# Buiness Review

FEDERAL RESERVE BANK of CLEVELAND

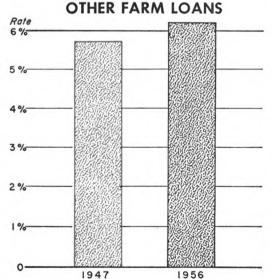
February 1957

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# AVERAGE INTEREST RATES ON FARM LOANS IN THE FOURTH DISTRICT

# FARM REAL ESTATE LOANS Rate 6% 5% 4% 4% 3% 2% 1% 1956



Interest rates charged by commercial banks on farm loans rose very slightly between 1947 and 1956, as disclosed by a recent survey. The moderate rise applied to realestate loans as well as to other types of farm loans.

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# Farmers' Costs of Borrowing

Bank credit represents one of the farmer's "better buys" in today's cost structure. Rates of interest have advanced far less since 1947 than the cost of most other instruments of production employed on the farm.

There are wide differences among rates on farm loans, reflecting the degrees of risk, liquidity or cost to the lender. Average rates for the various classifications of outstanding loans range from 3 percent to 12 percent. Most loans, however, are made at 5 percent to 6 percent.

Borrowers in the most favored position in regard to interest rates are those who have relatively large net worth and who borrow substantially larger than average amounts for the purchase of real estate. Among other factors associated with interest rates are farm tenure, security of loan, maturity and method of repayment.

Data on interest rates, along with other basic information relevant to bank credit to agriculture, were collected from a sample of commercial banks as of June 30, 1956. This comprehensive study, the first since 1947, serves to confirm knowledge obtained from fragmentary sources and to make new contributions to the accumulated storehouse of information on bank lending practices. The information presented here pertains mainly to practices in the Fourth Federal Reserve District.

#### The Increase in Rates

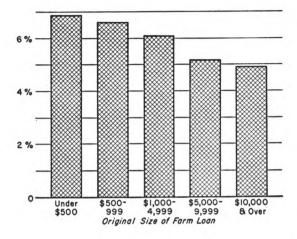
Rising interest rates and policies of credit restraint have been subjects of considerable publicity over the past two years. The significance of such matters for farmers, especially during a period of declining income, has not gone unmentioned. Specific information on interest rates paid by farmers, however, has been sketchy at best. Comparisons of rates paid by farmers in mid-1947 with those paid in mid-1956 now become possible; the results are revealing.

The net rise in interest rates paid by farmers, between 1947 and 1956, is found to be far short of spectacular; in fact, interest rates are conspicuous among the farmers' cost items because of the very small increase.

In mid-1956 the average rate of interest on bank loans secured by farm real estate was 5.2 percent; in 1947 this rate had been 4.9 percent. On other farm loans, i.e., those not secured by farm real estate, the average interest rate in mid-1956 was 6.2 percent compared with 5.7 percent in 1947. Stated in terms of the interest cost to a farmer of borrowing \$1,000 for a year, the increase over this nine-year period would amount to only 6.1 percent on a real-estate-secured loan and 8.8 percent on a loan not secured by real estate.

Such increases in the cost of borrowing are far overshadowed by increased prices of other goods and services which farmers must purchase for their operations. Prices of machinery, for example, went up 60 percent, building and fencing materials were up 36 percent, motor vehicles were up 45 percent. Taxes per \$100 of value on farm real estate increased about 20 percent over the nine-year interval; wage rates on hired farm labor gained 28 percent. Even fertilizer prices, which are also conspicuous by the small in-

<sup>(1)</sup> Surveys conducted in 1947 and 1956 were on a sample basis selected to be representative of all banks in the Fourth District. However, the banks sampled were not identical in each case.



crease, were 12 percent higher than in 1947. (2)
Prices paid by farmers for all goods and services used in production and family living averaged 20 percent higher in mid-1956 than in mid-1947. The relatively small weighting of interest in the farmer's cost structure, coincident with the very moderate gain shown in actual rates, would indicate that lenders made only a nominal contribution to the cost-price squeeze of agriculture from mid-1947 to mid-1956.

