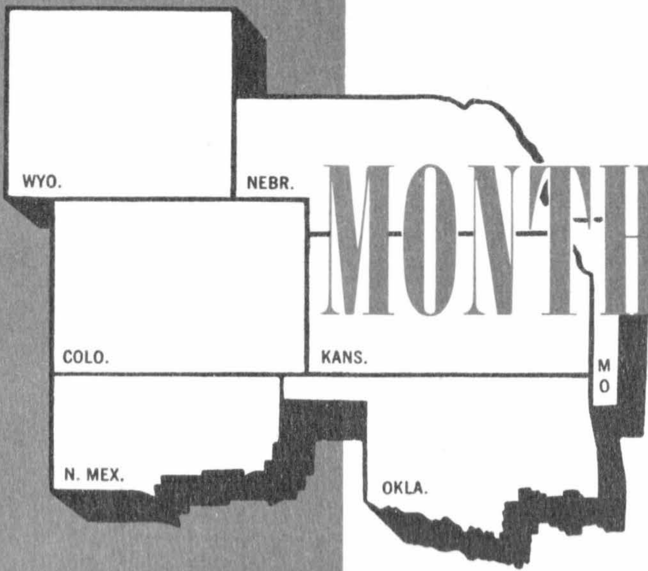
April 1960



MONTHLY REVIEW

In This Issue

FEDERAL RESERVE BANK
OF KANSAS CITY

The Residential Mortgage Market

in 1959

No industry in the national economy is more dependent upon the availability of credit than is the construction and sale of homes. From the purchase of equipment by builders to the direct construction costs and on to the final buyer, large amounts of credit are required. The housing market also depends upon credit to finance the turnover of existing homes which is involved in the upgrading of space use. Demands for credit from the various segments of this industry have been stimulated throughout the postwar years by public policies which broadly have eased the terms of finance and steadily widened the market for homes. Rising real personal incomes and their general cyclical stability also have contributed to demand and at the same time have lessened the apparent risks for lenders. These changes therefore have tended to weaken the restraints on housing demand which might otherwise have been produced by real factors such as changes in the rate of family formation and to concentrate attention upon the problems of financing as one of the central restraints upon a greater level of activity. Thus, in the postwar years, restricted credit supplies have been associated with declining housing construction and any easing of pressures in the credit markets has been reflected promptly in an expansion of construction.

Since residential construction has shown a sensitivity to interest rates, and since high rates were required in 1959 to bring into the market the supply of loanable funds demanded, the occurrence of a third postwar peak in homebuilding in the year seemed to represent a departure from earlier observed relationships. The volume of house construction during the year was all the more surprising in view of the large volume of individual savings channeled directly into the securities market, since this reduced the share of savings flowing to financial institutions which customarily make large amounts available to the mortgage market.

The failure of rising interest rates to set immediately in motion forces which constrict the level of housing construction often has been explained by the large volume of forward commitments which builders have secured from lenders during periods of low rates. It is possible that the influence of forward commitments in accounting for the timing of these actions has been overemphasized, for it suggests that lenders have little foresight in building up such commitments and little freedom to curtail their lending on mortgages until this backlog is worked down. In fact, if new commitments were reduced sharply as other interest rates increased, the volume of outstanding commitments would decline quite rapidly. When they do not do so – as available evidence suggests was the case through the first half of 1959 – it seems that a better interpretation would be that lenders continue to be willing to make commitments on the prevailing terms.

The general mechanism through which residential construction is influenced by changes of interest rates usually is explained in terms of the institutional arrangements for financing the sale of houses. The particular arrangements that have been regarded as most significant are those which have prevented interest rates on federally underwritten mortgages from adjusting readily to increases in market interest rates, since their ceilings are set by congressional action and administrative policy. Rates on conventional financing, which are negotiated between the borrower and the lender, generally are free to move in response to changes in supply and demand. Although liens underwritten by the Federal Housing Administration or the Veterans Administration can sell at discounts from par which compensate for the inadequacy of their nominal rates, extreme discounts have not proved attractive to lenders. Moreover, the absorption of discounts by builders raises their costs and reduces the profitability of construction. Discounts also may narrow the market for houses as this cost to sellers of existing houses tends to deter them from selling to acquire new or larger existing houses.

