

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Studies in the National Balance Sheet of the United States, Vol. 1

Volume Author/Editor: Raymond W. Goldsmith and Robert E. Lipsey

Volume Publisher: Princeton University Press

Volume ISBN: 0-691-04179-2

Volume URL: <http://www.nber.org/books/gold63-1>

Publication Date: 1963

Chapter Title: Housing as a Component of National Wealth

Chapter Author: Raymond W. Goldsmith, Robert E. Lipsey

Chapter URL: <http://www.nber.org/chapters/c3933>

Chapter pages in book: (p. 252 - 276)

CHAPTER 10

Housing as a Component of National Wealth

Long-Term Trends in Importance of Housing

ALL RESIDENTIAL STRUCTURES

FRAGMENTARY data for 1805 and 1850 combined with more reliable information for later years suggest that economic development is not necessarily accompanied by a trend in the importance of housing in reproducible wealth. The data for different countries in Table 64 confirm this impression. Although they do not encompass all levels of economic development, within the range included there is no obvious connection between, say, income and the share of housing.

Trends in the importance of housing are difficult to establish. The estimates available for early years are based on very slight evidence, and, moreover, wide swings in the ratio of housing to total structures and assets make trends sensitive to the choice of beginning and end years. Further uncertainty is introduced because the data, divided into three segments, have overlaps which often show considerable discrepancies. This problem, which runs through most of the long-term comparisons made here, is illustrated in Chart 23 by the differences between linked and unlinked ratios of residential structures to reproducible tangible assets. The linked ratios (Alternative I) imply a fall in the importance of housing between 1850 and 1958 and only a 5½ per cent rise between 1880 and 1958. The unlinked ratios, on the other hand, show a small rise from 1850 to 1958 and a considerable one (over 30 per cent) from 1880 to 1958.

Linking segments by a ratio for overlapping years implies that the revision improved the estimation of the level of the series or changed its coverage but that each segment represented the best estimate of the changes within the period. In other words, the discrepancy between the end of one segment and the beginning of the next is assumed to be characteristic of the whole segment. The series constructed under this assumption is referred to as Alternative I in Chart 23.

An alternative assumption is that the beginning of each segment represents the best estimate of the level for that year and that the error implied by the difference between the end of one segment and the beginning of the next accumulated gradually during the period. The initial year of each segment is thus taken to be correct and the rest of the segment is used to interpolate between the initial year of one seg-

HOUSING AS A COMPONENT OF NATIONAL WEALTH

ment and the initial year of the next. The resulting series is Alternative II in Chart 23. A choice between the two assumptions in the charts was avoided by plotting the series with overlaps. But in the discussion the second assumption was generally used.

Although the share of housing in reproducible tangible wealth has not shown a single clear trend during the last 150 years as a whole, it has exhibited wide swings. It fell from 33 per cent in 1805, one of the highest shares on record, to 23.6 per cent in 1880, the lowest observed. This was a period in which our very crude estimates for farm residences fell from roughly 17 per cent of tangible wealth to only about 4 per cent, and the gain in importance of nonfarm housing was much too small to make up for this reduction.

Between 1880 and 1945, housing's share of tangible wealth rose, particularly after 1912. The two sharpest increases took place between 1880 and 1890 and between 1922 and 1929, both periods which coincided roughly with strong upswings in long building cycles. But the milder upswing in building in 1900-09 was not reflected in the ratio of housing to wealth which, on the contrary, declined.¹

On the whole, the linked series (Alternative I) suggests no trend since 1850; the unlinked one and Alternative II indicate an upward trend. Much of this trend, however, was wiped out by the decline after World War II. If housing is compared with private, rather than total, tangible assets, there is a stronger upward trend in its share because government wealth (almost entirely nonresidential) grew more rapidly than private wealth after 1900.

As a proportion of total structures, residences showed much milder fluctuations and even less of a trend, in both linked and unlinked versions. But in relation to private structures, housing clearly increased in importance, particularly between 1880 and 1945, and the postwar decline was very slight.

NONFARM RESIDENTIAL STRUCTURES

Nonfarm housing, the main concern of this part, unquestionably grew in importance over a long period. Its share in structures increased from slightly over 25 per cent in 1805 to almost half after World War II, and its share in reproducible tangible wealth rose from 16 to around 30

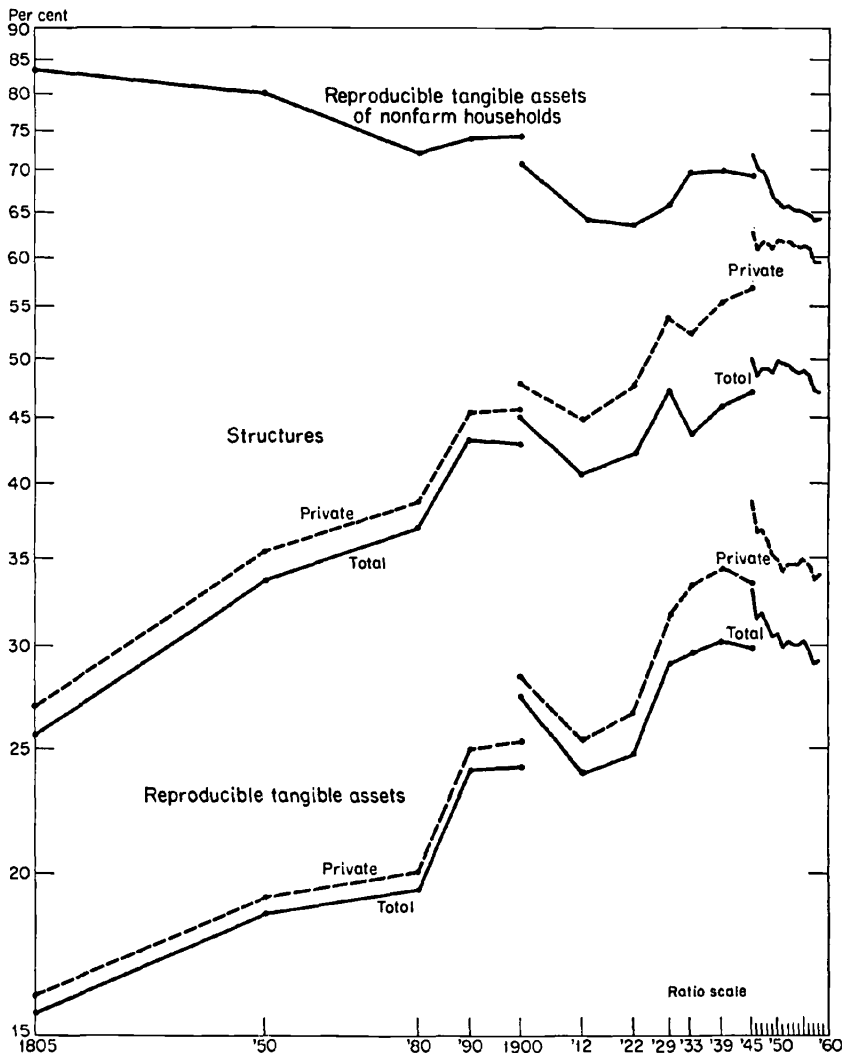
¹ Dates for turning points in number and value of housekeeping units are given in Leo Grebler, David M. Blank, and Louis Winnick, *Capital Formation in Residential Real Estate*, Princeton for NBER, 1956, p. 42. Dates for building cycles are listed in Arthur F. Burns and Wesley C. Mitchell, *Measuring Business Cycles*, New York, NBER, 1946, p. 422, and a large number of building series are charted in George F. Warren and Frank A. Pearson, *World Prices and the Building Industry*, New York, 1937, Chapter VI.

HOUSING IN THE NATIONAL BALANCE SHEET

per cent (Chart 24). Most of this rise took place before 1890. After that the shift from farm to nonfarm was not of great importance. Linking the three segments reduces the trend somewhat but does not begin to erase it. Since World War II there has been no further increase in non-

CHART 24

Share of Nonfarm Residential Structures in Total and Private Structures and in Total, Private, and Nonfarm Household Reproducible Tangible Assets, 1805-1958



Source: See source to Chart 23.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

farm housing's share of structures, and there has been a substantial decline in its share of total wealth. As was true of total housing, non-farm housing's share of private structures and reproducible wealth grew more rapidly than its share of the total.²

Despite the growth of nonfarm housing in total wealth, it suffered a steady loss in its position among the assets of nonfarm households. Consumer durables, the other reproducible tangible asset of households, more than doubled in importance, their share growing in almost every period. Three exceptions to this trend were the two building boom periods of 1880-90 and 1922-29, and the 1929-33 contraction when the more rapid depreciation of consumer durables tended to decrease their importance. A purely technical element in this declining trend was the fact that all housing was treated as owned by households in the 1805-1900 segment, while in the postwar years more than 10 per cent of it was allocated to business sectors.

