CREDIT REGULATIONS AND CONSUMER BUYING

A CRITICAL EVALUATION OF AVAILABLE CONSUMER CREDIT STATISTICS*

DUNCAN McC. HOLTHAUSEN
A. Holthausen, Union City, N.J.

AT THE PRESENT TIME there are three principal types of consumer credit statistics available on a regular or periodic basis.

First, there are the volume statistics. These include the regular monthly estimates of consumer credit outstanding published by the Federal Reserve Board, the individual trade reports on instalment sales (or loans) and collections, likewise published by the Federal Reserve Board, and many monthly and annual reports on credit granted and unpaid balances made available by trade associations and state and federal governments. One should also include the credit data contained in the decennial Census of Business and in the Registration Statements secured by the Federal Reserve Board in connection with Regulation W.

Secondly, there are the family data obtained in the annual Consumer Finance Surveys of the Federal Reserve Board on incomes, savings, family composition, and other characteristics of credit users.

As a third type of consumer credit statistics, there are the operating data on collections, losses, delinquent accounts, and costs assembled by trade associations. There are also terms data such as size of down payment and length of repayment period made available by trade associations and the Federal Reserve Board.

I plan to discuss the volume statistics, particularly the consumer credit series. There is much that can be said about the family data and operating data, but in the time alloted I feel it would be preferable to develop more fully a discussion of the present Federal Reserve Board series on consumer credit outstanding.

The consumer credit series was first published and made available on a current monthly basis in November, 1942, by the United States

* This article by Duncan McC. Holthausen and the following article by Clarke L. Fauver and Ralph A. Young, with discussion by Reavis Cox, Avram Kisselgoff, Wallace Mors, and Thomas W. Rogers, were presented at a Joint Session of the American Finance Association and the American Statistical Association in Boston on December 29, 1951. The general subject discussed at the session was "Credit Regulations and Consumer Buying." The program was under the chairmanship of Ernst A. Dauer, Household Finance Corporation.

Department of Commerce. In constructing this series, the Commerce Department used benchmark data and prior year estimates developed by the Russell Sage Foundation and National Bureau of Economic Research in their research activities on consumer financing. Actually, the series was called "short-term consumer" debt, which may still be a preferable term.

In the series, consumer credit is defined as "the total amount of outstanding unpaid balances arising from credit extended to individuals in their capacity as consumers, where the original credit extension does not exceed five years."

As defined, the consumer credit series is meant to cover short-term credit extended to individuals in their nonbusiness capacity for the purchase of commodities such as food, clothing, home furnishings, household appliances, radios and television sets, and automobiles; credit extended for medical, legal and educational purposes, laundry, cleaning, and repair services, public utility services, funeral expenses, and other miscellaneous personal services; and credit extended for the repayment of debts arising from the purchase of these commodities and services.

"Credit" is considered any advance of goods or services in exchange for a promise to pay at a later date. Thus whether the advance is of two weeks duration, thirty days duration or thirty months duration, it represents credit. As an illustration, were a statement of account rendered for consumers on a given date, their notes and accounts payable (i.e., debt) should include items that would normally be included on a balance sheet statement.

The series includes five types of credit: (1) Instalment sale; (2) Instalment loan; (3) Charge account; (4) Single-payment loan; (5) Service.

At the time of publication of the consumer credit (debt) series in November, 1942, by the Department of Commerce there were a number of weaknesses noted. The single-payment loan series excluded all policy loans of life insurance companies. Instalment loan credit excluded non-FHA repair and modernization loans. All short-term loans of building and loan associations were excluded. The service series excluded credit arising from legal services rendered.

Today, the consumer credit series has many of the same weaknesses. There are other questionable areas—some arise from the use of estimating techniques that need change. Other weaknesses appear as our store of knowledge about credit to individuals grows and we realize that certain items are not entirely consumer.