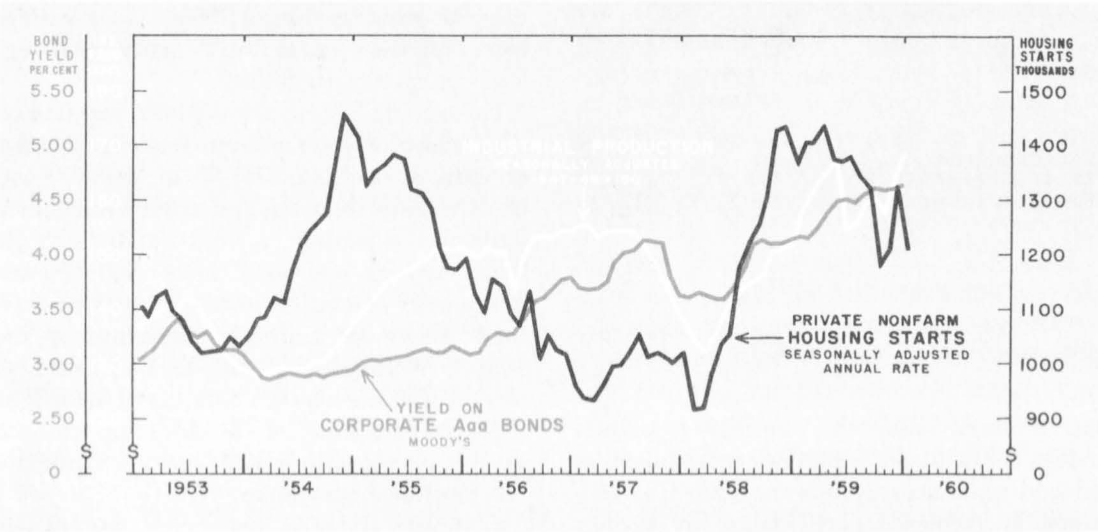
This account of the linkage between movements of interest rates and residential mortgage construction is consistent with the view that federally underwritten mortgages are especially important to home buyers whose incomes and asset positions cause them to be marginal to the housing market. Tightening credit supplies therefore find them more responsive to changes in interest rates and to the nonprice rationing devices employed by lenders in discriminating among risks. Rationing under these conditions takes such forms as increased requirements of income to debt service, and greater selectivity as to neighborhood, age of borrower, source of income, and type of employment of the applicant.

In light of this general framework of relationships, the achievement of a high volume of residential construction in 1959 was an interesting performance, particularly when compared with the previous peak in 1955. The peak in seasonally adjusted housing starts in the earlier period was reached in December 1954 and activity declined irregularly through 1955 despite the fact that interest rates, as measured by the yield on high-grade corporate bonds, rose only moderately. In 1958, housing starts had been rising for only a few months before market interest rates began to rise sharply. House construction continued at advanced levels to a peak in the spring of 1959 even though interest rates had risen further and were above the highs in 1957. Yields on corporate bonds at the peak in construction were about 60 basis points above their level at the start of the expansion. The largest part of the increase in construction in 1958 was financed through FHA and VA mortgages but the further growth in 1959 was mainly under conventional financing. Housing starts with underwritten financing were 440,000 in 1959 compared with 670,000 in 1955, whereas starts with conventional financing were 903,000 in 1959 compared with 640,000 units in 1955. The volume of housing starts under conventional terms has risen in each year in the intervening period except in 1956 when a nominal decline occurred.

Institutional Sources of Mortgage Credit

In view of the importance generally attributed to underwritten mortgages as a major mechanism through which the influence of restricted credit supplies is transmitted to residential construction, the predominance of conventional financing in 1959 might seem to account for the sustained level of construction in the face of sharply higher interest rates. Such an interpretation has some support in the fact that underwritten mortgages might encounter restraints, as a result of interest rate

Housing Starts, Bond Yields, and Industrial Production



relationships, earlier in a period of rising rates than would conventional liens. On the other hand, there are both legal and economic restrictions upon the ability of institutional lenders to raise the rates paid on savings so as to continue to attract funds which can be employed in the mortgage market. Legal restrictions on the rates paid for savings by commercial and mutual savings banks are applied by regulatory authorities. Economic restraints exist in the fact that balances placed with banks and savings and loan associations are short-term claims and consequently any increase in the rate paid applies not just to new savings but to all existing accounts. But the yield received by institutions on mortgages is the average of the entire portfolio and not simply the loans made at the currently prevailing rate of interest. This relationship of costs and returns tends to inhibit advances in the rate paid for savings, but in a highly competitive situation, increases of rates by one institution, by attracting balances from others, may force these institutions to make similar increases which raise the general lèvel of rates to uneconomic levels. A development which may partly offset some of these effects occurs when a high turnover of homes leads to a large volume of prepayment of old mortgages, freeing funds to be recommitted to the market at higher rates.

These considerations are of especial importance to an examination of the mortgage market since the largest part of all residential finance is supplied by institutional lenders—savings and loan associations, mutual savings and commercial banks, and life insurance companies. At the end of 1959, this group of institutions held approximately 83 per cent of the outstanding debt on 1- to 4-family nonfarm homes. At the end of last year, the Federal National Mortgage Association held about 4 per cent and the remainder was accounted for primarily by individuals and nonprofit organizations.

Data on the sources of funds to finance nonfarm 1- to 4-family residences in 1955-56 and in 1958-59 are presented in the accompanying table. A marked shift in the sources of mortgage funds between the earlier and later pe-

Net Sources of Residential Mortgage Credit

Loans on nonfarm, 1- to 4-family residences

	Dec. 31, 1954 to Dec. 31, 1956	Dec. 31, 1957 to Dec. 31, 1959*
	(Billions of Dollars)	
Total	23.3	23.7
Commercial banks	2.9	2.9
Mutual savings banks	4.0	2.8
Savings and loan associations	9.0	11.7
Life insurance companies	4.9	2.2
Federal National Mortgage Association	0.6	1.2
Individuals and others	1.7	3.0

*Preliminary estimates.

SOURCE: Housing and Home Finance Agency.

riods is clearly indicated. The share of mutual savings banks and life insurance companies was reduced quite sharply but the total was sustained by increased participation by savings and loan associations, individuals and nonprofit organizations, and the Federal National Mortgage Association. The behavior of institutional lenders could reflect either an altered rate of growth in their total assets or a change of investment preferences. Both were involved, as a further examination of the details will indicate.