This shift from housing to consumer durables in the assets of the household sector reflects the decline in expenditures for housing relative to those for other goods pointed out by Grebler, Blank, and Winnick.³ They attributed the shift to a weakening of consumer preferences for housing. Margaret Reid has suggested that the rising price of housing relative to other consumer goods was responsible.⁴ The unreliability of early construction expenditure estimates and the known understatement of recent expenditures may also help to explain the apparent decline in the importance of housing.

SECTORAL DISTRIBUTION OF RESIDENTIAL REAL ESTATE

Beginning with 1900, the date of the earliest national balance sheet, we can examine residential real estate as a whole, including residential land, and its importance to some of the main sectors.⁵ Corporate-owned housing is of minor importance in both the housing total and corporate

² In contrast to the upward trend in the share of nonfarm housing in reproducible tangible assets (in current dollars), Grebler, Blank, and Winnick find a great decline in the constant dollar ratio of nonfarm residential to total gross capital formation between 1890 and 1950 and something of a downward trend in the ratio for net capital formation. The share of residential in total construction after 1915 showed wide fluctuations but little or no downward trend. (Grebler, Blank, and Winnick, *Capital Formation*, pp. 134-141.)

³ *Ibid.*, pp. 124-133.

⁴ *Journal of Political Economy*, April 1958, pp. 147-152.

⁵ Some of the increase in information is illusory. The breakdown of real estate by sector is calculated by applying roughly estimated percentage distributions to totals for various types of residential real estate. Over considerable periods the sectoral distribution therefore varies mainly with shifts in the composition of the stock between one- to four-family and multifamily housing and allows for no change in the distribution of ownership within these groups. Similar arbitrary elements enter into the estimates of residential land values.

HOUSING IN THE NATIONAL BALANCE SHEET

assets. The allocation problem is more important for the nonfarm unincorporated business sector, in which multifamily housing is a fairly important asset. The problem involves not only a lack of knowledge of the ownership of real estate but also a difficulty in defining a business as opposed to a personal asset. The Federal Reserve flow-of-funds accounts, for example, treat rental housing outside of owner-occupied structures as business-owned, while the national balance sheets used here allocate all rental housing in one- to four-unit structures to the nonfarm household sector.⁶

Despite the built-in stability implied by these qualifications, some trends in the importance of residential real estate are visible in Table 65. It rose from 21-25 per cent in the 1900-22 period to a very steady 28-32 per cent in later years. On the other hand, it was over 31 per cent of the assets of nonfarm households in 1900, only 22-28 per cent after that. This decline may well be illusory; the early construction data, on which the 1900 value is based, include some extremely crude estimates, and the figures after 1900 show no trend. In the nonfarm unincorporated business sector balance sheets, the share of housing grew sixfold between 1900 and 1933 but declined somewhat after the war. These changes reflect the predepression rise and postwar decline of the importance of multifamily structures in the total housing stock. Changes in the role of multifamily housing also influenced the rapid growth of housing's small share in the corporate balance sheet up to 1929 and the slight decline after 1950. Public housing, a negligible factor in total and in government assets, grew steadily after the war but reached only 2 per cent of government assets.

In all of these national balance sheets, the ownership of nonfarm residences is overwhelmingly (over 85 per cent) concentrated in the nonfarm household sector throughout the period since 1900. This high concentration has, in effect, been built into the data by the method of allocation and would vary with changes in the definition of the nonfarm unincorporated business sector. But even the narrowest definition of the household sector, which included only owner-occupied units and treated all rental housing as business, would include two-thirds or more of the housing stock in all the postwar years.

⁶ Several treatments are possible. The allocation in the balance sheets of all rental units in one- to four-unit structures to the household sector is one extreme. It treats these houses as an investment rather than as a business. The opposite treatment would be to allocate to unincorporated business all rental units, including those in owner-occupied two- to four-family houses. This can be done with the estimates for the postwar years given later in this chapter. The method of the FRB flow-of-funds accounts is intermediate, placing in the household sector all rental units in owner-occupied properties and leaving other rental units in the business sector.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

TABLE 65

SHARE OF RESIDENTIAL REAL ESTATE IN TOTAL ASSETS, BY SECTOR, AND
IN TOTAL TANGIBLE ASSETS, 1900-58
(per cent)

<i>Share in Total Assets</i>						
Nonfarm Households	Nonfarm Unincorporated Business	Agriculture	Non- financial Corpo- rations	Govern- ment	Share in Tangible Assets, All Sectors	
(1)	(2)	(3)	(4)	(5)	(6)	
1900	31.6	3.0	6.6	1.1	n.a.	24.7
1912	25.2	6.5	5.6	1.3	n.a.	21.4
1922	24.8	9.4	8.7	1.7	n.a.	24.4
1929	22.3	15.5	9.0	2.9	n.a.	28.4
1933	25.0	18.2	10.0	3.1	n.a.	29.2
1939	26.0	17.5	9.3	4.1	n.a.	30.3
1945A	21.7	16.2	8.6	3.7	n.a.	29.9
1945B	22.8	21.5	8.8	3.9	1.4	31.5
1946	24.6	19.7	9.4	4.0	1.7	30.4
1947	27.1	19.6	9.9	4.1	1.7	30.8
1948	27.6	19.5	9.8	4.1	1.5	30.3
1949	26.5	19.1	10.0	4.0	1.6	29.8
1950	27.5	18.7	9.5	4.0	1.5	29.9
1951	27.3	17.9	9.2	3.8	1.7	29.1
1952	27.3	17.7	9.6	3.8	1.8	29.5
1953	27.3	17.3	10.1	3.8	1.9	29.5
1954	25.9	16.7	10.1	3.7	2.0	29.4
1955	25.6	16.1	10.3	3.5	1.9	29.6
1956	25.7	15.6	10.2	3.5	1.9	29.2
1957	26.2	14.9	9.8	3.4	2.0	28.4
1958	24.9	14.7	9.3	3.4	2.2	28.5

SOURCE: 1900-45A: Value of residential real estate from Raymond W. Goldsmith, *National Wealth of the United States in the Postwar Period*, Princeton for NBER, 1962, Tables A-35 and A-40. (All corporate holdings were assumed to be all held by nonfinancial corporations.) Total assets, by sector, and total tangible assets from Vol. II, Tables I and Ia.

1945B-58: Residential real estate from Vol. II, Tables IV-a-1 and IV-a-3a. Total assets, by sector, and total financial assets from Vol. II, Tables I and Ia.

Postwar Changes in Relationship of Housing to Wealth and Assets

TWO SOURCES OF HOUSING DATA

For the years after World War II, data on housing are available in much greater detail than before. In addition to the perpetual inventory data,⁷ which underlie all the balance sheet totals, there are census-type

⁷ See Raymond W. Goldsmith, "A Perpetual Inventory of National Wealth" in *Studies in Income and Wealth*, Vol. 14, New York, NBER, 1951; and *National Wealth*.

HOUSING IN THE NATIONAL BALANCE SHEET

data from which entirely independent estimates of the value and distribution of the housing stock can be made, as in Appendix A.⁸

The estimates developed in Appendix A are summarized in Table 66 and compared with the balance sheet estimates derived by the perpetual inventory method which are given in detail in Table 67.⁹ The two methods of estimation give results that differ substantially in both level and trend, the census-type figures rising from 85 per cent in 1946 to 108 per cent of the perpetual inventory estimates in 1956. One explanation might be the gradual disappearance of rent control, which would tend to raise census-type estimates but would not affect perpetual inventory data. But the plausibility of this explanation is reduced by the fact that most of the relative increase came not in multifamily housing, which is most affected by rent control, but in one- to four-family houses, which are mostly owner-occupied.

