CONSUMER CREDIT AND ECONOMIC STABILITY

BY

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FOREWORD

THAT consumption is the sole purpose of all production has been generally accepted as axiomatic since the days of Adam Smith. Yet until very recent years economic literature has concerned itself primarily with production and distribution, and has relegated consumption to a position of comparative obscurity.

It was not that consumption was considered to be unimportant, but rather that it could be taken for granted. Within practical limits the aggregate wants of consumers were insatiable, and economists did not feel called upon to explain or to explore the process by which goods were consumed as they did the processes by which goods were produced and distributed. Moreover, under the principles of classical theory there was little need for the concept of the consumer as an independent entity. It was contemplated that the best interests of consumers would be served automatically if each producer pursued his own self-interest. And it was believed that consumers could not influence the rate of business activity. Consumers' wants, expressed in terms of the prices they were willing to pay for various products, determined the kinds of goods produced, but the total volume of production was conditioned only by the availability of land, labor, and capital.

This situation has changed in recent years. The appearance of such agencies as the Consumers' Advisory Board of the National Recovery Administration (which was discontinued in 1935 by the invalidation of the National Recovery Act) and the Consumers' Counsels in the Department of Agriculture and in the National Bituminous Coal Commission has indicated a growing consciousness that the interests of consumers are not necessarily compatible with the interests of producers under present-day conditions. And a rapidly accumulating literature has witnessed the spread of the belief that the rate of production may be affected substantially by changes in consumers' money incomes and in the division of these incomes between spending and saving.

Thus, the consumer is being rediscovered as an independent entity that must be dealt with in the formulation of economic policy and in the interpretation of economic events. The increasing attention given to the consumer is in part a cause and in part a result of the gradual realization of the invalidity, under conditions of power production and imperfect competition, of the assumptions which relegated him to a minor role in the economic scene. His rediscovery has not yet made much of an impression upon economic textbooks. But the importance of his position in current literature makes it probable that he will not long remain what Robert S. Lynd has called him, "the man few economists know."[1]

The present volume, which deals with the relatively narrow but none the less important field of consumer credit, represents a contribution to the re-examination of the consumer as a determining factor in economic events. It makes available for the first time year-end estimates of the outstanding amounts of various types of consumer credit covering the period from 1923 to 1937 and it attempts to interpret the influence of expansions and contractions of the aggregate indebtedness of consumers upon the total flow of goods and services which constitute the real national income.

The need for a comprehensive study of the quantitative aspects of consumer credit has long been recognized. Although the use of credit by consumers was common in the United States even before the Civil War, and increased progressively thereafter as the result of the development of specialized consumer credit agencies and the extension of instalment merchandising, this field has been conspicuously barren of official statistics or reliable quantitative measurements. In the first general survey of the agencies engaged in consumer financing Evans Clark remarked that consumer credit was still a "dark continent in terms of public knowledge." Speaking of the specialized consumer credit agencies, he said, "It is astonishing that a business now as large as some of the leading industries could have grown up without any general knowledge of its size and in many quarters even of its existence."[2]

Similar comments have been made more recently by other writers. In 1935 Professor John M. Clark of Columbia University, referring to the data which were necessary to further exploration of the business cycle, called attention to the "need not only of more accurate figures of consumer credit, but also of a general segrega-

[1] The Consumer Becomes a "Problem," *in* Annals of the American Academy of Political and Social Science, May, 1934, p. 2.

[2] Financing the Consumer. Harper and Bros., New York, 1931, p. 213.

tion of loans according to the uses to which they are put."[1] A year later, a correspondent of the London Economist, commenting upon business conditions in the United States wrote:

> The magnitude of the volume of consumer credit, and how it is financed, are matters of guesswork, not statistics. . . . While every other phase of our credit system is regulated by law, subject to regular public report, and policed by vigilant supervisors, this area is a *terra incognita*, officially ignored, statistically non-existent.[2]

Although the estimates of the outstanding amounts of consumer credit given in this volume represent the results of five years of painstaking research, they cannot be accepted as a final or fully satisfactory answer to the challenge for accurate consumer credit statistics. In the first place, this study was essentially historical and no attempt has been made to carry our summary estimates beyond the close of 1937. In the second place, the estimates presented here are not fully reliable. For many types of consumer credit our estimates are exceedingly close, particularly for the period after 1929. But for some types of consumer credit our estimates contain large potential errors; and for a few others our estimates are so crude that they have only a suggestive value.

The writer has attempted to describe the data and the methods by which estimates were constructed in such detail that this study may be used as a point of departure for more intensive explorations of specific fields. No doubt substantial improvements can and will be made in our estimates for some types of consumer credit. But it is beyond the capacity of any research agency to obtain fully reliable historical figures. In the United States, during recent years, more than a million individual enterprises have been engaged in extending credit to consumers. Relatively few of these have issued reports that identify accurately the amount of consumer credit on their books. Many consumer credit-granting agencies go out of business each year. And of those that remain in business, some are unable and others unwilling to supply figures for the outstanding amount of consumer credit extended by them at various dates.

Hope for more accurate and useful figures lies principally in the

[1] Strategic Factors in Business Cycles. National Bureau of Economic Research, 1935, p. 221.

[2] The Economist (Banking Supplement), October 17, 1936, p. 9.

development of current reporting by agencies that extend credit to consumers. The United States Bureau of the Census now assembles and publishes monthly figures on the amount of retail automobile paper held by a representative group of instalment finance companies, a service that could readily be extended to other types of paper held by instalment finance companies and by manufacturers. The Department of Commerce now collects monthly sales figures from a large number of retail enterprises, and it publishes periodically a survey of retail credit. Current monthly figures for the consumer credit extended by various types of retail merchants could readily be had by requesting figures for accounts receivable, as well as for sales, from reporting retailers. All banks make periodic reports to some public supervisory agency, and the addition of several items in the report forms used by the Comptroller of the Currency, the Federal Reserve System, and the Federal Deposit Insurance Corporation would provide figures for the outstanding amounts of consumer credit extended by banks. The Federal Reserve System could readily assemble current figures for representative samples of other agencies that lend money to consumers.

Before such a program is feasible, however, it is necessary to demonstrate that movements of consumer credit have been of substantial magnitude, that such movements are highly significant to the interpretation of business fluctuations, and that accurate figures indicative of the current trend of consumer credit would have an important practical usefulness. This accounts for the second phase of the present study—the interpretation of the economic significance of consumer credit movements.

The estimates resulting from this study indicate that the outstanding amounts of consumer credit increased between the close of 1923 and the close of 1929 by almost four billion dollars; declined between the close of 1929 and the spring of 1933 by almost as large a sum; and expanded again between the spring of 1933 and the fall of 1937 to above the 1929 peak. Regardless of the shortcomings of these figures, the evidence is incontrovertible that during the period from 1923 to 1937 consumers expanded their credit when incomes were increasing and contracted their credit when incomes were declining. There can be little doubt, also, that our summary estimates adequately reflect the approximate magnitude of the movements over these broad periods. If there are any compensatory tendencies among estimating errors for various types of consumer credit, the potential error in our summary estimates should not exceed 20 per cent for the first period, 12 per cent for the second, and 10 per cent for the third. It seems probable that errors in the summary estimates tend if anything to understate the amplitude of consumer credit movements.

Obviously these substantial fluctuations in the amount of consumer credit are to a large extent the direct result of other cyclical forces. When incomes expand retail sales increase; and even if there were no change in the proportion of credit sales, an expansion in the volume of sales would cause new credit commitments to exceed payments on previous credit commitments. Rising incomes also increase the capacity of consumers to pay debts. Consumers, confident of their ability to pay in the future, increase their use of credit; and credit-granting agencies, confident of their ability to collect, liberalize their credit policies. Exactly the reverse occurs when incomes decline. Sales decline, and new credit commitments fall short of payments on previous commitments. Consumers' ability to pay is reduced. Consumer credit agencies undertake to bring their accounts into line with the lower incomes of their customers; and consumers, losing confidence in the continuation of their current incomes or even of their employment, avoid new credit commitments and pay off old ones.

This, however, is only half the story. What are the consequences of these fluctuations? Granted that consumer credit movements are to a large extent the result of changes in incomes, it does not follow that these movements may not in their turn exert an influence upon the trend of the national income.

It is the thesis of this volume that consumer credit fluctuations have contributed substantially to the amplitude of cyclical movements in recent years and that they represent an increasingly powerful force toward economic instability. An attempt will be made to prove that under the conditions prevailing in recent years an expansion of consumer credit tends to increase incomes, profits, and production and to provide additional incentives for producers' investment; while a contraction of consumer credit tends to decrease incomes, profits, and production and to destroy the incentives for producers' investment. It will be shown also that the stimulating influence of consumer credit expansion has been exerted in recent years, and may be expected to be exerted in the future, toward the acceleration of booms; and that contractions of consumer credit have occurred in recent years, and may be expected to occur in the future, at times when the depressing influence of such contractions is most destructive to the forces which must be depended upon to preserve economic stability.

The present volume is addressed to the general reader as well as to students of economics and to those associated with consumer credit agencies. This circumstance has required compromises in presentation which will probably not be fully satisfactory to any one of these groups. Those who have had no training in economics will find certain chapters difficult, but not, it is confidently expected, unintelligible. Specialists in the field of consumer credit will find much in these pages with which they are already familiar. And the professional economist will discover concessions to the general reader in the form of oversimplifications, explanatory excursions, and departures from accepted terminology.

Part I, which is devoted primarily to the historical development of consumer credit, is non-technical and easily comprehensible. The first chapter defines the area of the study; the three succeeding chapters describe the development of the agencies and the techniques of consumer credit between 1800 and 1938; and the fifth chapter discusses the forces underlying the growth and cyclical movements of consumer credit.

Part II deals with the economic consequences of consumer credit fluctuations. The opening chapters (Chapters 6 and 7) undertake to determine theoretically the relationship between movements of consumer credit and production—first under the assumptions adopted by the classical economists, and then under the assumptions of incomplete utilization of the factors of production. The succeeding chapter attempts to measure empirically the influence of consumer credit fluctuations upon movements of the national income during the period from 1923 to 1938; and the final chapter discusses the importance of consumer credit movements in relation to national economic policy and proposes a method of controlling such movements.

