2. Methods of Computing and Quoting Finance Charges

Finance charges may be computed in one way and quoted in another way or not quoted at all. All credit grantors use a rate of charge to compute dollar charges. Some quote only that rate, some quote both the rate and the dollar amount of the charge, some quote only the dollar amount, and some do not quote charges at all.

This chapter describes the three general methods which financing agencies and sellers use in computing finance charges; traces the evolution of these methods in instalment cash lending and retail instalment financing; indicates the extent to which they and their variants are specified in state legislation; and describes recent trends in computational methods used in revolving credit and small loans; and discusses the ways in which financing agencies and sellers quote finance charges to consumers.

The term finance charge is used throughout this paper to mean the dollar charge or charges for consumer credit excluding (1) any filing and recording fees which financing agencies and sellers collect from credit users for payment to public officials and (2) any charges on insurance written in connection with a credit transaction. In data compiled by the National Bureau and presented in this study, filing and recording fees and insurance premiums are included in the amount of credit extended, when financed, rather than in the finance charge.

Finance charges have various other trade names. In retail instalment financing they are called credit service charges, carrying charges, and time-price differentials, and in instalment cash lending they are called interest charges.

The term finance rate is used to mean the finance charge ex-
pressed as an effective annual rate, i.e., as a percentage of the average unpaid balance of the credit contract during its scheduled life. The term monthly finance rate is used to mean the finance charge expressed as an effective monthly rate.

*Methods of Computing Finance Charges*

**THE THREE GENERAL METHODS**

The three general methods used by financing agencies and sellers in computing finance charges and by states in setting finance charge ceilings apply rates of charge either to the amount borrowed or to the amount outstanding. These methods are commonly known as add-on, discount, and per cent per month on declining balance.

The add-on and discount methods apply rates of charge to the amounts borrowed. When expressed as percentages, they are called add-on and discount rates. When expressed in dollars and cents per some unit of the amount borrowed, e.g., per $100, they are called computational equivalents because they give the same finance charge as comparable rates. Thus an add-on rate of 7 per cent and an add-on computational equivalent of $7 per $100 borrowed produce the same finance charge. The per cent per month method of computing finance charges applies rates of charge at the end of each month to the credit balance outstanding during the month.

In describing the historical development and present status of the three general computational methods, it is convenient to consider instalment cash lending and retail instalment financing separately.

**HISTORICAL DEVELOPMENT: INSTALMENT CASH LENDING**

The prevailing social attitude toward instalment cash lending during, and even before, the nineteenth century played a vital role in influencing methods of computing finance charges for cash loans. This attitude was largely negative when consumer demand for loans developed in the decades after the Civil War. It stemmed from our European Christian heritage which once condemned all money lending for interest and then gradually condoned the practice provided the interest did not exceed a socially accepted ceiling set by law. Such a law is called a usury law and applies to all forms of lending not specifically exempted.
Most usury laws contain two ceilings, a legal ceiling and a contract ceiling. The legal ceiling is the maximum annual interest rate which may be charged in any loan contract which fails to specify an interest rate. The contract ceiling is the maximum annual interest rate which may legally be contracted for in any loan transaction. The contract ceiling is usually higher than the legal ceiling and is the one we are concerned with here. Both ceilings, it should be emphasized, are construed by courts to mean effective annual interest rates or yields. An effective annual rate is the finance or interest charge expressed as a percentage per year of the average unpaid balance of the loan or credit.

Forty-seven states and the District of Columbia have had usury laws during all or most of their existence. Table 1 contains 1964

TABLE 1
Frequency Distribution of State Contract Usury Ceilings and Method of Expressing These Ceilings, 1964

<table>
<thead>
<tr>
<th>Contract Usury Ceiling (per cent per year)</th>
<th>Number of States a</th>
<th>Number of States b</th>
<th>Contract Usury Ceiling in</th>
<th>Number of States</th>
<th>Per Cent</th>
<th>Dollars Per $100</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>8</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td>12 b</td>
<td>12</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>—</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total with ceiling</td>
<td>48</td>
<td>30</td>
<td>18</td>
<td>18</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total with no ceiling</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Including the District of Columbia.
b Including New Mexico, whose ceiling is 10 per cent on secured loans and 12 per cent on unsecured loans.

usury ceilings (as contract ceilings are called from here on) and gives a general picture of those which prevailed earlier, for there have been relatively few changes in usury ceilings over the years.

In the main, the usury ceilings in these laws were too low to enable commercial banks to make consumer loans on a profitable basis. Pawnbrokers and a few remedial loan societies were the only
other legitimate lending agencies\textsuperscript{1} in existence until around 1910 and they were unable to satisfy the rising demand for loans. Consumer lending was driven underground rather than eliminated because consumer demand was insistent and rising and society was unwilling to legislate sufficiently high ceilings to enable widespread legitimate lending on a profitable basis.

Illegal lenders grew in number and dominated consumer lending during the underground period, known as the loan-shark period, which extended from the Civil War to around World War I. They charged high rates, used a multiple advance charge method of computing finance charges, encouraged short maturities to stimulate refinancing and delinquency charges, gave no prepayment refunds, and adopted strict collection practices.\textsuperscript{2}

Illegal lenders adopted a multiple charge system, in part at least to attempt to "comply" with the usury laws. The part they called interest was usually equal to or less than the relevant usury ceilings. In the absence of legislative sanction, courts usually regarded the other parts of the finance charge (service charges and fees) as interest and ruled the transaction usurious whenever the total charge exceeded the relevant usury ceiling.

A number of cities vainly attempted to drive out illegal lenders during the 1880's and the 1890's. Illegal lenders stopped lending during the drives but resumed after they had ended.\textsuperscript{3}

The failure of these drives forced growing recognition of the fact that consumer lending was here to stay. The choice was not between lending and no lending but between lawful and unlawful lending. Social attitudes change slowly and are often colored in un-

\textsuperscript{1} As used here, "legitimate lending agency" means an agency which made loans at finance rates not higher than the legal ceiling under which it operated. For another use of the term, see Louis N. Robinson and Rolf Nugent, Regulation of the Small Loan Business, New York, 1935, p. 56.

\textsuperscript{2} Multiple advance charges and prepayment refunds are defined in the glossary at the end of this book, and the latter are also discussed below.

expected ways by events. The excesses of illegal lenders strengthened a widening conviction that profit-making lenders could operate only at what were then regarded as excessive rates. Before 1900 some twelve states sought to encourage profit-making lenders by passing laws permitting the lending of relatively small sums at ceiling rates in excess of usury ceilings. The ceilings in these laws were too low, however, to permit profit-making lenders to operate on a profitable basis and the laws failed to accomplish their objective. Emphasis gradually shifted from profit-oriented to consumer-oriented agencies as the best means of supplanting illegal lenders.

The terms consumer-oriented and profit-oriented are used in a descriptive rather than a normative sense. A profit-oriented firm has to make a profit in a private enterprise economy, such as ours, in order to survive. While not uninterested in consumers, it cannot consider them to the exclusion of its owners (shareholders) and expect to continue in business. A consumer-oriented firm is under little or no compulsion to make profits and therefore shifts its point of view almost entirely toward serving the consumer. It may do a better or worse job than a profit-oriented firm in serving consumers, for factors other than orientation affect performance.

