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## CHAPTER XX

### POSTSCRIPT: RECENT DEVELOPMENTS

By the time this volume was ready to go to press, two to three years had elapsed since completion of the basic analysis. The analysis rested mainly on statistics covering the period through 1950, although most series had been extended to 1952 or 1953. Naturally, the question arises as to whether consideration of more recent developments would modify the main findings of the study or the appraisal of long-term prospects. The first half of the decade 1950-1960 is now a matter of record. While ordinarily a few years would not be expected to have a major impact on trends derived from the performance of an economic sector during six decades, nevertheless the possibility of such an impact cannot be dismissed. Trends are not immutable, and changes during a short span of years may sometimes have strategic significance for long-run analysis.

To answer the question just posed, this postscript, written from the vantage point of early 1956, takes up the major topics of this monograph in sequence and examines the effects of recent changes on the main findings. No attempt is made, however, to bring up to date the entire statistical framework of the study. The results of this re-examination are summarized at the conclusion of the chapter.

#### *A Change in Growth Trend?*

Have recent developments changed the long-term growth pattern of capital formation in residential real estate—characterized by a declining rate of growth, or even arrested growth, if computed in real terms? The answer varies with the analytic treatment of the data for the period 1950 to 1955. In view of the substantial decline of residential construction in the early years of the current decade, Chapter III considered the year 1950 to be the “tentative terminal peak” of a cycle beginning in 1925 or, alternatively, in 1941. This arrangement yielded three long swings for the sixty years included in the study (or four if the last cycle was divided into two), and the growth trends were derived from cycle averages for each of the major swings. For a reconsideration of the position of the year 1950 in the last of these cycles, the basic data are summarized in Table 76.

In terms of the number of dwelling units started, the year 1950 still represents a peak, but about the same number of units were started in 1955 (though in none of the intervening years). In terms of construction expenditures in current prices, the 1950 volume was clearly exceeded in both 1954 and 1955, but in this series a delayed

TABLE 76  
Private Residential Construction,<sup>a</sup> 1950-1955

	DWELLING UNITS STARTED (thousands)	CONSTRUCTION EXPENDITURES	
		<i>Current Prices</i> (millions of dollars)	<i>1929 Prices</i>
1950	1,352	11,525	5,346
1951	1,020	9,849	4,245
1952	1,069	9,870	4,144
1953	1,069	10,555	4,344
1954	1,202	12,070	5,017
1955	1,308	14,990	6,059

<sup>a</sup> Private permanent nonfarm housekeeping dwelling units.

Source: Bureau of Labor Statistics and Department of Commerce data.

peak was also found in earlier cycles. More relevant is the fact that expenditures in 1929 prices were higher in 1955 than in 1950.

A case can be made from these data for extending the 1925-1950 cycle to 1955, and for considering the latter year as a "tentative terminal peak." But the case is by no means clear-cut, and a more nearly final verdict will be rendered only by the future behavior of residential construction. If there should be a substantial and prolonged decline during the next few years terminating, say, in the early sixties, the 1955 volume may indeed be considered the terminal peak of a 1925-1955 cycle. If dwelling unit starts and construction expenditures from 1956 to the early sixties should be fairly stable at the 1955 level or somewhat below, and increase thereafter, the period after 1950 may be more appropriately designated as a new cycle. This new cycle would be characterized by something like a plateau formation from peak to trough, that is, a decline in the rate of growth rather than in absolute volume, and an absolute increase thereafter.<sup>1</sup> Under such conditions, the inclusion of 1951-1955 would add much of the first phase of a new cycle to the last of the three swings analyzed in this volume.

Regardless of the future course of residential construction, the lapse of four years between the potential peaks of 1950 and 1955 warrants caution in extending the 1925-1950 cycle used in the basic analysis. In the interval between 1950 and 1955, both the number of dwelling units started and construction expenditures in 1929 prices fell by as much as 20 per cent. Some of this decline can be attributed to the effects of the Korean hostilities. Without these, an unequivocal peak might have been reached in 1951 or 1952. On this reasoning, the

<sup>1</sup> While the three residential construction cycles from 1890 to 1950 were characterized by pronounced absolute falls and rises, cycle phases marked off by changes in the rate of growth are, of course, common.

terminal 1950 date would come closer to what would have happened had there been no Korean war.