A more likely culprit is the apparent understatement of the value of construction in the official estimates. Data for 1959 indicate an upward revision of 11 or 12 per cent.¹⁰ Applied to the construction estimates for the whole postwar period, such a revision would bring about a considerably more rapid rise in the perpetual inventory estimates.

Another explanation for the faster growth of the census-type estimates is the apparently greater increase in house prices than in construction costs between 1950 and 1956. While construction costs rose by approximately 15 per cent, average house values gained over 50 per cent between the 1950 census and the 1956 National Housing Inventory, and average values shown in the Survey of Consumer Finances by the University of Michigan Survey Research Center rose by over 36 per cent. While the average values do not represent pure price changes, since they include the effects of improvements in the quality of new housing added to the stock, it is unlikely that this latter factor could account for such large differences. It therefore seems likely that the prices underlying these average house values did rise more than construction costs by a considerable margin.

⁸ In Appendix D of *Capital Formation*, Grebler, Blank, and Winnick compare the two types of estimates for 1950 and earlier years. An appraisal of the accuracy of owners' responses to value questions, which are the basis of census-type estimates, appears in Leslie Kish and John B. Lansing, "Response Errors in Estimating the Value of Homes," *Journal of the American Statistical Association*, September 1954.

⁹ The census-type estimates have been matched with the perpetual inventory data for privately owned housing only, on the ground that the census estimates are likely to have badly understated public housing. This understatement arises because rental housing values are estimated from rent data, using value-to-rent ratios for mortgaged private rental housing. These ratios, applied to the subsidized rents of public housing projects, probably understate the value of such projects by considerably more than half.

¹⁰ *Construction Reports: Construction Activity*, U.S. Bureau of the Census, Series C 30-25 (supplement), Washington, July 1961.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

There is one substantial piece of evidence on house prices during this interval: the results of price comparisons for identical houses in the 1950 Housing Census and the 1956 National Housing Inventory.¹¹ These show price increases ranging from 27 per cent for houses in the \$10,000-15,000 class in 1950 to 78 per cent for the cheapest houses, those under \$4,000, and averaging 39 per cent (Table 68).¹² If we allow for the fact that some depreciation occurred during this period, the range becomes 38 to 95 per cent, with an average of 52 per cent.¹³

It is possible that even the data on identical houses are biased if the object of measurement is the cost of an equivalent house. The units present at both dates may be those in the more desirable locations; those destroyed or altered are more likely to have been in deteriorating areas and thus to have been losing in value up to the point of disappearance. The units present in both periods may have had improvements which raised their value: additional equipment, re-wiring, landscaping, or rooms added. Very little information is available on changes in the characteristics of these "identical" units, but there was an increase in the proportion having all plumbing facilities, "both flush toilet and bathtub or shower inside the structure for the exclusive use of the occupants, and hot running water," which seemed to outweigh the accompanying increase in the proportion listed as dilapidated.¹⁴

Another source of discrepancy between costs of new and existing houses is that new houses are built further away from the central city as time passes. This movement should keep the land value component of price from rising as fast for new houses as it does in existing houses.

¹¹ *1956 National Housing Inventory*, U.S. Bureau of the Census, Washington, 1958-59, Vol. I, Part 1, Table 6, p. 40. This table does not supply the price information in the most desirable form, i.e., a tabulation of average per cent changes, but it shows a cross-classification of the value class in 1950 with the value class in 1956. Average changes were estimated by using the midpoints of classes as class averages. This is probably incorrect in that data in the appendix suggest that the averages are near the lower end of each class, but since both 1950 and 1956 were similarly treated we assume that the estimate of percentage change is not seriously biased. Percentage change was not computed for the open-end class by this method because it would have been hopelessly biased downward.

¹² It should be noted that these estimates of the change in house prices are very different from those of Roy Wenzlick, published in *The Real Estate Analyst*. His index of house prices rises only 11 per cent between 1950 and 1956 (*ibid.*, Supplementary Pages, 1960), a little more than half the increase in construction costs instead of more than twice according to our calculations.

¹³ The calculation assumes an eighty-year life. The perpetual inventory calculations used an eighty-year life for new construction but a shorter one for additions and alterations. The percentage increase in price under these assumptions should therefore be slightly greater than we have calculated.

¹⁴ *1956 National Housing Inventory*, Vol. I, Part 1, p. 6 and Table 4.

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 66

VALUE OF NONFARM HOUSING STOCK, BY TENURE AND TYPE OF STRUCTURE,
CENSUS-TYPE AND PERPETUAL INVENTORY ESTIMATES, 1945-60
(billion dollars)

	1945	1946	1947	1948
<i>One- to Four-Family Structures</i>				
Census-Type Estimates				
1. Owner-occupied units, 1-family	80.0	97.5	121.4	138.2
2. Owner-occupied units, 2- to 4-family	8.7	10.5	13.1	14.9
3. Renter-occupied units, in owner-occupied houses	7.5	9.2	11.4	13.0
4. Renter-occupied units, other	25.0	25.1	31.9	32.1
5. Vacant units, for sale	0.4	0.7	1.1	1.4
6. Vacant units, for rent	0.8	0.5	0.7	0.9
7. Total	122.4	143.5	179.6	200.5
8. Perpetual inventory estimates	144.9	170.2	208.0	225.3
9. Ratio of census-type to perpetual invent. (per cent)	84.5	84.3	86.3	89.0
<i>Multifamily Structures</i>				
Census-Type Estimates				
10. Owner-occupied units	0.5	0.5	0.7	0.7
11. Renter-occupied units	13.3	14.0	17.7	18.4
12. Vacant units	0.2	0.1	0.2	0.4
13. Total	14.0	14.6	18.6	19.5
14. Perpetual inventory estimates	14.6	16.5	19.4	21.5
15. Ratio of census-type to perpetual invent. (per cent)	95.9	88.5	95.9	90.7
<i>Total</i>				
16. Census-type estimates	136.4	158.1	198.2	220.0
17. Perpetual inventory estimates, private	159.5	186.7	227.4	246.8
18. Perpetual inventory estimates, public	2.1	2.5	2.8	2.8
19. Perpetual inventory estimates, total	161.6	189.2	230.2	249.6
20. Ratio of census-type to perpetual invent., private (per cent)	85.5	84.7	87.2	89.1

SOURCE

- Line 1: April 1, 1960, Table A-2, lines 6 and 11. April 1, 1950 and December 31, 1956, Table A-6, lines 10 and 12. Other years, interpolated and extrapolated via col. 1 of Table A-10.
- 2: Table A-10, col. 2, minus line 1 of this table.
- 3: Table A-10, col. 3.
- 4: Table A-20, col. 5, minus line 3 of this table.
- 5: 1945-54, Table A-24, col. 5. 1955-60, Table A-23, line 27.
- 6: 1945-54, Table A-26, col. 6. 1955-60, Table A-23, line 28.
- 7: Sum of lines 1-6.
- 8: Table 67, line 1.
- 9: Line 7 divided by line 8.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
136.8	156.7	178.1	200.9	211.3	228.0	254.8	291.7	308.0	323.3	353.2	364.3
14.8	16.5	18.1	19.6	20.0	20.8	22.3	24.6	22.3	19.7	17.5	17.1
12.9	14.3	15.8	17.2	17.4	18.1	19.5	21.5	19.5	17.2	15.4	15.0
31.5	35.3	39.0	42.7	43.7	45.9	49.8	55.4	59.4	63.4	70.2	72.2
1.6	2.0	2.6	3.2	3.7	4.3	5.1	5.3	6.6	7.0	7.3	8.1
1.1	1.6	2.2	2.8	3.4	4.0	4.9	4.6	5.0	5.5	5.9	6.1
198.7	226.4	255.8	286.4	299.5	321.1	356.4	403.1	420.8	436.1	469.5	482.8
221.9	258.5	276.7	292.5	304.6	316.7	344.8	370.0	387.3	406.6	439.5	456.7
89.5	87.6	92.4	97.9	98.3	101.4	103.4	108.9	108.6	107.3	106.8	105.7
0.7	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.2
18.1	19.9	21.4	22.8	22.6	23.1	24.3	26.3	27.0	27.5	29.2	29.8
0.5	0.7	0.9	1.2	1.4	1.6	1.9	1.4	1.5	1.5	1.9	3.2
19.3	21.4	23.1	24.9	24.9	25.6	27.1	28.7	29.5	30.1	32.2	34.2
21.8	24.5	25.6	26.4	27.2	27.3	28.6	29.8	30.4	31.1	32.3	32.7
88.5	87.3	90.2	94.3	91.5	93.8	94.8	96.3	97.0	96.8	99.7	104.6
218.0	247.8	278.9	311.3	324.4	346.7	383.5	431.8	450.3	466.2	501.7	517.0
243.7	283.0	302.3	318.9	331.8	344.0	373.4	399.8	417.7	437.7	471.8	489.4
2.8	3.1	3.8	4.3	4.8	5.0	5.3	5.6	6.1	7.0	8.1	8.7
246.5	286.1	306.1	323.2	336.6	349.0	378.7	405.4	423.8	444.7	479.9	498.1
89.5	87.6	92.3	97.6	97.8	100.8	102.7	108.0	107.8	106.5	106.3	105.6

10: Table A-20, col. 7.