One problem common to each major group of the series arises when credit is extended to professional people, farmers, or persons in business for themselves. For example, an automobile bought on time and used for work as well as for pleasure is not entirely a consumer item. The series excludes the sales of dealers who primarily sell items of business, professional, or farm use, but no adjustments are made for part-consumer and part-business use of an item.

The statistical practicality of an adjustment for split use of an item is questionable. At the present time, information for such a revision is not available. Actually, a series so adjusted might be of little use to the Federal Reserve Board and to industry members. For example, from a Regulation W standpoint, the Federal Reserve Board is interested in the type of article being financed. The split use of an article is not important from an administrative standpoint. Members of the credit industry likewise are more interested in the type of article financed rather than its use.

Perhaps the best method of evaluating the consumer credit series is to discuss each of the five major groupings separately, treating coverage of the grouping, methods of estimate, and reliability of estimates.

The Instalment Sale Credit Series

The instalment sale credit series covers consumer indebtedness arising from instalment sales of automobile dealers, department stores and mail-order houses, furniture stores, household appliance stores, jewelry stores, and a miscellaneous group of retail stores selling goods to the consumer on an instalment basis. Excluded are types of stores whose sales are predominantly to farmers, contractors, or others for business purposes, namely, farm implement dealers; hay, grain, and feed stores; farm and garden supply stores; school supply and equipment dealers; and scientific medical instrument and supply dealers.

The instalment sale credit series show for major retail components the amount of instalment receivables arising from the sales of each retail component regardless of whether the receivables are held by the retailer originating the paper or by a financial agency to which the paper has been sold. In other words, instalment sale credit is classified according to the type of retailer originating the credit, rather than according to the type of retailer or financial agency holding the credit.

The major retail components for which separate figures are estimated include: automobile dealers, department and mail-order stores, furniture stores, household appliance stores, and "all other" retail stores.

The method of estimating automobile dealer sale credit outstanding from month to month is to use the trend of passenger car instalment paper held as reported by sales finance companies and commercial banks. The reporting sample of sales finance companies and commercial banks is adequate as a measure of the month-to-month changes in automobile paper holdings. The automobile dealer series does not include credit for repair purposes.

The current month-to-month sample data used to project the department store series include about 90 per cent of total mail-order store business and 50 per cent of other department store volume. The estimates for this group can be termed firm.

The monthly sample data used to estimate instalment receivables arising from sales of furniture stores and household appliance stores are not entirely representative from a size of business or geographic standpoint. The furniture store monthly sample covers about 10 per cent of volume in that trade. In the household appliance group the coverage has been less than 10 per cent. Estimates for all other retail stores are projected using the trend of instalment sale credit other than automobile.

The margins of error in the furniture, household appliance, and all other retail series, each of which has been projected from a 1940 base, could be substantial, especially in view of the tremendous changes that took place in the retail trade during and after World War II. With all major retail instalment series, however, it has been possible to adjust the level of estimates annually by using more representative sample data collected once a year by the Federal Reserve System in the Retail Credit Survey.

It would appear that the instalment sale credit estimates for department, furniture, household appliance and all other retail stores are correct as to level. They approximate the volume of receivables shown by the 1948 Census of Business from which credit data have only recently become available.

The obvious limitation in the instalment sale credit series has been the lack of frequent benchmarks and the inadequate samples for some retail trades. The furniture and household appliance estimates could be subject to very wide margins of error if it is again necessary to project these figures for a ten year period with only reasonably adequate sample data and without more frequent benchmark statistics. The benchmark situation will be vastly improved, however, if present plans for a Census of the Retail Trade every five years are carried out.

The present method of estimating certain portions of sale credit does not make full use of sample data now reported by financial agencies for consumers' goods other than automobiles. Sales finance companies, commercial banks, and industrial banks purchase substantial amounts of instalment paper arising from the instalment sales of these consumers' goods and report both the volume of such paper purchased and outstanding balances monthly. While these "other consumers' goods" as reported by the financial agencies may not be strictly comparable in coverage with the area covered by the present other sale credit estimates, their holdings of other sale credit paper amount to almost one-half of the total of such paper. A very substantial part of this paper held by the financial agencies represents household appliance and furniture store paper, two of the areas in which sample retail coverage is not entirely adequate. Were it possible to use this financial agency information in addition to the retailer data in compiling current sale credit estimates, the over-all quality of the estimates might be improved.

