UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

# WHY INSTALLMENT CREDIT COSTS VARY

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We have recently had occasion to examine a number of installment credit plans described in newspapers, mailed advertising matter, and mail-order catalogs. Many made no mention of the credit costs involved. Among those which provided sufficient information to determine the credit costs, the data were provided in a variety of ways. In order to compare costs of the various plans we calculated the annual true interest rate charged (note, page 7). We found that these rates ranged from about 7 percent to 36 percent per year (table 1). There were differences between lending agencies, by type of good purchased, length of the repayment period, amount of the loan, and equity of the borrower. All of this must be confusing to the consumer shopping for credit, if he digs deep enough to discover the variations. For those of us who have the job of helping consumers with credit problems it is important to know what these differences are and why they exist.

## I. Variations in credit costs

Some of the more important variations in credit costs are related to:

Purpose for which credit is used.--An individual lending agency may charge different rates for different types of loans--that is, depending upon the purpose for which the loan is made. Assume that we are borrowing $1,500 from a bank. According to the literature from a local bank, the true interest rate will be 7.5 percent if we use the money to buy a new car, and 7.8 percent if we want it to modernize our home. We would have 30 months in which to repay these loans. For an unsecured personal loan--which may be for any number of purposes, such as paying medical expenses, taking a trip, or consolidating some small debts--we would pay interest at the rate of about 14 percent. The bank will discount the note for this personal loan so that we will actually receive $1,368.75, instead of $1,500. We will have 15 to 18 months to repay the loan.

The large mail-order houses also vary the interest rate on credit transactions by type of good purchased. For an order totaling $350, the true interest rate of one mail-order company would be 12.6 percent

Presented at the 37th Annual National Agricultural Outlook Conference, November 18, 1959, 1:30 p.m., Washington, D. C.

if the goods bought were for modernizing the house; 14.6 percent if they were furniture or appliances; and 18.0 percent if they were miscellaneous items put on a "revolving" account.

Size of loan.--The amount of money or credit involved in an installment contract may affect the interest rate. Consumer finance companies commonly charge higher rates for small than for large loans. From information given in a consumer finance company's advertising in a local paper we calculated the interest rate for cash installment loans of various sizes. In all cases the repayment schedule called for repaying the loan in 20 months. The annual true interest rate for a loan of $100 to $300 was 35.6 percent, for $500 was 16.9 percent, and for $1,000 was 15.0 percent.

Similarly, the rate of interest charged by one of the airlines for its "package" vacation tours varies according to the expense of the tour. If all installments are paid within 20 months, the true interest charge is about 21.6 percent for a $260 vacation, 18.9 percent for a $800 trip, and 16.1 percent for a $2,500 jaunt.

Length of repayment period.--The length of time it is going to take a borrower to repay his loan may affect the rate of interest he will pay. A local bank's repayment schedule for a new car loan of $2,000 shows an annual true interest rate of about 7.5 percent if the installment payments extend over a period of 12 to 24 months, and of 10 percent if they cover 36 months.

Consumers may tend to overlook the fact that extending the repayment period makes a big difference in the actual dollar cost of financing installment purchases. In the case of the $2,000 car loan, for example, where the interest was 7.5 percent on a 12-month repayment schedule and 10 percent on a 36-month period, the interest charge would have amounted to $82 for the shorter period compared to $323 for the longer, a difference of $241. Even if the 36-month loan had been at the same 7.5 percent rate as the 12-month one the cost for 36 months would have been $240, or $158 more than the cost for 12 months.

Type of lending agency.--For most types of installment purchases there is usually more than one source of credit available. Banks now finance a wide range of purchases. Some finance agencies specialize in financing car purchases; others lend money for a variety of purposes. Many department stores now sell "soft goods" as well as "hard goods" on the installment basis. Credit unions lend money to their members for various purposes.