The share of gross private financial savings of individuals flowing through life insurance companies and mutual savings banks combined decreased from 34 per cent in 1955-56 to 28 per cent in 1958-59. Thus, the volume of additional assets acquired by these institutions was not materially larger in the latter period, despite a substantially higher level of individual savings. This redirection of savings flows tended to restrict their residential mortgage lending. At the same time, the investment preferences of life insurance companies were shifting in such a way as to favor other employment of funds. Enlarged mortgage portfolios of these companies accounted for 61 per cent of the growth in their total assets during 1955-56, but the percentage fell to about 31 in 1958-59. Both life insurance companies and mutual savings banks, moreover, appear to have concentrated their mortgage investments during 1958-59 to a greater extent in liens on multiple-family dwellings and commercial buildings.

Savings and loan associations maintained their share of gross private financial savings of individuals from 1955-56 to 1958-59, and consequently their lending ability rose along with the expansion in individual savings. Since savings and loan associations consistently held around 82 to 85 per cent of their total assets as mortgage investments, the supply of funds available to the mortgage market was less affected than might have been expected as a result of the declining share of savings placed with mutual savings banks and life insurance companies.

Commercial banks are much less closely associated with mortgage lending than with other forms of credit demand. Their extensions of mortgage credit tend to contract when other borrowers increase their demands, and their lending on home mortgages tends to vary more than their loans on farm land and business real estate. These characteristics of bank lending on real estate are related to the fact that the individual depositor has much less reason to look to his bank to finance a home purchase than a large business account has to expect mortgage credit or other forms of accommodation. In addition, the long maturities of home mortgages make them an important object of heightened credit rationing when bank liquidity is reduced. The variability of bank participation in mortgage credit is illustrated by the fact that large amounts of residential mortgages were absorbed by banks in 1955-56, but in 1957 the amount shrank to a negligible volume. A large growth of time and savings deposits in 1958, along with weakness in other credit demands, apparently revived banks' interest in mortgages as their holdings increased \$1.4 billion. Even in 1959, however, when time deposit growth dropped to a lower rate and when the reserve positions of banks were strained by the pressure of other loan demands, banks acquired sizable amounts of mortgages. It is too early to form any definite view as to the combination of elements which sustained bank loans on mortgages in 1959 or the changes which might lead to an alteration of this policy.

A final feature of financial institutions' participation in the residential mortgage market in 1959 was that both mutual savings banks and savings and loan associations raised their mortgage holdings by amounts distinctly in excess of the growth of their deposits and share capital. The action of the mutual savings banks may have been unintentional rather than the result of policy decisions. Their deposit growth was interrupted by the response of their depositors to rising market rates of interest at a time when their commitments to acquire mortgages still were at high levels. The action of the savings and loan associations followed the same pattern as that in 1955 when they borrowed from the Federal Home Loan Bank and commercial banks to acquire mortgages while rates were favorable.

Other Sources of Mortgage Finance

A growing source of mortgage credit, indicated by data in the Federal Reserve System's flow of funds accounts, is the consumer and nonprofit organization sector of the economy, which includes the rapidly growing pension funds. Net annual increases in total mortgage holdings by this group rose from \$1.3 billion in 1954 to \$2.1 billion in 1957 and then receded to \$1.8 billion in 1958. In the first 9 months of 1959, preliminary estimates indicated a growth of \$2.1 billion, raising the possibility that a new record would be set in the year. Acquisitions in the first 9 months were equal to about 14 per cent of available mortgage funds. While not all of these investments are in mortgages on 1- to 4-family residences, an expanded interest in various types of mortgage loans by this group of investors would be reflected in the supply of funds available for financing purchases of smaller dwelling units.

Although there is a distinct upward trend in the participation of these lenders, there also is evidence of a response to high yields. Taken in conjunction with the declining percentage of private gross financial savings of individuals placed with mutual savings banks and life insurance companies, this development may mean that individual savings were being placed directly in the mortgage market without moving first to a savings institution. It is doubtful that this interpretation fully explains the growth, however, for pension funds have shown a rising interest in this form of investment.

Additional sources of mortgage credit in 1959 were Government agencies, of which the most important was the Federal National Mortgage Association. While the expansion of its mortgage portfolio accounted for less than 10 per cent of the total increase in mortgages, the concentration of FNMA purchases in underwritten liens meant that its growth amounted to about 40 per cent of the increase in these forms of mortgages. In the absence of this support, residential construction under these forms of financing would have been much lower, given the ceiling rates on these mortgages.

Summary and Interpretation

To an important extent, the supply of funds flowing to the residential mortgage market was sustained at a high level in 1959 by extraordinary sources of funds and by unusual bank interest in this form of credit. The scale of borrowing by savings and loan associations and the unusually large acquisitions of mortgages by FNMA constituted a channeling of funds from open-market sources to the mortgage market by way of sales of securities by the Federal Home Loan Bank Board and

FNMA and by use of authority to borrow from the Treasury. Further uses of these sources in the current year will depend upon the investment policies of savings and loan associations, the lending policies of the Federal Home Loan Banks, and congressional action in expanding the authority of FNMA to purchase guaranteed and insured mortgages.