Instalment Loan Credit

The instalment loan credit series show for major cash lending components the amount of unpaid balances arising from instalment loans to individuals in their capacity as consumers. These loan credit estimates are largely classified according to the financial agency holding the loans.

The major cash loan components include five financial agencies and two miscellaneous groupings. They are as follows: commercial banks, small loan companies, industrial banks, industrial loan companies, credit unions, and miscellaneous lenders, and FHA Title I repair and modernization loans.

Varying degrees of detail on instalment loans are available through monthly reports from the various cash lending agencies. Table I

TABLE I

Type of Agency	Direct Loans for Automobiles	Direct Loans for Other Consumers' Goods	Personal Cash Loans	Repair and Modernization Loans
Commercial banks	X	X	X	X
Credit unions			X	
Industrial banks	X	X	X	X
Industrial loan companies	X	X	X	X
Small loan companies			X	
Miscellaneous			X	

shows an outline of items estimated separately and included in the instalment loan total for each agency.

Unquestionably credit unions, small loan companies, and miscellaneous lenders make loans to individuals for the purchase of, and secured by, either automobiles or other consumers' goods, but it has not been feasible for these agencies to separate such loan totals in their current reporting and therefore only a combined instalment loan total is reported.

The cash loan series has its limitations, primarily due to undercoverage of financial agencies and the inclusion of non-consumer loans. Registration statements under Regulation W indicate that a considerable volume of instalment lending is done by savings and loan associations, mutual savings banks, and investment and holding companies. Also many miscellaneous businesses extend credit repayable on an instalment basis to their own employees although the volume of such loans is small. Some lending done by savings and loan associations against share accounts may result in the withdrawal of these savings for repayment of the debt, and, depending upon the definition of consumer credit adopted for the series, would or would not be considered credit extended. Estimates of the amount of instalment loan credit excluded from the series because of the foregoing omissions total about $400 million according to statements filed by registrants under Regulation W in 1950.

The present series also excludes the non-insured repair and modernization loans of all financial agencies. At the present time these loans are reported by a majority of the financial agencies in their current reports. The amount excluded from loan totals approximates $100 million.

In contrast to the incomplete instalment loan estimates caused by undercoverage of financial agencies, the improper reporting of consumer loans, particularly by commercial banks, probably makes for overestimates of instalment loans. The inclusion of non-consumer loans in the commercial bank data is likely due to the fact that some banks adopted the practice of reporting as consumer loans all loans made through their personal loan departments. Actually, some of these loans are small business loans repayable on an instalment basis. While the semiannual Call Reports, which provide benchmarks for bank data, request that banks show separately business and consumer loans, some banks were probably not able to segregate these loans or misunderstood Call Report instructions for this particular category. It is possible that Call Report instructions may not have been explicit enough for proper classification of these loans. Also, lending agencies sometimes may not have specific information on the purposes for which loans are made.

It is difficult to estimate how large a volume of non-consumer instalment loans is included or excluded in the present series. Some people have estimated that at a minimum non-consumer loans account for 15 per cent of the commercial bank instalment loan total. Were this the case, the commercial bank figure would at the present time roughly offset the undercoverage in the loan series because of the exclusion of the figures for certain financial agencies. Over a period of years, however, the cyclical behavior of these various elements might be considerably different.

It is suggested that *total* repair and modernization loans should be included with the estimates for each type of financing agency. Both FHA and other repair and modernization loans should be included. The present series shows only FHA loans. The benchmark for total repair and modernization loans would be obtained from the 1950 Registration Statement.