In order to illustrate variations in cost of credit by type of lending agency, let's take the purchase of a car. Assume the car costs $3,100, the downpayment is $1,000 and the remaining $2,100 is to be repaid over a 30-month period. The USDA Credit Union lends money for the purchase of automobiles at 3/4 percent per month on the unpaid balance, or 9 percent per year.

If the purchaser can arrange a loan through a bank, he may obtain more favorable terms. A study made by the Senate Judiciary committee 1/ reported that in 1958, Washington, D. C. banks were making 30-month loans for purchasing new automobiles at add-on rates ranging from 3 percent to 4 percent--or annual true interest rates of 5.7 percent to 7.5 percent. Recently several local banks have advertised 30-month new car loans with monthly repayment tables which we found were based on a 7.5 percent annual true interest rate.

A third way to finance the sale of the automobile would be through a sales finance agency specializing in car loans. The Senate study indicates that the majority of loans made by nationally known automobile finance agencies were made at 6 to 7 percent add-on rates--or annual true interest rates of 11.1 to 12.8 percent. At least one company was said to write some contracts on the basis of a 9 percent add-on charge, or an annual true interest rate of 16.3. Laws in some States prohibit this high a rate on loans to finance new car purchases.

While we are talking about lending agencies we might note how the relative importance of the various holders of consumer installment debt has changed over the years (chart 1). Retail outlets held almost a third of the $4.5 billion installment credit outstanding in 1939, but only 15 percent of the $33.9 billion outstanding in 1958. Commercial banks, which entered the field of installment financing in a small way in the 1920's, held $1.1 billion, or about one-fourth of total installment credit in 1939, and had increased this to $12.7 billion, or almost two-fifths by 1958. Credit unions increased their holdings from 3 percent of the total in the earlier year to 8 percent in the later. In terms of rate of increase, credit unions top the list, even though the $2.7 billion total of their outstanding loans is still relatively small. Sales finance companies held one-fourth of the total outstanding credit both in 1939 and 1958, and consumer finance companies and miscellaneous financial institutions held about 15 percent at both dates. At the present time, therefore, the commerical banks hold a larger volume of installment credit than any other one type of lending agency. These bank holdings are in two forms--direct loans made to individual consumers, and credit "paper" bought primarily from retail dealers.

Amount for "extras" in contract.--Differences in credit costs between various installment plans may be considerably greater than the annual true interest rates alone indicate. Persons financing the purchase of automobiles may find a considerable difference in the "extras" included in installment contracts. Some companies require the buyer to buy auto insurance which they handle, and which may cost more than the buyer could get similar insurance for elsewhere. 1/ Some include premiums for insurance coverage for the entire repayment period in the original amount of the contract, adding appreciably to the dollar cost of the interest if installments cover 2 or 3 years. Some companies require the

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1/ Administered Prices--Automobiles, Report of the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U. S. Senate, 85th Congress, 2nd Session, pp. 163-166, November 1958.

buyer to take a package insurance which may include personal accident, bail bond coverage, health, hospital, and ambulance insurance, and credit life insurance as well as the usual liability and collision insurance. Some add charges for such miscellaneous expenses as filing, notary, and documentary fees.

Many lenders are now requiring credit life insurance to cover the debts of installment borrowers and buyers. This type of insurance provides that if the borrower should die while he still owes on a loan, the insurance company will pay the balance due. Credit life insurance is common on credit union and consumer finance company loans, retailers' revolving charge accounts, and various types of installment contracts. Most (4/5 in 1958) of the credit life insurance is in the form of group policies taken out by lenders to cover their accounts. Ordinarily the lender includes the cost of the premium in the charges he makes to the debtor. Recently instances of excessive premiums for credit life insurance have been reported, and some States are trying to push through legislation to bring credit life companies under control. 2/

Figures on consumer debt and credit life insurance outstanding give some idea of the rapid growth of this insurance in the past decade. The amount outstanding in group policies amounted to 10 percent of the total amount of consumer credit outstanding at the end of 1948 and to 38 percent at the end of 1958.