Under the circumstances, it seems best to analyze the bearing of the 1951-1955 period on long-term growth trends in two ways: (1) by determining its position, and that of the full postwar decade 1946-1955, in the framework of the historical five-year and decade averages used in Chapters III and IV, and (2) by extending the 1925-1950 cycle to 1955, on the possibility that future events will call for such an extension.

### *The Record of Ten Postwar Years*

The annual average number of dwelling units started in the ten postwar years 1946-1955 was 1,043,000, or 49 per cent more than the annual average of 700,000 dwelling units for the twenties, the previous peak decade. The five-year average for 1951-1955 was 1,134,000, or 30 per cent higher than that of the largest five-year volume of the twenties (872,000 in 1923-1927). Similar comparisons are shown in Table 77 for various measures of capital formation presented in Chapters III and IV. In current prices, of course, all of these measures show very large gains in recent postwar periods over comparable periods in the twenties. In 1929 prices, however, the gains are modest, ranging roughly from 2 to 15 per cent. When construction expenditures for 1951-1955 are compared with those for the highest five-year period of the twenties, no gain is apparent. When net capital formation is compared for the same periods, the recent volume was below the best record of the twenties.

TABLE 77  
Selected Ten- and Five-Year Annual Averages for Various Measures of  
Capital Formation in Residential Real Estate  
(*millions of dollars*)

	1920 to 1929	1946 to 1955 <sup>a</sup>	Five Highest <sup>b</sup> Years in 20's	1951 to 1955
Construction expenditures, current prices	\$3,596	\$9,324	\$4,600	\$11,462
Construction expenditures, 1929 prices	3,725	4,127	4,800	4,762
Gross capital formation, current prices	3,893	10,178	4,900	12,560
Gross capital formation, 1929 prices	3,975	4,556	5,100	5,218
Net capital formation, current prices	2,418	5,952	3,400	7,548
Net capital formation, 1929 prices	2,524	2,635	3,500	3,134

<sup>a</sup> The sources for the data 1946 to 1955, and the methods used for computing them, are the same as those indicated in Chapters III and IV and in the appropriate appendix tables.

<sup>b</sup> The years are those indicated in the appropriate sections of Chapters III and IV.

The comparison can be extended to the ratios discussed in Chapter IV, which measure the growth of residential capital. Residential construction expenditures in 1929 prices from 1950 to 1955, as a ratio of 1950 structure values in 1929 prices, averaged 5.72 per cent per year. This average was below the 6.73 per cent of the twenties and the 8.02 per cent of the decade 1890-1899, but substantially above all other decades included in the series (Table 14). The ratio of gross capital formation to structure values, computed in the same fashion, was 6.25 per cent per annum and held a similar position in this series (Table 14). In other words, the ratio of new construction to the housing stock, in constant prices, still shows evidence of a secular decline, but the decline is less marked and less consistent than in the original data.

Extending Table 15, one finds that the ratio of new dwelling units started in 1950-1955 to the stock of dwelling units in 1950 averaged 2.95 per cent per year, still below the averages for the twenties and for both the 1890-1899 and the 1900-1909 decades. Here, the evidence of secular decline is somewhat modified but remains strong.

The annual increments to residential capital in 1929 prices (Table 20) from the end of 1949 to the end of 1955 averaged 3.82 per cent of the value of residential structures at year-end 1949. This was substantially more than the average rate of growth in the two preceding decades, but less than in the twenties and in the ten-year period ending in 1899.

On the whole, to the extent that averages for ten years or even shorter periods convey an impression of secular growth, the extended data suggest declining rates of growth although the decline appears less severe than in the original data. However, the absolute number of dwelling units started during the postwar period has reached new high levels, substantially exceeding previous records.