Savings and loan associations have substantial amounts of repair and modernization loans and these should be included in the instalment loan series. Savings and loan associations lend considerable amounts to shareholders against their share accounts as personal loans. To the extent that they are normally repaid, they should be included with loan totals. The inclusion of savings and loan association data may well require, if their volume is sizable, month-to-month reporting by a representative sample of associations. These reports should cover repair and modernization loans and personal loans.

Other miscellaneous cash lending agencies, heretofore not included in the series, should be added. Among these agencies are mutual savings banks, investment and holding companies, certain mortgage companies, businesses that lend funds to their employees, and possibly others. The benchmark data for these companies would be found in the 1950 Registration Statement. Current figures for this group could be estimated using the trend of loans shown by the principal cash lending agencies.

Loans from one person to another person for consumer purposes should also be included in the series. The development of a series for individuals, however, is a long-term project.

As previously indicated, the cash loan figures for commercial banks and possibly industrial banks include a certain volume of business loans. Efforts should be made to eliminate these nonconsumer loans from the series. Perhaps the only feasible means of doing this is through periodic sample surveys of instalment loans. In addition, the benchmark statistics obtained in Call Reports should be improved as much as possible.

Charge Account Credit

The charge account credit series show the total amount of unpaid balances due by consumers to retailers and other types of business extending sale credit on a charge or open account basis.

The benchmark figure for the present charge account series is provided by the 1939 Census of Business. Census data made possible an estimate of total charge-accounts outstanding as of December 31, 1939. The receivables of stores generally not dealing in consumers' goods were excluded.

From 1942 forward, the charge account figures were based on department store data using a relationship derived from the movement of seasonally adjusted total charge accounts receivable and seasonally adjusted department store charge accounts receivable in the years 1935 through 1940.

This series has its obvious limitations. It is based on a 1939 benchmark and has been extrapolated from that date using a relationship found between the movement of the receivables of one type of retail trade to twelve types of retail trade, as shown during the period from 1935 through 1941.

It was originally intended that the charge account series be carried on currently using this relationship, but that once a year, using receivables information collected in the Retail Credit Survey for twelve types of trade, an adjustment be made. In 1944, however, the Retail Credit Survey conducted by the Federal Reserve System, did not include all twelve types of retail trade and the monthly or year-end receivables information needed to make this adjustment was not requested.

In the period since 1941 Regulation W at one time or another had diverse effects on the charge accounts of many types of stores. Some retailers did not come under the provisions of Regulation W. Many hard goods stores, especially automobile dealers, household appliance, and furniture stores were closed during the war years and then new stores opened up in the postwar period.

There have been buying sprees that affected the sales and receivables of department stores to a greater extent than other lines of retail trade. Total charge account credit as estimated for such periods might overestimate actual changes in volume. In estimating total charge account credit during such unusual periods, attempts have been made to take account of the changing factors, but this, of course, is, at best, only guesswork. The 1948 Census of Business figures now indicate that the present charge account series is roughly one billion dollars too high.

A much firmer basis for making current estimates could be established if monthly charge account receivables information could be collected from grocery stores; motor vehicle dealers; and coal, ice, and fuel oil dealers. This information together with data collected presently from department stores, furniture stores, and household appliance stores would make possible estimates based on the movement of charge account receivables in trades accounting for at least 60 per cent of total charge receivables as against the less than 20 per cent sample representation used now.

If it should not prove possible to establish current reporting for these several lines of trade, then the alternative is to continue making monthly estimates using the department store data but to correct and adjust the series annually by collecting data once a year from the stores accounting for the bulk of charge account volume.

Were either of these estimating procedures not used it should be recognized that the current month-to-month figures as estimated from only department store data cannot be relied upon to show as accurately as desirable trends typical of total volume. Under such conditions the series should be discontinued.

Single-payment Loan Credit

The single-payment loan series is intended to show the amount of credit arising from the lending activities of commercial banks, pawnbrokers, remedial loan associations, and other miscellaneous lenders, where the obligations provide for repayment in a lump sum.