These insurance policies protect the buyer as well as the seller, of course. Some types of car insurance may be required by law; certainly we all agree that certain types of car insurance are highly desirable. But insurance costs must be considered a part of the cost of installment credit to the extent that (1) the same policies could be obtained from another source at a lower rate and (2) the individual's resources, including other insurance policies, are such that payments could, in the event of the borrower's death, be completed without serious consequences to his family and for this reason he would not voluntarily increase his insurance.

## II. Reasons for variations in credit costs

Variations in credit costs attributable to the different factors we have described may be substantial. Here are some of the reasons why these factors cause such wide variations.

Credit rating of customers.--Some institutions limit their business to good credit risks. Others extend credit to poorer credit risks, so their costs of collection are frequently substantial and bad debt losses may be larger. These costs are reflected in higher charges to all customers of such agencies.

Collateral for loan.--If the borrower pledges security for the loan, the lender runs less risk of a bad debt loss. Lower interest rates can

2/ Business Week, p. 47, September 26, 1959.

frequently be obtained if the borrower has high grade stocks or bonds to pledge as security. Because title to an automobile does not pass to the purchaser until the last installment is paid, the lender can repossess the car if payments aren't completed. Consequently, rates on automobile loans are typically lower than those for unsecured personal loans. In the event of nonpayment of the unsecured personal loan, the lender may have to garnishee the debtor's wages or bring a court suit against him. Both of these actions are time-consuming and expensive to the lender.

Cost of investigation and record keeping.--The cost of credit investigation and bookkeeping are about the same for a small loan as a larger loan. Consequently, a higher interest rate is frequently charged against smaller loans in order to cover the higher rate of overhead costs.

Longer loan period is more risky.--Why the higher interest rate on a 36-month automobile loan than on a 12-to-24-month loan? In the case of the longer loan period the buyer makes much smaller monthly payments. He may also have made a smaller downpayment. Small payments mean that the buyer's equity in the car builds up very slowly. Therefore, if the seller has to repossess the car, especially in the early months of the loan, he is likely to lose money on the transaction. The higher interest rate on the longtime loan helps to make up for this loss.

Cost of money to lending agency.--Agencies supplying funds for consumer installment credit are not the only ones seeking funds for making loans. They must compete with other groups such as organizations seeking funds to finance mortgages, with manufacturers who want funds to purchase raw material or expand facilities, and with Governments--local, State, and National--which need money for their programs. These borrowers do not necessarily pay the same rate of interest for borrowed funds, but each will be affected by what the others are willing to pay.

Small retailers frequently use inventories as collateral for loans. Such loans usually carry a higher rate of interest than loans secured by real estate, stocks, or bonds because of the administrative expense associated with handling them. 3/ Organizations which have obtained funds at relatively high interest rates necessarily pass the cost on to the consumer in the finance rate established for their installment sales.

We have considered a number of factors which affect the rate of interest charged for installment credit; several of these may be involved in establishing interest rates for a single installment credit plan. All may influence the interest rate in the same direction, or individual factors may be working in opposite direction. In any event, the consumer may find himself well rewarded for the time spent in shopping for credit.

Considerable attention has recently been focused on unethical practices involved in the extension of credit by certain retailers of clothing in the District of Columbia. However, these practices have been

3/ "Security Pledged on Business Loans at Member Banks," Federal Reserve Bulletin, p. 116, September 1959.

attributed to only a very small proportion of retailers who extend credit. Revisions made in the District's laws relating to garnishment of wages are expected to substantially reduce such practices. Abuses growing out of used car sales are reported to be quite serious in the District, and court officials report that existing laws do not adequately cover these situations. 4/ But in this case, too, only a small portion of dealers and automobile finance agencies engaged in used car sales are reported to be involved in such practices. Similar situations may exist in some of the States. We have made no attempt to cover these types of situations in our study of credit costs.