#### Variation Due to Size of Loan

One factor which is outstandingly important in influencing the interest rates paid by farmers is the size of the loan; as the size of loan increases, the interest rate declines. (Such a relationship between interest rate and size of loan is not, of course, peculiar to loans made to farmers. It is characteristic of general banking practice, since it costs proportionately more to negotiate and service a small loan than a large loan.) Thus, farm loans written for less than \$500 in size carry an interest rate which averages nearly 7 per-

cent. At the other extreme, the interest rate averages less than 5 percent on loans originally \$10,000 or more in size. Rates are respectively lower in each of several loan size gradations between the \$500 and \$10,000 extremes. (See chart.)

Furthermore, interest rates tend to be lower as the size of loan increases, even if each classification of security, tenure, purpose, or net worth is separately examined, including use of cross-classifications. Declines in rates with increases in loan size do not, however, occur within a uniform range for each of these special classifications. Interest rates on loans for purchasing intermediate investment goods and secured with a chattel mortgage, for example, range from 9.5 percent to 5.9 percent, for loan sizes ranging from less than \$500 up to \$10,000 and over. The same loan purposes, but unsecured, shows a range in rate from 6.4 percent to 5.1 percent.

On loans for investment goods which are secured by real estate, the range in interest rates is from 6.0 percent down to 4.7 percent. Some of the "spreads" between the rates for the extreme groups are even greater. For instance, chattel mortgage loans to farmers in the \$10,000-\$24,999 net-worth class range from an average of over 10.7 percent for loans under \$500 down to 6 percent for loans of \$10,000 and over.

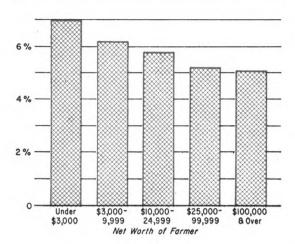
# Rates Change With Net Worth of Borrower

The amount of the borrower's net worth is one of the factors associated with risk in a farm loan. Interest rates are progressively lower as the farmer's net worth increases. (See chart on following page.) Average rates are 7 percent to farmers with net worth under \$3,000. As net worth reaches and exceeds \$100,000, average rates decline to 5 percent. It must be recognized that characteristics associated with large net worth may contribute to differences in interest rates on farm loans. Thus, farmers with large net worth may borrow larger amounts, may present

<sup>(2)</sup> Price data cited above are drawn from nation-wide averages. However, they may be considered to be broadly applicable to Fourth District experience and hence are generally comparable with the interest-rate data drawn specifically from the District.

Interest rates average lower for farmers with larger net worth.





more desirable physical security, or may borrow for purposes which present less risk. Closer consideration of rates according to net worth, however, reveals that interest rates tend to decline with increases in net worth for each classification of loan according to purpose, or security of loan, or tenure of operator.

Two-thirds of the bank loans reported in the 1956 survey were outstanding to farmers in the \$3,000-\$9,999 and the \$10,000-\$24,999 net-worth classes, carrying average interest rates of 6.2 percent and 5.8 percent, respectively. Loans to farmers in these two networth ranges accounted for well over half the total volume; the addition of loans to farmers in the \$25,000-\$99,999 net-worth class would account for a cumulative total of seveneighths of the outstandings. A relatively small proportion of loans were to farmers in the net-worth class below \$3,000, where interest rates are highest, or in the net-worth class of over \$100,000, where rates are the lowest of the various net worths.

#### Rates in Relation to Security of Loan

When all loans are lumped together, disregarding other characteristics, governmentguaranteed loans carry the lowest average interest rate of any security. The low level of risk to the lender and the specification of maximum rates which lenders can charge on Farmers Home Administration loans and Veterans Administration loans are largely responsible for this low rate. Loans secured by farm real estate command the second lowest rate.

Among the other major classifications of securities (chattel mortgage, endorsements and unsecured loans) it is interesting that unsecured loans draw the lowest rates and loans secured by a chattel mortgage command the highest rates. (See chart below.)

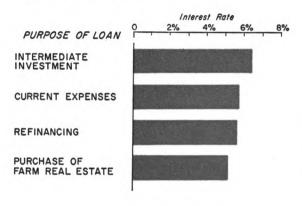
Reasons for the higher rates on chattel mortgage loans, as compared with unsecured loans, are not evident without a somewhat detailed analysis of the survey results. Loans for which a chattel mortgage is taken are used predominantly for intermediate-investment purposes. And loans for intermediate-investment purposes carry a generally higher rate of interest (see chart) for reasons associated with length of maturity and method of

Government-guaranteed loans carry the lowest interest rates. Loans secured by chattel mortgage tend to carry relatively high rates of interest.