Remedial Loan Societies and Credit Unions. Remedial loan societies were the first of two types of consumer-oriented agencies. The initial society was organized in 1857, the second in 1888, and thirteen additional ones between 1894 and 1909. The National Federation of Remedial Loan Associations was formed in 1909, two years after the Russell Sage Foundation became active in consumer finance. These two organizations worked closely together to organize new remedial loan societies and to develop principles on which to base consumer finance legislation.

Credit unions were the other type of consumer-oriented agency. The first one was organized in 1909. The number grew slowly until 1921 when Edward Filene established and financed the Credit Union National Extension Bureau to promote the organization of credit unions on a national scale. Before that, most credit unions were located in Massachusetts and New York. The Russell Sage Foundation drafted the New York credit union law, which was

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4 Robinson and Nugent, Regulation of Small Loan Business, pp. 79–80.
passed in 1913, and actively promoted credit unions in New York after its passage.5

Remedial loan societies and credit unions were, for the most part, organized under special laws which usually set ceilings above usury ceilings but below the general level of charges of illegal lenders. The main concern here is with their method of computing finance charges and the reasons for adopting this method, which was used initially by some (not all) remedial societies and credit unions and became more or less standard practice after 1909 under the leadership of the Russell Sage Foundation and the National Federation of Remedial Loan Associations.

The central problem of illegal lending was the level of finance charges, including not only original finance charges but also service, refinancing, and delinquency charges and failure to make prepayment refunds. Remedial societies and credit unions gradually worked out a method of computing charges which, in their opinion, minimized consumer exploitation and misunderstanding. This was per cent per month on declining balance.

According to this method (also called the simple interest method and true interest method), the finance or interest charge is computed at the end of each month by applying a monthly percentage rate to the loan balance outstanding. Thus, if the loan balance during June is $200 and the monthly rate is 2 per cent, the finance charge for June is $4.

The reasoning behind the choice of this method by remedial loan societies and credit unions may be summarized as follows. The finance charge is computed monthly because, since consumers generally make monthly instalment payments, the month was viewed as the natural interval in consumer instalment lending. Computing the finance charge at the end of the month (1) makes special delinquency charges unnecessary since the borrower pays at the regular finance charge rate for each day he uses the money, (2) avoids the need of prepayment refunds on loans which are paid in full before maturity, and (3) simplifies refinancing since loans may be enlarged, extended, or reduced without the need of prepayment refunds. All these characteristics, it should be noted, are

5 Ibid., pp. 90, 152–153.
Consumer Credit Finance Charges
inherent in a method which computes the finance charge at the end of each instalment period.

As developed by the Russell Sage Foundation and the National Federation of Remedial Loan Associations, per cent per month on declining balance provides one single over-all charge intended to cover all cost elements involved in financing. These elements can be classified in various ways and include capital acquisition cost, service cost, and risk. The one over-all charge was conceived as a means of making it easy for borrowers to ascertain the finance cost as an effective monthly rate and of preventing financing agencies from charging extra fees. The one-charge feature, it should be noted, is not inherent in the per cent per month method. It can be made part of any method of computation.

After the Russell Sage Foundation and the National Federation of Remedial Loan Associations began encouraging the formation of remedial societies in 1909, the number increased to forty-one within several years. Leaders of the National Federation thought the societies would multiply sufficiently to take care of the consumer loan demand.

Whether the Russell Sage Foundation shared this view at any time is not entirely clear. The societies were critical of the Foundation's shift in emphasis from organizing remedial societies to promoting the passage of small-loan laws which would encourage lawful consumer lending by profit-oriented financing agencies. The Foundation made the shift somewhere around 1911 when it realized that remedial societies and credit unions were not multiplying sufficiently to meet more than a small fraction of the consumer loan demand. A Foundation spokesman later stated that the Foundation never expected remedial societies to take over the whole job. "They were intended as experimental agencies—an object lesson—a stabilizing force. . . ." 6

Of importance here is that the Foundation advocated the inclusion of the method of per cent per month on declining balance in small-loan laws passed before 1916 and incorporated it in the Uniform Small-Loan Law which was drafted in 1916 in cooperation with the newly formed National Association of Small-Loan Brokers

Computing and Quoting Finance Charges

as a model for legislative guidance. It advocated this method as a natural outgrowth of its study of and experience with lending conditions. It was convinced that lending abuses would be minimized if profit-oriented lenders were required to follow the method of computing finance charges developed by remedial societies and credit unions. The Foundation was successful in getting most of the states which adopted small-loan legislation to follow its point of view, except for the few states which had set usury ceilings in their constitutions. The legislatures in these states had to choose between not passing any small-loan law pending a constitutional amendment or passing a small-loan law using add-on plus or discount-plus methods of computing finance charges.

In a literal sense, per cent per month results in uneven monthly payments, for each succeeding monthly payment is the sum of a fixed repayment of principal and a declining interest payment. Lenders can, however, adopt an alternative procedure which results in even monthly payments. To illustrate this procedure, in a twelve-month loan of $120 at 2 per cent per month, the $120 may be thought of as the present value of twelve periodic payments at a compound interest rate of 2 per cent per period. Using an annuity table, we proceed as follows: (1) the monthly payment under a twelve-month contract whose present value at a compound interest of 2 per cent per month is $1 is $0.09456; (2) the monthly payment under a twelve-month contract whose present value at a compound interest of 2 per cent per month is $120 ($120 x .09456) is $11.35. The even monthly payment is $11.35.

Industrial Banks. The discount method (and its variant, the discount-plus method) of computing finance charges also resulted largely from the adverse social attitude toward money lending which prevailed in the nineteenth century. According to the discount method, the finance charge \( F \) equals the annual discount rate \( D \) times the principal amount of credit \( P \) times the number of years in the contract \( N \), or \( F = DPN \). In the case of the computational equivalent, \( F = D'P'N \), where \( D' \) is the annual discount in dollars per $100 of principal, and \( P' \) is \( P \) divided by 100.

If the principal amount is $1,000 and the annual discount rate is 7 per cent, the finance charge is $70 on a one-year contract and
$140 on a two-year contract. The same charges are obtained for an equivalent discount charge of $7 per $100.

The finance charge is deducted from the principal. The credit user receives the difference between the principal and the finance charge and pays back the principal in monthly (or other periodic) instalments. In the above example of a two-year contract, the credit user gets $860 and pays back $1,000 in twenty-four monthly payments of $41.67 each.

According to the discount-plus variant, the finance charge equals an amount computed under the discount method plus an additional charge variously called an investigation charge, service charge, or fee. In formula form:

\[ F = DPN + S \text{ or } D'P'N + S \]

where \( S \) is the investigation charge, service charge, or fee.

The additional charge comes in several basic patterns: (1) as a flat function of the principal owed, e.g., 2 per cent or $2 per $100; (2) as a sliding function of the principal owed, e.g., 8 per cent on the first $600 and 4 per cent on any excess; or (3) as a function of both the principal and time, e.g., 50 cents per month on the first $50 of principal plus 25 cents per month on each of the next five $50 units of principal. Patterns 1 and 2 contain an absolute dollar limit in some cases.