Professional economists may resent the insertion in Chapter 6 of an oversimplified discussion of the principles and assumptions of classical doctrine. It has, however, seemed desirable to meet in advance the objections of the considerable group of persons who, while admitting the existence of idle men, money, and machines, continue to apply theoretical principles that depend for their validity upon assumptions incompatible with chronic unemployment. This chapter may be omitted without interrupting the theoretical argument.

The discussion in Chapter 7 of the relationship between consumer credit fluctuations and production, under conditions of incomplete utilization of the factors of production, draws its theoretical components from a body of literature on which the ink is scarcely dry. The analysis given in that chapter is not fully consistent either in terminology or in content with any of the presently available theoretical systems. It relies heavily upon the work of John Maynard Keynes. But those familiar with recent developments in dynamic theory will recognize modifications in Mr. Keynes' formulations that have been inspired by other writers. Unfortunately, the current terminology of dynamic theory is unsuitable for purposes of empirical analysis and we have faced the alternatives of redefining the familiar terms "savings" and "investment" or of employing new terms to describe income-increasing and income-decreasing phenomena. The alternative of redefining the familiar terms has the great advantage of simplicity. However, on the basis of experimentation with both solutions and upon the advice of many theorists, we have reluctantly chosen the alternative of using a less familiar terminology.

Chapter 7 is essentially technical and, in spite of an earnest effort to simplify the exposition, it will probably prove difficult for many readers. Those who do not wish to examine the theoretical reasoning underlying our interpretation of consumer credit movements, are urged to go directly from Chapter 5 to Chapters 8 and 9, which are more easily comprehensible because they deal with actual events and empirical measurements.

Part III describes the sources of data and methods used in constructing estimates of the outstanding amounts of various types of consumer credit. A chapter is devoted to each of the four major classes of consumer credit agencies: retail merchants, service creditors, intermediary financing agencies, and cash-lending agencies. These chapters will be of interest primarily to readers associated with consumer credit institutions, to statisticians, and to those who wish to appraise the reliability of the statistical evidence upon which conclusions have been based. We have attempted wherever possible to present summaries of statistical data and to show the computations by which estimates were derived from these data. However, the income tax data, upon which the estimates for many types of retail merchants were based, were so voluminous when presented either in tabular or graphic form that only a general description of the income tax samples and of the methods of analyzing them has been given. If the need should arise, these data will be made available in summary form.

A bibliography has been omitted from this volume partly because much of the most important material of this study was drawn from sources which would not generally be available to the reader, and partly because a list of publications covering the area of this study, if complete, would be enormous and, if selected, would represent largely a repetition of footnote references given in the text.

The study described in this volume had its origins in an investigation initiated in 1934 by the Consumers' Advisory Board of the National Recovery Administration. During the early months of 1934 it was frequently asserted that many consumers had accumulated large amounts of delinquent debt during the period of declining incomes; that recently re-employed wage-earners were being harassed for the payment of debts which could be liquidated only over a considerable period of time; and that many merchants were unable to restore depleted inventories because their working capital was tied up in frozen customer accounts. From the standpoint of social and economic policy the federal government was urged to create facilities for adjusting and funding delinquent consumer debts. The Consumers' Advisory Board appointed a committee, under the chairmanship of Gardiner C. Means, a member of the Board, to study the problem and to recommend a program which the Board might sponsor.[1]

[1] Other members of the committee were: Evans Clark, Director of the Twentieth Century Fund; John H. Cover, of the University of Chicago; William O. Douglas, then of the Yale School of Law; Leon Henderson, then Director of the

Since no funds were available for the work of the committee, the co-operation of other agencies was solicited and obtained. The Russell Sage Foundation agreed to supply the services of the writer on a part-time basis to direct the study. The United States Bureau of Labor Statistics agreed to participate in a study of wage-attachments; and the Bureau of Foreign and Domestic Commerce agreed to participate in a study of receivables of merchants and professional people. The Works Progress Administration furnished the services of a small group of workers.

After a brief preliminary investigation, it became clear that the problems which the committee had been directed to study were chronic rather than emergent. Both the amount of consumer debt and the number of wage attachments were at a low level in 1934 as compared with 1929.

Delinquency was extensive and some individuals were overwhelmed by debt. But these conditions were being rapidly ameliorated by increases in incomes, by informal adjustments of debts between debtors and creditors, and by operation of the statutes of limitations. Consequently, the writer recommended that government intervention be avoided and that the study be directed toward a more thorough statistical exploration of the field.

From the very beginning the Russell Sage Foundation carried the major part of the burden of the study, partly because the program of the committee coincided closely with the program of its Department of Consumer Credit Studies; and when the National Recovery Act was invalidated by the courts in 1935, the study was continued and expanded by that Department. The enlarged study covered both the social and economic aspects of consumer credit. Data concerning the social consequences of the extensive use of consumer credit are still being assembled and a later publication on this subject is contemplated.

The accumulation of statistical data for this study has necessarily involved the co-operative effort of a large number of individ-

Division of Research and Planning, National Recovery Administration; James R. Hewitt, of the National Retail Credit Men's Association; C. H. Janssen, representing the Retail Grocers' Code Authority; R. M. Neustadt, representing the Retail Dry Goods Code Authority; Grace Morrison Poole, of the Consumers' Advisory Board; and Arthur D. Whiteside, then Deputy Administrator of the National Recovery Administration.

uals and institutions. We are especially indebted to the Standard Statistics Company, which gave us access to its remarkable collection of corporate reports; to the Dun and Bradstreet Company, which gave generous assistance in many ways; to the Commercial Investment Trust Corporation, which permitted us to use its collection of reports of instalment finance companies; to Henry F. Long, Commissioner of Corporations and Taxation in Massachusetts, through whose courtesy we were able to obtain data from the income tax records in that state; and to Harold M. Groves of the University of Wisconsin, who supervised the transcription of data from the income tax reports in Wisconsin. Some 3,500 enterprises have voluntarily contributed figures, frequently at considerable inconvenience and at some expense; and several hundred persons with specialized knowledge have assisted in the preparation of estimates for various types of consumer credit. To all of these we wish to express our gratitude.

Many persons have also contributed to the interpretation of the data and to the preparation of the manuscript of this study. The writer is especially indebted to Hans Staudinger and Fritz Lehmann of the Graduate Faculty of Political and Social Science in the New School for Social Research from whose store of knowledge he has drawn heavily at many stages in the development of this study. Gerhard Colm of the Graduate Faculty of Political and Social Science, Gottfried Haberler of Harvard University, and Ralph Young of the University of Pennsylvania have read the manuscript and have made valuable suggestions. Lauchlin Currie, of the Board of Governors of the Federal Reserve System; Simon Kuznets, of the University of Pennsylvania; and Alfred Kahler and the late Emil Lederer, of the Graduate Faculty of Political and Social Science, have read one or more chapters of Part II and have made helpful comments. The assistance of many others, who have reviewed specific sections of the manuscript, is acknowledged at appropriate points in the text.

Probably none of these persons would agree fully with the writer at all points, and their assistance does not imply approval of the conclusions of this volume. Each has contributed to whatever merit this volume may have. The writer alone is responsible for its shortcomings.

PART I

THE DEVELOPMENT OF CONSUMER CREDIT

CHAPTER I

NATURE OF CONSUMER CREDIT

ALTHOUGH the term "consumer credit" has appeared more and more frequently in the recent literature of business and finance, it has been used very loosely and it has not yet acquired a precise or generally accepted meaning. The purpose of this chapter is not to seek a universally satisfactory definition, but rather to explain how the term will be used in this study.

General Characteristics of Credit

Before attempting to define consumer credit, it seems desirable to insert a few brief comments concerning credit in general. Literally, the word "credit" means faith or trust. In modern usage, however, this literal meaning has been substantially perverted. Credit is merely an advance of goods or services or claims to goods and services in anticipation of repayment at a later date. The credit grantor may rely entirely upon the good faith of the credit recipient for repayment; but more frequently the creditor's trust in the debtor is supplemented by security or by written instruments which can be used to compel payment. Payment may be limited to the return of the actual quantities or equivalent values of goods, services, or claims originally advanced; or it may involve the return of additional quantities or values as compensation for the credit.

The early classical economists believed that credit represented only a shift in the possession of the existing stock of goods or claims to goods, and they failed to recognize that credit-granting might under certain circumstances increase the total quantity of claims to goods. This misconception persisted in some quarters until comparatively recent years. As late as the middle of the nineteenth century, John Stuart Mill insisted that "credit is never anything more than a transfer of capital from hand to hand . . . If the borrower's means of production and of employing labor are increased by the credit given him, the lender's are as much diminished."[1]

[1] Principles of Political Economy, Book III, chap. 2, secs. 1 and 2.

Even before Mill's time, however, some writers observed that banks had the capacity to increase the total number of money claims by granting credit. The accuracy of this observation is now generally accepted. When banks make loans by issuing additional bank notes, the quantity of currency in the hands of the borrower is increased without a compensating reduction in the quantity of currency held by the lender. Where checks are generally used in place of currency, the results of credit-granting by banks are similar. The amount of bank deposits is increased immediately when the proceeds of a loan are credited to the account of the borrower. This additional deposit is usually withdrawn from the lending institution as the result of disbursements by the borrower. But, if withdrawn by check, the deposit is merely transferred to the accounts of depositors of other banks; and if withdrawn in currency, it is likely to reappear very promptly in the bank accounts of those who sell consumers' goods and services. Thus, within the banking system as a whole, if not within individual banks, the granting of additional credit tends to increase the total amount of bank deposits.

The total quantity of claims to goods might conceivably be increased by other types of credit transactions. For instance, government bonds or the notes and acceptances of private borrowers might be used as the means of buying goods or paying debts. But fluctuations of value and other practical difficulties generally prevent the extensive use of such instruments as currency, and for all practical purposes it is only within the banking system that the means of payment are increased by credit transactions. Hence some modern writers have reserved the word "credit" to describe bank credit, or the credit money created by the banking system.