#### *Extending the 1925-1950 Cycle to 1955*

The modifications of the "cycle averages" caused by extending the 1925-1950 cycle to 1955 are summarized in Table 78 both for the entire period and for the two subperiods used in the original analysis in Chapters III and IV. For comparison with the preceding two cycles, the reader must refer back to the original tables.

According to the modified data, the annual average number of starts in the 1925-1955 cycle was almost one-third higher than in the preceding cycle of 1905-1925. But the increase was not as great as that between the 1892-1905 and the 1905-1925 cycle, either absolutely (129,000 dwelling units as against 183,000) or in relative terms (28

TABLE 78  
Annual Average Volume of Various Measures of Capital Formation  
in Residential Real Estate within Alternative Long Cycles  
(dollars in millions)

	1925 to 1950	1925 to 1955	1941 to 1950	1941 to 1955
Dwelling units started (in thousands)	484	593	581	780
Construction expenditures, current prices	\$2,661	\$4,119	\$3,803	\$6,415
Construction expenditures, 1929 prices	2,203	2,618	2,105	3,028
Gross capital formation, current prices	3,022	4,600	4,319	7,125
Gross capital formation, 1929 prices	2,495	2,935	2,406	3,381
Net capital formation, current prices	1,133	2,165	1,552	3,615
Net capital formation, 1929 prices	805	1,187	673	1,538
Ratio of net to gross capital formation, current prices	34.0%	51.3%	35.9%	56.4%
Same, 1929 prices	32.3	45.3	28.0	50.8

Source: For the original data for 1925-1950 and 1941-1950, see Tables 2, 7, 12, 16, and 18. The sources of the additional data for 1951-1955, and the methods used in computing them, are the same as those given for the original data. Terminal years are weighted one-half. For some of the series, the initial year is 1926 rather than 1925, as indicated in the original tables.

per cent as against 65 per cent). If the period 1941-1955 is considered a separate cycle, however, the growth in dwelling unit starts is greater in both absolute and relative terms. On this reckoning, one arrives at a continuous increase in annual average starts from cycle to cycle, interrupted only in the 1925-1941 period.

As one would expect, the rise from cycle to cycle in annual average expenditures in current prices is merely accentuated by the new data. Expenditures in 1929 prices for the extended cycles 1925-1955 and 1941-1955 also show an increase over the preceding cycle, in contrast to the declines revealed in the original data. The increase between the 1905-1925 cycle and the 1925-1955 cycle is still smaller in absolute and relative terms than the growth from the first to the second cycle. If the 1925-1955 period is divided into two cycles, however, the absolute increase 1941-1955 over 1905-1925 was larger than that between 1892-1905 and 1905-1925. The relative increase was about the same.

About the same relationships hold for the data on gross capital formation in 1929 prices. However, annual average net capital formation in real terms during the 1925-1955 period was still about 10 per cent lower than in 1905-1925. Here, the decline is diminished but not erased by the addition of five years of record construction activity to the last cycle. If the period 1941-1955 is considered a separate cycle,

its annual average net capital formation shows an increase of almost 17 per cent over 1905-1925.

The annual average ratios of net capital formation to gross capital formation are substantially raised when the last cycle is extended to 1955. Nevertheless, they still show a decline from the previous cycle averages if reckoned in 1929 prices, although the declines are less severe than in the original data.

The finding of an increasing amplitude of long swings would also be modified if the 1925-1950 cycle were extended to 1955 (Table 79).