For commercial banks, the figures from 1943 forward have been based on semiannual Call Reports which include all banks in the country. Monthly figures are estimated using the movement of "all other loans" after deduction of instalment loans as reported by a sample of weekly reporting banks.

The commercal bank single-payment loan figures until recently revised greatly overstated true consumer loan balances. They included a very sizable amount of non-consumer loans. This occurred in large part because of the "catch-all" nature of the question on single-payment loans asked in the semiannual Call Report of the federal banking agencies.

Beginning with the December 1942 Call Report the miscellaneous item of previous statements—"all other loans"—excluded loans to individuals for the first time. The result was that the category "single payment loans" became the miscellaneous item for loans to individuals. This change required banks to classify as single payment loans all non-instalment loans to individuals for consumer purposes *plus* all other non-instalment loans to individuals, the purposes of which did not fit into the regular loan categories such as "commercial and industrial loans," "loans to framers," "loans to brokers and dealers in securities," "other loans for the purpose of purchasing or carrying stocks, bonds and other securities," "real estate loans," and "consumer instalment loans or paper." Any loans to individuals on a non-instalment basis, the purposes of which were unknown, were likely to be included with single payment loans.

Apparently there is a large variety of non-consumer purposes for which loans can be made to individuals, none of which fall by purpose into a specific category mentioned above and therefore are automatically included with single-payment loans. The purposes of some of these loans to individuals are as follows: purchase of a home, investment in unlisted securities, investment in real estate, reloan to a business enterprise, investment in business (partnership and corporation), repayment of funds due partner on liquidation of partnership, financing of construction, short-term advances to assist in financing and purchasing of real estate and mortgages, and accounts receivable financing for accountants, doctors, lawyers, and other professional people.

Many single-payment loans of banks are secured by life insurance policies or securities and, in the case of larger banks, amounts loaned to some individuals are very substantial. In some New York banks, for example, the average loan is about $10,000 in size with a number of loans amounting to more than $50,000 and accounting for a substantial part of total volume.

The downward revision of two billion dollars in single-payment loans, made last year by considering all loans above $3,000 in size as non-consumer loans, eliminates the overstatement of the commercial bank figures. It has been found recently, however, by the Federal Reserve Board that a sizable number of loans above $3,000 are actually consumer loans, and that there are many non-consumer loans of less than $3,000 in size. Present information would indicate that the revised consumer loan total is perhaps $500 million too low. Eventually, the Board will have to undertake a more thorough statistical study of single-payment loans in order to classify them properly.

The over-all single-payment loan series further understates the true figure because of the exclusion of certain lending agencies. As already mentioned, the non-instalment loans of industrial banks, investment and holding companies, and other miscellaneous financial and business agencies are not included in current totals. Also life insurance policy loans are not included.

While it is a long-term project, the single-payment loan series should be adjusted to include the loans of these financial agencies.

An exploratory study of the policy loans of insurance companies should be undertaken as soon as possible. Information to be assembled on policy loans would include: total volume, repayment periods, size of loan, and purpose of loan. While a study covering the entire industry is probably out of the question, perhaps an analysis could be made of a sample of policy loans. Such a study, while not comprehensive, should serve as a basis for determining whether the policy loans of these companies are properly a part of consumer credit.

Regarding the single-payment loans of other financial institutions, their inclusion in the series is a matter of assembling for each type of financial agency a set of statistics on their outstanding loans. Little source material is presently available and this information will need to be assembled as opportunities arise for inclusion of questions relating to these loans on future reports submitted by these agencies to state or federal authorities.

Service Credit

The service credit series purports to show consumer balances arising from services rendered by medical practitioners, hospitals, laundries, cleaning and pressing establishments, funeral parlors, public utilities, and correspondence schools.

The service credit estimates for the years 1929–40 were based on data developed by the Russell Sage Foundation. Beginning with 1941 the series was based on service income data using a relationship derived between service credit year-end figures and income payments for the service industries.