As a rule, the finance charge (discount and additional charge combined) is subtracted from the principal, as described above for the discount method. An alternative, and reportedly little-used, procedure is to add the additional charge to the principal. The credit user gets this sum less the discount at the time the credit is extended and pays back this sum in monthly instalments. To illustrate this alternative, if the additional charge on a one-year $1,000 contract at a 6 per cent annual discount rate is $20, the principal is $1,020, the discount is $61.20 (6\% \times $1,020), the cash or its equivalent to the credit user is $958.80 ($1,020 - $61.20) and the monthly payments are $85 ($1,020 \div 12).

Arthur Morris became aware of the demand for consumer loans during his legal practice. When he set up what is recognized as the first industrial bank\(^7\) in 1910 to help meet this demand, he was

\(^7\) The term industrial comes from the fact that consumer loans were originally made mainly to industrial workers. Industrial banks are also called industrial
familiar with the discount method traditionally used by commercial banks in lending to business firms. To obtain an effective rate high enough to make small loans without benefit of a special statute, he combined a discount loan at a legal rate under the usury laws with a repayment plan in a hypothecated savings account. It is thus fairly clear that the use of the discount method in instalment cash lending is the result of its earlier use in business lending and the desire to secure a maximum return under usury restraints. According to the method worked out by Morris, an industrial bank entered into two simultaneous but legally unrelated contracts with each borrower. One was a loan contract at a discount rate within the usury ceiling whereby the borrower agreed to pay back the principal of the loan at maturity. As the borrower received an amount less than the principal, the difference represented the discount plus a service or investigation charge or fee. The second contract was an investment contract in which the borrower agreed either to purchase an investment certificate or build up a savings account equal to the loan principal by making equal monthly payments over a period equal to the loan period. Neither the investment certificate nor the savings account earned interest before they were used to retire the principal of the loan at maturity.

Society's skeptical attitude toward consumer lending during the formative years of industrial banking undoubtedly helps explain why industrial bank spokesmen so long denied that their plan resulted in finance charges which, from an economic standpoint, exceeded usury ceilings. Lacking legislative sanction, they needed court sanction and were probably fearful of giving courts ammunition which might cause an adverse ruling on the plan's legality. The plan raised two legal points. First, were the two contracts separate or were they, in fact, part of one transaction? Second, was the investigation or service charge separable from interest or was

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8 A few remedial loan societies adopted the discount method in consumer financing before Morris did. They did so under special legislation authorizing rates in excess of usury rates. They had little influence on the subsequent spread of the discount method, however, for most remedial loan societies used per cent per month and the remedial loan movement advocated per cent per month.
Consumer Credit Finance Charges

it a disguised added interest charge? Most of the courts which con-
sidered these points ruled the plan legal.

As industrial banks became established and multiplied, many
states gave them firmer legal standing by passing industrial loan
laws authorizing ceiling charges above usury ceilings and exempt-
ing industrial banks from the usury laws. Two points are of par-
ticular importance here. First, most of these laws set ceilings in
terms of discount plus as devised by Morris or, in a few cases, in
terms of its close counterpart, discount. Some of the laws that
adopted the discount method set a discount rate which was the sum
of the previously existing discount and service charge rates. Second,
many of the laws adopted a maximum discount rate which was the
same as that state’s usury ceiling rate.

Maximum revenue was important for, even with discount plus,
Morris’ plan gave maximum finance rates which were lower than
those allowed in remedial, credit union, and small-loan laws. The
result was a separation of the market into two parts with an un-
known overlap. Industrial banks made larger lower-cost loans, and
credit unions, remedial societies, and small-loan companies made
smaller higher-cost loans. Some remedial loan society leaders used
these facts as the basis for their claim that industrial banks were
no solution to the loan-shark problem.\(^9\)

Per cent per month on declining balance and discount plus be-
came firmly established as legal lending increasingly replaced illegal
lending in the years after 1910. Remedial loan societies, credit
unions, and small-loan companies generally used per cent per month
on declining balance and industrial banks generally used discount
plus. Commercial banks also tended to adopt discount plus or dis-
count when they entered consumer lending in the 1930’s. They did
so for a variety of reasons: (1) discounting was the traditional
method of computing commercial loan charges; (2) entering with-
out benefit of special legislation, they faced the same situation
which Morris had faced twenty years earlier; and (3) the 1934 origin-
al FHA Title I repair and modernization loan plan, which in-
fluenced many banks to enter consumer lending, promulgated a

\(^9\) W. N. Finley, “Report of the Chairman,” Bulletin of the National Federa-
tion of Remedial Loan Associations, August 1913, p. 8.
regulation setting a maximum rate of "... $5 discount per $100 original face value of a 1-year note to be paid in equal monthly instalments, calculated from the date of the note..." 10

States began adding legislative sanction in the 1930's by passing instalment or personal loan laws exempting commercial bank consumer instalment cash lending from the usury laws. Most instalment loan laws specify discount plus or discount; over half have ceiling discount rates which are the same as the relevant usury ceiling rates.

HISTORICAL DEVELOPMENT: RETAIL INSTALMENT FINANCING

Although a credit sale and a loan of money to purchase consumer goods are similar economically, they are quite dissimilar legally. Most courts in the United States have held that credit extended for the sale of a product is not a loan of money and therefore does not come under the jurisdiction of the usury laws.11

This doctrine is called the time-price doctrine and is based on the following reasoning. A seller can sell goods for cash or credit. He can, if he wishes, have two prices, a cash price and a credit price. The cash price applies to the sale of goods under one set of specified conditions and the credit price under another set of specified conditions. Both are straight sale transactions and neither come under the usury laws since neither involves an advance of money. The difference between the cash and credit prices is often called the time-price differential.

In developing the time-price doctrine, courts have also developed certain exceptions to it, which cover credit sales made under the following conditions: (1) when the seller fails to quote both a cash and a credit price; (2) when the seller and a financing agency agree


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before a sale that the agency will purchase the buyer's contract from the seller; and (3) when a close relationship exists between the seller and the financing agency.\textsuperscript{12} On the first point, the time-price doctrine applies if the seller has both a cash and a credit price, even though he computes the credit price by starting with the cash price and adding an amount to it. Courts universally hold that credit sales which do not come under the doctrine are subject to the usury laws.

The time-price doctrine is a legal concept. Its economic rationale is questionable because most instalment sellers do not have one credit price. They have a number of credit prices, often one for each possible contract maturity. From an economic point of view, these credit transactions can be regarded as the equivalent of the advance of funds for different periods of time rather than as the sale of goods under different conditions of sale. A number of legal observers have questioned the logic of the doctrine.\textsuperscript{13}

Retail instalment financing goes back a long way but became significant mainly after World War I when automobiles and household appliances became increasingly important to consumers. Although skeptical views of the social and economic worth of retail instalment financing were widely held well into the 1930's,\textsuperscript{14} no legal barriers to the natural development of such financing were erected. The time-price doctrine enabled instalment sellers to establish finance charges without regard to usury ceilings and to develop their own methods of computing such charges.

The finance charge practices of instalment sellers were undoubtedly influenced in many cases by the buying-rate policies of sales finance companies. Buying rates were discount rates applied to the face amount of the paper (including the finance charge of the instalment seller to the instalment buyer) which finance companies

\textsuperscript{12} Warren, Yale Law Review, April 1959, pp. 843-849.

