,151	6,626	6,242	12.1	9.1	16.4
7,000- 9,999.....	3.5	2.5	9,389	10,144	7,884	7,715	10.5	7.8	14.0
10,000 or more.....	1.5	1.5	13,299	12,183	10,262	9,248	8.1	5.7	10.7

¹ FHA property valuation includes valuation of the house, all other physical improvements, and land.

² Includes monthly payment for the first year of mortgage to principal, interest, FHA insurance premium, hazard insurance, taxes and special assessments, and ground rent and miscellaneous items, if any.

³ Includes total monthly mortgage payment for first year of

mortgage; estimated monthly cost of maintenance; regular operating expense items such as water, gas, electricity, and fuel for heating; expense for other home where borrower is occupying another house or apartment as owner or tenant; and monthly payment on secondary loan if mortgagor is a veteran of World War II who is financing home-purchase with aid of an additional loan guaranteed by the Veterans' Administration.

been the increase in cost of construction and in the purchase price of homes. A rise in real estate prices and construction costs necessitates larger loans with larger payments for interest, amortization and insurance. While it is difficult to generalize on real estate prices, we know that they are substantially above prewar. With respect to residential construction costs, estimates indicate that they are about double prewar. Labor costs have about doubled; materials costs have about doubled; and contractors' overhead and profits have about doubled.

The rise in labor costs has reflected advances in wage rates, and reductions in productivity due to uneven flows of materials, wasteful practices, and loss of skilled workers. There appears to be little prospect of reduction in rates so that a lowering of labor costs is dependent on elimination of overtime and increased efficiency and productivity. There is some evidence that productivity is rising. Mechanization and use of power equipment is finding increased acceptance. However, so long as demands on the construction industry continue to exceed its ability to produce, some encouragement will be given to costly and wasteful practices both in labor and in management.

Materials costs have increased because of higher prices and costly substitutions. Output of many building materials is in record volume but supplies of some are still tight in the face of the current high levels of construction. The price outlook for building materials, therefore, is somewhat mixed. Some items may decline in price but others can be expected to remain firm. So long as the present volume of construction, maintenance and repair is sustained, the prospects for substantial reductions in building materials prices generally are not bright.

The rise in contractors' overhead and profits has reflected partly the cost of delays in construction and partly profits in an inflated market where effective demand has been in excess of supply. As materials become more plentiful, and workers more efficient and productive, operations can be scheduled more smoothly and the time involved in construction reduced. The time required for completing a house has already been reduced by $\frac{1}{3}$ since 1946, or from about 8 months to about 5 months. Here again, however, so long as effective demand continues to exceed supply and competitive pressures are largely absent, little incentive is provided for builders to cut overhead and reduce profit margins.

Prospects Assuming no drastic population and industrial shifts arising out of emergencies, the near-term outlook for housing is dependent on prospective effective demand for housing and on the volume of new construction. So long as income and employment are well maintained and credit is

available the demand for housing will be sustained at least over the next year or two.

A survey of consumer finances conducted for the Federal Reserve System in the first quarter of 1946 revealed that from 3 to 4 million spending units planned to buy houses in 1946. On the average, these potential buyers expected to spend about \$5,000 for their homes, not more than $\frac{1}{3}$ indicating a willingness to pay more than \$6,000, while an additional 15 percent were not sure how much they would pay. In general, the prospective buyers as a group expected to borrow about $\frac{1}{2}$ of the entire amount to be spent on housing, apparently raising about $\frac{2}{10}$ from sale of liquid assets and about $\frac{3}{10}$ from sale of other types of assets or from anticipated inheritances or gifts.

Early in 1947, the survey was repeated to find out what people had actually done in 1946 and what they expected to do in 1947. That survey showed that in 1946 slightly less than 3 million spending units actually bought houses as against 3 to 4 million planning to buy at the beginning of the year. How many prospective buyers failed to buy because of inability or unwillingness to pay higher than anticipated prices was not ascertained.

The number of owner-occupied nonfarm dwelling units may have increased by about $\frac{3}{4}$ million during 1946, of which about $\frac{3}{5}$ represented new 1- to 4-family units and $\frac{2}{5}$ older structures previously in the rental market. The remaining approximately two million dwelling units bought in 1946 were sold by other owners in 1946 at generally rising prices and increasing mortgage debts. It is estimated that altogether home buyers spent nearly \$15 billion on housing in 1946, about $\frac{1}{2}$ of which was borrowed on mortgages; the remainder was obtained from use or sale of liquid assets, of real estate and other non-liquid assets, from inheritances or gifts, and from current incomes. In 1946 about \$9 $\frac{1}{2}$ billion in loans, including construction and other temporary loans, were made on 1- to 4-family houses; \$5 billion was paid off, leaving a net increase of about \$4 $\frac{1}{2}$ billion in loans outstanding with a gross increase of about 450,000 in new permanent units.