It will be helpful at certain points in this study to distinguish between credit which represents merely a transfer of existing claims to goods from one holder to another and credit which represents an addition to the total quantity of claims. The term "transfer credit" will be used to describe the first, and the term "expansion credit" to describe the second of these types of credit.[1]

[1] Some writers have used the term "mercantile credit" to describe what we have chosen to call transfer credit. The former term is unfortunate at best, and for purposes of this study it would be especially confusing because under present conditions a considerable part of the credit arising from retail merchandising represents expansion credit.

The distinction between transfer credit and expansion credit arises from differences in the nature of credit-granting institutions, and these terms represent a classification based upon the source of credit. For purposes of this study, however, it is necessary also to establish a classification based upon the destination of credit. The term "producer credit" will be used to describe credit granted to business enterprises; the term "public credit," to describe credit granted to national, state, and local governments and other public agencies; and the term "consumer credit," to describe credit granted to families and to individuals for use in their capacity as consumers.[1]

Credit may be used by each of these groups for a variety of purposes. Business enterprises, for instance, may expand their credit to buy equipment, to acquire raw materials, to pay wages during the period of production, to finance the maintenance of stocks of finished goods, to pay dividends or interest on obligations, or even to meet operating deficits. Public agencies may use credit for such diverse purposes as the building of schools, highways, and dams; the construction of battleships, military aircraft, and machine guns; the maintenance of current services; the provision of relief payments to indigent citizens; or the conduct of wars. Consumers may use credit to acquire automobiles and household equipment, to provide the means of subsistence when incomes are interrupted, to meet unexpected expenses, or to finance family expenditures between dates when incomes are paid.

The principal distinctions between producer, public, and consumer credit arise from differences in their motivation rather than

[1] The term "consumer credit" has been used recently by some writers in England and on the Continent to describe a form of credit granted by consumers to governments. Since holdings of paper currency not fully covered by reserves represent an advance of credit to the issuing authority, fiduciary currency held by consumers as pocket money represents an advance by consumers to the governments issuing the currency. Advances of this sort have played an important role in recent monetary history. In Germany, for instance, after the hyper-inflation of the early 1920's, the Rentenmark was substituted for the depreciated Reichmark. The Rentenmark, like the Reichmark, was a fiduciary currency, but confidence in the new currency was such that consumers increased the amount of pocket money which they carried, thus providing the government with working capital. Since the term "consumer credit" was already in general use to describe credit *used by* consumers, it seems unfortunate that the same term should have been selected to describe credit *granted by* consumers to governments through their currency holdings.

from differences in the uses to which credit is put by these groups of credit recipients. Producer credit is motivated by anticipation of business profits, and its fluctuations reflect very largely the impact of changing conditions upon the calculations of the business community with respect to the future profitability of investments. Consumer credit is motivated by desire for satisfactions from the present use of goods and services, and its fluctuations reflect primarily the influence of changes or prospective changes in incomes upon the consumer's appraisal of the difficulty of future payment and upon the credit grantor's appraisal of the difficulty of collection. Public credit, on the other hand, is motivated by a variety of political, economic, and sociological forces that are reflected in the fiscal policies of public agencies.

In some respects the distinctions between producer, public, and consumer credit are less significant than differences in the uses to which credit may be put within each of these groups of credit recipients. It has been noted that business enterprises, public agencies, and households may use credit to acquire useful assets or to finance deficits, and this distinction is obviously of prime importance. Many writers have used the words "productive" and "consumptive" to distinguish credit used to acquire useful assets from credit used to finance deficits. Unfortunately, however, these terms have given rise to a great deal of confusion. They have been associated erroneously with producer and consumer credit and they have been used improperly to identify socially useful and socially wasteful credit transactions.

Consumer Credit and Consumptive Credit

The classical economists and many of their successors condemned consumer credit because it dissipated wealth. Consumer credit, they contended, was essentially consumptive or "spendthrift" credit. It facilitated the consumption of capital in extravagant living, and it contributed nothing to production. Producer credit, on the contrary, was considered to be socially desirable because it was productive. It put capital in the hands of those who would use it for the purpose of creating additional wealth; it facilitated the preservation of capital in the form of factories, machinery, raw materials, and other goods which contributed to production.

Whether or not this invidious comparison was ever fully appropriate, it is certainly no longer an accurate generalization. Business enterprises, it is true, use credit primarily to finance the acquisition of useful assets. But, as has been suggested in the preceding section, consumer credit may be used to acquire durable goods, which have been universally recognized as part of the national wealth, while producer credit may be used for purposes that contribute nothing to the total stock of useful goods.

The persistence in some quarters of the belief that consumer credit is socially wasteful appears to be due in large part to the confusion that arises from the varied meanings given to the word "consumption." Consumption, literally, is the process by which goods are used up or their values destroyed. But there are two important variations. The economist has added significant overtones to the literal meaning. For him, consumption is the enjoyment, and only incidentally the using up, of the utilities inherent in the goods which emerge as the end products of human effort. The business man offers still another definition. For him, consumption is the delivery of goods into the hands of consumers; it is measured statistically by retail sales.

Consumer credit is used universally either to finance the purchase of consumers' goods and services or to refinance debts that had their origins in such purchases. If consumption is defined as the movement of goods into the hands of consumers, consumer credit is identical with consumptive credit. If the economist's definition is used, the similarity between consumer credit and consumptive credit is still rather close. But if the literal meaning of consumption is applied, consumer credit and consumptive credit are two quite different things.

Everyone knows that retail sales are not identical with consumption. The movement of goods into the hands of ultimate consumers represents only the initiation of the process of consumption, and it has been used as the measure of consumption only for want of better means of empirical measurement. There is a time element in all forms of consumption. It may be a few minutes for certain types of amusements; several hours for food and children's toys; several days for flowers and household supplies; several months for some articles of clothing; several years for automobiles, electrical appliances, and rugs; several decades for some types of household furniture; and several generations for silverware, fine watches and jewelry, and pictures.

The aggregate lag between the delivery of goods to consumers and the final wearing out of these goods has been increased progressively by the growth of the proportion of expenditures for durable goods in consumers' budgets. In buying an automobile, a mechanical refrigerator, or household furniture, the consumer acquires the means of present and future consumption. A substantial part of consumer credit is extended against unconsumed use-values of goods in the hands of consumers and is, in the literal sense, nonconsumptive. An expansion of consumer credit is generally accompanied by an increase in consumers' inventories, and a contraction of consumer credit by a decline in consumers' inventories.

It has been contended, however, that goods acquired through the use of consumer credit are nonproductive, since they contribute nothing to the facilities for producing goods. That there are significant differences between the kinds of goods which are likely to result from the use of credit by business enterprises and by consumers is undeniable. But it is impossible to establish any clear-cut relationship between these kinds of goods and their social usefulness.

What, for instance, is the difference in productivity between credit used by families to acquire passenger automobiles capable of providing individual or family transportation for a number of years and credit used by business enterprises to acquire railway coaches, street-cars, or buses that will provide personal transportation *en masse?* And what is the difference in productivity between credit used by families to acquire mechanical refrigerators and credit used for the construction of a plant to supply ice to the same families? It must be recognized at the outset of this study that there are household capital goods whose functions are similar to those of producers' capital goods. The fact that household capital goods are used to supply family satisfactions while producers' capital goods are used to yield a profit distinguishes their motivation but not their social usefulness.

Some consumer credit, like some public credit and some producer credit, is used to finance deficits and is therefore consumptive.

But during normal times consumptive credit comprises a relatively small part of the total amount of consumer credit. Deficit financing is resorted to by consumers largely as the means of adjusting for sudden declines in income or sudden increases in unavoidable expenses. The techniques of consumer credit agencies are designed to prevent the continuous use of consumptive credit, and the penalties imposed upon individuals for the improvident use of such credit are severe.

Needless to say, it is highly desirable that the savings of a nation should be used so far as possible in the creation of useful assets. But it is a mistake to assume that consumptive credit is necessarily wasteful or otherwise antisocial. A loan to keep intact an existing industrial organization during a business crisis may have a far greater social usefulness than a loan to finance the construction of a new plant; and the use of credit to finance the maintenance of essential public services during a period of declining tax revenues may be exceedingly wise public policy. Similarly, the use of credit to finance a necessary surgical operation or to sustain the family of an unemployed wage-earner may yield benefits both to the borrower and to the community as a whole.

Differences in the social usefulness of productive and consumptive credit become even more vague when the question of economic stability is considered. It will be contended in this volume that it is impossible, under present-day conditions, to have any general liquidation of credit without severe repercussions upon the economic system as a whole. Thus, if producer credit is contracting, consumer credit or public credit must be expanded if a contraction of production and incomes is to be avoided. Under such circumstances putting credit to use is far more important than how it is used.

In summary, neither the distinction between classes of credit recipients nor the distinction between asset-creating or deficit-financing credit can be safely applied as criteria of social usefulness. There is little evidence that the price and profit mechanism that governs the channeling of producer credit necessarily provides a more useful distribution of credit resources than the decisions of those who control family budgets in the interest of yielding the greatest satisfactions or the decisions of those who determine the fiscal policies of public agencies. Judgments of the social value of various credit transactions must depend not only upon the purposes for which credit is used but also the timing and circumstances of each transaction in relation to the current economic situation.

In this volume the terms "producer credit," "public credit," and "consumer credit" will be used without implying any distinction in their social usefulness. In order to avoid confusion the words "consumption" and "consumptive," unless otherwise noted, will refer to the process of exhausting the use-values inherent in consumers' goods and services.

Approach to the Problem of Measuring Consumer Credit

It has been the custom to use the terms "credit" and "debt" interchangeably, depending upon whether reference is being made to an asset of the creditor or to the corresponding liability of the debtor. The total amount of consumer credit may be said to be the sum of the asset items representing advances to consumers on the balance sheets of creditors. This sum is identical, however, with the total amount of consumer debt, or the sum of the liabilities on the balance sheets of consumers. Since customer "receivables"[1] on the books of creditors need not necessarily be consumer credit, while the liabilities of consumers are unmistakably consumer debt, it would seem desirable to measure consumer credit through consumers' balance sheets.