Against the background of developments in 1959, it seems that the analysis of the relation between residential construction and interest rate movements which centers on the changing investment status of underwritten mortgages should be extended to incorporate the influence of rising market interest rates upon the flow of savings to and among lending institutions. Such an extension of the analysis is made the more desirable as a growing volume of total construction finance takes the form of conventional mortgages. Otherwise the shift to this form of finance may lead to overemphasis on the improved competitive status of mortgages and on the extent to which restraint on the flow of savings to residential construction has been reduced. While it may be granted that a tendency of this kind may exist, substantial elements of instability remain in the flows. The alternate borrowing and repayment by savings and loan associations and the volatility of commercial bank participation in this market are examples of probable continuing sources of instability. Additional evidence that conventional financing may not produce the expected effect is the new and heretofore unimportant restraint encountered in the form of usury laws which became a matter of growing importance during 1959 in some 11 Eastern and Southern states. Finally, mutual savings banks can lend beyond the geographical limits defined by state regulatory authorities only on underwritten liens. The failure of these institutions to continue their former rates of growth may have been a factor in the growth of conventional financing since this form is commonly employed when financing is extended by local savings institutions. In a number of regions, local institutions have not developed rapidly enough to meet local needs and, while this problem may eventually be resolved, it constitutes a temporary obstruction to the flow of capital to the residential mortgage market.

Changes in the Use of

Consumer Instalment Credit — Implications for 1960

Consumer instalment credit has played an important role during recent years in elevating consumer outlays during periods of general economic expansion. In 1955, new extensions of instalment credit rose $8 billion above the previous year and amounted to 15.2 per cent of total personal consumption expenditures. In 1959, the increase in new extensions from the previous year was $7.7 billion and the total volume of new extensions equaled 15.6 per cent of consumer purchases. While the net increase in instalment credit outstanding was about the same in 1959 as in 1955, consumer credit analysts have noted significantly different sources of growth in instalment credit during the two periods. A large part of the expansion in 1955—when new passenger car registrations totaled 7.2 million—was in automobile paper. Total new car registrations in 1959 amounted to 6.0 million, and as a result of this and other factors, auto loans outstanding did not increase at a rate similar to that in 1955. About 56 per cent of the total increase in instalment credit during 1959, in fact, was in types of loans other than for auto purchases.

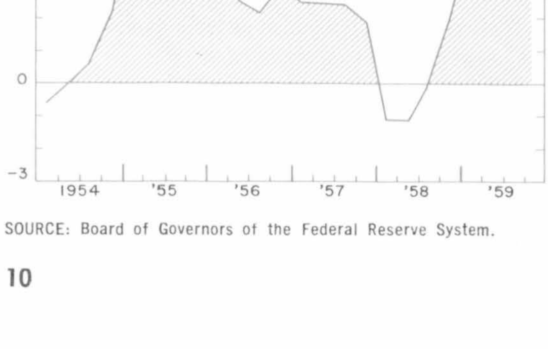
With the increase in 1959 in types of instalment credit other than auto loans, and with auto sales in 1960 promising to rise from last year's level, it may be expected that changes in instalment credit outstanding between 1959 and 1960 will not repeat the sequence of 1955-56. Instalment credit in 1956 grew by $2.5 billion less than in 1955, in part because of the decline in new car sales between those years. A continuing high rate of advance during 1960 would have important implications for those institutions supplying credit to consumers, and it has larger significance relating to the pressures in the financial markets that may emanate from consumer uses of borrowed funds. Consequently, it is desirable to obtain as accurate an appraisal as possible of the prospects for growth in instalment credit in the current year. With this objective in mind, the present article first reviews the cyclical variations evident in instalment credit data during recent years and then turns to an examination of some shifts in the uses of instalment credit by consumers over the postwar period. The final section discusses the volume of new instalment loans which might be extended during 1960 and indicates, on the basis of historical evidence, the change in instalment credit outstanding which would be associated with varying levels of new loan extensions.

Cyclical Changes in Outstandings

Fluctuations in the growth of instalment credit outstanding may be viewed in the broadest sense as a normal concomitant of cyclical variations in consumer spending. Although personal consumption outlays have continued to advance in every postwar year, the rate of growth has altered from one year to the next in general conformance with changes in aggregate economic activity. Growth in new extensions of instalment loans parallel to the relative movements of total consumer outlays would have been sufficient to produce pronounced variations in total credit outstanding, since repayments are influenced by other factors which change more slowly. Because a variety of additional factors affect both the volume of new extensions and the pattern of changes in consumer indebtedness, however, fluctuations in consumer credit outstanding need not follow closely the cyclical pattern in consumer purchases or in general business activity.

Chart 1, which shows the quarterly changes in instalment credit outstanding since 1954 on a seasonally adjusted annual rate basis, indicates the cyclical pattern present during recent years. The period of rapid growth in outstandings during 1954-55 was initiated about 2 months after the general business recovery, and the maximum rate of advance was reached as early as mid-1955. Thereafter, the growth rate diminished until, in the first quarter of 1958, a decline in outstandings was recorded. During the 1958-59 economic upswing which began in the spring of 1958, instalment credit outstanding did not display a significant uptrend until the final quarter of 1958. The increase in outstandings during the following 12 months was similar in magnitude to the change in 1955, but the relative gain was appreciably less. The $5.4 billion growth in outstandings during 1955 represented a 22.9 per cent increase, but because it began from a higher base, the $5.4 billion advance which occurred during 1959 amounted to only 15.9 per cent.