	Interest Rate 0 2% 4% 6% 8%
SECURITY	0 2% 4% 6% 8%
CHATTEL MORTGAGE	
ENDORSEMENT	
NO SECURITY	
FARM REAL ESTATE	
GOVERNMENT GUARANTY	

repayment. Furthermore, loans secured by chattel mortgages often take the form of instalment payment loans with interest computed on the original amount rather than

Interest rates average highest on loans for intermediate-investment purposes and lowest on loans to buy farm real estate.



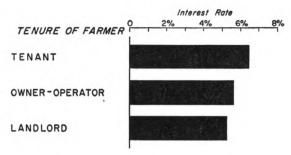
the unpaid principal. These "above average" rates tend to concentrate among loans with maturities from 1 through 3 years.

#### Other Factors Influencing Rates

Rates tend to be lowest to landlords and highest to tenants (see chart) for each of the major purposes. This distinction in rates according to tenure is evident in loans to individuals throughout the \$10,000 to \$99,999 net-worth range, regardless of size of loan. In net-worth groups below \$10,000 and over \$100,000, landlords frequently pay more interest on loans than borrowers with other forms of tenure.

Repayment methods and, to a very moderate extent, even renewal policy are also reflected in interest rates. Except for loans to buy farm real estate, interest rates tended to average slightly higher on notes which had not been renewed as of the survey date, and lowest on loans which had been renewed according to plan when the loan was originally negotiated.

Tenants pay a higher average rate of interest than owner-operators or landlords.



Repayment methods may be classed in three ways which have a bearing on interest charges. (See Table 1.) Single-payment loans tend to carry a somewhat higher rate than instalment-payment loans with interest on the unpaid balance. By far the highest rates are reflected in instalment loans with interest charged on the original loan amount. By this procedure, interest on a loan continues to be charged on the original balance despite a gradually declining unpaid balance, with the consequence that effective rates are approximately double the nominal rate. In the over-all loan total, only about 5 percent of outstanding loans are instalment loans subject to interest payments on original amounts.

Table 1

Interest Rate According to Purpose and Repayment Method

REPAYMENT METHOD	All Purposes	Inter- mediate Invest- ment	Current Expenses	Refi- nancing	For Purchase Of Farm Real- Estate
Single Payment	5.5%	5.6%	5.8%	5.6%	5.4%
Instalment Payment: With interest charged on unpaid balance	5.2	5.5	5.5	5.1	4.9
With interest charged on original amount	11.3	11.3	11.0	12.0	14.0

When related to maturity, interest rates do not demonstrate the clarity of relationship which is typical of the association of rates with size of net worth, or size of loan, or other factors previously discussed. Loans with the longest maturities, i.e. those over three years, are associated with the lowest rates, reflecting the predominance of loans for buying farm real estate. Nearly 70 percent of the outstandings with maturities of over three years were extended for buying farm real estate, according to the 1956 Survey.

Loans of intermediate maturity carry the highest average rates of interest. Frequently, these are loans for the purchase of machinery and capital goods. They may, however, be loans for current expenses or for refinancing purposes. Regardless of the purpose of such loans, the loans of intermediate maturity appear to be high-cost loans, except for that group of intermediate-maturity loans which takes the form of real-estate loans. (See Table 2.)

Short-term loans, i.e. those of one-year maturity or less, typically carry rates which are substantially below those of the intermediate-maturity loans just discussed. Stated

Table 2

Average Interest Rates According to Purpose and Maturity of Loan

	PURPOSE								
LENGTH OF MATURITY	All Purposes	Inter- mediate Invest- ment	Current Expenses	Refi- nancing	Purchase Of Farm Real- Estate				
1, 3, 6, 9, and 12 months	5.9%	6.1%	5.7%	5.9%	5.4%				
15, 18, 24, and 36 months	7.5	8.5	7.3	6.7	5.2				
Over 3 years	5.0	5.2	5.0	5.1	4.9				

otherwise, at the point where maturity of loan passes beyond 12 months, there is a marked tendency toward a jump in the interest rate. Although many of the loans of maturity beyond one year originated with merchants or dealers and are merely purchased by banks, the lenders apparently subscribe to the proposition that the granting of maturities beyond one year, for purposes other than buying real estate, tends to increase both the risk and the cost of the loan, and to reduce liquidity by a margin sufficient to justify the larger rates.