\textsuperscript{13} See ibid., pp. 848-849, and Raoul Berger, "Usury in Instalment Sales," Law and Contemporary Problems, April 1935, pp. 148-172. The Mosaic code, Papal decrets, and court decisions in European countries have generally applied usury restraints both to the loan of money and the loan of goods. For a defense of the time-price doctrine, see Stanley B. Ecker, "Commentary on 'Usury in Instalment Sales,'" Law and Contemporary Problems, April 1935, pp. 173-188.

\textsuperscript{14} See, for example, Roger Babson, The Folly of Instalment Buying, New York, 1938, and Edwin R. A. Seligman, Economics of Instalment Selling, New York, 1927, Vol. 1, Chap. 12.
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purchased from instalment sellers.\textsuperscript{15} It is, therefore, worthwhile looking at both finance charge and buying-rate practices in the years following World War I. Studies indicate that sellers who made a separate identifiable charge for instalment credit generally used one or more variations of the add-on method in the years following World War I and, presumably, in the preceding years as well.\textsuperscript{16} For convenience, we call these variations flat charge, flat add-on, variable add-on, and annual add-on.

In all of these variations, and two more which are introduced later, the finance charge is added to the principal. The credit user receives the principal and pays back the sum of the principal and the finance charge in monthly or other periodic instalments. To illustrate, if the principal of a one-year instalment contract is $100 and the add-on finance charge is $8, the credit user receives $100 and pays back $108 in twelve monthly instalments of $9.

In the flat add-on charge, a flat dollar charge is made for the credit regardless of the length of the credit period. The following actual examples from the 1920's may be cited: a washing machine manufacturer charged $10 for financing the instalment sale of his washing machines and a sewing machine manufacturer set a cash price of $83.10 and an instalment price of $96 for his sewing machines.\textsuperscript{17}

Mail-order companies used variable add-on rates.\textsuperscript{18} Sales finance companies used flat, variable, and annual buying rates to determine the charges which they made in buying instalment receivables from sellers.\textsuperscript{19} A flat add-on rate is a percentage rate which is the same for contracts of all maturities. Variable rates are percentage rates which vary but not as a proportionate function of time, viz.:\textsuperscript{20}

\textsuperscript{15} Otto C. Lorenz and H. M. Mott-Smith, Financial Problems of Instalment Selling, New York, 1931, p. 94.
\textsuperscript{16} For examples in the 1920's, see Wilbur C. Plummer, Social and Economic Consequences of Buying on the Instalment Plan, Supplement to the Annals of the American Academy of Political and Social Science, January 1927, p. 30.
\textsuperscript{17} Ibid.
\textsuperscript{19} See Lorenz and Mott-Smith, Financial Problems, pp. 93-96; Plummer, Buying on Instalment Plan, p. 29; and Seligman, Instalment Selling, p. 288.
\textsuperscript{20} Ibid., p. 288.
An annual add-on rate is applied to each year's portion of a contract or fraction thereof and yields finance charges which are proportionate to time. If the annual add-on rate is 5 per cent, the finance charge on a $100 instalment credit contract is $5 for one year, $10 for two years, and $2.50 for half a year.

In formula form, the finance charge \((F)\) is computed as follows with annual add-on:

\[
F = APN \quad \text{or} \quad F = A'P'N
\]

where \(A\) is the annual add-on rate, \(P\) is the principal amount of credit at the start of the contract, \(N\) is the number of years in the credit contract, \(A'\) is the annual add-on equivalent in dollars per $100 of principal \((A \times $100)\), and \(P'\) is \(P\) divided by 100.

Finance companies furnished instalment sellers with buying rates in the form of schedules or charts and also included examples to guide sellers in computing finance charges to consumers.\(^{21}\) To illustrate, one finance company, which had variable buying rates from 4 per cent on four-month paper to 8 per cent on twelve-month paper, suggested that on a ten-month contract the instalment seller compute the finance charge by adding 10 per cent to the selling price.\(^{22}\) A 10 per cent add-on rate was higher than any of the finance company's buying (discount) rates and was more than sufficient to cover the finance company's charge. In the early 1930's, financing agencies systematized their guidance by furnishing sellers with finance charge charts or tables containing suggested finance charges in dollars. These charges were usually computed by using add-on rates.

The main reason that finance companies suggested that sellers use add-on in preference to discount rates in computing finance

\(^{21}\) Plummer, Buying on Instalment Plan, p. 27.

\(^{22}\) Ibid. For other examples, see Seligman, Instalment Selling, pp. 288–289, and Harold Emerson Wright, The Financing of Automobile Instalment Sales, Chicago, 1927, p. 30.
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charges to consumers probably lies in simplicity of computation. Simplicity was important because many small sellers were not well versed in financing procedures and practices and obtained help from financing agencies.

In retail instalment financing, the finance charge is easier to compute with add-on than with discount. To illustrate, if a consumer buys an automobile for $2,000 at an annual add-on rate of 7 per cent, the finance charge on a one-year contract is 7 per cent of $2,000, or $140. With an annual discount rate, the seller must advance more than $2,000 to give the buyer take-home credit of $2,000. Determination of this amount and the discount charge requires solving the following formula:

\[ H = P - PD \]

where \( H \) is the take-home credit, \( P \) is the principal owed, and \( D \) is the discount rate per year. In our example this works out as follows:

\[ \begin{align*}
2,000 &= P - .07P \\
2,000 &= .93P \\
P &= \frac{2,000}{.93} = 2,150.54
\end{align*} \]

The finance charge equals \( P - H \), in our case, $150.54.

Discounting instalment loans was adopted by industrial and many commercial banks primarily to enable them to get maximum financing revenue under a given usury ceiling. No such compulsion existed in retail instalment financing. If sellers required more financing revenue, all they needed to do was raise the add-on rate.

Data are not available on the extent to which the several variations of add-on were used in the 1920's and early 1930's. The question might be difficult to answer even with data because (1) twelve-month contracts were then frequent if not predominant in auto financing,\(^{23}\) (2) many flat buying rates were probably set in terms of twelve-month contracts, and (3) where this was true, flat and annual buying rates would lead to similar finance charges.

The annual add-on became increasingly important after the middle 1930's. Among the factors contributing to this trend were the 6 per cent plan of General Motors Acceptance Corporation

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\(^{23}\) Wilbur C. Plummer and Ralph A. Young, *Sales Finance Companies and Their Credit Practices*, New York, NBER, 1940, pp. 140-142. Typical maturities in other types of financing varied from six to eighteen months (*ibid.*, p. 147).
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and the lengthening of maturities. For sellers, a flat add-on rate becomes increasingly disadvantageous relative to an annual add-on rate as maturities lengthen beyond a year, just as it becomes increasingly advantageous as maturities shorten below a year. The annual add-on method was well established when states began passing retail instalment financing laws and has been incorporated in most of these laws.

Monthly add-on has been incorporated in a few state laws and is similar to annual add-on in that both give dollar finance charges which change proportionately with changes in maturities i.e., with time. With monthly add-on, the finance charge equals the principal times the add-on rate times the number of months in the contract.