The early 1947 survey of consumer finances showed that fewer families intended to buy houses in 1947 than intended to buy or did buy in 1946, but that they expected to pay more per house than was paid in 1946 and that the aggregate of the intended purchases might be as much or even greater than in 1946. About $\frac{1}{2}$ of the prospective purchasers were spending units with veterans as members—slightly over 1 million and possibly as many as 1 $\frac{1}{2}$ million units. If all of these veterans did actually buy in 1947, the doubling-up estimated to be present in about 1 $\frac{1}{2}$ million veteran households would be substantially lessened. At the beginning of 1947,

more spending units were uncertain and undecided about buying houses than at the beginning of 1946. Of the 2½ million or more persons or families intending to buy in 1947, at least 1 million planned to buy newly-built houses. Less than 1 million new homes were built in 1947.

Of the 2½ million or more who planned to buy houses in 1947:

- 13 percent expected to pay full cash.
- 14 percent expected to borrow less than 60 percent of the price.
- 42 percent expected to borrow 60 percent or more.
- 18 percent expected to borrow an uncertain amount.
- 13 percent did not indicate how they planned to pay for the houses.

About ½ of the prospective buyers expected to use some of their liquid assets and about 2/5 expected to obtain funds through sale of other real estate or from other nonliquid assets.

A survey is now under way to ascertain what happened in 1947 and what buyers' plans are for 1948. Unfortunately, the results of the survey will not be available for some time. An interim survey was made in July 1947, however, to obtain a quick check on what was happening. That survey indicates that purchases of homes were up to expectations in the first half of the year and that effective demand, i. e. intentions to buy over the succeeding 12 months, was about as great in July 1947, as at the beginning of that year.

The findings of the 1947 surveys are supported by data which show that loans made on 1- to 4-family homes amounted to about \$10½ billion in 1947, \$1 billion more than in 1946, that retirements at \$5¼ billion were only slightly higher than the year before and that consequently outstandings showed a net increase of about \$5¼ billion in 1947 compared with \$4½ billion in 1946. About 800,000 permanent new nonfarm dwelling units were added to the supply in 1947 against the purchases of perhaps 2 to 2½ million units, indicating a turnover of perhaps 1½ million or more existing structures at increasing levels of debt.

Notwithstanding the fact that construction of new dwelling units has reached and is being maintained at seasonally record levels, the housing shortage persists because the increase in demand has been much greater than the increase in supply. From 1940 to 1947 the increase in occupied nonfarm dwelling units was about 4½ million. Since then about 1 million new units have been completed. However, notwithstanding a near-record rate of increase in number of dwelling units, the number of doubled-up families has increased rapidly, particularly in the postwar period when so many veterans married and sought to establish homes.

From February 1946 to April 1947 the number of families with veterans as heads increased by more than 3 million while the number of nonveteran families was reduced by slightly under 2 million, the latter reduction reflecting chiefly a reduction in families with female heads resulting from the return from military service of absent male family heads. In the same 14 months the number of households, both veteran and nonveteran, containing more than one family increased by about 1/6 and the number of families doubled-up increased by about 1 million. Most of these apparently were veterans' families.

Since early 1947, the rate of family formation appears to have declined substantially, and for the first time in recent years the increase in dwelling units appears to have exceeded the increase in families. There is some evidence, therefore, that the intensity of the demand for housing will gradually taper off. For the present, however, demand is still in excess of the ability of the construction industry to produce. Probably at least 2 million families, or spending units, hope to buy homes in 1948. The most optimistic estimates of new units coming onto the market for purchase and rental do not exceed 1 million so that unsatisfied demand is expected to continue to be heavy.

The gradual prospective reduction in the housing deficit, coupled with increasing housing costs and increasing pressure of those costs on income, and coupled with evidences of tightening of the mortgage market, should all contribute to a progressive lessening of the intensity of demand. Further business uncertainty, coupled with increasing unemployment and lower incomes, could also contribute to a marked lessening of demand and could undoubtedly cause financial difficulties among some recent buyers of homes.

Outlook for Construction Output of housing in 1947 was substantially above that of 1946 and was close to the record years of the peak of the boom of the Twenties. Assuming maintenance of demand, construction of housing in 1948 may reach the all-time peak of 1925. The ability of the building industry to achieve this goal will depend chiefly on the supply of building materials and on the competitive demands for nonresidential construction. Requirements and planned capital outlays of industry, of utilities and of public agencies for plants highways, airports, schools, hospitals and office buildings suggest a strong possibility of total construction continuing at very high if not at record levels over the near-term future. The U. S. Department of Commerce estimates prospective construction of all kinds at \$15 billion for 1948, compared with less than \$13 billion of new construction in 1947.