Unfortunately, however, it is impossible to measure consumers' liabilities directly. Few families or individuals keep satisfactory income statements, to say nothing of intelligible balance sheets. Most consumers could probably construct a fairly accurate current statement of their liabilities if they were willing to do so. But people are generally so reticent about their personal debts that it seems unlikely that reliable current data could be secured by sample studies. Moreover, memories are exceedingly short in such matters and few families could compare accurately their present position

[1] The term "receivables" will be used to refer not only to current receivables, or accounts which are due at the moment, but also to deferred receivables, or accounts on which full or partial payments are not due until later dates. In accounting terminology the word "receivables" generally refers to current receivables. But in the absence of any satisfactory general term we have elected to use the word to cover current and deferred receivables.

with that of a year or two years ago. Consequently, we are compelled, at least for the present, to go to the balance sheets of creditors for the means of developing estimates of consumer obligations.

The latter approach is not altogether an escape from difficulties. Satisfactory balance sheets are available for relatively few of the enterprises that come within the area of this study, and these are unreliable for sampling purposes. For most classes of creditors only fragmentary reports are available, and for some important classes no balance sheet data whatsoever have been published. Even where balance sheets are available, the problem of identifying consumer receivables from other receivables frequently remains to be solved.

Fortunately for our purpose specialization among various classes of creditors minimizes the latter problem. Those who sell goods on credit generally specialize either in consumers' goods or in producers' goods. Grocers and furniture stores, for instance, deal almost entirely in consumers' goods and their customer receivables are therefore likely to represent consumer credit in a very large degree. On the other hand, the receivables of office equipment stores are likely to represent primarily producer or business credit. A relatively similar specialization exists in the professions, among service industries, and among moneylending agencies. The receivables of the medical and dental professions consist predominantly of obligations of consumers, while the receivables of lawyers and engineers usually have a high producer credit content. Small loan companies, credit unions, industrial banking companies, and certain other lending agencies deal primarily with consumers, while commercial banks deal primarily with businesses.

No complete segregation of consumer credit is possible by such a classification of creditors. There are many business accounts among the receivables of the classes of creditors which will be treated as consumer credit agencies. Likewise, there are many consumer accounts among the receivables which will be put in the producer credit category. But in general, the division is sufficiently accurate for our purpose. In a few instances, notably for banks and instalment finance companies, an attempt will be made to segregate consumer credit from other types of credit in their portfolios.

Types of Creditors Included and Excluded

For convenience, consumer credit agencies have been divided into four general classes: (1) retail merchants, who sell consumers' goods on credit; (2) service creditors, who render consumers' services on credit; (3) intermediary financing agencies, which buy contracts arising out of credit sales of goods or services; and (4) cash-lending agencies, which lend money to consumers.

In the first class of creditors are the clothing stores, country general stores, department stores, drug stores, dry-goods stores, electrical appliance and radio stores, florist shops, food stores, fuel and ice dealers, furniture stores, jewelry stores, mail-order houses, and other retail enterprises which deal primarily in consumers' goods. "Limited price" stores and many less important classes of retailers have been excluded because they sell almost exclusively for cash. Office equipment stores, farmers' supply stores, dealers in lumber and building materials, and other types of retailers whose principal customers are business or agricultural enterprises have also been excluded.[1]

In the second class of creditors are physicians, dentists, and nurses in private practice, hospitals, undertakers, public utility companies, laundries, cleaning and dyeing establishments, and correspondence schools.

In the third class are sales finance companies, banks (so far as they buy contracts arising out of instalment sales), and manufacturing companies that acquire instalment contracts arising out of sales of their products by retail dealers.

In the fourth class are banks (for which estimates of consumer loans will be attempted), credit unions, industrial banking companies, pawnbrokers, regulated small loan companies, unregulated lenders, and other less important agencies.

It will be immediately apparent that the latter class excludes many cash-lending agencies which appear to fall within the field of consumer credit as defined in this chapter. It excludes, for instance, loans on real estate mortgages, loans by life insurance companies against the cash values of policies, loans by banks against savings passbooks, loans by building and loan associations against their

[1] For a more detailed statement of the types of retail trade included and excluded, see pp. 249–252.

shares, loans by employers, and personal loans by relatives and friends. There can be little doubt that a large part of the loans made by these classes of creditors is used by persons in their "consuming" capacity. But certain characteristics of each class make it desirable to exclude them from the area of this study.

Homes are, of course, durable consumers' goods. The essential similarity between financing the purchase of a home and an automobile on instalment terms has been convincingly stated by those who have undertaken to defend instalment selling against the attacks of its critics. The exclusion of home mortgage credit from the area of this study does not deny this similarity. But there is one characteristic of home mortgage credit which makes it necessary to segregate it from other types of consumer credit for purposes of interpreting quantitative movements.

Reductions in the aggregate amount of home mortgage credit have been accomplished in the past primarily by foreclosure, while declines in the outstanding amount of other types of consumer credit have represented to a very large extent repayment by consumers from their current incomes. It is true that many automobiles, refrigerators, and other durable goods are repossessed. But these repossessed chattels must find a retail market. If they are sold for cash, the credit is liquidated from consumers' incomes just as effectively for our purpose as if the original buyer had fulfilled his contract; and if they are sold on credit, the unpaid balance will continue to appear among the receivables of some consumer credit agency. Foreclosed homes, on the other hand, need not find consumer buyers. They may be rented to the former owner or to another consumer, and if market conditions permit, the rental will include a price for the use and amortization of the capital invested in the property.

Regardless of this distinction, the segregation of home mortgage credit would have been impracticable had it not been for the large amounts involved in individual mortgage contracts. Where smaller sums are involved, it is impossible to segregate credits arising from the sale of a particular commodity. An automobile purchaser, for instance, may elect to finance his purchase through an instalment finance company or to borrow from one of the many cash-lending agencies, where the transaction cannot be identified with the purchase. Moreover, some part of the credit arising from the purchase may be transferred, by subsequent borrowings or by deferments of payment, to still other creditors. In the home mortgage field, on the other hand, the sums involved are generally beyond the reach of other creditors. Consequently, loans on real estate mortgages tend to preserve their identity and they may be excised with some degree of precision from the area of this study.

The decision to exclude home mortgage credit rather than to segregate it for special treatment was influenced by the shortcomings of the available statistical data[1] and by the knowledge that competent studies in this special field were under way. The exclusion represents, therefore, the acceptance of a practicable division of labor and not a denial of the pertinence of home mortgage loans to the field of consumer credit. To the extent that the aggregate mortgage debt is reduced by payments out of the incomes of home-owners, the consequences of this liquidation are identical with the consequences of liquidation of other types of consumer credit. The recent increase in the practice of financing homes on long-term amortization schedules seems likely to give still greater significance to fluctuations of home mortgage credit in the future.

Loans against savings bank passbooks, life insurance policies, and the shares of building and loan associations were excluded because these loans represent in various degrees withdrawals of savings. The person who borrows against his savings bank passbook has the alternative of withdrawing his deposit, and he may liquidate his loan at any time by such withdrawal. To a lesser extent this is true also of those who borrow against the cash values of insurance policies and against building and loan shares. Trends of savings

[1] For instance, the series of outstanding loans of building and loan associations which are carried in the reports of the Comptroller of the Currency are based in part upon net loan balances and in part upon gross loan balances. Gross loan balances are the sum of the original values of mortgage contracts without allowance for repayments made through the purchase of hypothecated shares. Adjustments to net loan balances are made difficult by the fact that there has been a substantial shift toward reporting net figures in recent years. It is the belief of Morton Bodfish, executive vice-president of the United States Building and Loan League, that more than a billion dollars of the decline in the reported amount of loans of building and loan associations since 1933 may be explained by the change in the method of reporting. Unfortunately these figures and other series with similar errors have frequently been accepted at their face value.

and dissavings are closely related in their economic significance to fluctuations of consumer credit. But it has seemed desirable to exclude from the area of consumer credit these elements which may best be interpreted when treated together with other phenomena in the field of savings and dissavings.

Loans between relatives and friends are excluded for still other reasons. That such loans represent in the aggregate a large sum is clearly indicated by the records of consumer bankruptcies, by studies of wage attachments, and by the case records of family welfare agencies. But such credits are generally informal and there is no satisfactory means of measuring them. Moreover, there is reason to doubt that loans between relatives and friends have a substantial significance for our purpose. It is only when consumer credit is capitalized as an asset by the creditor that expansions and contractions of consumer credit have an influence on consumer purchasing power. If, as is probably the rule, loans between relatives and friends are considered by the lenders as money "spent," and their repayment as windfall gains, such loans would have no bearing upon the problems dealt with in this volume.

Loans made by employers to their employes also amount to substantial sums. But the figures available in the reports of business enterprises frequently include loans made to facilitate the purchase of securities of the employing corporation. These latter loans cannot be considered to represent consumer credit, and the task of segregating such loans proved so difficult that all loans by employers to employes were excluded from our measurements. In the instances where employers' loan balances appeared to be free from security loans, aggregate figures were relatively stable from year to year. Consequently, while the exclusion of these loans tends to understate the outstanding amount of consumer credit, it probably has little effect upon year-to-year changes in the outstanding amount.

In addition to these types of loans several types of debt for services were excluded from the area of this study. Accrued and delinquent income taxes were excluded because of the obvious differences between these obligations and other types of consumer debt. Accrued or delinquent interest on home mortgage loans and accrued or delinquent real estate taxes were excluded because of their close relationship to the field of home mortgage loans. Delinquent rents for homes were also excluded. An initial attempt to develop estimates of the outstanding amounts of delinquent rents was abandoned because of the difficulty of obtaining adequate data. Since the collectibility of delinquent rents appears generally to be questioned by landlords, omission of this type of credit probably does little damage to our aggregate estimates.