PRESENT STATUS

As the previous section indicates, the three general methods of computing finance charges have several variations currently in use which may be catalogued as follows:

1. Add-On Method
   a. Annual add-on*
   b. Monthly add-on*
   c. Annual add-on plus
   d. Monthly add-on plus

2. Discount Method
   a. Discount*
   b. Discount plus*

3. Per Cent Per Month Method
   a. Per cent per month*
   b. Precomputation

The starred variations have already been explained. In the annual and monthly add-on plus variations, the finance charge equals an amount computed under the respective add-on variations plus an additional charge variously called an investigation charge, service charge, or fee. Precomputation is explained later in the chapter. For convenience in exposition, all of the eight variations above are hereafter referred to as computational methods.²⁴

We have already seen that the per cent per month method is a direct creation of statute and that the discount and add-on computational methods developed as responses of financing agencies and sellers to existing environments. As states began in the 1920's to

²⁴ The procedure for computing the finance charges for each of the eight variations is explained in the glossary.
Computing and Quoting Finance Charges

enact legislation governing bank instalment lending, they tended to adopt the discount and discount-plus computational methods developed by industrial and commercial banks. Alternatively, as states began enacting retail instalment financing laws from 1935 on, they tended to adopt one of the add-on computational methods developed by sales finance companies and sellers.

Once passed, laws setting ceilings on finance charges influence all financing agencies and sellers who operate under them to adopt the specified computational methods in order to be sure of not violating the ceilings. Financing agencies are under the strongest compulsion to adopt the specified method when laws specify add-on, add-on plus, per cent per month on declining balance, and pre-computation.

Financing agencies and sellers have some latitude in the laws which specify discount and discount plus. They can, if they wish, charge up to the maximum discount rate specified in the law but use the rate as an add-on rather than a discount. They may safely do this because, first, for any given annual rate or dollars per hundred, the discount and add-on methods give the same finance charge in dollars and, second, the size of the credit is larger with add-on than with discount. As a result, the effective monthly or annual rate is lower with add-on than discount no matter what formula is used to compute the effective rate. A creditor clearly charges less than the legal ceiling when he substitutes an add-on for a similar discount rate. No consumer instalment financing law prohibits below-ceiling charges.

State legislation is now widespread. Approximately two-thirds of the states set finance charge ceilings on automobile instalment sales and approximately one-third have finance charge ceilings on instalment sales of goods other than automobiles. The ceilings apply to all designated retail instalment credit transactions, whether the resulting instalment credit contracts (also called instalment receivables and instalment paper) are kept by instalment sellers or sold by them to instalment sales finance companies, banks, or other financing agencies.

In cash lending, forty-nine states have small-loan laws (governing consumer finance companies), the federal government and forty-four
states have credit union laws, four-fifths of the states have instalment or personal loan laws (governing commercial banks and, in some states, other lenders), and almost three-fifths have industrial loan laws (governing industrial banks). All cash lending laws specify the method to be used in computing finance charges.

Since laws have an influence on finance charge computational practices, one measure of the extent of the use of the various computational methods is the number of laws which require each. This and recent shifts in the use of computational methods are covered in the remainder of this section. In so doing, it is worth emphasizing a basic distinction between per cent per month and other computational methods. In the former, the finance charge is computed at the end of each month (or other payment period) on the credit outstanding during that period. In the several add-on and discount methods and precomputation, the finance charge is computed in advance for the whole contract period, i.e., at the time the credit is extended or renewed.

*Most Frequently Used Methods.* Annual add-on, discount, discount plus, and per cent per month are the computational methods most frequently designated in state laws.

Annual add-on is widespread in retail instalment financing. Over four-fifths of the existing laws with finance charge provisions set ceilings in terms of annual add-on rates or dollar equivalents. Annual add-on is less widespread but still important in instalment cash lending. It is specified in about one-sixth of the instalment loan laws, approximately one-fifth of the small-loan laws, and one industrial loan law. All of the small-loan laws which specify annual add-on have been passed since 1957 and mark what may be a new trend in the small-loan sphere.

Discount and discount plus are important in cash lending and are of negligible importance in retail instalment financing. Discount is specified in almost two-thirds of the instalment loan laws and in several industrial loan and credit union laws. Discount plus is specified in almost two-thirds of the industrial loan laws, about one-tenth of the instalment loan laws, and a few small-loan laws. Discount is specified in one retail instalment financing law and discount plus is none.

Per cent per month on declining balance is important in cash
Computing and Quoting Finance Charges

lending and unimportant in retail instalment financing. It is specified in over four-fifths of the small-loan laws, the Federal Credit Union Law, most of the state credit union laws, a few instalment loan laws, a few industrial loan laws, and a few retail instalment financing laws.

Less Frequently Used Methods. These include monthly add-on, monthly add-on plus, annual add-on plus, and precomputation. Monthly add-on is specified in a few retail instalment financing and industrial loan laws and virtually all existing revolving credit laws (explained below). Monthly add-on plus is specified in one industrial loan law and one small-loan law. Annual add-on plus occurs in one retail instalment financing law, a few industrial and small-loan laws, and one instalment loan law. Approximately one-fourth of the small-loan laws which specify per cent per month and all instalment loan laws, industrial loan laws, and retail instalment financing laws which specify per cent per month also authorize precomputation as an alternative method. While monthly add-on and precomputation are relatively unimportant at present, they have been growing in importance in recent years and are discussed further in the next section.

RECENT LEGISLATIVE TRENDS

Monthly Add-On. Increasing numbers of sellers have been extending what is known as revolving credit and over one-fourth of the states have passed revolving credit laws in recent years. An adaptation of the monthly add-on method is used by most sellers in computing finance charges for revolving credit and is specified in virtually all of the revolving credit laws passed to date.

Revolving credit is over-due charge-account credit on which the seller makes a finance charge. Under the usual revolving credit arrangement, the buyer agrees to pay for the use of the credit if he fails to pay for the purchase within the charge-account period normally allowed by the seller. To illustrate, if a customer has a revolving credit account of $400 on the seller's monthly billing date and the seller's monthly add-on rate is \(1\frac{1}{2}\) per cent, the finance charge for the next month is $6.00 and the customer agrees to pay a portion of the $406 in the next month. A new charge is made each billing date for the succeeding month. This is an adaptation of the monthly
Consumer Credit Finance Charges

add-on in that the finance charge is computed at the end of each month for that month rather than at the time the credit is extended for the contract period as a whole.

A number of banks have formulated competitive "charge-account" plans for sellers who do not wish to hold their own revolving credit receivables and check-credit plans for borrowers who wish to borrow money by cashing checks up to prearranged amounts. These banks generally use the above adaptation of the monthly add-on to compute finance charges on both types of credit.

Precomputation. Legal authorization of precomputation as an alternative to per cent per month has been most pronounced in small loans mainly since 1951. With precomputation, the finance charge is computed for the instalment contract as a whole and is added to the principal at the time the credit is advanced. The credit user pays back the sum of the principal and the finance charge in monthly (or other periodic) instalments. The finance charge is computed by one of the two per cent per month procedures described above, both of which give the same result.

Annual Add-On. Approximately one-fifth of the small-loan laws permit annual add-on as an alternative to per cent per month or specify annual add-on alone. This trend toward annual add-on dates from 1957 and is even more recent than the trend toward precomputation.