11: Table A-20, col. 6.

12: 1945-54, Table A-26, col. 7. 1955-60, Table A-23, line 29.

13: Sum of lines 10-12.

14: Table 67, line 8.

15: Line 13 divided by line 14.

16: Sum of lines 7 and 13.

17: Sum of lines 8 and 14.

18: Table 67, line 22.

19: Sum of lines 17 and 18.

20: Line 16 divided by line 17.

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 67

VALUE OF NONFARM HOUSING STOCK, BY TYPE OF STRUCTURE AND SECTOR OF OWNERSHIP,
PERPETUAL INVENTORY ESTIMATES, CURRENT PRICES, 1945-6.
(billion dollars)

		1945	1946	1947	1948	1949
<i>Private</i>						
1.	1- to 4-family: Total	144.9	170.2	208.0	225.3	221.9
2.	Structures	126.1	148.1	181.0	196.1	193.1
3.	Land	18.8	22.1	27.0	29.2	28.8
4.	Nonfarm households: Structures	123.7	145.3	177.6	192.3	189.4
5.	Land	18.5	21.7	26.5	28.7	28.2
6.	Corporations: Structures	2.4	2.8	3.4	3.8	3.7
7.	Land	.3	.4	.5	.5	.6
8.	Multifamily: Total	14.6	16.5	19.4	21.5	21.8
9.	Structures	11.7	13.2	15.5	17.2	17.5
10.	Land	2.9	3.3	3.9	4.3	4.3
11.	Corporations: Structures	4.5	5.1	6.0	6.8	7.1
12.	Land	1.1	1.3	1.5	1.7	1.8
13.	Unincorporated business: Structures	7.2	8.1	9.5	10.4	10.4
14.	Land	1.8	2.0	2.4	2.6	2.5
15.	Nonhousekeeping: Total	4.2	4.7	5.3	5.7	5.5
16.	Structures	3.4	3.7	4.3	4.6	4.4
17.	Land	.8	1.0	1.0	1.1	1.1
18.	Corporations: Structures	1.4	1.5	1.9	2.0	2.0
19.	Land	.3	.5	.4	.5	.5
20.	Unincorporated business: Structures	2.0	2.2	2.4	2.6	2.4
21.	Land	.5	.5	.6	.6	.6
<i>Public</i>						
22.	Total:	2.1	2.5	2.8	2.8	2.8
23.	State and local	.9	1.4	1.7	1.8	1.9
24.	Federal	1.2	1.2	1.1	1.0	.9

SOURCE

All references are to Goldsmith, *National Wealth*, unless otherwise noted. Figures were extended to 1960 by using data and methods cited in that source.

- Line 1: Table B-12, col. 5, plus Table B-164, col. 11.
 2: Table B-10, col. 8, plus Table B-164, col. 11.
 3: Line 1 minus line 2 of this table.
 4: Table B-16, col. 8, plus Table B-164, col. 11.
 5: Table A-40, col. 2.
 6: Line 2 minus line 4 of this table.
 7: Line 3 minus line 5 of this table.
 8: Table B-12, col. 6, plus Table B-146, col. 11.
 9: Table B-10, col. 9, plus Table B-146, col. 11.
 10: Line 8 minus line 9 of this table.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
258.5	276.7	292.5	304.6	316.7	344.8	370.0	387.3	406.6	439.5	456.7
224.9	240.7	254.5	265.0	275.6	300.0	321.9	336.9	353.7	382.3	397.1
33.6	36.0	38.0	39.6	41.1	44.8	48.1	50.4	52.9	57.2	59.6
220.6	236.1	249.5	259.9	270.2	294.1	315.5	330.3	346.7	374.7	389.3
32.9	35.2	37.2	38.8	40.4	44.0	47.2	49.4	51.9	56.1	58.3
4.3	4.6	5.0	5.1	5.4	5.9	6.4	6.6	7.0	7.6	7.8
.7	.8	.8	.8	.7	.8	.9	1.0	1.0	1.1	1.3
24.5	25.6	26.4	27.2	27.3	28.6	29.8	30.4	31.1	32.3	32.7
19.7	20.5	21.2	21.8	21.9	22.9	23.9	24.4	24.9	25.9	26.2
4.8	5.1	5.2	5.4	5.4	5.7	5.9	6.0	6.2	6.4	6.5
8.2	8.6	9.1	9.5	9.6	10.2	10.8	11.2	11.5	12.2	12.5
2.0	2.2	2.3	2.4	2.4	2.6	2.7	2.8	2.9	3.0	3.1
11.5	11.9	12.1	12.3	12.3	12.7	13.1	13.2	13.4	13.7	13.7
2.8	2.9	2.9	3.0	3.0	3.1	3.2	3.2	3.3	3.4	3.4
5.9	6.0	6.1	6.2	6.3	6.6	7.0	7.4	7.9	8.6	9.4
4.7	4.8	4.9	5.0	5.0	5.3	5.6	5.9	6.3	6.9	7.5
1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.9
2.1	2.2	2.3	2.4	2.5	2.7	2.9	3.1	3.4	3.8	4.2
.6	.6	.6	.6	.7	.6	.8	.8	.9	.9	1.1
2.6	2.6	2.6	2.6	2.5	2.6	2.7	2.8	2.9	3.1	3.3
.6	.6	.6	.6	.6	.7	.6	.7	.7	.8	.8
3.1	3.8	4.3	4.8	5.0	5.3	5.6	6.1	7.0	8.1	8.7
2.3	3.0	3.6	4.1	4.4	4.8	5.1	5.5	6.0	6.6	6.9
.8	.8	.7	.7	.6	.5	.5	.6	1.0	1.5	1.8

- 11: Line 9 minus line 13 of this table.
- 12: 25 per cent of line 11 of this table.
- 13: Table B-16, col. 9, plus Table B-146, col. 11.
- 14: Line 10 minus line 12 of this table.
- 15-16: Table B-13, cols. 5 and 3.
- 17: Line 15 minus line 16 of this table.
- 18: Line 16 minus line 20 of this table.
- 19: Line 17 minus line 21 of this table.
- 20: Table B-54, col. 3.
- 21: Table B-54, difference between cols. 5 and 3.
- 22: Table A-35, sum of cols. 6 and 7.
- 23: Table A-35, col. 6.
- 24: Table A-35, col. 7.

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 68

CHANGE IN VALUE OF IDENTICAL HOUSES, 1950 AND 1956^a

Value of House in 1950 (dollars)	Average Value of House in 1956 ^b	Percentage Change, 1950 to 1956 ^b	
		Without Allowance for Depreciation	With Allowance for Depreciation ^c
Under 4,000	5,345	78	95
4,000 - 5,999	7,679	54	68
6,000 - 7,999	10,081	44	57
8,000 - 9,999	12,133	35	47
10,000 - 14,999	15,821	27	38
Average		39	52
Average excl. houses under \$4,000 in 1950		35	48

SOURCE: 1956 National Housing Inventory, Vol. I, Part 1, Table 6, p. 40.

^a Owner-occupied one-dwelling-unit structures without business and with only one dwelling unit in property.

^b Calculated assuming class averages to be at midpoints. Geometric means would give almost identical results.

^c Assuming 80-year life and 6.75 years of depreciation.