Production of building materials in the aggregate broke all records in 1947, resulting in considerable

improvement in the supply of these items. In some areas, however, shortages still persist in such materials as gypsum products, cast iron pipe, steel items, certain grades of lumber, millwork, and nails. While new capacity is being added in various segments of the building materials industry, it does not appear likely that supplies of materials will permit an expansion this year of housing beyond the upper limits now being forecast.

Inventories of lumber at all levels in relation to sales are generally higher than a year ago, but continue below prewar. Prevailing high prices for lumber have created considerable uneasiness among dealers. Prices have risen more over prewar levels than for any other building materials or indeed than for most other commodities. One-third more dollars are needed to carry inventory today than were required to support the same stock a year ago. Dealers hesitate to place large orders in the face of possible price weaknesses, a circumstance that has resulted in widespread adoption of a hand-to-mouth buying policy. Beginning in February 1948, according to figures of the National Lumber Manufacturers Association, the margin of new orders over a year ago began to shrink, and by March 13 new orders had declined to a point 30 percent below the same week in 1947, while shipments and production continued above last year.

Clarification of the lumber situation is expected when warmer weather allows full scale operations. It may be that occasional shortages of lumber items will continue to crop up here and there during 1948.

The iron and steel industry is operating at a record peacetime level but demand continues to outrun supply. This domestic deficiency is a partial result of exports which in 1947 accounted for 17 percent of total production of concrete reinforcing bars, 13 percent of fabricated structural steel, and 11 percent of wire rods, whereas the corresponding available ratios for other building materials were 5 percent or less. Fabricated structural steel output in 1947 was 30 percent higher than the average in 1936-1940, but well below every year from 1922 to 1930. For production of wire nails 1947 was the fifth best year on record; for output of rigid steel conduits and fittings it was the second highest; and for the manufacture of concrete reinforcing bars it was the third best year to date. U. S. Department of Commerce estimates of the volume of construction in 1948 indicate a consumption likely to match any gain in the output of steel for building, so that these items are expected to continue in short supply.

Production of cast iron pressure pipe and fittings totaled slightly over one million tons last year, a 30 percent gain over 1946. Yet the record current volume of unfilled order equals the output of the entire past year. Shipments of cast iron soil pipe and fittings in January were a trifle less than a year ago,

and the backlog of orders for these products is the equivalent of six months' production.

The total of five billion brick produced in 1947 was the largest in 17 years and appeared to meet demand effectively, although the output was only half that of the record year, 1925. Production of unglazed structural tile hit a new production peak in 1947, and stocks by the end of 1947 reached a four-year high. It is expected that supplies of practically all clay products will be sufficient to meet demand during 1948.

Gypsum board and lath production capacity has recently been increased to the point where supply and demand may finally reach a balance during 1948 even at anticipated high levels of construction.

An easy supply situation is anticipated for asphalt roofing materials and for most paint products. This is not the case in cement, where the all-time record output of 1947 was not enough to prevent drawing down inventories, which reached a quarter-century low point. It seems likely that cement will continue in 1948 to be in stringent supply.

Production of building boards—structural insulation, laminated fiberboard, and hardboard—reached a new record peak last year and, if boosted to a slightly better rate, should be sufficient to prevent recurrence of the sporadic shortages that have plagued the industry from time to time in recent months.

Outlook for Credit An important factor in the current real estate boom has been the ready availability of mortgage credit on liberal terms. If buyers' plans are maintained throughout 1948 at the levels indicated for the last half of 1947 and the first half of 1948, and residential building continues at the high levels anticipated, the demand for mortgage money on 1- to 4-family houses should exceed that of 1947 by more than \$1 billion and amount to perhaps \$12 billion or more.

About \$5½ to \$6 billion of anticipated retirements would leave a net growth of about \$6 billion or more to a total at the close of 1948 of perhaps more than \$36 billion in outstanding debt on 1- to 4-family houses, a new all-time record. Most of these loans will be long-term loans on high valuations and in liberal amounts. A large part of the retirements will be on the older outstanding loans. The vulnerability of mortgage creditors thus will be increased even more than the increase in outstanding debts would indicate. Creditors include not only banks, savings and loan associations, insurance companies and other lenders, but also the Veterans' Administration and the FHA insurance system. If these estimates are borne out, more than ½ and possibly ⅔ of the dollar amount of loans outstanding at the close of 1948 will represent loans made since the close of the war.