Chart 1.
Cyclical Changes in Instalment Credit Outstanding



SOURCE: Board of Governors of the Federal Reserve System.

The earlier turning point in instalment credit during the 1954-55 period quite clearly reflects the varying response of auto loans to the stimulus of economic recovery. Auto loans outstanding began to rise sharply in the fall of 1954 and by the first quarter of 1955—the second full quarter of the business expansion —were increasing at a seasonally adjusted annual rate of $3.5 billion. The year 1955 as a whole witnessed a $3.7 billion rise in outstanding auto paper, in response to a greatly expanded level of new car sales and a marked relaxation of credit terms. Stimuli of comparable magnitude were not present in 1958 or 1959, and auto paper outstanding has yet to duplicate the rate of advance witnessed in 1955.

Growth of Instalment Credit by Type

It is apparent, therefore, that the 1959 repetition of the 1955 growth in total instalment credit outstanding was more heavily dependent upon nonautomobile loans. As indicated by the data in Table 1, increases in all other major categories of instalment credit were substantially larger in 1959 than 4 years earlier, and comprised a much larger share of the total. "Other consumer goods paper"

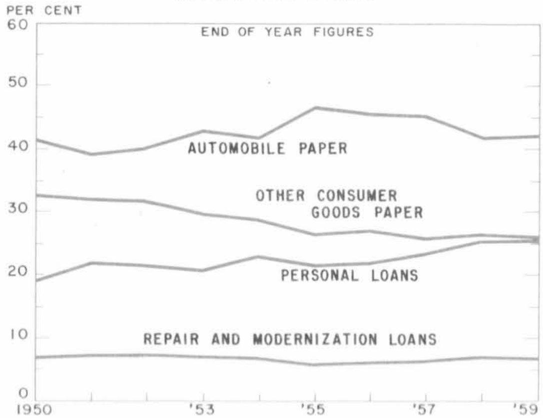
Table 1.

Distribution of Increases in Instalment Credit by Type of Loan

Type of Loan	1955 Change (Millions)	1955 Per Cent of Total	1959 Change (Millions)	1959 Per Cent of Total
Auto paper	$+3,663	68.0	$+2,353	43.6
Other consumer goods paper	+883	16.4	+1,320	24.4
Repair and modernization loans	+73	1.4	+354	6.6
Personal loans	+771	14.3	+1,375	25.5

Chart 2.

Relative Shares in Outstanding Instalment Credit



SOURCE: Board of Governors of the Federal Reserve System.

and personal loans each accounted for about 25 per cent of the 1959 advance in outstandings; in 1955 their combined share was only 31 per cent.

The strong performance of nonauto loans in 1959 relative to 1955 invites consideration of whether forces of a long-run character may have been involved. It may be noted, in this regard, that 1955 was an exceptional year in the consumer markets—a year in which individuals' use of credit to purchase new cars was stimulated greatly by the relaxation of credit terms which took place. The distribution by types of loan in the growth of instalment credit during 1955 would thus tend to deviate from the more typical pattern.

Trends in the shares of consumer instalment credit outstanding by type since 1950, as shown in Chart 2, reveal several interesting features of recent experience. The share of instalment credit accounted for by personal loans has risen noticeably since 1950 to its present level of 25 per cent. Personal loans outstanding recorded an advance of 254 per cent from 1950 to 1959, in contrast to a rise of 169 per cent in total instalment credit. Auto paper outstanding and repair and modernization loans show no distinct upward or downward trend as a share of the total over the last 9 years as a whole, although the unusually large increase in auto credit during 1955 is quite evident. Other consumer goods paper moved down to about one fourth of outstandings in 1959 from about one third in 1950. Taken together, all instalment loans outstanding other than auto paper, therefore, do not show any significant advance as a proportion of total instalment credit over the past 9 years. Moreover, the relative shares of each type of loan in the growth of outstandings during 1959 do not appear to be exceptional, but are quite close to the magnitudes which might have been expected on the basis of the distribution of outstandings at the end of 1958 and the general changes in this distribution since 1950.

It would be helpful to have detailed information on the forces at work in promoting so rapid a growth in personal loans since 1950 and in curbing the advance of other consumer goods paper. Unfortunately, available data are too sketchy to permit more than a few broad generalizations. The failure of other consumer goods paper to advance as rapidly as the remaining types of consumer time-payment loans appears to reflect, in large measure, the declining share of the consumer's dollar devoted to outlays for durables other than autos—particularly the furniture and household equipment group. Such outlays have advanced, percentagewise, about half as much as total consumer spending since 1950, in part because of the relatively mild increase in prices on these articles in comparison with other items in the consumer budget. Had it not been for a marked increase in the use of credit for durable goods purchases since 1950, the share of instalment credit represented by other consumer goods paper would have declined further. New extensions of other consumer goods paper have risen nearly 90 per cent since 1950, while consumer spending on durables other than autos has advanced approximately 45 per cent.