TABLE 79  
Amplitude of Alternative Long Cycles for Various Measures of  
Capital Formation in Residential Real Estate

	TOTAL RISE AND FALL		RISE AND FALL PER YEAR	
	1925- 1955	1941- 1955	1925- 1955	1941- 1955
Dwelling units started	347.7%	212.0%	11.6%	15.1%
Construction expenditures, current prices	470.3	263.3	16.2	18.8
Construction expenditures, 1929 prices	397.2	263.3	13.2	18.8
Gross capital formation, current prices	454.2	254.0	15.7	18.1
Gross capital formation, 1929 prices	367.8	251.2	12.3	17.9
Net capital formation, current prices	799.4	417.1	26.6	29.8
Net capital formation, 1929 prices	877.5	513.5	29.3	36.7

While the modifications vary in detail, depending upon the measure of capital formation and the use of total or per-year rise and fall as a measure of cycle amplitude, the impression of a flattening in cycle amplitude prevails if the rise and fall per year is considered the more valid test; and this impression is strengthened if the 1941-1955 period is considered a separate cycle.

The reduction in total amplitude results from the high and relatively stable level of residential construction in the post-1950 period. The reduction in the rise and fall per year is due to the same factor plus the greater length of time over which the amplitude is averaged.

Thus the extension of the 1925-1950 cycle to 1955 on the whole still yields a declining rate of growth as measured by cycle averages, but the decline is less marked than the original data suggested. If the 1925-1955 period is divided into two cycles, the results are more ambiguous. The cycle amplitude in 1925-1955, which was measured as a by-product rather than as an essential analytic ingredient of the study, was less than in the preceding cycle. However, it must be said again that the case for extending the long swing 1925-1950 to 1955 is by no means a clear-cut one at present.

### *Underlying Forces*

This study reaffirmed the strong nexus between the long-term growth of nonfarm households and the long-term growth of the nonfarm housing stock in terms of dwelling units. It emphasized, however, that this nexus does not necessarily require a close numerical relationship between household growth and the number of *new* dwelling units built. Between 1930 and 1950, conversions represented an unusually large percentage of total dwelling units added to the supply, with the result that the pre-1930 nexus between household growth and new construction was broken. The data for 1950-1955 suggest that the nexus was re-established and confirm the study's expectation that conversions are likely to diminish in importance.

According to the estimates of the Bureau of the Census, the number of nonfarm households between April 1950 and April 1955 increased by 5,154,000. The number of nonfarm dwelling units started from January 1950 through December 1954 totaled 5,712,000. This relationship is very similar to the one existing in the 1890-1910 and 1910-1930 periods and is in sharp contrast to that of 1930-1950 (Table 25).

The ratio of new dwelling units started to the *increase* in nonfarm population from 1950 to 1955 also shows a return to the pre-1930 pattern (Table 24, column 8). When the 5.7 million new dwelling units started from 1950 through 1954 are related to the 13.7 million increase in nonfarm population from April 1950 to April 1955, one finds that a little over 416 new dwelling units were added per 1,000 increase in population. This ratio was higher than in any previous decade (although only 38 units per 1,000 population more than in 1920-1930). If continued, it would signify the resumption of the historical rise in this ratio between 1900 and 1930. The rise was in part attributable to the long-term decline in the average size of nonfarm households. This decline continued in the 1950-1955 period. The average population per nonfarm household in April 1955 was 3.35 as against 3.44 in April 1950 (Table 23).

One of the strategic factors in the declining rate of growth of residential capital in real terms was found to be the long-term fall in real expenditure per new dwelling unit, from about \$6,000 during the first of the six decades under study to about \$3,800 during the period 1946-1953 (in 1929 prices; see Chapter VII and Table J-1). In recent years, expenditures per new unit in 1929 prices have increased, from \$4,064 in 1953 to \$4,174 in 1954 and more sharply to \$4,622 in 1955. During the postwar period 1946-1955, the real value per new unit rose 45 per cent, at about the same rate as during the decade of the twenties. However, the evidence of a long-term decline in real



expenditures per new dwelling unit remains strong. The average for 1951-1955 was still 28 per cent lower than that for 1925-1929, the previous period in which peak values in this series were clustered. For the original comparison between 1925-1929 and 1946-1953, the decline was 35 per cent. This slowing down of the rate of decline is consistent with the assumption made in the discussion of prospects for real capital formation in this field (page 281).