CHANGES IN THE COMPOSITION OF THE HOUSING STOCK

Although the census-type data may represent the movements of market value more accurately, we have used the perpetual inventory data as the basic framework for our estimates because they are consistent with other parts of the national balance sheet. We have taken the distribution of housing values by tenure from the census-type data and applied it to the perpetual inventory aggregates. The resulting estimates, which are used in the rest of this chapter, are given in Table 69.

Private one- to four- family housing is clearly of overwhelming importance. Starting under 90 per cent in 1945, its share rose slowly, but consistently, to 91.7 per cent, while that of private multifamily housing fell from 9 to 7 per cent. The shift appears even more strongly in the original census-type data of Table 66. There the share of all one- to four-family housing rises from 89.7 to 93.4 per cent, pushing down that of multifamily housing from 10.3 to 6.6 per cent.

The importance of rental units in the total stock of housing also declined, partly reflecting the fall in the importance of multifamily structures. But the share of one- to four-family rental housing also shrank—from over 24 per cent of the total value of housing to less than 18 per cent. The only type of rental housing which grew relatively was public housing, but it remained of very minor importance,

HOUSING AS A COMPONENT OF NATIONAL WEALTH

never reaching 2 per cent of the total housing stock. The place of rental units in owner-occupied two- to four-family structures declined sharply after 1956 as a result of the apparent shift of owner-occupiers to one-family homes discussed below.

Owner-occupied and sales units, over 65 per cent of the total value at the beginning of the period, increased their share to 79 per cent by 1960. The share of the main component of this group, one-family houses, rose from less than 59 to more than 69 per cent, while that of two- to four-family houses was cut almost in half, mainly after 1956.

Vacant housing, only 1 per cent of the total in 1945, reached 3.3 per cent in 1960.

Within the one- to four-family sector, rental housing lost ground to owner occupancy, particularly between 1945 and 1950. Owner-occupied two- to four-family structures, 13 per cent of one- to four-family housing in 1945, accounted for less than 7 per cent in 1960.

The apparent decline in the absolute and relative value of two- to four-family structures requires further exploration; it seems too sudden and too extreme. Data on numbers of units for April 1950, December 1956, and April 1960 show this drop, but the recently published volume on components of inventory change from 1950 to 1959¹⁵ suggests a much milder shift toward one-family houses and no absolute decline in the number of two- to four-family structures. The difference between the December 1959 and April 1960 figures for the number of units in two- to four-family structures is particularly large: the former was 10.5 million and the latter 7.6 million.¹⁶

Within rental housing, the share of public housing grew to a peak of 6.8 per cent in 1960. However, one- to four-unit private structures continued to provide most of the stock of rental housing—never less than 68 per cent.

In order to fit residential housing into national balance sheets, it is necessary to allocate the total stock by sectors. But because of the arbitrary nature of this allocation,¹⁷ Table 70, which gives the data, must be taken more as a working out of the assumptions used than as an accurate description of reality.

Households, by definition, hold a monopoly on owner-occupied housing units, but they also own more than 65 per cent of total rental housing. Their share of rental housing in one- to four-family structures is,

¹⁵ *U.S. Census of Housing: 1960*, Washington, 1962, Vol. IV, Final Report HC (4), Part 1A, No. 1, p. 28.

¹⁶ *Ibid.*; and *U.S. Census of Housing: 1960*, Advance Reports, Housing Characteristics, Series HC (A2)—1, June 1962, p. 6.

¹⁷ For example, nonfarm unincorporated business was assumed to hold only multi-family structures, while corporate business was assumed to hold 2 per cent of one- to four-family housing, and nonfarm households were credited with the rest.

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 69

VALUE OF NONFARM HOUSING STOCK, BY TENURE AND TYPE OF STRUCTURE,
PERPETUAL INVENTORY ESTIMATES ALLOCATED BY DISTRIBUTION OF CENSUS-TYPE ESTIMATES 1945-60
(billion dollars)

	1945	1946	1947	1948	1949
<i>One- to Four-Family Structures, Private</i>					
1. Owner-occupied units:	105.0	128.1	155.8	172.0	169.3
2. 1-family houses	94.7	115.6	140.6	155.3	152.8
3. 2- to 4-family houses	10.3	12.5	15.2	16.7	16.5
4. Renter-occupied units:	38.5	40.7	50.1	50.7	49.6
5. Owner-occupied houses	8.9	10.9	13.2	14.6	14.4
6. Other	29.6	29.8	36.9	36.1	35.2
7. Vacant, for sale	0.5	0.8	1.3	1.6	1.8
8. Vacant, for rent	0.9	0.6	0.8	1.0	1.2
9. Total 1- to 4-family	144.9	170.2	208.0	225.3	221.9
<i>Multifamily Structures, Private</i>					
10. Owner-occupied	0.5	0.6	0.7	0.8	0.8
11. Renter-occupied	13.9	15.8	18.5	20.3	20.4
12. Vacant, for rent	0.2	0.1	0.2	0.4	0.6
13. Total multifamily	14.6	16.5	19.4	21.5	21.8
<i>Total</i>					
14. Owner-occupied or for sale	106.0	129.5	157.8	174.4	171.9
15. Renter-occupied or for rent, private	53.5	57.2	69.6	72.4	71.8
16. Total private	159.5	186.7	227.4	246.8	243.7
17. Public	2.1	2.5	2.8	2.8	2.8
18. Renter-occupied, incl. public (15 + 17)	55.6	59.7	72.4	75.2	74.6
19. Total, all housekeeping units	161.6	189.2	230.2	249.6	246.5
20. Nonhousekeeping	4.2	4.7	5.3	5.7	5.5
21. Total, all residential units	165.8	193.9	235.5	255.3	252.0

of course, considerably greater, but has been losing ground to corporate holdings. The share of owner-occupied one-family homes in household housing assets increased at the expense of both owner-occupied two- to four-family structures and other rental structures.

Within the rental housing inventory, the corporate share gained on those of the other two sectors.

Increments to the value of the housing inventory give a clearer picture of short-term developments than the stock data because they represent current experience instead of the cumulation of the past. These changes in the value of the nonfarm housing stock in the post-war years ranged from an increase of \$42 billion to a decline (the only one) of \$3 billion (Table 71). Movements in the various types of housing were roughly synchronous, with the largest increases in 1947 and with other peaks in 1950, 1955, and 1959.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
197.8	212.2	225.2	235.2	245.4	268.1	290.3	304.0	319.8	347.0	360.8
178.9	192.7	205.2	214.9	224.9	246.5	267.7	283.5	301.4	330.6	344.6
18.8	19.6	20.0	20.3	20.5	21.6	22.6	20.5	18.4	16.4	16.2
56.6	59.3	61.2	62.1	63.1	67.0	70.6	72.6	75.1	80.1	82.5
16.3	17.6	17.6	17.7	17.9	18.9	19.7	17.9	16.0	14.4	14.2
40.3	41.6	43.6	44.4	45.3	48.2	50.9	54.7	59.1	65.7	68.3
2.3	2.8	3.3	3.8	4.2	4.9	4.9	6.1	6.5	6.8	7.7
1.8	2.4	2.9	3.5	3.9	4.7	4.2	4.6	5.1	5.5	5.8
258.5	276.7	292.5	304.6	316.7	344.8	370.0	387.3	406.6	439.5	456.7
0.9	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.1	1.1	1.1
22.8	23.7	24.2	24.7	24.6	25.6	27.3	27.8	28.4	29.3	28.5
0.8	1.0	1.3	1.5	1.7	2.0	1.5	1.5	1.5	1.9	3.1
24.5	25.6	26.4	27.2	27.3	28.6	29.8	30.4	31.1	32.3	32.7
201.0	215.9	229.5	240.0	250.6	273.9	296.2	311.1	327.4	354.9	369.6
82.0	86.4	89.6	91.8	93.3	99.3	103.6	106.5	110.1	116.8	119.9
283.0	302.3	318.9	331.8	344.0	373.4	399.8	417.7	437.7	471.8	489.4
3.1	3.8	4.3	4.8	5.0	5.3	5.6	6.1	7.0	8.1	8.7
85.1	90.2	93.9	96.6	98.3	104.6	109.2	112.6	117.1	124.9	128.6
286.1	306.1	323.2	336.6	349.0	378.7	405.4	423.8	444.7	479.9	498.1
5.9	6.0	6.1	6.2	6.3	6.6	7.0	7.4	7.9	8.6	9.4
292.0	312.1	329.3	342.8	355.3	385.3	412.4	431.2	452.6	488.5	507.5

SOURCE: Tables 66 and 67.