Essential Unity of the Field of Consumer Credit

Some writers, particularly those associated with sales finance companies, have insisted that only agencies which purchase contracts arising out of instalment sales can be considered to be true consumer credit institutions. This narrow definition, however, has given rise to objections by representatives of other types of credit agencies and by many students of this field.[1] There can be little doubt of the desirability of finding some general term to distinguish agencies that buy instalment contracts arising from instalment sales to consumers from those that lend money or extend credit directly to the same classes of customers. But there is no justification for the pre-emption by the former of a descriptive title that can be applied as well to many other types of agencies and to many other techniques.

Whatever name may be used to describe the phenomenon which we have called consumer credit, it is necessary to deal with it as a whole. The nature of an instalment contract is not changed in the least by its sale to a finance company, nor is there any essential difference in the transaction if the consumer does his buying with cash borrowed from a moneylending agency. Also, there is no functional difference between open-book credit and instalment credit. In many fields of merchandising one technique may be substituted for another without changing materially the total amount of consumer credit, and for some retail enterprises the outstanding amount of receivables in relation to sales has even been reduced by the substitution of instalment payment plans for

[1] See, for instance, Milan V. Ayres' article in Time-Sales Financing (published by the National Association of Sales Finance Companies), January, 1938, pp. 3–7, and the series of statements of contrary opinion in Personal Finance News (published by the American Association of Personal Finance Companies), November, 1937, pp. 3–4, and December, 1937, p. 18.

open-book credits. Finally, the relationship between agencies that initiate consumer credit and those that refinance existing consumers' commitments must be recognized. Many of the initial credit commitments growing out of the sale of automobiles, for instance, are refinanced by credit unions, industrial banking companies, and small loan companies, and some part of these obligations may even be transferred to the books of pawnbrokers. All forms of consumer credit arise directly or indirectly out of the sale of goods or services. This gives an essential unity to the whole field.

CHAPTER II

CONSUMER CREDIT BEFORE THE CIVIL WAR

DURING all historical periods most people have been both producers and consumers. In order to isolate consumer credit it is necessary to distinguish credit used by persons in their capacity as consumers from credit used by persons in their capacity as producers.

So long as production and consumption took place within the household, it was extremely difficult to make such a distinction. Suppose, for instance, that a family, engaged in rug-weaving in a primitive society, obtained food and shelter on the promise of payment following the completion and sale of its product. One could say that the credit was used in the family's consuming capacity and that the transaction was identical with that of modern retail merchants who extend credit between their customers' paydays. But it could be maintained with equal justification that the credit was granted to the family in its producing capacity and that the transaction was identical with loans made today by commercial banks to finance the processing of goods.

It was not the removal of production from the household so much as the circumstances which caused and accompanied its removal that made possible the distinction between producer and consumer credit. The shift in the place of production was caused by the reorganization of production and an increase in size of the production unit. In other words, the unit of production became distinct from the unit of consumption with respect not only to its location but also to its composition. This cleavage necessitated separate bookkeeping for producing and consuming units. In the final analysis it was the separation of family budgets from production accounting that permitted identification of consumer credit.

The beginnings of consumer credit may therefore be said to coincide with the beginnings of the modern organization of business enterprise. Just as this organization has evolved gradually over a long period of time, so the distinguishing features of consumer credit have evolved with time and it is impossible to fix the exact date of its emergence. Moreover, the reorganization of productive work which makes possible the distinction between producer and consumer credit has not been completed. In agriculture, in the professions, and in many small businesses, the household continues in some degree to be both the unit of production and the unit of consumption. For many families engaged in these occupations, the bookkeeping of producing and consuming elements of the household is hopelessly intermixed.

By 1800, when the household had become predominantly a consumption unit in some sections of the United States, several types of consumer credit-granting agencies could be recognized. The first was the merchant; the second, the physician; the third, the pawnbroker. Thus, at this early date, three of the four general classes of creditors with which this volume deals were already represented.

Retail Trade During the Early Part of the Nineteenth Century

Merchants were the predominant source of consumer credit throughout the period from 1800 to the Civil War. In order to facilitate examination of the characteristics of credit extended to consumers by retail merchants during this period, it seems desirable at the outset to indicate roughly the organization of trade which existed at the beginning of the nineteenth century and to identify the principal changes that occurred during succeeding decades.

Colonial America had been engaged primarily in the production of raw materials. Most equipment, supplies, and wearing apparel that could not be produced within each household had to be imported from abroad. The Revolutionary War gave an important stimulus to intercolonial trade, and political independence of Great Britain removed the legal restraints that had handicapped the development of domestic manufacturing. Nevertheless, at the beginning of the nineteenth century the new nation was still highly dependent upon overseas trade, and a large part of the manufactured goods purchased for use in American households came from Europe.

The overseas trade during the colonial period appears to have been conducted largely by shipowners who traded in domestic and foreign markets for their own account.[1] By 1800, however, a substantial part of the import business seems to have shifted into the hands of merchants who had established stores in the seaport cities and specialized in certain types of goods. Some dealt in dishes, crockery, and glassware; others in hats, gloves, waistcoats, and cravats; and still others in cotton cloth, linens, and laces; in woolen goods; in cutlery, inkstands, and stationery; in drugs, medicines, and chemicals; or in hardware and "iron-mongery" goods.[2]

Most of these importers did both a wholesale and a retail business. In addition to local retail customers their clientele included traders, who exchanged goods purchased in the port cities for the produce of the hinterland; inland storekeepers, who made periodic pilgrimages to the nearest seaport to replenish their stocks; and peddlers, who distributed their wares among the scattered plantations of the South and the isolated farms of the western frontier. Through the agency of these tradesmen, goods from overseas found their way to the least accessible white settlements and Indian trading-posts.[3]

A rapidly increasing section of trade, however, involved goods of domestic origin. In the cities greengrocers had come into existence to distribute the products of nearby farms; and shoemakers, watchmakers, cabinetmakers, metal-workers, harnessmakers, bakers, and butchers had established places of business where the products of their skills were sold at retail. In New England, especially, some of these craftsmen had begun to produce for more distant markets; and by 1800 traders selling to storekeepers and peddlers selling to planters and to farmers were carrying southward and westward buttons, combs, furniture, jewelry, needles, pins, and

[1] A colorful description of the colonial overseas trade is given in a recent novel, Three Harbours, by Frank van Wyck Mason, J. B. Lippincott Co., Philadelphia, 1939.

[2] See, for instance, the advertisements of merchants of this period in the New York Gazette and Daily Advertiser; in the Columbian Centinel and Massachusetts Federalist, Boston; in the General Advertiser, Philadelphia; and in the City Gazette, Charleston, S. C.

[3] See Economics of Retailing by Paul H. Nystrom, Ronald Press, New York, 1930, 3d ed., vol. 1, pp. 76–79; Hawkers and Walkers in Early America, by Richardson Little Wright, J. B. Lippincott Co., Philadelphia, 1927.

shoelaces produced by New England's handicraft industry. These goods, and the factory-made clocks, watches, stoves, textiles, and shoes that followed them in the succeeding years formed part of a general intersectional exchange of manufactured goods and salt fish from New England, of cotton and tobacco from the South, and of corn and wheat from the central states.

In the cities, which at the beginning of the nineteenth century were also the seaports, there was a high degree of specialization among tradesmen with respect to the kind of goods sold, but there was little specialization with respect to wholesale and retail trade. Although grocers, butchers, and bakers were essentially retailers, importing merchants and some craftsmen sold both at wholesale and retail. Elsewhere, however, this situation was reversed. In 1800, outside of the coast cities, the typical store was the general store, which sold only at retail, but which handled a great variety of goods, ranging from needles to plows and from local garden produce to silk waistcoats.[1]

The first few decades of the nineteenth century witnessed a remarkable expansion of the American frontier. The Louisiana Purchase gave the United States control of the Mississippi River which opened a new highway for trade and immigration into the prairie states. Then, the completion of the Erie Canal permitted travel and shipment of goods from the East to the Middle West via the Great Lakes. And a few years later the railroads began to link seaports and factory towns with raw-material-producing areas. Once the Alleghenies ceased to be a barrier to the movement of people and goods between East and West, settlement of the Middle West proceeded rapidly. Within half a century villages and trading-posts on the Great Lakes and on the Ohio and Mississippi Rivers became thriving commercial cities.

Better transportation facilities brought a greater division of labor. The difficulties of marketing their produce had compelled early settlers beyond the Atlantic seaboard to be largely self-sufficient. Each community produced chiefly within itself its means of subsistence and each household produced much of its clothing and

[1] An excellent description of the New England country store of the 1840's is given in the Annual Report of the Massachusetts Bureau of Statistics of Labor for 1899, pp. 58–64.

some of its household goods. Now, however, both communities and households became increasingly specialized. Agricultural communities raised cotton or tobacco or wheat or corn and hogs or cattle; and industrial towns specialized in the manufacture of cotton textiles or shoes or pottery or clothing or furniture. Within individual households the substitution of "store" clothes for homespuns was symptomatic of a broad shift from family self-sufficiency to dependence on a market.

These changes were reflected in a rapid growth in the volume of trade, which in turn induced an elaboration of the merchandising organization. In the seaports and in the inland commercial cities there was a gradual separation of retail and wholesale trade. The shops in which craftsmen sold their products gave way to establishments which sold factory-made goods. Furniture stores began to appear shortly after the turn of the century; and shoe stores, ready-made men's and women's clothing stores, and leather goods stores came into existence in succeeding decades. In smaller places the general store was succeeded by the dry-goods store, the grocery store, the drug store, and the hardware and farmers' supply store; and the dry-goods store, in turn, lost part of its business to the family clothing store and to the furniture store. Toward the close of the period under discussion department stores that combined several specialty shops in a single establishment made their appearance in the larger cities.

In the rural areas of the South and Middle West the peddler continued to play an important role in the distribution of manufactured goods. The peddler who carried a pack or used horse and wagon to carry his wares became the drummer of the canal boats and railroad trains. Some continued to peddle small articles from farm to farm; others used rooms in country hotels to display their goods to farmers from the surrounding territory. Concerning the latter practice about the time of the Civil War, one salesman wrote:

> All this hardware was sold in a retail way and much of it to persons who were going to use it themselves. All customers came to the hotel to see and examine the samples and the trunks of the salesmen were carried up to the rooms by strong porters.[1]

[1] Briggs, Edward P., Fifty Years on the Road. Lyon and Armor, Philadelphia, 1911, p. 33.