The growth in residential real estate debts will impose additional costs on consumers. A higher proportion of incomes will have to be set aside for debt service, insurance and operating costs. These represent relatively fixed costs and will press harder and harder on consumer incomes, increasing the vulner-

ability of debtors to economic vicissitude.

The price levels now prevailing and the magnitude of the sums involved suggest that this is the sort of situation out of which financial difficulties have been generated in the past.

APPENDIX

ESTIMATE OF DOUBLED-UP FAMILIES ACTIVELY SEEKING OTHER HOMES

Tables B and C indicate that slightly over 3 million families were living with slightly less than 3 million other families in early 1947. The greatest pressure for housing would be expected to come from these doubled-up families. However, not all of the more than 3 million nonfarm subfamilies or secondary families are actively in the market for housing. "On the basis of data on marital status tabulated from the 1940 Census, it is estimated that normally about 20 percent of the couples marrying do not establish separate living quarters until more than a year after marriage".¹ It is not known how many of the subfamilies or secondary families would seek separate homes if those homes were available at prices the particular couples could afford. However, it may be assumed that under ordinary conditions when productive facilities are generally ample to expand output of residential dwellings in response to effective demand, that demand does not occur in about 20 percent of the new marriages. On that basis it would appear that more than 300,000 of the nonfarm couples married in 1946 and early 1947 would not, in the ordinary course of events, be seeking separate homes in early 1947.

Of the 3 million or more nonfarm families living with other families, about 2 $\frac{1}{3}$ million consisted of husbands and wives with or without children and less than 1 million consisted chiefly of broken families, that is with one spouse missing or absent. To what extent these broken families would be seeking separate quarters cannot be estimated but it may be assumed that most of them are not actively in the market.

Turning to the 2 $\frac{1}{3}$ million couples with or without children and deducting therefrom the 300,000 recently-married couples that ordinarily would not have established separate living quarters, we have about 2 million nonfarm families living with other

families who might get separate homes if they could afford to and could find them. The doubled-up families tend to be in the younger age groups and, consequently, in the lower income groups. Available information indicates that rental opportunities have diminished most and price increases have been greatest in those properties and dwelling units which are most in demand by the lower income groups. Housing costs have increased relatively the most for the lower income groups, reducing substantially their ability to buy shelter and, apparently, forcing some lower income families out of the market.

This estimate of effective demand emanating from doubled-up families may be approached from a slightly different point of view. In April 1947, about $\frac{2}{3}$ million nonfarm nonseasonal dwelling units, 2 percent of the total supply, were vacant but habitable compared with more than 1 million, or about 3 $\frac{3}{4}$ percent of all nonfarm units in 1940. In 1940 when there were slightly under 4 million doubled-up nonfarm families in less than 2 million homes, the rate of vacancies was nearly double that of 1947 when there were about 6 million doubled-up nonfarm families in slightly less than 3 million homes.

More dwelling units could probably have been occupied in 1940 than were actually occupied, even without major population shifts, and more structures could have been built in the years immediately preceding 1940 had effective demand been forthcoming. Marketwise, we did not appear to be suffering from a housing shortage as that term is ordinarily used even though some of our housing was not as adequate as might have been desired. By that standard it might be assumed that the increased rate of family formation had resulted in the accumulated shortage by 1947 of more than 1 million dwelling units.

We cannot assume, however, that housing conditions in 1940 were normal or provide an adequate standard of comparison with today. Housing in 1940 reflected the aftermath of a prolonged and severe depression. Housing conditions today reflect, at least

in part, a prolonged period of sustained activity, prosperity and inflation. A better basis of comparison might be afforded if we go back to the close of the boom of the Twenties.

The doubling-up rate for 1940 was sufficiently higher than in 1930 to suggest that a latent, or potential shortage of perhaps $\frac{1}{2}$ million homes had been accumulated by 1940 because of the failure of housing and incomes to keep pace with family formation during the decade of the Thirties. On that assumption, there would be an accumulated deficit or shortage of about $1\frac{1}{2}$ million nonfarm homes in 1947 based on general occupancy standards of the late Twenties. That figure agrees reasonably well with our other estimate of under 2 million. Admittedly these estimates are very rough; they require

liberal assumptions regarding some very involved intangible factors but they serve also to illustrate some of our housing problems.

The estimate receives some further support from results of surveys of consumers' buying plans. Early in 1947 between 2 and 3 million spending units, roughly comparable to families, indicated that they would or probably would buy homes in 1947; about 2 million definitely expected to buy while the others thought they would but were not certain. If from these expected buyers we could deduct those who were in the market because they were dissatisfied with their present homes or were moving for business reasons we would probably find less than 2 million seeking homes because they had none of their own and were living with others.