Factors Underlying the Trend Toward Precomputation and Annual Add-On for Small Loans. Consumer finance companies have provided the main impetus behind these trends. As explained below, companies generally (not universally) favor precomputation and annual add-on over per cent per month as means of improving gross revenue, operating efficiency, and borrower relations.25

 Originally small-loan laws generally specified a flat per cent per month ceiling rate, e.g., 3 per cent. After 1935 a shift took place to graduated (aggregate, combination, or multiple) ceiling rates and all but three small-loan laws now specify two, three, or four ceiling rates.26 Massachusetts, for example, has a graduated ceiling struc-

26 For the reasons for this shift, see Wallace Mors. "Rate Regulation in the Field of Consumer Credit," The Journal of Business, January 1943, pp. 60-63, and Robinson and Nugent, Regulation of Small Loan Business, pp. 267-269.
Computing and Quoting Finance Charges

The rule with four rates, viz.: 2½ per cent a month on the part of a loan under $200; 2 per cent a month on the part between $200 and $600; 1½ per cent a month on the part between $600 and $1,000; and ¾ per cent a month on the part between $1,000 and $3,000.

Under any given graduated structure, per cent per month, precomputation, and annual add-on can be designed to provide the same gross revenue on loans which are paid on schedule to maturity. Precomputation and annual add-on produce higher gross revenue than per cent per month on prepaid loans, i.e., loans paid in full or refinanced before maturity. The reason for this lies in different procedures for allocating the finance charge to each month of the contract under precomputation and add-on, on the other hand, and per cent per month, on the other.

Virtually all of the relevant small-loan laws require consumer finance companies to use the “rule of 78” (direct-ratio or sum-of-the-digits) allocation procedure when prepayment refunds have to be computed. A prepayment refund schedule is also an earned revenue schedule since what is earned up to a given point in the contract is not refunded and vice versa.

Under the “rule of 78” the finance charge is allocated as follows: First, the numbers of the months in an instalment loan contract are added. In a twelve-month contract, the numbers or digits are 1 through 12 and add to 78 (hence the name “rule of 78”) and in a six-month contract the digits are 1 through 6 and add to 21. Second, the finance charge is allocated among successive months by multiplying it by fractions in which the numerators are the numbers of the months in a contract in reverse chronological order and the denominator is the sum of the digits as determined above. On a six-month contract with a finance charge of $42, the revenue allocated to the first month is 6/21 of $42, or $12, and that allocated to the sixth month is 1/21 of $42, or $2. If the loan is pre-

27 The portion of the finance charge which a company actually earns on a prepaid loan is determined by the “rule of 78” procedure, for the refund is determined by that procedure and, as stated above, the refund plus the amount earned equals the finance charge. To prevent any possible misunderstanding, consumer finance companies are free to use any allocation procedure they wish for internal operating purposes. For a description of four such procedures, see John C. Wetzel, “Earned Income Under Precomputation,” Personal Finance Law Quarterly Report, winter 1957, pp. 7-10.
Consumer Credit Finance Charges

paid at the end of the first month, the prepayment refund is $30.\textsuperscript{28}

The "rule of 78" procedure always results in a falling monthly earned revenue schedule because the finance charge is computed for the contract as a whole at the start and the fractions used to allocate the finance charge fall each month. While the revenue earned each month under per cent per month also falls, it falls more slowly because, under graduated rates, as the loan balance is reduced each month, the parts paid off move successively from the least expensive, to the most expensive, and because the finance charge is computed at the end of each month on the actual loan balance.

Table 2 illustrates this point. If the loan in the table is prepaid at the end of the first month, the per cent per month lender would have earned $6.80 and the precomputation lender $7.60. This is a gross revenue advantage of $0.80 or 11.8 per cent for precomputation. If the loan is prepaid at the end of the second month, the precomputation lender has a gross revenue advantage of $0.66 or 5.5 per cent.

TABLE 2
Allocation of Finance Charge Earned (Gross Revenue) on a Hypothetical Loan Under Per Cent Per Month and Precomputation\textsuperscript{a}

<table>
<thead>
<tr>
<th>Month</th>
<th>Finance Charge Earned or Gross Revenue (dollars)</th>
<th>Cumulative Gross Revenue (dollars)</th>
<th>Added Cumulative Gross Revenue from Precomputation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Cent</td>
<td>Precomputation\textsuperscript{b}</td>
<td>Per Cent</td>
</tr>
<tr>
<td>1</td>
<td>6.80</td>
<td>7.60</td>
<td>6.80</td>
</tr>
<tr>
<td>2</td>
<td>5.20</td>
<td>5.06</td>
<td>12.00</td>
</tr>
<tr>
<td>3</td>
<td>3.20</td>
<td>2.54</td>
<td>15.20</td>
</tr>
<tr>
<td>Total</td>
<td>15.20</td>
<td>15.20</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} The hypothetical loan is a three-month loan of $480 at the following graduated rates: 2 per cent on that part of the loan under $200 and 1 per cent on that part of the loan from $200 to $500.

\textsuperscript{b} The figures in this column are the result of allocating the finance charge for the contract as a whole to each month according to the "rule of 78" procedure. The sum of the digits is 6 and the successive fractions are $\frac{2}{6}$, $\frac{2}{6}$, and $\frac{2}{6}$.

Computing and Quoting Finance Charges

The extent of the percentage revenue advantage of precomputation and annual add-on over per cent per month on prepaid loans depends on loan size, maturity, the point in the loan contract at which prepayment occurs, and the percentage difference between the rates in a graduated rate structure. These points can be seen in Table 3. First, under any graduated rate structure, the percentage advantage of precomputation over per cent per month increases for any given loan size as maturity lengthens (compare columns 1, 2, 3, and 4), increases for any given maturity as loan size increases

### TABLE 3

Added Gross Revenue from Precomputation as a Percentage of Gross Revenue from Per Cent Per Month for Selected Loan Sizes, Maturities, and Graduated Rates