The available information concerning the credit practices of merchants during the early part of the nineteenth century is fragmentary and difficult to interpret. But it is clear that credit was frequently granted in connection with retail sales. One of the earliest American economists, H. C. Carey, observed in 1838:

There are few circumstances connected with the American Union more worthy of remark than the credit system, which extends itself over the whole of their vast territory. The traders of Missouri and Arkansas—of Mississippi and Alabama—of Illinois and Michigan . . . are supplied with merchandise on credit. . . . Those traders give credit to the farmer, the planter and the small storekeeper, who in turn grants it to the labourer. . . .[1]

Credit policies differed materially among various classes of merchants and we shall undertake to examine in turn the three principal forms in which credit was granted by merchants to retail customers.

Term Credit Granted by Merchants

Importing merchants in the seaport cities at the beginning of the nineteenth century generally sold both for cash and on credit. Their advertisements in the newspapers usually specified "the customary credit," "sixty-day credit," "credit on approved bonds." In some instances endorsers were required or credit was limited to purchases involving substantial sums. There is some reason to believe that credit was offered almost primarily to the wholesale trade and that retail customers were generally expected to pay cash. But in any case it is clear that credit was not granted indiscriminately—applicants for credit were required to prove their reliability, and promises to pay maturing at a specified date were generally taken.

Somewhat similar credit policies were followed by other merchants who sold relatively high-priced goods at retail. In rural areas horses, plows, carriages, seed, clocks, and household furniture were frequently sold for promissory notes payable after the harvest. And in urban centers furniture, sets of dishes, and other goods that required more cash than the retail customer was likely to have on

[1] The Credit System in France, Great Britain, and the United States. Philadelphia, 1838, p. 24.

hand were sold for a partial cash payment and a note payable in sixty or ninety days.

This form of credit, which will be called "term" credit, appears to have been very common at the beginning of the nineteenth century. Although its use in retail transactions declined progressively in the cities during succeeding decades, it persisted in rural areas. In the 1820's clock peddlers appear to have taken down-payments and notes payable at a specified time,[1] and hardware was sold to farmers by traveling salesmen on promissory notes running from four to eight months in the 1860's.[2]

Open-Book Credit-Granting by Retail Merchants

While relatively expensive goods were commonly sold on term credit, cheaper goods, which had to be replaced at frequent intervals, were generally sold either for cash or on "open-book" credit. In granting open-book credit the merchant took no formal promise to pay a fixed sum at a specified date, but merely recorded items in customers' accounts as purchases were made. It was expected, however, that purchases would be kept well within the purchaser's accruing earnings and that full settlement would be made promptly following the date on which he received his income. For retail merchants in agricultural areas this meant that accounts would not be settled until cash crops were marketed; merchants whose customers were business and professional people generally required monthly settlements; and those who dealt with wage-earners expected settlement each payday.

At the beginning of the nineteenth century open-book credit appears to have been granted most liberally in agricultural areas. Farmers and planters generally owned land, buildings, equipment, growing crops, livestock, and, in some areas, slaves, all of which provided a basis for credit. There were few banks or moneylenders in agricultural areas in those days, and the general storekeeper, usually with the aid of credit extended by those from whom he purchased his stocks, financed the farmer from one crop to another.

[1] Kline, Priscilla C., New Light on the Yankee Peddler, *in* the New England Quarterly, March, 1939, p. 82.

[2] Briggs, Edward P., Fifty Years on the Road, p. 34.

The peddler, in order to sell his wares, was compelled also to extend credit until after the harvest period.

The widespread use of long-term credit, which appears to have been on an open-book credit basis when high-priced goods were not involved, is indicated by recently published correspondence of peddlers. A member of a Connecticut clock-making firm, wrote to his partner in 1827:

You seem to find fault with credits given by the pedlers last season in lower Kentucky. Now let me tell you that . . . the people in that section of country calculate upon at least a year's credit. . . . This is the way they had been in the habit of doing business.

And a peddler writing from Mississippi in the same year said:

I have been a trying for some weeks past to sell goods for cash but I find it out of the question. . . . I can sell out the balance of my goods on a credit untill next Christmas at a handsome profit to good customers . . . admit evry merchant in this country to be a selling on a years credit and you can faintly imagine the difaculy of geting hold of a dollar which you have not bond for.[1]

The advertisements of grocers, bakers, shoemakers, and watchmakers in urban centers during the first few decades of the nineteenth century generally omitted reference to credit and some specified that goods were sold only for cash and country produce. Wage-earners were generally less desirable credit risks than farmers; and tradesmen in the cities were probably more hesitant to extend credit to the rank and file of their customers than country storekeepers.

Nevertheless, there is ample evidence that open-book credit-granting was common in many cities shortly after the turn of the century. The discussion of imprisonment for debt in Massachusetts in the 1820's indicates that a very large part of the working-class population was in debt principally to "bakers and shopkeepers."[2] A letter describing the credit system in Cuba addressed to the editor of the New Orleans Commercial Bulletin in 1839, which acquires pertinence from the suggestion that the development in

[1] Kline, Priscilla C., New Light on the Yankee Peddler, pp. 81–83.

[2] See, for instance, the letters addressed to the editor of the Columbian Centinel, Boston, published in the issues of that newspaper for August 5, August 12, August 16, and August 26, 1820.

Cuba was similar to that in the United States, indicates that the use of credit was already highly developed in agricultural areas and was increasing in urban communities. That writer said:

> The planters obtain credit, as well from their factors as from their iron-mongers, their grocers, their clothiers, and the whole catalogue of traders who minister to their wants. . . . If we . . . descend to the ordinary retail traffic—the markets, the petty grocers, the mechanics, laborers, etc.—we find the cash system more generally in use, . . . but even here, the "credit system" is gradually acquiring the sanction of custom.[1]

Specific reference to the baker in the Massachusetts correspondence quoted above suggests that bakers were among the first tradesmen to extend open-book credit in the cities. This suggestion is confirmed by the correspondent from Cuba who indicated that credit-granting to urban workers had begun with the bakers and that their example was "insensibly working an influence over other tradesmen." However, by 1850 in the United States, open-book credit-granting had become common practice among urban bakers, clothing stores, drug stores, dry-goods stores, grocers, and shoe stores.

In some factory towns in the United States, the method of paying wages produced a peculiar type of open-book credit. For instance, in Lynn, during the 1820's and 1830's, some employers paid their workers in store orders which were charged to the employer's account with a merchant and settled annually on New Year's Day.[2] This type of open-book credit, however, can scarcely be called consumer credit. Like much of the credit extended to farmers by general storekeepers at that time, it represented intermediate-term financing of production. In Chicopee, during the same period, wages of millworkers were paid semiannually, which required merchants to extend very long-term credit, and probably retarded the development of independent retail stores.[3]

[1] Currency of Cuba, (anonymous) *in* the Merchants' Magazine and Commercial Review, New York, June, 1840, pp. 523–524.

[2] Johnson, David N., Sketches of Lynn. Thomas P. Nichols, printer, 1880, p. 103.

[3] Shlakman, Vera, Economic History of a Factory Town. Smith College Studies in History, October, 1934 to July, 1935, vol. 20, nos. 1–4, Northampton, Mass., p. 66.

In the South, and to some extent in other areas where wages were paid quarterly or semiannually, employer-owned stores extended credit to workers. It seems possible that these stores were established first because independent merchants were unwilling to extend credit to wage-earners for such long terms, and that store orders were later instituted to prevent independent merchants from competing for this business when the period of payment was reduced.

Legal Remedies for Default

Open-book credit transactions were highly informal. There were no notes or other contracts to evidence debts, nor any security or charge for credit service. Credit was an accommodation extended to customers who paid their accounts promptly. The principal collection weapons were the suspension of credit privileges and the pressure of public opinion. But the latter was a powerful weapon. All the social forces of an intimate community life could be pressed into the service of defrauded creditors. In the eyes of most American communities of the early part of the nineteenth century, prompt payment was a virtue, and failure to meet one's just obligations a cardinal sin.

The credit-granting merchant could, however, exercise certain legal remedies in case of default. He might sue the debtor and obtain a judgment which could be executed against the debtor's property. In many areas during the early part of the nineteenth century, it was also possible to obtain a body execution by which the debtor could be imprisoned until the judgment was satisfied. Property executions were effective principally against tangible property such as real estate, and for debtors who owned real property the existence of this weapon undoubtedly minimized voluntary defaults. Body executions were probably effective against wealthy debtors, but for other debtors imprisonment generally destroyed their ability to pay. Moreover, in some jurisdictions the creditor of an imprisoned debtor was required to pay the cost of the debtor's prison maintenance. Consequently, this weapon seems to have been used sparingly.

The collection weapons available at the beginning of the nineteenth century appear to have been weakened progressively during the period from 1800 up to the Civil War. In the first place, the machines of New England's textile mills and of other early industries were manned largely by immigrants drawn from the surrounding agricultural regions or from Europe. These immigrants needed credit from payday to payday, but they were relatively impervious to the social pressures which contributed to prompt payment by those long associated with the community. In the second place, the effectiveness of execution after judgment was reduced by the gradual elimination of imprisonment for debt,[1] by exemption of certain household goods from execution, and by a decline in the proportion of urban families who owned real estate. Few industrial wage-earners owned their homes, and for other classes there was a gradual shift in the form of wealth from tangible to intangible property.

These circumstances led to the development of two new weapons for the enforcement of claims against debtors. The first was the assignment of wages and salaries and the second was the garnishment of wages and salaries.

Wage assignments had their origin in the common law of contracts, and these instruments therefore came into use without statutory authorization. Accrued wages are the property of the wage-earner and the courts have generally held that he may sell, assign, or otherwise dispose of these wages as he sees fit.[2] Wage assignments, it has been said, were first used to secure credits granted to seamen for necessities before a voyage and later "served to protect tradesmen in New England textile-mill towns from donating a living to irresponsible labor."[3] These instruments appear to have been used on a small scale in many jurisdictions before the Civil War principally by merchants dealing with very low-income classes. It

[1] In some areas, notably in New England, imprisonment of debtors gradually became meaningless. The impoverished debtor could relieve himself of his debt by taking the poor debtor's oath, and prison "limits" for debtors were defined to include the work places of industrial laborers.