#### NOTES

Recent addresses which deal with Federal Reserve policy and which may be of interest to our readers include:

"The Price of Stability" by Winfield W. Riefler, Assistant to the Chairman, Board of Governors of the Federal Reserve System. (Address before the Rochester Chamber of Commerce, Rochester, New York, January 14, 1957.)

"A Review of Monetary Policy" by M. S. Szymczak, Member, Board of Governors of the Federal Reserve System. (Address before the National Credit Conference of the American Bankers Association, Chicago, Illinois, January 14, 1957.)

A limited number of copies of both speeches are available at the Research Department of this bank.

# **Ups and Downs in Home Building**

RESIDENTIAL construction activity moved counter to the general upward course taken by most sectors of the economy during 1956. Indicators of home building activity have been falling, registering relatively large percentage declines. But, sharp ups and downs have been the rule in the industry rather than the exception. Actually, the nation's home builders can look back on 1956 as a good year by most historical standards.

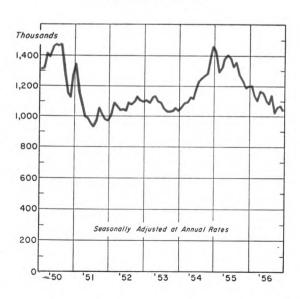
Investors' indifference toward home mortgages underwritten by the Federal government has been singled out by many observers as one of the major reasons why new housing volume has been declining. With housing demand apparently holding up well throughout most sections of the country, the home builders' inability to produce and sell more houses than they did during 1956 has been attributed to the decreasing flow of long-term capital into government-backed mortgages. Conventional mortgage lending has continued at about the record 1955 pace, however, mitigating the drop in funds available for government guaranteed and insured mortgages.

Early 1954 is a convenient beginning point to describe the housing industry's current difficulties. That was when new housing construction spurted upward to the levels from which the current minus signs are being measured.

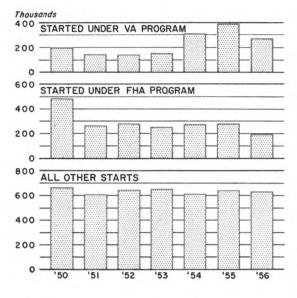
#### The 1954 Bulge

It is easy to confuse the turning points of the housing industry's most recent rise and fall in activity. Using annual totals of the number of privately-financed homes started, the 1955 total of 1,309,500 units stands out as the country's second best housing year and the peak of the latest bulge. But, the same series on a monthly basis shows a somewhat different picture after allowances have been made for seasonal movements. The annual rate of private housing starts, as shown in the accompanying chart, climbed about 40 percent during 1954, but declined fairly steadily throughout both 1955 and 1956, ending up 1956 at about the same level from which the surge had started in early 1954. About one-half of the 1954 increase was lost in '55 and the balance in '56.

# NUMBER OF HOUSING STARTS (Private nonfarm)



### HOUSING STARTS ACCORDING TO TYPE OF PROGRAM



Measuring the turning points in terms of the value of new residential work put in place shows essentially the same pattern as the number of housing starts, except that the peak shifts from December 1954 to mid-1955. Also, the the subsequent decline in expenditures for new residential building is not as great as that registered by the starts figures, since the value series reflects rising construction costs and increases in the average size and quality of the units built. For example, outlays for new residential work put in place during December were running at a seasonally adjusted annual rate only 14 percent below the July 1955 peak, while the rate of private housing starts had declined 22 percent during the same period. (There is, of course, a time lag between housing starts and work put in place.)

The major impetus to the recent bulge in housing activity came during 1954 when investors scrambled for home mortgages as they found the recession reducing the demand for funds from most other sectors of the economy. Builders suddenly found that long-term commitments for mortgages guaranteed by the

Veterans Administration were available in quantity at very attractive terms. The volume of new commitments was reduced substantially in '55 and '56, but those already made were worked off slowly.

The effect upon housing starts of the inflow of long-term funds into VA-guaranteed mortgages is shown very clearly when the number of homes started under government programs is contrasted with conventionally-financed starts. This is done graphically in the accompanying chart. The two top panels represent homes started under the inspection of the Veterans Administration and the Federal Housing Administration. The bottom panel shows the number of private units started without such arrangements for Federally-underwritten financing.