The decline of multifamily housing stands out more sharply in the net changes than in the housing stock data in the previous section. Multifamily structures and land, which formed 9 per cent of the initial stock of housekeeping real estate, only twice supplied that fraction of the change, and in the last seven years never rose above 4½ per cent. Conversely, one- to four-family housing, which began the period at just under 90 per cent of the housing stock, supplied more than 89 per cent of the growth in every following year, aside from a decline in 1949.

The decline of renter occupancy is illustrated by the fact that private rental housing, 33 per cent of the 1945 stock, supplied only 20 per cent of the postwar growth. Owner-occupied dwellings accounted for 76 per cent of the total postwar change compared with 65 per cent of the initial stock.

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 70

VALUE OF HOUSING, BY SECTOR OF OWNERSHIP, TENURE, AND TYPE OF STRUCTURE, 1945-60
(billion dollars)

	1945	1946	1947	1948	1949
Nonfarm Households					
1. Owner-occupied units:	105.0	128.1	155.8	172.0	169.3
2. In 1-family houses	94.7	115.6	140.6	155.3	152.8
3. In 2- to 4-family houses	10.3	12.5	15.2	16.7	16.5
4. Renter-occupied and vacant units:	37.2	38.9	48.3	49.0	48.3
5. In owner-occupied houses	8.9	10.9	13.2	14.6	14.4
6. Other renter-occupied or vacant	28.3	28.0	35.1	34.4	33.9
7. Total	142.2	167.0	204.1	221.0	217.6
Nonfarm Unincorporated Business					
8. Renter-occupied and vacant, multifamily	9.0	10.1	11.9	13.0	12.9
9. Nonhousekeeping	2.5	2.7	3.0	3.2	3.0
10. Total	11.5	12.8	14.9	16.2	15.9
Corporations					
11. Renter-occupied and vacant:	8.3	9.6	11.4	12.8	13.2
12. In 1- to 4-family houses	2.7	3.2	3.9	4.3	4.3
13. In multifamily structures	5.6	6.4	7.5	8.5	8.9
14. Nonhousekeeping	1.7	2.0	2.3	2.5	2.5
15. Total	10.0	11.6	13.7	15.3	15.7
16. State and Local Govt., Renter-Occupied	.9	1.4	1.7	1.8	1.9
17. Federal Government, Renter-Occupied	1.2	1.2	1.1	1.0	.9

SOURCE.

- Lines 1, 2, 3, and 5: Table 69, lines 1, 2, 3, and 5.
 4: Line 7 minus line 1.
 6: Line 4 minus line 5.
 7: Table 67, sum of lines 4 and 5.

Data on changes in the value of housing point to a more important role for public housing in the postwar period than its share in the stock of housing would suggest. The whole increase in the value of private multifamily housing in the years 1951 through 1960 was only \$8.2 billion. Increments to the value of public housing were \$5.6 billion, mostly in multifamily housing to judge from data on postwar housing starts.¹⁸ Thus although public housing accounted for less than 11 per

¹⁸ The distribution of publicly owned dwelling units started was as follows (in thousands):

	One- and Two-Family Structures	Multifamily Structures
1935-45	225	88
1946-50	13	95
1951-55	21	182
1956-60	126	96

Housing Statistics, Annual Data, U.S. Housing and Home Finance Agency, Washington, April 1962.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
197.8	212.7	225.2	235.2	245.4	268.1	290.3	304.0	319.8	347.0	360.8
178.9	192.7	205.2	214.9	224.9	246.5	267.7	283.5	301.4	330.6	344.6
18.8	19.6	20.0	20.3	20.5	21.6	22.6	20.5	18.4	16.4	16.2
55.7	58.6	61.5	63.5	65.2	70.0	72.4	75.7	78.8	83.8	86.8
16.3	17.6	17.6	17.7	17.9	18.9	19.7	17.9	16.0	14.4	14.2
39.4	41.0	43.9	45.8	47.3	51.1	52.7	57.8	62.8	69.4	72.6
253.5	271.3	286.7	298.7	310.6	338.1	362.7	379.7	398.6	430.8	447.6
14.3	14.8	15.0	15.3	15.3	15.8	16.3	16.4	16.7	17.1	17.1
3.2	3.2	3.2	3.2	3.1	3.3	3.3	3.5	3.6	3.9	4.1
17.5	18.0	18.2	18.5	18.4	19.1	19.6	19.9	20.3	21.0	21.2
15.2	16.2	17.2	17.8	18.1	19.5	20.8	21.6	22.4	23.9	24.7
5.0	5.4	5.8	5.9	6.1	6.7	7.3	7.6	8.0	8.7	9.1
10.2	10.8	11.4	11.9	12.0	12.8	13.5	14.0	14.4	15.2	15.6
2.7	2.8	2.9	3.0	3.2	3.3	3.7	3.9	4.3	4.7	5.3
17.9	19.0	20.1	20.8	21.3	22.8	24.5	25.5	26.7	28.6	30.0
2.3	3.0	3.6	4.1	4.4	4.8	5.1	5.5	6.0	6.6	6.9
.8	.8	.7	.7	.6	.5	.5	.6	1.0	1.5	1.8

8: Table 67, sum of lines 13 and 14.

9: Table 67, sum of lines 20 and 21.

10: Sum of lines 8 and 9.

11: Sum of lines 12 and 13.

12: Table 67, sum of lines 11 and 12.

13: Table 67, sum of lines 6 and 7.

14: Table 67, sum of lines 18 and 19.

15: Sum of lines 11 and 14.

16: Table 67, line 23.

17: Table 67, line 24.

cent of the value of the multifamily housing stock as late as 1950,¹⁹ it was responsible for at least one-third of the increment to this class of property after that date.

In number of units, public housing represented about 2.5 per cent

¹⁹ Even this 11 per cent is an overstatement because it assumed all public housing to be multifamily. In fact, a substantial part of the stock consisted of one- to four-family houses. Cumulation of units started from 1935 through 1950 indicates that less than half were in structures of three or more units. However, their average value was probably considerably higher than that of units in one- and two-family houses.

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 71

NET CHANGES IN VALUE OF NONFARM HOUSING STOCK BY TENURE AND TYPE OF STRUCTURE, 1946-60
(billion dollars)

	1946	1947	1948	1949	1950
<i>One- to Four-Family, Private</i>					
1. Owner-occupied units:	23.1	27.7	16.2	-2.7	28.5
2. In 1-family houses	20.9	25.0	14.7	-2.5	26.1
3. In 2- to 4-family houses	2.2	2.7	1.5	-0.2	2.3
4. Renter-occupied units:	2.2	9.4	0.6	-1.1	7.0
5. In owner-occupied houses	2.0	2.3	1.4	-0.2	1.9
6. Other	0.2	7.1	0.8	-0.9	5.1
7. Vacant, for sale	0.3	0.5	0.3	0.2	0.5
8. Vacant, for rent	-0.3	0.2	0.2	0.2	0.6
9. Total, 1- to 4-family	25.3	37.8	17.3	-3.4	36.6
<i>Multifamily, Private</i>					
10. Owner-occupied	0.1	0.1	0.1	0	0.1
11. Renter-occupied	1.9	2.7	1.8	0.1	2.4
12. Vacant, for rent	-0.1	0.1	0.2	0.2	0.2
13. Total, multifamily	1.9	2.9	2.1	0.3	2.7
<i>Total</i>					
14. Owner-occupied or for sale	23.5	28.3	16.6	-2.5	29.1
15. Renter-occupied or for rent, private	3.7	12.4	2.8	-0.6	10.2
16. Total private	27.2	40.7	19.4	-3.1	39.3
17. Public	0.4	0.3	0	0	0.3
18. Renter-occupied, incl. public (15 + 17)	4.1	12.7	2.8	-0.6	10.5
19. Total, all housekeeping units	27.6	41.0	19.4	-3.1	39.6
20. Nonhousekeeping	0.5	0.6	0.4	-0.2	0.4
21. Total, all residential units	28.1	41.6	19.8	-3.3	40.0

of the 1950 stock.²⁰ Since World War II, it has accounted for over 20 per cent of total multifamily housing starts.²¹

NET INVESTMENT AND CAPITAL GAINS

These changes in the value of the housing stock are made up of two very different elements, net new investment in housing, and capital gains on existing residential real estate. Changes in the value of land held by a particular sector contain both capital gains and net acquisitions of land from other sectors (even though, for the country as a whole, all changes in land value can be considered capital gains). The

²⁰ There were 7.3 million rental units in structures of three or more units in 1950 (*U.S. Census of Housing: 1950*, Vol. I, Chapter I, Table 5, p. 3). Public housing starts cumulated since the beginning of the program added up to 183,000 (*Twelfth Annual Report of U.S. Housing and Home Finance Agency, 1958*, Table A-1, pp. 280-281).