[2] Some courts, however, have objected to partial assignments of earned wages because of the difficulties in dealing with fractional choses in action. With respect to future wages the decisions also vary. In many instances courts have refused to enforce assignments of future wages on the ground that the property right is inchoate or that such assignments are offensive to public policy.

[3] Strausberger, Albert F., Jr., The Wage Assignment Problem, *in* Minnesota Law Review, vol. 19, April, 1935, pp. 536–555.

was not until after the Civil War that instalment merchants began to use them on a large scale.

Garnishment process had its origin in statutory law. It grew out of the process of attachment to which it is closely related. By means of attachment a creditor could prevent the disposal of property by his debtor while he was demonstrating his right to an execution against such property in the courts. Garnishment was the process of attaching property of the debtor held by a third party. Although both garnishment and attachment were authorized by statute in many American jurisdictions during the colonial period, these processes appear to have been used prior to 1800 almost exclusively in connection with tangible property such as real estate and merchandise. In most jurisdictions it was difficult to attach intangible property, and no effort appears to have been made in the statutes to facilitate the application of the garnishment process to wages and salaries.

Although the history of wage garnishments is obscure, it seems probable that this collection device developed first in Massachusetts under an act of 1794 which authorized the attachment of tangible and intangible property through "trustee process." The use of this process to attach wages began sometime between the date of enactment of this statute and 1842, when an amendment exempting wages to the amount of $20 from attachment is clear evidence of the use of trustee process for the collection of wage-earner debts.[1] Other New England states appear to have followed promptly the lead of Massachusetts. In most other jurisdictions, however, application of the garnishment statutes to wages and salaries did not begin until the second half of the nineteenth century, or even later.[2]

The real security behind the extension of open-book credit by retailers, however, was, and has continued to be, the willingness of the debtor to pay. This attitude grew out of his close association with his creditor in many types of retailing, the feeling that the merchant had delivered goods of real value for which he was justly

[1] The writer is indebted to Reginald Heber Smith, of the Massachusetts Bar, for information concerning the use of trustee process in Massachusetts.

[2] For a history of the application of garnishment process to wages and salaries in New York, see Collection of Money Judgments in New York, by Isadore H. Cohen, *in* Columbia Law Review, November, 1935, pp. 1036–1037.

entitled to payment, realization that credit was a convenience that might be lost through default, and the satisfactions inherent in a good credit reputation.

Beginnings of Instalment Merchandising

At the beginning of the nineteenth century credit sales of retail merchants in urban areas to people of moderate means seem to have been confined principally to goods of current consumption, to low-priced household necessities, and to certain articles of wearing apparel. Furniture and other more expensive durable goods were obtained directly from the craftsmen who made them, and most purchasers probably had to await the accumulation of the purchase price.

When retail merchants began to act as the agencies of distribution for high-priced durable goods for household use, the shortcomings of open-book credit immediately became apparent. A merchant could not expect the customer of limited income to liquidate promptly a bill for a stove, for a bed, or for a sofa. If these articles were to be sold without requiring immediate cash payment, which tended to limit the market, special credit arrangements were necessary. It is significant that the firm of Cowperthwaite and Sons, founded in New York City in 1807, and reputedly the first specialized furniture store in the United States, began immediately after its organization to sell goods on instalment terms.[1]

Instalment credit differed from open-book credit in the following principal respects: (1) Instalment credit was granted specifically in connection with a single purchase. (2) It was evidenced by a formal contract by which a merchant retained title to an article sold until the purchase price had been paid and by which a purchaser agreed to make regular periodic payments which were to be considered as "rent" for the use of an article if the contract were not fulfilled.[2] (3) The initial amount of credit granted on instal-

[1] Horses, carriages, and farm equipment were, however, sold much earlier on notes requiring annual instalment payments. An advertisement in the City Gazette, Charleston, S. C., for December 9, 1789, offered "Horses for sale on credit with approved security of one, two, and three years or good instalment bonds."

[2] Such contracts, which are known as conditional sales contracts, are by far the most common in instalment sales. In some areas, however, chattel mortgage contracts are used for statutory reasons. The principal difference lies in the fact that title passes to the purchaser in the chattel mortgage contracts and remains with

ment terms was usually much larger than that which the merchant would be willing to extend to the same customer on open-book terms, but payments were spread over lengthy periods so that single payments tended to be smaller than those generally anticipated on open-book accounts. (4) A partial cash payment was usually required at the date of purchase of goods sold on instalment terms.

The instalment system was a logical device for selling high-priced durable goods on credit to wage-earners and salaried persons. It provided a schedule of repayment for credits that were too large to be liquidated in full on the purchaser's next income date. It permitted consumers to acquire high-priced goods without first saving the purchase price or without diminishing cash held in reserve for other purposes. And it provided merchants with some measure of security and an effective collection weapon. Usefulness of the instalment plan to both merchant and consumer led to its gradual spread among furniture dealers and to its use in other lines of merchandising. The Singer Sewing Machine Company is reputed to have begun selling its products on the instalment plan about 1850. Manufacturers of pianos, household organs, and stoves, selling directly to the consumer through agents, appear to have initiated instalment sales about the same time.

Shortly after 1850 piano and organ dealers, who frequently sold other musical instruments and sheet music as well, made their appearance in the principal cities, and some of these dealers offered instalment terms. In 1855 Horace Waters, a piano dealer in New York City, advertised, "To suit some purchasers, monthly payments will be taken."[1] In later years, advertisements of the same dealer contained the phrase "Monthly payments received for pianos and melodeons."

The instalment system appears, however, to have been used very conservatively prior to the Civil War. Instalment sales were confined almost universally to goods which had a satisfactory resale market; terms of repayment appear to have been relatively short

seller in conditional sales contracts. For other distinctions, see The Law of Chattel Mortgages and Conditional Sales Contracts, by Griffin and Curtis, Matthew Bender and Co., New York, 1931.

[1] New York Times, April 20, 1855, p. 7. An advertisement of S. T. Gordon, New York City, offering reed organs on monthly payments appeared in the New York Times, May 31, 1855.

and down-payments substantial; and instalment credit privileges appear to have been limited to persons who enjoyed good credit reputations and who were well able to meet their contracts. Many merchants who sold furniture, pianos, organs, and stoves in industrial areas continued to sell only for cash; and among those who offered instalment terms, cash sales probably formed a substantial part of total sales.

Credits for Services

The earliest type of service credit was that extended by physicians. Physicians supplied what were clearly consumers' services, and credit was a common by-product of these services. This credit, however, differed materially from that extended by other types of creditors. Professional ethics required that emergency service be rendered without regard to the patient's ability to pay. Moreover, expenditures for medical services were frequently determined by forces beyond the restraining influence of the family budget. Consequently, families who were accustomed to meeting other obligations promptly were frequently obliged to defer payment of physicians' bills.

These characteristics of medical service provided not only a measure of justification, but also an excuse for delay in payment. The peculiar relationship of the physician to his patient made it difficult to use either social pressure or legal process for the collection of accounts. The attitude of debtors also differed with respect to debts for medical services and debts for goods. Because the physician had not incurred "out-of-pocket" costs by supplying goods and because the contraction of medical debts was in a sense involuntary, the incentives which induced prompt payment of mercantile credits did not exist.

Much of the credit extended by physicians during the period under discussion appears to have been uncollectible, or to have remained uncollected, and it seems likely that physicians measured their current earnings generally by cash receipts rather than by the value of services rendered. Consequently, if this study were confined to the period before the Civil War, medical service credits would have been excluded from consideration for the same reason that loans by relatives and friends were excluded.

Credit extended by dentists and by nurses in private practice had some of the characteristics of that extended by physicians. But because their services were more readily dispensable, or at least more readily postponable, dentists and nurses obtained a creditor status more nearly resembling that of the open-book credit merchant.

Cash-Lending to Consumers

The agencies described thus far in this chapter were those which granted credit as a by-product of the sale of merchandise or services. These agencies could include their charges for credit service, if any, in the price of their goods or in their fees or charges for services, and they were able by this means to avoid the restrictions upon interest rates imposed by the usury laws. The cash-lending agencies which will be described in this section granted credit as a primary function and their charges applied solely to the credit service which they rendered. Consequently, these latter agencies were confronted directly by the usury laws, and their history has been inseparably related to the avoidance of these restrictive statutes either by statutory exemption or by evasive devices.

Pledge Loans

As already indicated, the first agency to make cash loans to the consumer in this country was the pawnbroker. The technique of advancing money or goods against tangible personal property delivered into the possession of the lender is as old as the earliest historical records and there were many periods during which the pawnbroker was an important source of short-term credit for business purposes. But after the development of banks, which were able to supply producer credit at lower cost, the pawnbroker became largely a consumer credit agency.

The early history of pawnbroking in the United States has been inadequately explored. It seems probable that there were pawnbrokers in several American cities during the colonial period; and there is little doubt that pawnbrokers were operating on a considerable scale in many cities by 1800.[1] In New York City, where pawn-

[1] Levine, Samuel W., The Business of Pawnbroking. D. Halpern Co., New York, 1913, pp. 8–18.

brokers were subjected to police supervision at an earlier date than in other cities, 149,000 pledges were reported by pawnbrokers in the year 1828. About half of these pledges appear to have been articles of clothing, and watches and jewelry comprised the largest part of the remainder.[1] The pawnbroking business was fully as extensive in Philadelphia and Boston during the same period.

The pawnbroker takes no note nor promise to pay from the borrower. His claim extends solely against the property pledged. In this significant respect the pawnbroker differs from all other types of creditors dealt with in this volume, each of whom has the borrower's express or implied promise to pay. The pawnbroker is, in a sense, a merchant and not a lender. His transactions represent essentially the conditional purchase of personal property.