The fall in real value per dwelling unit through 1953 explains at least in part why construction expenditures, gross capital formation, and net capital formation in real terms still show declining rates of growth, even after the 1951-1955 data have been fully taken into account, as shown in preceding sections of this chapter.

Recent changes in the numerous factors influencing real value per new dwelling unit need only be sketched briefly. The increase in the percentage of single-family houses in total housing starts, observed since the thirties, has continued. In 1954 and 1955, about 90 per cent of all starts were in this category as against a range of 85 to 88 per cent in 1950-1953. The share of the Pacific and Mountain states in total housing starts has continued to rise. In 1954 and 1955, these states accounted for over one-fourth of all nonfarm dwelling units started as against 22.5 per cent in 1940-1950. In 1955, there were almost as many homes built in California alone as in the nine states comprising the New England and Middle Atlantic regions. On the other hand, the shares of the West South Central and South Atlantic states, which had shown an increase from 1920 to 1950, have declined in recent years. The former area accounted for only 8.5 per cent of all starts in 1955 as against 12.2 per cent in 1940-1950. The latter accounted for about 14 per cent as against 17.5 per cent in 1940-1950.

According to fragmentary evidence, new single-family houses built in the past few years were somewhat larger than those offered in the immediate postwar period, and they incorporated more equipment and additional installations. Both these developments are consistent with assumptions made in the discussion of future prospects.

Fragmentary evidence points also toward an increasing rate of demolitions, which raises the demand for replacement units. According to estimates of the Bureau of Labor Statistics, based on surveys in six cities, "it is possible that in the neighborhood of 250,000 to 300,000 nonfarm dwelling units have been withdrawn from the housing supply annually in recent years."<sup>2</sup> These withdrawals include "reverse conversions" as well as demolitions. If the estimates are confirmed by

<sup>2</sup> Construction Review (U.S. Departments of Labor and Commerce), July 1955, p. 8.

more comprehensive surveys, annual withdrawals would be at a level at least three or four times as high as those estimated for prewar years. An increasing number of demolitions due to highway and urban redevelopment programs and to stricter enforcement of local codes was included among the factors favoring a high level of demand for new dwelling units in the period to 1975 (Chapter XVII).

### *The Relative Position of Housing*

Gross residential capital formation as a percentage of various measures of aggregate economic activity has shown a long-term decline (Chapter IX). In 1950, when construction was at a very high level, the share of residential capital formation in the gross national product (Department of Commerce definition) was 4.2 per cent in current prices and 2.2 per cent in 1929 prices; in both cases these ratios were far below those of 1922-1928. The ratios declined through 1952 and remained fairly stable in 1953 (Table K-3), but they increased in 1954 and 1955 to about the level of 1950. The share of residential capital formation in gross private capital formation (Commerce definition) in 1954 and 1955 exceeded that of 1950 in both current and constant prices.

The movement of these ratios has always been subject to considerable fluctuations superimposed on a long-run downward trend. The data for 1954 and 1955 may well denote such short-term fluctuation. The factors that have produced the long-run decline of residential capital formation in the nation's output—the stimulation of new wants and services and the introduction of new products—have not lost their force. It would be rash, therefore, to interpret the changing relative position of residential capital formation in total output or total capital formation in 1954 and 1955 as a reversal of a long-run trend.

It is likewise too early to determine whether certain phenomena observed in the long postwar period of sustained prosperity and growth signify a basic change in consumer preferences for housing (Chapter VIII). The possibility of a change in favor of housing and the forces that might cause such a change were discussed in Chapter XVII: the growth of home ownership, the increase in leisure, the cultural influences of progressive suburbanization, larger families, and the apparently greater focus on family and home in our daily lives. But a good case can also be made for interpreting the sustained high level of housing demand to date as reflecting the usually long-delayed effects of continued increases in real income, rather than as a manifestation of an autonomous change in consumers' taste. We may well be on the threshold of such a change. More evidence, however, will be

required before such an interpretation can be placed on recent developments.