III. What is the outlook for installment credit costs

The outlook is for more State control of installment credit. Thirty-five States now have uniform small loan laws in force; nine additional States have laws dissimilar to the uniform act, but considered to provide effective control. Adoption of laws to control small loans are now under consideration in both Alabama and Texas. 5/ California recently passed a much stricter law regulating installment sales than it previously had. The new act not only specifies rates which can be charged, but relates sales of services as well as goods, outlaws "fine print" on sales finance contracts, requires full disclosure of just what the time charges are, gives the buyer the right to rebate of interest if he prepays his contract, and protects him from garnishment of wages during the first 60 days of default.

Indications are that the interest rates on some types of consumer installment credit may be raised shortly, if rates for business loans hold at their current high levels, or increase. Rates on short-term business loans have advanced substantially in the past year (chart 2).

The U. S. Treasury recently sold 4-year-10-month notes carrying a 5 percent interest rate--the highest interest rate offered by the Treasury in 30 years. The Federal Housing Administration raised the basic maximum rate on home mortgages it insures from 5-1/4 percent to 5-3/4 percent late in September. A number of banks have raised the rate of interest paid on savings accounts in recent months. Primary interest rates have had little effect on the finance rate charged for many types of installment credit because so many factors enter into the determination of this rate in addition to the cost of money to the lender. However, there are indications that some banks consider a rise in their minimum rates for consumer installment credit inevitable if other interest rates continue to climb. 6/

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4/ The Sunday Star, p. 1 (Washington, D. C.), November 1, 1959.

5/ Business Week, p. 128, May 16, 1959.

6/ Business Week, p. 127, June 13, 1959.

NOTE: The direct ratio formula was used in calculating interest rates on installment contracts discussed in this paper. This formula is as follows: $i = \frac{2mD}{P(n + 1) + 1/3D(n - 1)}$

In this formula,

i = rate of charge
m = number of payment periods in 1 year (12 if you repay monthly, regardless of the number of months you actually pay)
n = number of payments to discharge debt (col. 6)
D = credit cost in dollars (col. 8)
P = principal or cash advanced (col. 4)

Example (item 1 from table 1):

$$i = \frac{2(12)\ (150.00)}{1,500.00(31) + 1/3(150.00)\ (29)} = \frac{3,600.00}{46,500.00 + 1,450.00} =$$