The phenomenal expansion of personal loans over the past 9 years is more difficult to interpret. Negatively viewed, the trend cannot be ascribed primarily to the promotional efforts of any particular type of financial institution, for commercial banks, sales finance companies, and other financial institutions (including credit unions) each have witnessed increases of 200 per cent or more in their personal loans to individuals since 1950. Nevertheless, the emergence of credit unions as important lenders to individuals, recognizing their specialization in the personal loan field, has provided added impetus to the growth of this type of credit. It may be, also, that the well-advertised spread of the use of consumer credit to finance vacations, other recreational types of outlays, and a variety of services has added significantly to the growth of personal loans, although this possibility must remain conjectural, since there are no comprehensive sources of information on the purposes for which personal loans are incurred.

Expansion in Consumer Reliance Upon Credit

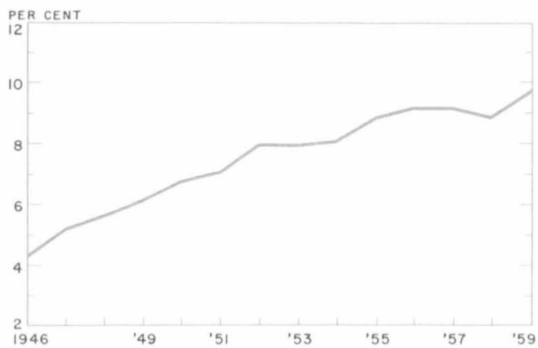
Although the relative shares in the 1959 growth of instalment credit accounted for by the various types of credit do not seem atypical in historical perspective, it may still be asked whether the substantial gains in loans other than auto paper represent a significant departure from past patterns. Did consumers, in other words, resort to the use of credit in exceptionally large amounts to finance a growing level of outlays for goods and services other than autos? This question is dealt with preferably by reference to new extensions of credit rather than to changes in outstandings, for extensions are the most direct measure of the dependence of consumers upon credit facilities. Because new extensions of repair and modernization loans have changed very little from one year to the next and are small absolutely, attention needs to be concentrated primarily upon personal loans and other consumer goods paper.

Chart 3 presents the ratio of new extensions of personal loans and other consumer goods paper to expenditures for consumer goods and services other than autos and accessories, for the period 1946-59. While it is obvious that the ratio of new extensions to outlays has increased substantially over the postwar period, closer observation reveals that the

Chart 3.

Ratio of Loan Extensions to Expenditures

Extensions of Personal Loans and Other Consumer Goods Paper Relative to Consumer Nonautomotive Outlays



SOURCE: Board of Governors of the Federal Reserve System; U. S. Department of Commerce.

average annual increase has been considerably smaller since 1952 than in previous years. From 1946 to 1952, the average yearly rise was 0.61 percentage points; from 1952 to 1959, 0.25 percentage points. Thus, the trend since 1946 indicates a continuing movement in the direction of increased use of credit, but at a decelerated rate.

Perhaps a more interesting feature is the suggestion of a cyclical pattern in consumers' use of credit facilities since 1952. Prior to 1952, there was little deviation from the upward trend except for a slowdown in 1951 and a speedup in 1952—attributable largely to the existence of Regulation W in 1951 and its removal in May 1952. In the subsequent years, however, increases in the ratio of extensions to outlays were particularly sharp during 1955 and 1959 — when economic activity advanced rapidly from previous recessionary levels and the volume of individual disposable income, adjusted for price changes, improved markedly. Favorable economic and income developments in 1956 also were accompanied by a rise in the extensions-to-purchases ratio, but by significantly less than in 1955 and 1959. When general recessionary conditions prevailed during part of a year—such as in 1953, 1954, 1957, and 1958—the ratio showed little advance or a decline.

The hypothesis of cyclical variations in consumers' reliance upon credit can be advanced only tentatively, since firm judgments cannot be made from the evidence of only 7 years. But until further evidence demonstrates the contrary, it seems appropriate to attribute the increased use of credit facilities by consumers during 1959 — for acquiring goods and services other than autos—in large measure to the general improvement in economic conditions and the expansion of individual incomes. It may be noted, also, that an increase in the ratio of extensions to outlays as large as in 1959 has not occurred twice in succession during the postwar period.

The postwar growth in the dependence of consumers upon credit facilities to acquire goods and services other than autos appears to have been evident in the automotive field as well. A comparison of new loan extensions with expenditures for automobiles cannot easily be made, however, since new extensions of auto loans are for both new and used car purchases, while available data on expenditures are not designed to measure gross consumer outlays for new and used cars. Fortunately, some fragmentary evidence is available relating to the percentage of new automobiles sold on credit and to the average size of new loans extended to purchase new and used cars. Since 1947, the percentage of new cars sold on credit appears to have risen from about 45 per cent to 63 per cent, and the average new car contract has increased from about $1,100 to about $2,600. Growth in the average size of new car loans, it will be noted, was substantially larger in relative terms than the increase in unit outlays per new car—reflecting the reduction in downpayments. In the used car market, on the other hand, the relative volume of credit buying apparently has not shown an upward trend over the postwar period. Estimated growth in the average size of used car loans also has been relatively moderate—an increase of about 60 per cent between 1947 and 1959 contrasts with a rise of about 135 per cent in the average size of new car contracts.