Actually, there has never been an adequate benchmark for the service credit estimates. Russell Sage figures were based on rather fragmentary receivables data assembled for the principal service creditors. Since the time that the Russell Sage figures were compiled, a comprehensive set of income statistics for service components has been assembled by the National Income Division of the Department of Commerce. Were it possible to obtain ratios of receivables to income for the principal service groups, the service credit estimates could be given much firmer footing. One serious limitation in working with receivables data for professional people such as doctors and dentists is the large volume of long delinquent accounts carried on the books.

There is a question as to the amount of accounts receivable held by public utilities that represent consumer receivables. It should be determined whether adequate allowance is made for utility receivables that represent business credit. Also whether there is a proper allowance made for consumer deposits with utilities. In the original estimates of the Russell Sage Foundation, allowance was made for both of these factors.

Consumer debt arising from legal services and on the books of lawyers is not included in the present service credit series. Under the definition of consumer credit, certainly credit for legal purposes should be included.

A completely adequate revision of the service credit series cannot be expected in the near future. Census or other global information must be obtained on the consumer receivables of service establishments, medical practitioners, and other professional persons. The Bureau of the Census, because of budget limitations, was not able to include questions on the receivables of service establishments in the 1948 Census. Plans should be made now for the inclusion of such data in the next Census of Service Establishments. In addition, surveys of the income and receivables of professional persons (ratio data if necessary) should be encouraged and available statistical data covering various types of service establishments should be assembled.

General Evaluation of the Series

When the over-all consumer credit series were first developed and set up on a current monthly basis by the Department of Commerce, it was thought that there would continue to be proper benchmark and sample data available for maintaining a set of firm estimates. At that time, it appeared that service credit would be the only serious weak spot in the entire series. Service credit was not an important part of total credit in volume and also was not subject to wide short-term fluctuations. So it was felt, in spite of the shortcomings of the service data, that it was worth while including these figures to provide a total estimate of short-term consumer credit.

Many changes have occured since 1942, the date when the total Consumer Credit series was first established, and today the series rests on rather weak footing. The non-instalment series are particularly weak. First, it has not been possible to make any further refinements in the service credit data. Secondly, the collection of certain sample data on charge account credit was discontinued and there were no further benchmarks until the 1948 Census. While these Census data have just become available and it will be possible to revise the series to a more correct level, representative sample data for making monthly estimates are *still* lacking. Thirdly, it has only recently become known that the Call Report figures obtained on single-payment loans semiannually contained very substantial amounts of non-consumer paper. While a correction has been made for these non-consumer loans, it would appear that the correction was too severe and a further revision is needed. The two instalment segments of the series—sale credit and cash loan—are in reasonably good shape but certain areas need improvement.

Benchmark data have been a real problem in the maintenance of the consumer credit series. Adequate benchmark data have not been readily available to check levels of estimate or make needed revisions.

In the retail field, the Federal Reserve Board has been largely dependent upon Census data to provide 100 per cent coverage for any trade. Credit data from the 1948 Census are just becoming available. This marks the first adequate benchmark since the 1939 Census. The Federal Reserve Board is, of course, already taking steps to make any necessary revisions in its retail credit estimates.

In the cash lending field, the Federal Reserve Board is able to play a more direct part in obtaining benchmark data. The Federal Reserve Board, the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the state bank supervisory agencies cooperate in the collection of statistics from all commercial banks and industrial banks in the country through the medium of the Call Report. For other cash lending agencies the Board relies primarily on state data.

Unfortunately, the Call Reports have not provided completely adequate consumer credit data. In some cases, banks do not maintain loan records that clearly identify the purpose of all loans made to individuals. In other cases, banks report all loans made through particular departments as consumer or business loans regardless of purpose. The consumer credit items as reported on the Call Report have, therefore, included some business or other non-consumer paper. Likewise business loan items have included some consumer or other nonbusiness paper.