²¹ All these proportions would, of course, be higher if they were taken for structures of four units or more as in the case of the values. The 1950 ratio of public to total multifamily housing, for example, would be raised from 2.5 to 4 per cent.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1946-60
14.4	13.0	10.0	10.2	22.7	22.2	13.7	15.8	27.2	13.8	255.8
13.8	12.5	9.7	10.0	21.6	21.2	15.8	17.9	29.2	14.0	249.9
0.8	0.4	0.3	0.2	1.1	1.0	-2.1	-2.1	-2.0	-0.2	5.9
2.7	1.9	0.9	1.0	3.9	3.6	2.0	2.5	5.0	2.4	44.0
1.3	0	0.1	0.2	1.0	0.8	-1.8	-1.9	-1.6	-0.2	5.3
1.3	2.0	0.8	0.9	2.9	2.7	3.8	4.4	6.6	2.6	38.7
0.5	0.5	0.5	0.4	0.7	0	1.2	0.4	0.3	0.9	7.2
0.6	0.5	0.6	0.4	0.8	-0.5	0.4	0.5	0.4	0.3	4.9
18.2	15.8	12.1	12.1	28.1	25.2	17.3	19.3	32.9	17.2	311.8
0	0.1	0	0	-0.1	0.1	0	0.1	0	0	0.6
0.9	0.5	0.5	-0.1	1.0	1.7	0.5	0.6	0.9	-0.8	14.6
0.2	0.3	0.2	0.2	0.3	-0.5	0	0	0.4	1.2	2.9
1.1	0.8	0.8	0.1	1.3	1.2	0.6	0.7	1.2	0.4	18.1
14.9	13.6	10.5	10.6	23.3	22.3	14.9	16.3	27.5	14.7	263.6
4.4	3.2	2.2	1.5	6.0	4.3	2.9	3.6	6.7	3.1	66.4
19.3	16.6	12.9	12.2	29.4	26.4	17.9	20.0	34.1	17.6	329.9
0.7	0.5	0.5	0.2	0.3	0.3	0.5	0.9	1.1	0.6	6.6
5.1	3.7	2.7	1.7	6.3	4.6	3.4	4.5	7.8	3.7	73.0
20.0	17.1	13.4	12.4	29.7	26.7	18.4	20.9	35.2	18.2	336.5
0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.5	0.7	0.8	5.2
20.1	17.2	13.5	12.5	30.0	27.1	18.8	21.4	35.9	19.0	341.7

SOURCE: Table 69.

data on land do not permit the separation of these two components, but those on structures, since they were assembled by combining separate estimates of gross investment, depreciation, and price changes, can be disassembled into their original components. The difference between net investment and the net change in assets is a measure of capital gains or losses and is equal to the product of initial value of structures and percentage change in price.

Some of the largest total net gains in the value of one- to four-family structures took place between 1945 and 1950 even though these were not years of very high gross or net investment (Table 72). They were, however, the years of the largest capital gains (as well as the only capital loss) since World War II.

Both gross and net investment in one- to four-family houses increased over the thirteen-year period, but there was no such trend in multi-

HOUSING IN THE NATIONAL BALANCE SHEET

TABLE 72

DECOMPOSITION OF CHANGES IN VALUE OF PRIVATE
NONFARM RESIDENTIAL HOUSEKEEPING STRUCTURES, 1946-60
(million dollars)

	1946	1947	1948	1949	1950	1951
<i>One- to Four-Family Structures</i>						
1. Net change in value of structures	21,768	32,705	14,844	-2,882	31,713	15,850
2. Net investment:	1,434	3,230	5,844	4,755	8,133	8,071
3. Expenditures	4,860	7,461	10,718	9,635	13,430	13,955
4. Depreciation	-3,426	-4,231	-4,874	-4,880	-5,297	-5,884
5. Capital gains (+) or losses (-)	20,334	29,475	9,000	-7,637	23,580	7,779
<i>Multifamily Structures</i>						
6. Net change in value of structures	1,508	2,275	1,596	162	2,096	880
7. Net investment:	-123	-6	278	452	366	74
8. Expenditure	204	384	724	914	863	619
9. Depreciation	-327	-390	-446	-462	-497	-545
10. Capital gains (+) or losses (-)	1,631	2,281	1,318	-290	1,730	806
<i>Total Housekeeping Structures</i>						
11. Net changes in value of structures	23,276	34,980	16,440	-2,720	33,809	16,730
12. Net investment	1,311	3,224	6,122	5,207	8,499	8,145
13. Expenditure	5,064	7,845	11,442	10,549	14,293	14,574
14. Depreciation	-3,753	-4,621	-5,320	-5,342	-5,794	-6,429
15. Capital gains (+) or losses (-)	21,965	31,756	10,318	-7,927	25,310	8,585

SOURCE

Lines 1, 6, and 11: Goldsmith, *National Wealth*, Table B-10, columns 7, 8, and 9,
2-4: *Ibid.*, Table B-5, columns 8, 1, and 5.
7-9: *Ibid.*, Table B-7, columns 8, 1, and 5.

family housing except possibly in 1959 and 1960. During most of the period there was no net investment there at all. Almost all of the \$1.4 billion of postwar net investment in private multifamily housing took place in 1948-50, under the stimulus of the FHA section 608 mortgage program, and in 1959-60. In the remaining years taken together, and in six out of ten of them individually, net investment was negative.

Half of the postwar increase in the value of one- to four-family homes was from net investment; half from capital gains. There was a sharp contrast between one- to four-family and multifamily structures: net investment accounted for only 9.9 per cent of the increase for the latter group. In the early postwar years, through 1950, capital gains were the main source of increases in value. After those dates, although capital gains remained important, most of the growth came from net investment.

The components of net change in value can be looked at in another way. Multifamily housing, which was responsible for about 8½ per

HOUSING AS A COMPONENT OF NATIONAL WEALTH

1952	1953	1954	1955	1956	1957	1958	1959	1960	1946-60
13,845	10,527	10,576	24,490	21,928	15,207	16,913	28,774	15,036	271,294
8,003	8,932	9,398	13,168	11,888	10,491	10,388	17,574	14,885	136,194
14,218	15,435	16,047	20,242	19,532	18,519	18,748	26,424	24,284	233,508
-6,215	-6,503	-6,649	-7,074	-7,644	-8,028	-8,360	-8,850	-9,399	-97,314
5,842	1,595	1,178	11,322	10,040	4,716	6,525	11,200	151	135,100
654	591	156	986	982	513	593	981	315	14,288
-3	67	-12	6	54	-29	-32	218	110	1,420
569	666	599	645	732	679	699	985	903	10,185
-572	-599	-611	-639	-678	-709	-731	-767	-793	-8,765
657	524	168	980	928	542	625	763	205	12,868
14,499	11,118	10,732	25,476	22,910	15,720	17,506	29,755	15,351	285,582
8,000	8,999	9,386	13,174	11,942	10,462	10,356	17,792	14,995	137,614
14,787	16,101	16,646	20,887	20,264	19,198	19,447	27,409	25,187	243,693
-6,787	-7,102	-7,260	-7,713	-8,322	-8,737	-9,091	-9,617	-10,192	-106,079
6,499	2,119	1,346	12,302	10,968	5,258	7,150	11,963	356	147,968

12-14: Sum of lines 2 and 7, 3 and 8, and 4 and 9.