No such evidence is as yet to be found, for example, in the amount of real residential capital per capita. In 1955 this amount stood at \$740 in 1929 prices, only slightly above the \$703 for 1950 and quite low in comparison with previous decennial figures (Table 36) considering the rise in per capita real income.

### *The Growth of Residential Mortgage Debt*

The postwar increase of the residential mortgage debt has continued at a spectacular pace. The total reached a probable \$102 billion at the end of 1955,<sup>3</sup> as against less than \$55 billion in 1950 (Chapter XI, Table 40). On this basis, the per capita debt in 1955 stood at \$722 as compared with \$426 in 1950, and the debt per nonfarm household was \$2,417 as against \$1,480. The residential mortgage debt in relation to disposable personal income increased from less than 27 per cent in 1950 and less than 30 per cent in 1952 (Table 42) to a postwar peak of almost 40 per cent in 1955. This ratio comes close to the all-time decennial high of 41 per cent in 1930 and is nearly 2½ times the 1945 ratio.

The reader must again be reminded that these data cannot measure "the burden of the debt," nor do they give any hint as to the limits of "sound" debt expansion. Most of the postwar increase in residential mortgage indebtedness is attributable to borrowing by home owners and is therefore intimately related to the spectacular growth of home ownership in recent years. The percentage of nonfarm dwelling units occupied by the owner increased from 41 in 1940 to 53 in 1950 and again to 57 in 1955. The number of home owners in 1955 was about 24 million as against less than 20 million in 1950 and 11.4 million in 1940.<sup>4</sup> As more consumers occupy single-family homes which they buy, rather than dwelling units which they may rent, they are assuming a burden in the form of debt; otherwise, they would have assumed a burden in the form of outlays for rent.

The increasing importance of the home mortgage debt in total consumer outlays for housing raises important questions. Among them

<sup>3</sup> This estimate is based on the preliminary totals of \$89.1 billion for the debt on one- to four-family nonfarm homes and \$32.6 billion for the debt on multi-family and commercial properties (President's Economic Report, January 1956, p. 212). The \$102 billion for the residential debt assumes that 40 per cent of the debt on multi-family and commercial properties was secured by multi-family residences, as against 43 per cent in 1950. A decline in this percentage seemed warranted in view of the small volume of multi-family residential construction and the large volume of commercial construction between 1950 and 1955.

<sup>4</sup> President's Economic Report, Chart 31 and p. 80.

are the relative flexibility of debt payments and rents in the case of declines in family income; the possibility that families usually improve their housing standards when they purchase homes and so increase their outlay for housing; the changes in the relative costs of owning and renting that have resulted from liberal credit terms and operating economies in single-family houses for which the owner serves as janitor and repairman; and the effects of these changed cost relationships on the vulnerability of homeowners to foreclosure. But these matters cannot be pursued here.<sup>5</sup>

In 1954 and 1955 the pace of net mortgage borrowings outstripped the pace of real capital formation, accentuating the trend in this direction. The residential mortgage debt increased by \$24 billion while net residential capital formation totaled \$18.5 billion. The ratio of mortgage debt increments to residential construction expenditures averaged 81.5 per cent, appreciably above the 1948-1952 average of 67 per cent (Table 45). The ratio of debt to residential wealth also rose sharply, from 25.7 per cent in 1952 to a new high of 32.8 per cent in 1955—exceeding the ratio of the twenties and even the average ratio of the early thirties, when falling real estate values combined with the debt inherited from the twenties caused the ratio to reach its prewar peak.

The share of the residential mortgage debt in total private long-term debt has continued to increase. The residential mortgage debt at the end of 1955 accounted for nearly one half (48.5 per cent) of the total private long-term debt, as against 43.3 per cent in 1950 and 45.5 per cent in 1952. The residential mortgage was still growing in importance as an outlet for investment of capital funds. Institutional investment in residential mortgages has maintained both its absolute and relative growth. At the end of 1954 the mortgage loans held by the four major institutional lenders (savings banks, savings and loan associations, life insurance companies, and commercial banks) equaled 84 per cent of the total residential mortgage debt as compared with 80 per cent in 1950 (Chapter XIII).