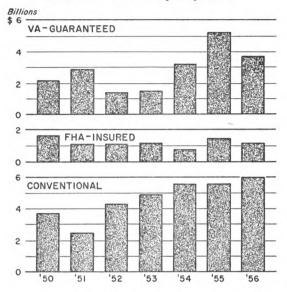
The chart emphasizes the fact that the '54-'55 bulge in housing occurred largely under the impetus of the VA program while the '56 contraction occurred in both FHA and VA starts. About one-third fewer units were started under the government-assisted programs in 1956 than in 1955 (120,000 fewer VA units and 90,000 fewer FHA units) while conventional starts remained at about the same level. In fact, the maximum fluctuation in conventional starts so far during the 1950's is a 9-percent decline which occurred between 1950 and 1951, when material controls and financing restrictions went into effect.

The 1956 decline in government-assisted home construction—as well as the 1954 surge in VA starts — was closely associated with the availability of mortgage credit. Since starts under VA and FHA inspection relate in only a general way to the type of permanent mortgage placed upon the units, a more accurate picture of mortgage financing trends may be obtained from the flow of new capital into the different types of residential mortgages.

#### **Financing Trends**

Trends in residential mortgage financing have a direct effect upon the course of new home building as well as the rate of turnover

# INCREASE IN MORTGAGE DEBT OUTSTANDING (Nonfarm 1- to 4-Family Properties)



of existing homes. Sales of new homes and old homes are closely related. Findings of the Survey of Consumer Finances suggests that two existing houses changed hands for each new home purchased during the past six years. Also, the findings indicate that about three out of every five home buyers owned their previous dwellings and, presumably, sold them to help finance their current purchases. Furthermore, some mortgage debt has been incurred in connection with about 85 percent of all home purchases in recent years.

The simplest way of estimating the net flow of new capital into home mortgages is from the increases in mortgage debt outstanding on nonfarm one- to four-family properties. The change in outstandings is a net figure, that is, new credit extensions on both new and existing homes, less repayments. (Such repayments include scheduled amortization and prepayments, which usually are contingent on the refinancing of debt resulting from the transfer of properties on which mortgage instruments already exist.) Estimates of mortgage credit extensions for home purchases suggest that roughly \$2 was extended for each \$1 increase in outstandings during the

past six years, giving an indication of the degree to which new extensions are financed by repayments made on debt already outstanding. (1)

Home mortgage debt outstanding grew less rapidly in 1956 than in 1955, increasing by nearly \$11 billion to \$99 billion at year-end. During 1955, aggregate outstandings rose by \$12.6 billion. Nevertheless, more new funds—net on balance—were available for, and used for, financing home mortgages during 1956 than in any prior year except 1955, whether it was a year of "tight money" or "easy money." Furthermore, the dollar increase in conventionally-financed mortgage debt was larger during the year just passed than the record increases posted in 1954 and 1955.

The annual increases occurring since 1950 in VA-guaranteed, FHA-insured and conventional mortgage debt outstanding are contrasted in the accompanying chart. The 1954-55 bulge in VA-guaranteed debt — which reached record proportions in 1955—again stands out clearly. During 1955, VA-guaranteed home mortgage debt outstanding increased by \$5.3 billion, or over one-fourth, while conventional debt rose by \$5.6 billion, or about 13 percent. The growth in VA-guaranteed debt slowed down during 1956 to a 15 percent increase of \$3.7 billion, whereas conventional debt continued the 1955 rate of growth with a \$6.0 billion rise.

The high level and rapid growth of the mortgage debt burden have been the cause of some concern in recent years. While the relation of debt repayment to income has appeared to be within historically safe limits, mortgage debt outstandings have been growing about twice as rapidly as personal income during the 1950's. At present, however, the emphasis seems to be on how to sustain the growth in mortgage debt, that is, to provide enough new funds to sustain new home construction at "reasonable" levels.

The home builders' present dilemma is whether to continue to build the same quality

<sup>(1)</sup> For estimates of mortgage credit extended on new and existing houses from June 30, 1950 through 1954, as well as an excellent discussion of credit and monetary developments preceding the 1954 surge in home building, see Saul B. Klaman, "Effects of Credit and Monetary Policy on Real Estate Markets: 1952-1954", Land Economics, August 1956.

house at past volume, with a resulting cut in profit margins, or to maintain or even increase profit margins by building fewer, but higher priced, homes. This dilemma stems in part from the government programs of home mortgage underwriting which have helped considerably in turning the country from one consisting, predominantly, of renters to one of home owners. In the process, builders have come to rely on financing close to half of their sales with either FHA-insured or VA-guaranteed mortgages.