Of considerable interest in evaluating prospects for automobile instalment loans in the years ahead is the fact that reliance upon credit facilities to acquire new cars apparently has not increased appreciably since the middle 1950's. Between 1954 and 1956, purchases of new cars on credit are estimated to have grown from 57 to 67 per cent of total new car sales, but the high 1956 figure was not exceeded in the past 3 years. Between 1954 and 1957, the average size of new car contracts advanced about 30 per cent, but there was little additional increase from 1957 to 1959. The lack of further gains in the average size of new car contracts since 1957 reflects, in part, the increased share of total new car sales attributable to imports and domestically produced smaller cars. In addition, the reduction in minimum downpayments initiated by lenders in late 1954 and early 1955 continued to spread through the market in 1956 and 1957, but this source of growth in the average contract size weakened with the absence of significant further liberalization of minimum downpayment requirements.

Implications for 1960

Implications of the preceding discussion for the growth of instalment credit in 1960 may be drawn by indicating first the growth in instalment credit which would be associated with varying levels of new instalment loans extended during the year, and then considering the volume of new extensions which might be anticipated.

Table 2 contains hypothetical figures for new extensions of auto loans and total instalment credit during 1960 and the change in outstandings which would be expected to result from different levels of new extensions. (The smallest figure for new extensions represents the actual volume in 1959.) Changes in outstandings associated with a particular level of new extensions are based on historical relationships evidenced over the postwar period; the interested reader will find a technical note outlining the method of estimation at the conclusion of this article.

Table 2.

Expected Relationship of New Instalment Credit Extensions to Changes in Outstandings During 1960

Total Instalment Credit			Automobile Paper		
New Extensions	Change in Outstandings		New Extensions	Change in Outstandings	
48.5	+0.7		18.0	+0.3	
53.0	+3.3		19.0	+0.9	
54.0	+3.9		20.0	+1.5	
55.0	+4.5	±0.6*	20.5	+1.8	±0.6*
55.5	+4.8		21.0	+2.1	
56.0	+5.1		22.0	+2.6	
57.0	+5.6		23.0	+3.2	

*This term is an error figure which applies to each stated change in outstandings, and expresses a range within which actual changes reasonably can be expected to fall.

It is evident that a repetition in 1960 of last year's growth in instalment credit would require a marked increase in the volume of new extensions from the 1959 level because of the increase in repayments associated with prior growth of outstandings. With due allowance for a potentially high estimate of repayments in 1960, it appears that reasonable assurance of duplicating the 1959 increase in auto paper outstanding ($2.4 billion) during 1960 would require that new extensions of auto loans rise to at least $20.5 billion in the year—some $2.5 billion above the 1959 level. If this magnitude of increase in auto loan extensions were to take place, growth in new extensions of nonauto loans also would be required if the 1959 increase in total instalment credit outstanding ($5.4 billion) were to be duplicated or exceeded. Total new extensions of instalment loans in 1960 must rise to a level of $55.5 billion or higher—which would mean a rise of $7 billion or more above the 1959 level—to provide reasonable assurance of generating a $5.4 billion or larger advance in total instalment credit during 1960, after allowing for a potential overestimate of repayments.

With respect to automobile loans, a growth of $2.5 billion in new extensions between 1959 and 1960 would be a smaller rise than the $3.7 billion gain between 1958 and 1959. However, it should be noted that the rise between 1958 and 1959 was sufficient to finance an increase in new passenger car registrations of 1.4 million and to permit a marked improvement in the used car market. A comparable rise of new and used car sales from 1959 to 1960 would imply a 1960 volume of new car registrations exceeding that of 1955 —an improvement in consumer auto purchases which would surpass even the more optimistic industry forecasts. It appears quite possible that growth in new auto sales to the magic 7 million figure in 1960 might be accompanied by a comparatively moderate rise in new auto loan extensions. In fact, if the percentage of new cars sold on credit and the average size of new car contracts were unchanged from 1959 to 1960, sales of 7 million new cars apparently would imply an increase in new auto loan extensions of less than $2 billion from the 1959 level. Any further increase would have to emanate from loans to acquire used autos, from a larger volume of new car sales, or from a pronounced increase in the use of credit to purchase automobiles — either through a marked rise in the percentage of credit sales or a significant reduction in downpayments, such as took place in 1955. A sharply increased dependence upon credit may be regarded as a real possibility, but it could not be confidently expected on the basis of recent trends in the use of credit to acquire new autos.

It was indicated previously that extensions of personal loans and other consumer goods paper, as a per cent of consumer outlays other than for autos, appear to have fluctuated in recent years in response to cyclical variations in consumer incomes, or, more broadly, in general economic activity. Thus, any change in the ratio to be expected in 1960 would seem to depend on prevailing economic conditions. The further advance in the overall level of economic activity widely expected for 1960 perhaps suggests some additional increase in consumer reliance upon credit facilities to purchase goods and services other than autos, but a rise in the ratio of loan extensions to consumer purchases as large as in 1959 has not been repeated in any two consecutive postwar years. An increase of the magnitude which took place between 1955 and 1956 would indicate a level of new extensions of personal loans and other consumer goods paper in 1960 equaling approximately 10.0 per cent of consumer outlays other than for autos. A repetition in 1960 of the $15 billion advance in these types of consumer outlays from 1958 to 1959, together with a rise to 10.0 per cent in the extensions-to-purchases ratio, would suggest a growth in new extensions of personal loans and other consumer goods paper of about $2.5 billion from the 1959 volume.