$$\frac{3,600.00}{47,900.00} = 0.0752 \text{ or } 7.5 \text{ percent}$$

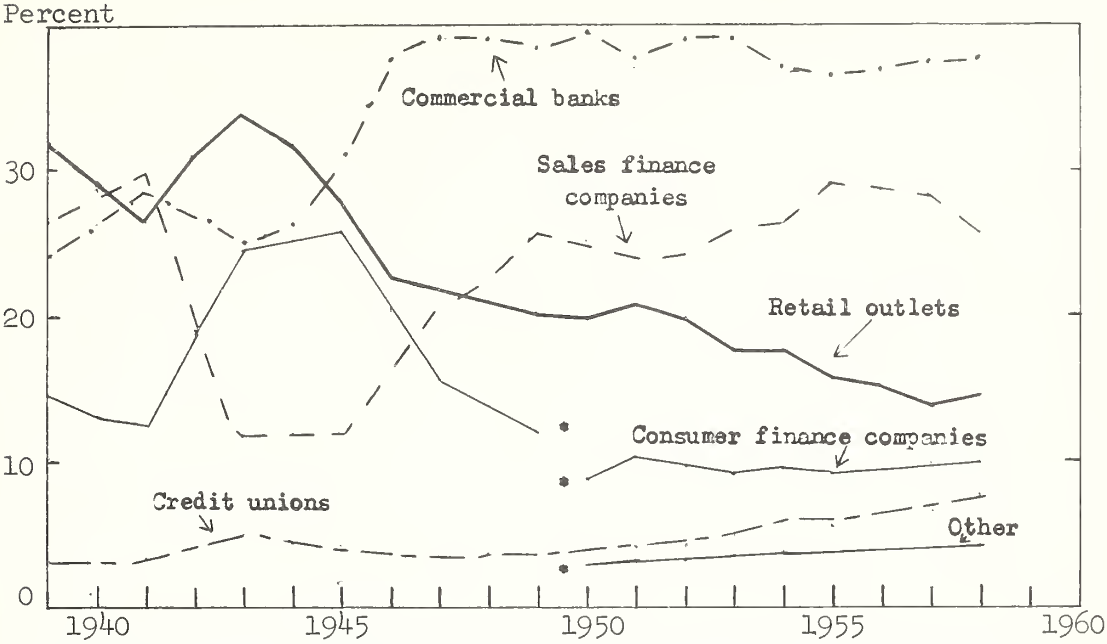
If the borrower were to have the use of the full $1,500 for the whole period of the loan, and were charged $150 interest, his annual interest rate would be 4 percent ($150 interest for 30 months, or $60 per year, $\frac{60}{1,500} =$ 4 percent). However, in the case of installment credit as in the example above, the borrower has the use of $1,500 for only the first month. After his first monthly payment he has use of $1,450 borrowed funds, not $1,500. Each month thereafter he has the use of $50 less than the preceding month. By the 30th month he is using only $50 borrowed funds. The formula given above takes into account the decreasing amount of credit in use by the borrower.

Table 1.--TRUE INTEREST RATE OF CONSUMER INSTALLMENT CREDIT

| Item | Price of merchandise or stated amount of loan | Downpayment or amount discounted | Credit extended or cash advanced (2)-(3) | Repayment schedule | | Total amount paid in installments 1/ (5)x(6) | Total financing cost (7)-(4) | Approximate annual TRUE interest rate | Plan offered by |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Monthly payment | Number of months | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| | | | | | | | | Percent | |
| Automobile loan... | $1,500.00 | -- | $1,500.00 | $ 55.00 | 30 | $1,650.00 | $150.00 | 7.5 | Bank |
| Modernizing loan.. | 1,500.00 | -- | 1,500.00 | 55.17 | 30 | 1,655.00 | 155.00 | 7.8 | Bank |
| Unsecured personal loan............ | 1,500.00 | $ 131.25 | 1,368.75 | 100.00 | 15 | 1,500.00 | 131.25 | 14.0 | Bank |
| Modernizing materials....... | 350.00 | -- | 350.00 | 11.74 | 36 | 422.50 | 72.50 | 12.6 | Mail-order house |
| Furniture or major appliance....... | 360.00 | 10.00 | 350.00 | 16.92 | 24 | 406.00 | 56.00 | 14.6 | Mail-order house |
| Revolving charge account | Varied | | | | | | | 18.0 | Mail-order house |
| Unsecured personal loan............ | 100.00 | -- | 100.00 | 6.72 | 20 | 134.40 | 34.40 | 35.6 | Consumer finance co. |
| Unsecured personal loan............ | 500.00 | -- | 500.00 | 28.88 | 20 | 577.60 | 77.60 | 16.9 | Consumer finance co. |
| Unsecured personal loan............ | 1,000.00 | -- | 1,000.00 | 56.81 | 20 | 1,136.20 | 136.20 | 15.0 | Consumer finance co. |
| Holiday tour...... | 290.66 | 29.66 | 261.00 | 15.66 | 20 | 313.20 | 52.20 | 21.6 | Airline |
| Holiday tour...... | 909.00 | 91.00 | 818.00 | 48.02 | 20 | 960.40 | 142.40 | 18.9 | Airline |
| Holiday tour...... | 2,763.05 | 277.05 | 2,486.00 | 142.53 | 20 | 2,850.60 | 364.60 | 16.1 | Airline |
| Automobile loan... | 2,000.00 | -- | 2,000.00 | 173.53 | 12 | 2,082.36 | 82.36 | 7.5 | Bank |
| Automobile loan... | 2,000.00 | -- | 2,000.00 | 64.53 | 36 | 2,323.08 | 323.08 | 10.0 | Bank |
| Automobile loan... | 3,126.15 | 1,042.05 | 2/ 2,250.90 | 81.60 | 30 | 2,447.85 | 196.95 | 6.6 | 4/ Bank |
| Automobile........ | 3,126.15 | 1,042.05 | 3/ 2,266.60 | 86.89 | 30 | 2,606.59 | 339.99 | 11.1 | 4/ Sales finance co. |