The sharp rise in interest rates that is symptomatic of "tight money" has an impact upon mortgage borrowers, mortgage lenders and builders under FHA or VA programs which is quite different from the effect upon mortgages financed through conventional channels. Interest rates rise on conventional mortgage loans. Although the advance is sluggish and lags behind other money rates, the increased interest cost is passed on directly to the borrower. Conventional interest rates have risen by about 0.5 percent to 1.0 percent during the past year. Maturities may be shortened slightly and loan-to-value ratios lowered a little, but conventional lending is the most conservative sector and terms do not change as rapidly as those on Federallyunderwritten mortgages.

FHA and VA loans, on the other hand, have interest rates which are fixed by administrative or Congressional action. The rate was set at 4.5 percent throughout the recent swing in home building activity. Discounts of varying degrees were charged throughout this period in order to raise the yield to the lender. The seller or builder is required to absorb the cost since it is illegal to pass it on to the borrower (home buyer). Thus, discounts make up one more element of the price squeeze on builders and add to the pressures of increasing construction costs, rising land prices, and higher charges for construction loans. Builders, however, regard discounts as a legitimate interest cost that should be paid by the borrower.

Discounts on commitments for 4.5 percent mortgages were running around 6 points in early 1957, or \$6 for each \$100 of permanent mortgage amount. A 6-percent cash discount has the effect of boosting the yield of a 25-year, 4.5-percent mortgage to slightly over 5 percent, if the mortgage runs to maturity. The amount of discount varies among lenders, among builders, and among sections of the country. It has discouraged many builders from using the government mortgage programs. At the same time, the discounting process has kept funds for VA and FHA mortgages from drying up entirely during a period when money rates in general have advanced to the highest levels in several decades.

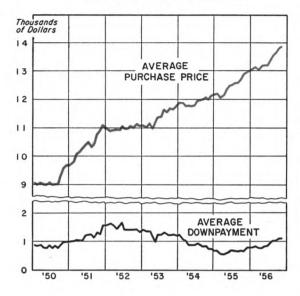
Changes in the monetary and credit markets have affected FHA and VA loans in yet another manner that has an important bearing upon the level of new home construction. Lenders tend to tighten or ease downpayment ratios and maturities on government-backed mortgages according to the availability of mortgage funds.

Easing and tightening terms on mortgages have, respectively, the effect of broadening and narrowing the effective demand for homes. The lower downpayments and extended maturities granted by lenders during the 1954 period of credit ease, for example, meant that more families could qualify for loans. Less accumulated savings were needed to make the downpayment and the longer maturities meant that income requirements were lower. Consequently, home production and sales boomed for a period.

#### **VA Loan Characteristics**

The extent of the changes that occurred in terms on VA-guaranteed mortgages since 1954 is easily ascertained from the VA's monthly report on the characteristics of mortgage loans closed. The characteristics do not necessarily reflect conditions prevailing at the time of closing, however, since the original commitment is made by the lender some months previous. Nevertheless, from the characteristics of mortgages closed, it would appear that the most lenient terms were ex-

#### VA LOANS ON NEW HOMES



tended on those closed during March 1955. Taking this month as the intermediate point, the change in downpayments and maturities between January 1954 and November 1956 (the most recent data available) are described in the following table.

#### CHARACTERISTICS OF VA HOME LOANS

(Section 501 loans closed on existing, new, and proposed homes)

	Jan. '54	Mar. '55	Nov. '56
Average purchase price	\$11,425	\$11,680	\$13,242
Average downpayment	12.3%	6.8%	9.8%
Number closed	24,429	48,794	38,629
With no downpayment* Distribution by	13.0%	44.8%	11.0%
maturity:			
Less than 25 years	48.8%	20.9%	23.2%
Exactly 25 years	40.6%	32.8%	37.6%
26 to 30 years	10.6%	46.3%	39.2%

<sup>\*</sup>Since July 30, 1955, a minimum downpayment of 2% has been required. Loans closed after this date without a downpayment reflect commitments outstanding at the time the regulation went into effect.