<table>
<thead>
<tr>
<th>Payment</th>
<th>Size of Loan (dollars)</th>
<th>500</th>
<th>500</th>
<th>500</th>
<th>360</th>
<th>500</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12.3</td>
<td>15.8</td>
<td>22.6</td>
<td>33.9</td>
<td>23.1</td>
<td>19.1</td>
<td>24.1</td>
</tr>
<tr>
<td>2</td>
<td>3.6</td>
<td>8.6</td>
<td>13.7</td>
<td>31.9</td>
<td>21.1</td>
<td>11.4</td>
<td>22.8</td>
</tr>
<tr>
<td>3</td>
<td>—</td>
<td>4.8</td>
<td>10.0</td>
<td>29.9</td>
<td>19.2</td>
<td>6.8</td>
<td>21.5</td>
</tr>
<tr>
<td>4</td>
<td>2.3</td>
<td>7.3</td>
<td>27.9</td>
<td>17.0</td>
<td>3.5</td>
<td>20.7</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.7</td>
<td>5.5</td>
<td>25.8</td>
<td>15.0</td>
<td>1.1</td>
<td>10.8</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>—</td>
<td>4.1</td>
<td>23.7</td>
<td>0.0</td>
<td>7.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2.9</td>
<td>21.6</td>
<td>11.5</td>
<td></td>
<td>14.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1.8</td>
<td>19.5</td>
<td>10.3</td>
<td></td>
<td>13.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1.0</td>
<td>17.4</td>
<td>9.1</td>
<td></td>
<td>11.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0.5</td>
<td>15.2</td>
<td>8.2</td>
<td></td>
<td>10.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0.2</td>
<td>13.0</td>
<td>7.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>—</td>
<td>10.1</td>
<td>6.4</td>
<td></td>
<td>8.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>9.3</td>
<td>5.6</td>
<td></td>
<td></td>
<td>7.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>7.8</td>
<td>4.9</td>
<td></td>
<td></td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>5.5</td>
<td>4.1</td>
<td></td>
<td></td>
<td>5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>5.3</td>
<td>3.5</td>
<td></td>
<td></td>
<td>4.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>4.2</td>
<td>2.8</td>
<td></td>
<td></td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>3.3</td>
<td>2.2</td>
<td></td>
<td></td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>2.5</td>
<td>1.6</td>
<td></td>
<td></td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1.7</td>
<td>1.0</td>
<td></td>
<td></td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>1.0</td>
<td>0.6</td>
<td></td>
<td></td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>0.6</td>
<td>0.2</td>
<td></td>
<td></td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Graduated rates used are as follows:

<table>
<thead>
<tr>
<th>Loan Portion ($)</th>
<th>Monthly Rates (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Col. 1-5</td>
</tr>
<tr>
<td>0-200</td>
<td>2.5</td>
</tr>
<tr>
<td>200-400</td>
<td>2.0</td>
</tr>
<tr>
<td>400-500</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Annual add-on gives the same relative results as precomputation for equivalent graduated rates.
(compare columns 4 and 5), and, for any given loan size and maturity, is greatest in the first month and falls steadily each month throughout the contract period.

Second, between two graduated rate structures, the percentage advantage of precomputation over per cent per month becomes greater for any loan size and maturity, the greater is the percentage difference between the graduated rates in each structure (compare columns 2 and 6 and 4 and 7). The percentage difference between the first two rates in the column 6 rate structure is $33\frac{1}{3}$ (using the highest rate as base) and in the column 2 structure is 20. For any given month, precomputation gives a higher percentage advantage in column 6 than in column 2. Similarly the percentage differences between the last two rates in the column 4 and column 7 structures are, respectively, 75 and 50. For any given month, precomputation gives a higher percentage advantage in column 4 than in column 7.

The absolute level of the rates in a rate structure does not affect the percentage advantage of precomputation over per cent per month. To illustrate, precomputation gives the same percentage advantage over per cent per month on prepaid contracts under both of the following graduated rate structures even though each rate in structure one is one-half the corresponding rate in structure two:

<table>
<thead>
<tr>
<th>Loan Portion (dollars)</th>
<th>Structure One Monthly Rates (per cent)</th>
<th>Structure Two Monthly Rates (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0—200</td>
<td>2\frac{1}{4}</td>
<td>5</td>
</tr>
<tr>
<td>200—400</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>400—500</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

A study covering 1950 and 1951 indicates that instalment loans to existing borrowers accounted for 65 per cent of the loans of the consumer finance companies covered. A New York Banking Department study for 1945–57 states that about 80 per cent of all consumer finance company loans in New York are refinanced. Annual reports of the operations of consumer finance companies in Connecticut in 1959 and 1960 show that existing borrowers comprised over 75 per cent of total borrowers. These figures all support the

29 W. David Robbins, *Consumer Instalment Loans*, Columbus, 1955, p. 82.
Computing and Quoting Finance Charges

conclusion that a high proportion of consumer finance company loans are paid in full or refinanced before maturity.\textsuperscript{31}

Collection clerks must separate each instalment payment into interest and return of principal and enter each part in the company's records for per cent per month on declining balance. No such separation is necessary for precomputation and annual add-on, which reportedly increases operating efficiency by speeding collections and reducing the possibility of error.\textsuperscript{32} Companies claim that borrowers prefer the equal monthly payments they get with precomputation and annual add-on to the uneven ones they may get with per cent per month on declining balance.\textsuperscript{33} Borrower preferences have not yet been tested by direct study.

\textit{Methods of Quoting Finance Charges}

As Table 4 indicates, there is considerable variation in the different sectors of consumer financing in the finance charge disclosure requirements of state laws and in the voluntary disclosure practices of financing agencies and sellers. Methods of finance charge quotation include dollars, computational rates, computational equivalents, finance rates, monthly finance rates, and multiple effective rates. All but the last term have been previously defined. Multiple effective rates may be defined as two or more effective rates on a given credit contract, each rate applying to a given portion or bracket of the contract, not to the contract as a whole.

\textbf{INSTALMENT CASH LENDING}

In cash lending, credit union laws do not require any finance charge disclosure as a rule. Credit unions generally quote monthly finance rates in writing to borrowers and often quote annual rates orally as well.

Most of the small-loan laws derived from the uniform small-loan law of the Russell Sage Foundation require that the instalment

\textsuperscript{31}For further discussion of prepayment, refinancing, extension, and delinquency, see Appendix D.


\textsuperscript{33}Redfield, \textit{Personal Finance}, spring 1960, p. 57.
TABLE 4
Disclosure Requirements of Consumer Financing Laws and Disclosure Practices
of Consumer Financing Agencies and Sellers

<table>
<thead>
<tr>
<th>Consumer Financing and Usury Laws</th>
<th>Credit Sources</th>
<th>Dollar Charge</th>
<th>Computation Add-On or Discount Rate(s)</th>
<th>Computation Add-On or Discount Equivalent(s)</th>
<th>Finance Rates Monthly</th>
<th>Annual Rates Monthly</th>
<th>Multiple Effective Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instalment cash lending</td>
<td>Credit unions</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Credit union laws</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial loan laws</td>
<td>Industrial banks</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Installment loan laws</td>
<td>Commercial banks</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
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<tr>
<td>Small-loan laws</td>
<td>Consumer finance companies</td>
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<td>Flat per cent per month</td>
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<td>Graduated per cent per month</td>
<td>Consumer finance companies</td>
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<td>L</td>
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<tr>
<td>Annual add-on rate or equivalent</td>
<td>Consumer finance companies</td>
<td>L</td>
<td>L</td>
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<td>Retail instal. financing laws</td>
<td>Instalment sellers</td>
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<td>L</td>
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<td>Sales finance cos.</td>
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<td>Commercial banks</td>
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<td>Other</td>
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<td>Revolving credit laws</td>
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<td>L</td>
<td>L</td>
<td>L</td>
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<tr>
<td>Usury laws</td>
<td>All lenders</td>
<td></td>
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</tr>
</tbody>
</table>

a L = Legal requirements.
V = Voluntary practice.

b On "check-credit" and "charge account" plans, banks often quote charges on a per cent per month basis.
Computing and Quoting Finance Charges

cash loan contract contain a reproduction of the rate section of the law or the rate or rates being charged for the loan in question. A number of other laws require a similar disclosure. The rate section of a small-loan law specifies computational rates. Publication of rates under the section results in the three following types of finance charge quotation: a monthly finance rate in the few laws which specify a flat per cent per month rate; multiple effective monthly (or yearly) rates in the small-loan laws which have two or more graduated per cent per month (or per year) rates; and computational annual add-on rates or equivalents in the small-loan laws which have two or more graduated add-on rates or equivalents. Four small-loan laws require disclosure of the finance charge in dollars or as a finance rate.