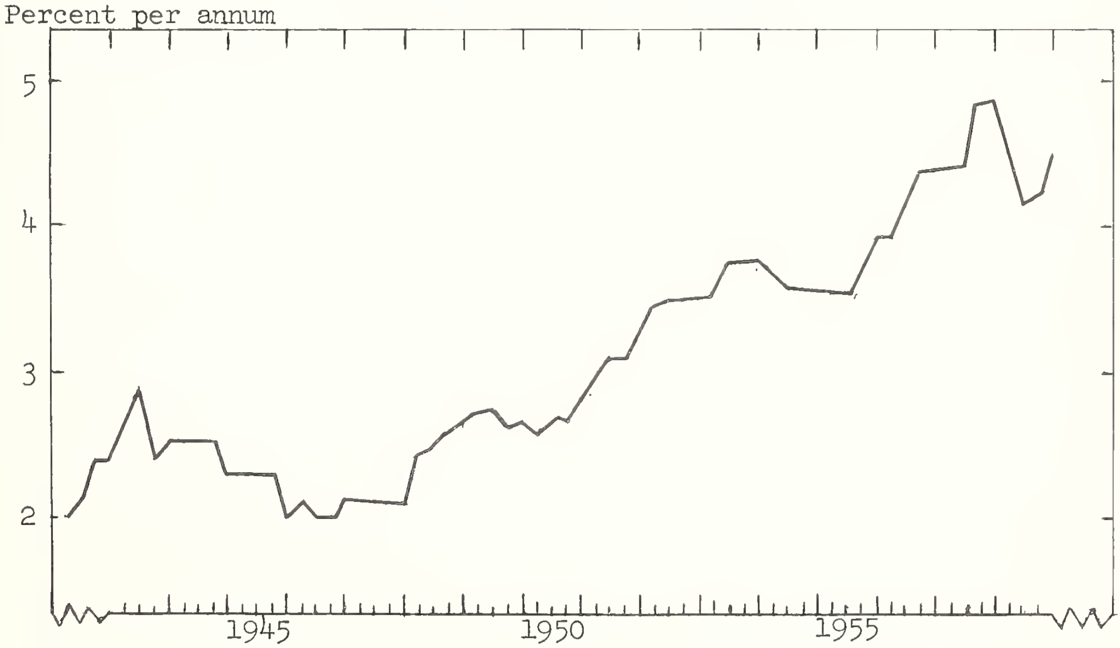
1/ Difference due to rounding. 2/ Includes $162.80 fire, theft, comprehensive, and $50 deductible insurance, 30 months, and $9 initial membership fee (excluded if previously a member), also includes $4 filing and notary fees. 3/ Includes $182.50 fire, theft, comprehensive, and $50 deductible insurance, 30 months. 4/ Administered Prices-Automobiles--Report of the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U. S. Senate, p. 164, November 1, 1958.

Chart 1.--CONSUMER INSTALLMENT CREDIT BY HOLDER, 1939-1958




* Consumer finance companies and "other" combined from 1939-1949.
Source: Federal Reserve Board data as of last day of year.

Chart 2.--BANK RATES ON SHORT-TERM BUSINESS LOANS, QUARTERLY, 19 LARGE CITIES




Source: Federal Reserve Board