Competition among lenders resulted in a large volume of commitments for VA loans with no downpayment. Over half of the VA loans closed on new or proposed units during most of 1955 were 100 percent loans. As a result, the average downpayment on new homes was reduced sharply. During March 1955, the average veteran buying a new home put up only \$557 in cash on a home costing \$12,036. The average downpayment five years earlier, as shown by the accompanying chart, was about 50 percent greater on a home costing 25 percent less. Loan-to-value ratios on existing homes run lower than those on new units so that the average downpayment on all loans closed by VA did not drop quite so low.

The no-downpayment loan was coupled with a 30-year payoff period, making the most lenient mortgage available under VA regulations. The proportion of the loans closed with maturities running 26 to 30 years jumped from about 11 percent at the beginning of 1954 to 46 percent in March 1955. Thereafter, the average maturity declined slowly.

This, then, was the type of financing that made possible the recent bulge in starts. Any decisive test of whether it was "good" or "bad" financing has been forestalled, or at least postponed, by rising incomes and rising home prices.

#### Overbuilding or Underbuilding?

One of the important factors sustaining home building activity during the late 1940's was the rapid increase in new nonfarm households. Households were formed faster than new homes were built and the conversion of older homes into smaller dwelling units housed the excess. The rate of household formation tapered off following 1950 and, since then, housing starts have exceeded new household formation, with the gap widening slightly in recent years. The increasing excess of starts has been taken by some observers to be an indication of overbuilding.

Since there was only a modest increase in vacancies during the 1954-56 period, some other explanation of the widening gap between nonfarm housing starts and nonfarm household formation is needed. The "excess starts" have probably served to fill the grow-

ing replacement demand for dwellings which have been removed from the housing inventory by disaster, demolition and possibly by reconversions. The nature of the data precludes exact measurement of the various types of demand. From the estimates covering 1953 through 1955, it would appear that total demand—new household formation plus replacement—could be conservatively estimated at between 1,100,000 and 1,200,000 new dwellings a year.

In late 1956, a comprehensive study of capital formation in residential real estate prepared by the National Bureau of Economic Research<sup>(2)</sup> concluded that the percapita value of new residential capital additions (in constant prices) has been declining for several decades due to a combination of factors. While this trend does not necessarily indicate underbuilding, it does point up the fact that residential construction has been a shrinking sector of the economy for some time. That is, other sectors have been growing much more rapidly. It is thought that housing has been downgraded substantially in the consumer's scale of preferences.

#### The Outlook

Generally, long-term credit—including mortgage credit—is the lending of the savings of individuals. Recently, there has not been enough savings to satisfy the long-term capital needs of all sorts and the housing industry has encountered difficulties for the reasons already outlined. Some improvement in savings rates has been noticeable lately and may prove helpful to the housing industry in 1957.

The FHA's action in December, raising its interest rate to 5 percent, helped bring the

return on such mortgages to a position more in line with other market rates. A similar increase in the VA rate is under consideration in Congress. Also, the Housing Administrator has stated that he will work toward obtaining means for permitting the adjusting of rates on FHA and VA mortgages to changing conditions in the long-term capital markets. Whether or not steps of this sort will increase the flow of funds into housing remains to be seen. It takes a period of time for builders to translate commitments into firm plans and actual starts.

On the negative side of the picture is the fact that the Federal National Mortgage Association is running out of funds for its secondary market operations. FNMA purchases of government-underwritten mortgages have provided an increasingly important source of funds—principally for VA mortgages. FNMA's secondary market purchases jumped from about \$1 million during the first quarter of 1955 to nearly \$72 million during the same 1956 months and about \$295 million during the last three months of 1956. For the year 1956, FNMA purchases totaled about \$570 million.

Since there are a number of forces at work which will affect the volume of housing during 1957, it is not surprising that forceasts of the number of dwelling units to be started this year vary widely, ranging from a low of around 900,000 to a high of 1,100,000. The most frequently mentioned number is 1,000,000, or 10 percent less than the 1956 total.

A group of home builders in the five largest cities of the Fourth Federal Reserve District indicated in early January that their 1957 volume would be about one-fifth below 1956 levels. For every 3 builders planning to start more units this year than last, 4 builders reported that they were planning reductions.

<sup>(2)</sup> Leo Grebler, David M. Blank, and Louis Winnick, Capital Formation in Residential Real Estate, Trends and Prospects, Princeton, Princeton University Press, 1956.