As to the flow of funds into new residential construction, the tendency toward an increasing proportion of borrowed funds has probably been accentuated in the past few years. According to the estimates in Table 80 and Appendix Table M-1, the proportion of equity funds used in the acquisition of new residential real estate declined from 29 per cent in 1951-1953 to 27 per cent in 1954 and 23 per cent in 1955. If any confidence can be placed in the figures and assumptions underlying these calculations, they confirm the two main conclusions pre-

<sup>5</sup> See Louis Winnick, "The Burden of the Residential Mortgage Debt," *Journal of Finance*, March 1956.

TABLE 80  
 Estimates of the Flow of Mortgage Loans and Equity Funds  
 into Residential Construction and into Land Used for Residential  
 Construction, 1953-1955  
 (dollars in millions)

	1953	1954	1955
1. Expenditures for new private residential construction	\$10,555	\$12,070	\$14,990
2. Ratio of expenditures for land to total expenditures <sup>a</sup>	12%	13%	14%
3. Ratio of expenditures for land to item 1	13.6%	14.9%	16.3%
4. Estimated expenditures for land	\$1,435	\$1,798	\$2,443
5. Item 1 plus item 4	\$11,990	\$13,868	\$17,433
6. Per cent of item 5 all cash <sup>b</sup>	12%	11%	10%
7. Amount all cash	\$1,439	\$1,525	\$1,743
8. Per cent of item 5 financed by sales contracts	1%	1%	1%
9. Amount financed by sales contracts	\$120	\$139	\$174
10. Total expenditures involving mortgage financing	\$10,431	\$12,204	\$15,516
11. Ratio of mortgage loans to item 10 <sup>c</sup>	80%	82%	85%
12. Amount of mortgage loans	\$8,345	\$10,007	\$13,189
13. Amount of equity funds	\$3,525	\$3,722	\$4,070
14. Ratio of item 13 to item 5	29%	27%	23%

<sup>a</sup> Based on FHA data on average price of site as percentage of total value.

<sup>b</sup> A slight decline in this ratio has been assumed in the absence of data.

<sup>c</sup> The loan-to-value ratio for FHA-insured home loans averaged 82 to 83 per cent. The step-up in the ratio from 1953 to 1955 is based primarily on the increase in the percentage of VA-guaranteed loans on new homes without downpayment. This percentage increased steadily from 17.2 in January 1954 to 58.6 in April 1955 and remained over 50 through November 1955.

Source: See Appendix M for the methods used in these estimates.

viously drawn from the analysis of the flow of equity and borrowed funds into new residential construction: (1) a tendency for the proportion of borrowed funds to increase in periods of expanding construction volume, and (2) a long-run tendency for this proportion to rise, which is superimposed on the cyclical variations in the use of borrowings.

### *The Role of Federal Aids*

The federal government's role in private residential construction and its financing, as measured by the share of the FHA and veterans' home loan programs in housing starts and home mortgage lending, has increased during the past few years. The new dwelling units financed by FHA-insured and VA-guaranteed loans, which in 1952 and 1953 accounted for 39 per cent of all new private units started (Table 37), represented 48 per cent of the total in 1954 and 51 per cent in 1955, which equaled the previous peak ratio of 1950. While the share of the

FHA program in private housing starts declined, that of the veterans' home loan program rose sharply. In 1955 three of every ten housing units started were financed with veterans' home loans.

The amount of outstanding government-underwritten home mortgage loans increased from \$28 billion at the end of 1953 to an estimated \$39 billion at the end of 1955. The share of such loans in the total home mortgage debt remained roughly 42 to 43 per cent. That this share did not increase in line with the sharp advance in housing starts under the government programs was due, among other things, to the fact that government-underwritten loans are used much less in the financing of purchase of older houses.

Thus, while governmental policies of recent years, as pointed out in Chapter XVI, have redefined the role of the Federal National Mortgage Association in the secondary mortgage market and have made some progress in adapting mortgage lending terms under government programs to the objectives of economic stabilization, the over-all quantitative influence of these programs upon capital formation and financing in residential real estate has by no means diminished.