5, 10, and 15: Net change in value minus net investment.

cent of the value of housekeeping structures in 1945, accounted for only 5 per cent of net additions after that date. Its share in depreciation was 8.3 per cent and in construction expenditures only 4.2 per cent; as a result, the share in net investment was only 1 per cent. But a large share in capital gains, 8.7 per cent, partly offset the low net investment. The importance of multifamily housing in these measures was not only low, but also, in the case of expenditures and net change in value, declining. Only once, in 1949, was the share of multifamily structures in expenditures as large as its initial postwar share in assets. And these small and relatively declining expenditures were overshadowed, most of the time, by the depreciation on the large and aging stock of multifamily structures, mostly dating from the 1920's.

Public residential construction expenditures since World War II have added up to over \$7 billion.²² They are not published separately by type of structure, but using the proportion of public housing starts that are in multifamily structures (see footnote 18) one can make a conservative estimate of approximately \$5 billion for postwar public

²² Goldsmith, *National Wealth*, Tables B-144, B-145, and B-162.

HOUSING IN THE NATIONAL BALANCE SHEET

multifamily building.²³ This is about one-third of all multifamily construction since the war—quite a large share in view of the fact that all public housing combined (including a large proportion of single-family houses) amounted to only one-eighth of private multifamily and public housing combined in 1945. Net investment in public housing, about \$3 billion, was more than twice private multifamily investment or, in other words, about two-thirds of the total.²⁴

Nonprofit housing cooperatives, of negligible importance before the war, accounted for something like 6 per cent of the \$10 billion in postwar multifamily construction expenditure. But since almost all of these cooperatives date from after 1951, which was the first year of the operation of the FHA program under section 213, there has been very little depreciation on them. They must therefore have accounted for a much larger share of net investment, probably close to one-third.

Additions to the value of the total housing stock have been allocated here between net investment and capital gains. However, the stock of owner-occupied or rental housing can also be augmented or diminished by shifts between the two types of tenure. The size of the present stock of one-unit rental structures in itself suggests that such a shift must have taken place in the past; it seems unlikely that so many one-family houses were originally built for rental occupancy. Even in 1960 more than 21 per cent of all occupied one-unit structures and 27 per cent of those outside metropolitan areas were renter occupied. In 1950 the ratios were 29 per cent for all occupied units and 33 per cent for rural nonfarm and farm houses, and the 1940 ratios were 43 per cent of the total renter-occupied and over 40 per cent even in urban areas.²⁵

Some of these changes in the distribution of houses by tenure could have been brought about by the building of new homes with a tenure distribution different from that of the existing stock, without any change in tenure for old buildings. There are, however, some data on the tenure distribution of old units, those that have been in existence

²³ The estimate is conservative because it assumes that value per unit in one-family structures is equal to that in multifamily structures. It is likely that the latter are considerably more expensive on the average.

²⁴ Depreciation on public housing is difficult to allocate by type of structure. Even allocating all depreciation to multifamily structures, we would find that more than a third of postwar net investment in multifamily housing was made by public agencies. A much more reasonable assumption would be that the depreciation on wartime housing should be attributed to one- and two-unit structures, since 85 per cent of the public housing units built during 1941-45 were of this type. This assumption yields an estimate of about \$3 billion for postwar public net investment in multifamily housing. See Goldsmith, *National Wealth*, Tables B-144, B-147, B-162, and B-165.

²⁵ *U.S. Census of Housing: 1960*, Vol. IV, Final Report HC(4), Part 1A, No. 1, pp. 28 and 29; *U.S. Census of Housing: 1950*, Vol. I, Part 1, p. 3; *U.S. Census of Housing: 1940*, Vol. II, Part 1, p. 10.

HOUSING AS A COMPONENT OF NATIONAL WEALTH

since the previous or earlier censuses. A comparison of these with the distribution at the earlier date gives more direct information on changes of tenure. In 1950, for example, half of the nonfarm units which were in structures ten years old or older, and thus had been covered by the 1940 Census, were renter occupied, while 59 per cent of all units were reported as renter-occupied in the 1940 Census.²⁶ This difference suggests a possible shift of over two million units from renter- to owner-occupancy between 1940 and 1950, if the effects of conversions, mergers, demolitions, and shifts between residential and nonresidential uses of property are ignored. The text of the 1950 Census report suggests that "at least 3,000,000 owner-occupied units in 1950 were renter-occupied in 1940."²⁷ Data from the 1940 Housing Census, on the other hand, suggest that before that date there was a tendency for older houses to move from owner- to renter-occupancy. The proportion of nonfarm units in 1940 that were renter occupied in structures standing at the time of the 1930 Census and of each earlier census back to 1890 was higher than the proportion at the time of each of those censuses.²⁸ Of course, this comparison too is inconclusive because it is possible that demolition and conversion rates differed between owner- and renter-occupied units.

Only for 1950-60 is there any direct evidence on these changes in tenure, from the survey of components of inventory change. These data, summarized in Table 73, show that there was a considerable amount of shifting in both directions between 1950 and 1960 among units in existence in 1950, but that on net balance there was a movement of about 300,000 units from owner- to renter-occupancy. Almost two million units which were renter occupied or vacant for rent in 1959, aside from those in owner-occupied houses, had been built during the 1950's; some of these may have passed through owner-occupancy before appearing on the rental market. Conversions and mergers, not included in Table 73, were of less importance. Their net effect was to add about 50,000 units to the number of rental units.²⁹ Another half million rental units were added by other means, such as alteration of nondwelling units or of nonresidential space. Offsetting these additions to rental housing other than in multifamily structures was the demolition of a million units and the loss of over 900,000 through other means including accidental destruction, deterioration, and change to nondwelling or nonresidential use.

²⁶ *U.S. Census of Housing: 1950*, Vol. II, Part 1, p. 6; and *U.S. Census of Housing: 1940*, Vol. II, Part 1, p. 3.

²⁷ *U.S. Census of Housing: 1950*, Vol. I, Part 1, p. xxix.

²⁸ *U.S. Census of Housing: 1940*, Vol. II, Part 1, pp. 3 and 12.

²⁹ *U.S. Census of Housing: 1960*, Vol. IV, Final Report HC(4), Part 1A, No. 1, pp. 36 and 46.

HOUSING IN THE NATIONAL BALANCE SHEET

There is evidence, then, that shifts among tenure types do account for part of the changes in the rental housing stock.

They were most important in the period during and after World War II when they involved a loss of rental units. In other periods they were one of a number of factors other than new construction, which tended to add to the supply of rental housing.

TABLE 73

MAIN COMPONENTS OF INVENTORY CHANGE, 1950-59:
RENTAL UNITS IN STRUCTURES^a OF ONE TO FOUR UNITS
(thousand units)

<i>Additions to Rental Housing</i>	
1. Owner-occupied in 1950, renter-occupied in 1959	2,634
2. Constructed between 1950 and 1959, renter-occupied in 1959	2,041
3. Less units in owner-occupied structures	—320
4. Constructed between 1950 and 1959, vacant, for rent in 1959	206
5. Units added by means other than new construction, conversion, and merger	512
<i>Subtractions from Rental Housing</i>	
6. Renter-occupied in 1950, owner-occupied in 1959	—2,332
7. Renter-occupied in 1950, demolished between 1950 and 1959	—1,036
8. Units removed by means other than demolition, conversion, or merger	—939
9. <i>Identified Net Change</i>	766

SOURCE

Line 1: *U.S. Census of Housing: 1960*, Vol. IV, Final Report HC (4), Part 1A, No. 1, Table 4, p. 56.

2: *Ibid.*, Table 1, p. 28.

3: Total newly constructed units in owner-occupied two- to four-unit structures (*ibid.*) were divided between two-family and three- to four-family structures by the ratio in Goldsmith, *National Wealth*, Table B-189. The number of rental units in two-family houses was assumed equal to the number of owner-occupied units and the number in three- to four-family houses was calculated using the ratio given in Table A-7, line 4, of this volume.

4: Vacant units in newly constructed one- to four-unit structures (all units minus owner-occupied units) taken from *U.S. Census of Housing: 1960*, Vol. IV, Part 1A, No. 1, Table 1. From these, the number available for sale only and the number not available for sale or rent (*ibid.*, Table 2, p. 36) were subtracted.

5: *Ibid.*, Table 2, total in one- to four-unit structures minus owner-occupied.

6: *Ibid.*, Table 4.

7-8: *Ibid.*, Table 3, total in one- to four-unit structures minus owner-occupied.

9: Lines 1, 2, 4, and 5 minus lines 3, 6, 7, and 8.

^a Except owner-occupied.