There has been a lack of aggressiveness on the part of the bank supervisory agencies in following up the reporting of items on the

Call Report. The supervisory agencies should endeavor to see that commerical banks understand the various purpose classifications of loans and report their loans as properly as possible. Naturally, the cost of reporting these data and the limitations of any individual bank's knowledge of purpose of some loans must be taken into account. In addition, perhaps the bank supervisory agencies can devise some basis for making needed adjustments in various reported loan totals.

To digress a moment, considerable criticism has been leveled at the Federal Reserve Board series in recent years by some groups in the consumer credit industry. Certainly some of it is justified. We must be alert, however, that this criticism is not in all cases simple criticism of statistics, but in many cases it is suggested by something quite different, which is opposition to control or regulation.

There have been frequent attacks on the series because it includes credit of two weeks or thirty days duration. In my opinion the credit series should include all short-term credit that can be identified as such under its definition. The two-week account is a credit extension, the thirty-day charge account is a credit extension, the 15-month loan is a credit extension, and each of these accounts properly belongs in the consumer credit series. When we measure consumer income, all income that can be identified as consumer regardless of amount, source, frequency of payment, type of payment or economic effect is included.

From an economic standpoint there is, of course, a vast difference in the thirty-day credit and fifteen-month credit. But that does not mean that either type of credit should be excluded from the overall consumer credit series.

There *is* reason to have separate estimates for these different types of credit such as is done now by having different credit components, namely, instalment sale, instalment loan, charge account, single payment loan, and service. It would also seem proper that in any discussion of a particular type of credit, the estimates referred to should be limited to that type of credit.

The nature of the revisions made in the consumer credit statistics depend in part, of course, on the extent to which the Board of Governors of the Federal Reserve System wishes to underwrite an adequate consumer credit series. A good, sound, short term consumer credit series requires extra expenditures for charge account receivables in information, single-payment loan data, and spot surveys of service credit. It requires more detailed and careful reporting from commercial banks on instalment credit. It may require certain current reporting on single payment loans. A good series requires periodic benchmark data not covered by present-day federal or state reports of financial agencies. It requires benchmark data for retailers—covering instalment sales and receivables and charge sales and receivables—perhaps every five years. It may require current information on life insurance company policy loans.

The extent to which revisions should be made is in some degree a matter of public interest and public responsibility. Refinements in the series are not just a matter of providing personnel within the Federal Reserve System to tabulate reports. Business firms have to supply the figures, and they undergo costs in the reporting of data. The reporting of a particular type of credit data by a financial agency might be a very costly undertaking. In making any revisions, the Board should attempt to weigh the need for and uses of various credit data by supervisory authorities, by business, and by the public as against the costs involved by all concerned in assembling the information.

On balance, an over-all major revision of the series, if made, probably would not make for any great change in the total estimated amount of consumer credit although there would be differences in individual components and the cyclical movement of the series might change somewhat.

The following factors in such a revision would probably make for a decrease in consumer credit: elimination of nonconsumer credit from instalment series; revision of charge account series to new 1948 Census benchmark.

The following factors would make for an increase in consumer credit: revision of the instalment loan series to include savings and loan associations, mutual savings banks, and other miscellaneous agencies not now included; inclusion of repair and modernization loans other than FHA; the inclusion of certain life insurance policy loans in the single-payment loan series; revision of commercial bank single-payment loans to include certain consumer loans now excluded; the inclusion of credit extended by lawyers in the service credit series; a revised estimate of credit extended by medical practitioners.

As a by-product of any general revision that is undertaken, it would be very useful if the Federal Reserve Board at a later date would find a place in its various banking and credit statistics for the non-consumer paper that is removed from the present consumer series. For example, certain non-consumer paper in the present commercial bank series should be properly added to "business loans." In the case of sales finance companies, non-consumer paper could be added to data already available covering credit for purchase of trucks, farm implements, and other commericial equipment. Perhaps a "business loan" series could be developed for sales finance companies.

We all know that the Federal Reserve Board is actively considering and working on revisions of its various consumer credit statistics. In the work that the Board undertakes, I hope that its aim will be to improve first the estimates of consumer credit outstanding.