#### *Implications for Future Prospects*

In summary, this re-examination of long-term trends in the light of recent developments suggests modifications of some of the study's major findings in detail or in degree but not in substance. In other cases, it confirms and strengthens the original conclusions.

Both the new five-year and ten-year averages for the postwar period, and the extension of the last cycle to include the years 1925 to 1955, indicate a slower decline in the rate of growth than shown by the original data. Most of the measures of capital formation in real terms still point to a declining growth rate. The number of dwelling units built shows some growth from the second to the third cycle, and from the previous peaks of the twenties to the recent postwar peaks, in contrast to a level movement or decline revealed by the original data. However, it has already been pointed out in Chapter XVII that "the failure of dwelling unit starts during the 1925-1950 cycle to increase over the previous cycle cannot be interpreted as a secular trend and mechanically projected into the future."

The contrast between the original and the modified findings is the strongest when the 1925-1955 period is considered to comprise two cycles divided by the year 1941. But the new averages for this period, it must be emphasized again, rest on a cycle definition that cannot be fully supported on present evidence.

Some of the recent developments, such as the increases in the real value per new dwelling unit and in the share of residential construction

in total output, are of such short duration that their significance for long-run trends cannot be appraised. Just as the decade of the twenties presented sharp deviations from secular trends observed over a sixty-year period, it is possible that some of the developments in the recent postwar decade will emerge as fluctuations superimposed on trend lines.

While variations in the rate of growth are important to certain kinds of economic analysis, consideration of absolute magnitudes is equally significant for an appraisal of future prospects. As was pointed out in Chapter XVII, "the number of additional households between 1950 and 1975 is likely to exceed any increment on record." The estimates derived from the recently revised projections of the Bureau of the Census to the year 1975, already used in Chapter XVII, give added support to this expectation. The new data brought together in this postscript, quite apart from their possible bearing upon modifications of past growth trends, serve also to identify more clearly some of the elements of strength in future capital formation, already sketched in Chapter XVII. Thus demolitions, for the first time in many decades if not in the history of residential real estate in this country, seem to reach proportions calling for a large volume of new construction over and above the long-term rate of net household formation. The forces supporting the high level of demolitions are probably of more than temporary character. If withdrawals from the housing supply of 300,000 dwelling units per year are added to an annual average net nonfarm household formation in the neighborhood of 1,000,000, close to the median estimate derived from the projections of the Bureau of the Census, the average number of new dwelling units that would equal these two potential sources of demand by far exceeds any historical record for a similar period. In combination with a decelerated decline in the real value per new dwelling unit, as already outlined in Chapter XVII, such a level of housing starts on the average would yield total real expenditures for housing construction greater than those recorded for any previous period of twenty years.

Such a development, among other things, would have important implications for the demand for funds, even if further increases in construction costs and house prices were ignored. Not only would mortgage investment remain a large outlet for funds, but there may be a question as to whether the supply of savings will be adequate to meet the demand for financing a high average volume of housing construction as well as the demand for long-term funds in other sectors of the economy, without an appreciable increase in interest rates. Because the demand for housing is particularly sensitive to credit terms and depends heavily on debt financing, a general long-term in-

crease in the cost of borrowing would tend to affect the volume of residential construction more than the volume of business investment, a large portion of which is financed from internal funds. Thus it is possible that the ease of borrowing for housing construction and home purchase, which by and large prevailed during the past twenty years and tended to raise the level of demand, will be replaced by greater stringency. Such a turn of events, among other things, would intensify the search for new sources of mortgage funds and add to the problems of government policies affecting this sector of the economy.

NOTE: Unless otherwise indicated, the data for this postscript are taken from the standard sources used throughout the volume. In the interest of simplicity, specific references have been omitted. In a few cases the data mentioned in the postscript for the early years of this decade are slight revisions of preliminary figures given earlier in the volume.