A few instalment loan laws and a few industrial loan laws require that the instalment cash loan contract contain a reproduction of the rate section of the law. At least one instalment loan law and one industrial loan law require that the contract state the computational rate or rates used to compute the finance charge. Most of the laws do not impose any disclosure requirements on industrial and commercial banks. Both types of banks generally follow the practice of quoting charges as a discount (or, in some cases, an add-on) equivalent, i.e., in “dollars per hundred of the amount borrowed.”

Dollar disclosure, i.e., expressing the finance charge for an instalment contract as a whole in dollars, is recommended by the American Bankers Association and practiced by many banks. For special bank plans, such as “check credit” and “charge account banking,” banks often quote charges as a monthly rate and show the finance charge as a dollar amount on the monthly bill.

RETAIL INSTALMENT FINANCING

Dollar disclosure has been a major feature of retail instalment financing laws since the first law was enacted in 1935 and was recommended as a trade practice rule in auto financing by the Federal Trade Commission in 1951. These laws generally require separate quotation of the finance charge in dollars in a written instalment contract. Other items which must be shown separately in the con-
tract include price, down payment, insurance premiums, other charges, balance owed, number of payments, and amount of each payment. A few laws permit a seller to combine the finance and insurance charges in the contract provided he shows them separately in a (later) written statement to the buyer.

We have already seen that all but one of the retail instalment financing laws with ceilings set ceilings in terms of add-on rates (or equivalents) applied to the amount borrowed. Dealers and financing agencies often disclose add-on equivalents in response to consumer questions about credit costs. Instalment financing laws do not require disclosure of finance rates.

Some revolving credit laws require that the revolving credit agreement contain a reproduction of the rate section of the law. This results in the quotation of a monthly finance rate in the laws which specify a flat per cent per month rate and of multiple effective monthly rates in those laws which have graduated per cent per month rates. Usury laws do not have any disclosure requirements.

**LEGISLATIVE PROPOSALS FOR UNIFORMITY IN METHOD OF FINANCE CHARGE QUOTATION**

There have been numerous discussions going back as far as the turn of the century on the subject of providing consumers with uniform finance charge information. Some discussions have been limited to certain sectors of consumer credit while others have included virtually the whole field. Most of them have been in terms of either effective annual or effective monthly rates. We cite only enough of them here to document the point that uniformity in method of finance charge quotation has been and is a subject of continuing interest. Except where otherwise noted, proposals for a uniform method of quotation do not imply or require a uniform method of finance charge computation.

Between 1906 and 1942 the Russell Sage Foundation advocated a

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34 As discussed in Chapter 3, court rulings prohibit sellers and nonbank financing agencies from quoting add-on or discount rates. The American Bankers Association has adopted a policy which asks banks to refrain from quoting add-on and discount rates. Most, if not all banks, voluntarily follow this policy.

35 Illinois is an exception here.

36 For additional citations covering 1935-43, see *Opinions of Charges to Consumers for Small Instalment Loans*, Chicago, 1943.
Computing and Quoting Finance Charges

per cent per month method of finance charge computation and quotation for small loans and credit unions. It advocated extension of this method of finance charge computation and quotation to retail instalment financing in 1940 and to personal instalment lending by banks in 1942.37

A 1930 study of consumer credit advocates legislation which would require all instalment financing agencies "... to calculate their rates on the basis of a single standard of measurement, which would show the percentage per year rate charged the borrower for the funds of which he has the actual use, and to include a statement of this rate in all their loan contracts." 38

The Consumers' Advisory Board set up under the National Recovery Act of 1933 recommended that provisions be inserted in Retail Trade Codes requiring that monthly instalment credit charges be expressed as a percentage on the current unpaid monthly balance.39 Legislative committees in a number of states made similar recommendations in the 1930's.40

A number of pamphlets issued in the 1930's and 1940's by the Pollak Foundation discuss various aspects of consumer instalment financing and, among other things, suggest the adoption of a uniform method of finance charge quotation for all types of such financing.41 A 1943 article by Rolf Nugent advocates that banks express their finance charges as an actual simple interest rate.42 Cox' 1948 study on instalment buying cites a number of writers

37 See "Russell Sage Foundation Uniform Law to Regulate Instalment Selling" (mimeographed), 1940, and "Russell Sage Foundation Model Law to Authorize and Regulate Personal Loans Made by Banks" (mimeographed), 1942.
39 For a full statement of the Board's position in its own words, see William Trufant Foster and LeBaron R. Foster, "Rate Aspects of Instalment Legislation," Law and Contemporary Problems, April 1935, pp. 193-194. The Fosters agree with the Board's position.
40 See, for example, "Indiana Consumer Finance Agencies" (mimeographed), Indiana Department of Financial Institutions, 1936, p. 4; Report of State Banking Commission and Interim Advisory Legislation Committee to Investigate Finance Companies, Wisconsin, 1936, p. 42; "Report of Committee on Consumer Credit" (mimeographed), Massachusetts, 1936, chap. 3; and Retail Instalment Selling, Maryland Legislative Council, Research Report No. 6, 1940, p. 34.
41 See, for example, William Trufant Foster and LeBaron R. Foster, Rate Aspects of Instalment Legislation, Newton, Mass., 1935.
who object to the existence of diverse ways of quoting finance charges and expresses his own arguments against effective rate quotation as a possible solution.\textsuperscript{43}

Moving to more recent years, a Minnesota committee in 1958 recommended enactment of a law requiring "... that in all forms of agreements for consumer credit the amount charged either as interest or as finance charge must be stated in terms of simple interest on an annual basis." \textsuperscript{44} The Consumer Credit Labeling Bill introduced into Congress in 1960 and the Truth in Lending Bill introduced into Congress in 1961 and subsequent years both contain a provision requiring quotation of the charge for consumer credit as an effective annual rate. Similar bills have been introduced in a number of states including California, Massachusetts, New Mexico, New Jersey, and Oregon. None of these bills has been enacted. A 1962 study considers the problems involved in the full disclosure of consumer credit cost.\textsuperscript{45}

On June 22, 1964, the National Conference of Commissioners on Uniform State Laws announced that it had started a "Project on Retail Installment Sales, Consumer Credit, Small Loans and Usury." This project contemplates studies to draft comprehensive, uniform or model state legislation "on substantially all aspects of consumer credit trade practices, including disclosure of cost of credit, rate controls or ceilings, the time price doctrine and usury, contract provisions, licensing and other means of securing compliance, default procedures including garnishments and their relationship to consumer bankruptcies, and the related fields of credit life and credit disability insurance." \textsuperscript{46}

\textsuperscript{43} Reavis Cox, \textit{The Economics of Instalment Buying}, New York, 1948, pp. 193-208.
\textsuperscript{44} "Report by the Governor's Study Committee on Consumer Credit" (mimeographed), Minnesota, 1958, p. 24.
\textsuperscript{46} Release dated August 22, 1964.