It appears, therefore, that—in the absence of a marked advance in consumer outlays beyond that which has been generally expected or an increase in consumers' use of credit representing a distinct departure from recent trends—the growth of instalment credit outstanding during 1960 would fall short of the 1959 advance. Such a development need not result from a disappointingly small rise in consumer expenditures or a reduction in the percentage of consumer outlays financed by instalment credit; the dominant factor tending to hold down the increase in outstandings may be no more than the inexorable rise in repayments which follows close upon the heels of a previous growth in outstandings.

TECHNICAL NOTE

The equation used for estimating the change in total instalment credit outstanding, given the volume of extensions, is of the form: $X_1 = 1{,}972 + .419\,X_2 + .626\,X_3 + .145\,X_4$, where X_1 represents repayments, X_2 new extensions, X_3 outstandings at the end of the previous year, and X_4 change in outstandings during the previous year, all expressed in millions of dollars. The equation was fitted to annual data for 1946-59, excluding 1951 and 1952—during which years the existence of Regulation W caused a departure from the more typical relationships among the variables. All of the independent variables are statistically significant at the .05 level for a single-tailed test. The multiple correlation coefficient was .9996 and the standard error of estimate $310 (millions).

To estimate the change in outstanding auto paper, an attempt was made to add a fifth variable representing an estimate of average contract duration in months, at the end of the previous year. Again an equation was fitted to the period 1946-59, excluding 1951 and 1952, which was of the form: $X_1 = 674 + .426 X_2 + .547 X_3 + .145 X_4 - \$4.05 X_5$. ($X_1$ - - - X_4 are defined as indicated above.) The additional variable improved the fit scarcely at all, however, presumably because the technique employed to derive an estimate of average contract duration did not produce sufficiently reliable estimates. For this equation, the multiple correlation coefficient was .9987 and the standard error of estimate \$261 (millions).

A remark is in order concerning the variable X_4. The logic of factors affecting repayments would suggest a negative coefficient for X_4, on the grounds that growth in outstandings tends to lengthen the average maturity of contracts outstanding and thus to reduce the relative volume of repayments attributable to outstandings in the subsequent year. A reasonable explanation of the positive coefficient lies in the fact that the early postwar years witnessed very sharp percentage gains in outstandings and, correspondingly, an unusually low volume of repayments attributable to outstandings, in relative terms. As the growth in outstandings slowed down in percentage terms, repayments out of outstandings would tend to rise in relation to outstandings. Assuming this to be the case, the variable X_4 improves the fit by acting as an expression of the growth trend in outstandings since 1946. Care must be used in interpreting the variable, therefore, for this argument suggests that the regression equation would tend to overstate repayments—and understate the growth in outstandings—in years following a marked upsurge in outstandings. Allowance for this has been made in the textual commentary relative to Table 2 by assuming that the equations may tend to understate repayments in 1960 by about the maximum amount indicated in the error term. It may be noted, in this connection, that the error terms given in that table are larger than the maximum deviation between actual and computed values of X_1, in all of the years to which the equation was fitted.

BANKING IN THE TENTH DISTRICT

District and States	Loans				Deposits			
	Reserve City Member Banks		Country Member Banks		Reserve City Member Banks		Country Member Banks	
	February 1960 Percentage Change From							
	Jan. 1960	Feb. 1959	Jan. 1960	Feb. 1959	Jan. 1960	Feb. 1959	Jan. 1960	Feb. 1959
Tenth F. R. Dist.	†	+10	+1	+9	−1	−4	−1	†
Colorado	−1	+13	+2	+12	+1	+1	†	+1
Kansas	−2	+8	†	+4	−2	−5	−2	−1
Missouri*	†	+10	+1	+16	−1	−4	−3	+3
Nebraska	+2	+7	−1	+9	−2	−3	−3	−4
New Mexico*	**	**	−1	+10	**	**	†	−1
Oklahoma*	+1	+10	+4	+7	†	−6	−1	+2
Wyoming	**	**	+1	+9	**	**	†	+1

*Tenth District portion only. **No reserve cities in this state.
† Less than 0.5 per cent.

PRICE INDEXES, UNITED STATES

Index		Feb. 1960	Jan. 1960	Feb. 1959
Consumer Price Index	(1947-49=100)	125.6	125.4	123.7
Wholesale Price Index	(1947-49=100)	119.4	119.3	119.5
Prices Rec'd by Farmers	(1910-14=100)	233	231	243
Prices Paid by Farmers	(1910-14=100)	299	299	297

TENTH DISTRICT BUSINESS INDICATORS

District and Principal Metropolitan Areas	Value of Check Payments		Value of Department Store Sales	
	Percentage change—1960 from 1959			
	Feb.	Year to date	Feb.	Year to date
Tenth F. R. District	+7	+3	−3	−2
Denver	+13	+8	0	+1
Wichita	+3	+3	−12	−11
Kansas City	+8	+5	0	+2
Omaha	+7	−1	+4	+1
Oklahoma City	+6	+5	−2	−5
Tulsa	+5	+1	−8	−5