It was probably this characteristic that made it possible for pawnbrokers to exist at so early a date in spite of the legal restraints upon interest rates. The first pawnbrokers were former dealers in second-hand goods, and it was quite natural for pledge-lending to take the form of purchases of property with the understanding that the seller might redeem the goods at an increased price within a specified time. Later on, after the courts had declared this increment in price to represent interest, pawnbrokers frequently attempted to disguise their interest as charges for "storage" or "insurance" or to discount their charges in advance in order to make proof of usury difficult. It was not until late in the nineteenth century that statutory recognition was given generally to the pawnbroking business.[2]

If those who borrowed money on pledges generally looked upon the transaction as a sale of property, pawnbroking might properly be excluded from our definition of consumer credit. The fact is, however, that the great majority of borrowers redeem their pledges. Some pawnbrokers, particularly those who lend substantial sums upon precious stones and metals study carefully the markets for such articles and keep their lending schedules below wholesale prices. Other pawnbrokers rely heavily upon the borrower's per-

[1] Carey, Mathew, Public Charities of Philadelphia, *in* Miscellaneous Essays, printed for Carey and Hart, Philadelphia, 1830, p. 160.

[2] See Regulation of Pawnbroking, by R. Cornelius Raby, Russell Sage Foundation, New York, 1924.

sonal attachment to the article pledged. But it is the general practice of pawnbrokers to lend a smaller sum than the pledge is worth to the borrower, and this accounts for the high percentage of redemptions.

Consumer Loans by Banks

It seems probable that banks played little or no part in the granting of consumer credit in the United States during the first few decades of the nineteenth century. Although most practical bankers were not strongly influenced by the traditional objections to consumer credit, consumers were generally unable to meet the terms upon which bank credit was available. Besides, banks were able to employ all their available funds in commercial, industrial, and agricultural loans. The gradual growth of large-scale enterprises during the succeeding decades, however, created a new class of managerial and professional employes who had occasional credit needs and were acceptable applicants for bank credit. Before long two other classes of consumer borrowers obtained access to bank credit on a small scale. The first class was composed of depositors of long standing to whom, in good times, some bankers were willing to make loans of small amounts for short terms. The second class consisted of those who were able to offer a note endorsed by a satisfactory name.

These consumer loans were generally small and, because they were made at the customary discount rates for commercial loans, unprofitable. They were generally made on thirty, sixty, or ninety-day notes with the understanding that the loan would be repaid in full or renewed for a lesser amount at the maturity date. But consumers were less precise about meeting their obligations than commercial borrowers and most bankers considered such loans to be a nuisance. Consumer loans were known generally as "accommodation" loans and were made sparingly by most banks.

Note-Shavers' Loans

In addition to commercial banks and pawnbrokers most urban communities during the latter part of the period under discussion had one or more private moneylenders who were known generally as "note-shavers," a term derived from the technique used to evade the usury laws. Note-shavers took notes which bore interest at the maximum legal rate, but they subtracted commissions and charges for various services or "expenses" from the amount given the borrower. In order to plead usury as a defense it was necessary for a borrower to prove first that he had received less than the face amount of the note and subsequently that the charges for expenses were excessive in relation to the lender's necessary outlays. Since the principal sum was paid to the borrower in cash without witnesses, proof of usury was generally difficult.

Little is known about the note-shaving business. The available information comes largely from fictional literature of the period rather than from studies of the scope and character of the business. But it seems clear that note-shaving covered a great variety of transactions. Note-shavers lent to small business men on equipment, inventories, and receivables; to farmers on land, buildings, livestock, and crops; to craftsmen and salaried workers on homes, tools, and other security. In communities in which credit policies of banks were stringent because of restrictions of the usury laws or for other reasons, note-shavers supplied the emergency credit needs of a substantial part of business and agriculture. Where bank-credit policies were liberal, the note-shaver was compelled to accept poor credit risks and to lend on undesirable forms of security. Note-shavers ranged from respected private bankers, whose charges were governed by the business risks involved in the transaction, to town "Shylocks," who drove the hardest bargain which the necessities of the borrower permitted, and who suffered the social opprobrium and enjoyed the financial rewards of the usurer.

Although the proceeds of many of the loans of note-shavers were undoubtedly used by borrowers in their capacity as consumers, the business as a whole probably accounted for a very small part of the total amount of consumer credit. Note-shavers dealt generally with propertied borrowers, and because most wage- and salary-earners could not meet their security requirements, their clientele was confined largely to small business men and farmers. It was only in intimate communities, where the threat of exposure of indebtedness served as an effective collection weapon, that note-shavers were willing to forego tangible security.

The note-shaver of the pre-Civil War period was generally supplanted in the succeeding years by banks in the field of short-term business and agricultural credit, and by building and loan associations and other specialized mortgage loan institutions in the field of first mortgage loans on real estate. Although the specialized small loan business that began in the 1870's used some of the techniques of note-shavers, it appears to have developed independently of them and it served a class of borrowers to whom note-shavers would generally have been unwilling to lend. In the field of consumer credit the business of unauthorized "discount companies"[1] represents the nearest approach to the note-shaving technique, but there seems to be little historical relationship between these two types of businesses. Note-shaving has persisted largely in the field of second mortgage loans and in the financing of very small businesses.

Quantitative Movements of Consumer Credit Before the Civil War

There are no historical data concerning the quantitative aspects of consumer credit during the period from 1800 to the Civil War. No investigator undertook to measure the outstanding amount of consumer credit at any date or to determine its rate of growth during any period; and the casual comments of contemporary writers that bear upon quantitative movements are inconclusive. Enterprises that extended credit to consumers were generally small and their balance sheets have not been preserved. Account books of some merchants of this period are available in museums, but we have been unable to find any from which a series of year-end receivables can be obtained.

It seems possible, however, to make some rough generalizations concerning the growth and cyclical movements of consumer credit during the period under discussion. We have some knowledge of the trend of retail sales and of changes in credit practices among retail merchants and we know something of the trend of pawnbroking, moneylending, and banking. Also, as anthropologists have so adequately demonstrated, the past may be reconstructed in the absence of historical records by the study of survivals from earlier periods. The credit policies of small independent merchants in

[1] For a description of these lending agencies, see pp. 362–365.

some isolated communities have changed but little since the Civil War, and we may rely to some extent upon the current practices of these merchants in drawing conclusions concerning the past.

There can be little doubt that the outstanding amount of consumer credit increased very substantially and with some degree of regularity between 1800 and 1860. The population of the United States increased almost sixfold during this sixty-year period, and the total volume of retail sales undoubtedly increased even more rapidly, partly because of the rise in per capita productivity and real incomes and partly because of the expansion of the market system that followed the improvement of transportation facilities. Consequently, if there had been no change in the proportion of credit sales or in the term for which credit was granted, the expansion of credit granted by retail merchants would have been more than sixfold.

It is exceedingly difficult to say whether the outstanding amount of retail credit expanded more or less rapidly than retail sales. In agricultural areas credit was already being granted very extensively on long terms by 1825, and a further liberalization of credit policies among country storekeepers and peddlers could scarcely have been expected. In fact, there appears to have been some restriction of credit terms in the succeeding years; and the rapid growth in the number of banks after 1830,[1] many of which were organized in agricultural areas, probably induced some shifting of credit used to finance agricultural production from the books of tradesmen to the portfolios of banks.

In urban areas, on the other hand, it seems probable that retail credit expanded in relation to the volume of retail sales. Open-book credit-granting appears to have become increasingly common throughout the period from 1800 to 1860. It is true that wage payments in some industries became more frequent as the result of statutory regulations and workers' demands, and that this tended to shorten the term for which credit was extended to wage-earners. But the increased frequency of settlement also reduced the hazards of credit-granting and made merchants more willing to extend open-

[1] H. C. Carey reported the number of banks in certain years as follows: 1811, 88; 1816, 246; 1820, 307; 1830, 328; 1838, 677. (The Credit System in France Great Britain, and the United States, p. 31.)

book credit to employe groups. The gradual growth of instalment sales of durable goods also tended to increase the outstanding amount of retail credit in relation to the volume of retail sales.

The best guess seems to be that these divergent tendencies in agricultural and in industrial areas were compensatory, and that the growth of retail credit was roughly proportionate to the growth of retail sales. However, if allowance is made for the fact that the declining ratio of receivables to sales of some merchants reflected in part a shift to banks of receivables representing producer credit, and if, in addition, we take into consideration the increase in cash-lending to consumers, it seems reasonable to conclude that the outstanding amount of consumer credit as a whole expanded somewhat more rapidly than sales to consumers.

The lack of any quantitative data whatsoever to indicate how consumer credit was affected by business fluctuations during the period from 1800 to 1860 is unfortunate, but apparently irremediable. There are, however, several reasons for believing that consumer credit tended to fluctuate inversely with business activity.

First, there was a tendency among many merchants to sell so far as possible for cash and to resort to credit only as a means of disposing of goods when demand was slack. This tendency was particularly marked among merchants who sold expensive imported goods, at auction sales of second-hand goods, and among peddlers. Advertisements of importers occasionally offered goods for cash upon arrival of a new shipment, while subsequent advertisements offered the same goods on credit terms. Similarly, goods which were not sold at an auction sale were occasionally offered later on liberal credit terms. The peddler, who carried his wares laboriously to an inland market, had to dispose of them in good times and bad; and judging from the correspondence of the Connecticut clock peddlers to which reference has been made, goods could be sold, regardless of the condition of crops and agricultural prices, if sufficiently liberal credit terms were offered.

Second, a very large part of the total volume of consumer credit was extended in connection with the sale of non-postponable necessities. When crops failed or employment was slack, repayments tended to decline while new credit commitments continued so long as the merchant permitted.

Third, the intimacy of community life in those days probably made it extremely difficult for merchants to refuse credit privileges to good customers, and the general optimism produced by a rapidly expanding economy probably encouraged the belief that it was good business to carry desirable customers through periods of crop failure or unemployment.

Some degree of confirmation of the latter two observations is to be found in the practices of present-day merchants dealing in current necessities in small intimate communities. The receivables of many such merchants rose during periods when their customers' incomes were reduced and declined when their customers' incomes rose, prior to the time when large-scale government relief and agricultural benefit payments began substantially to affect these movements.

CHAPTER III

CONSUMER CREDIT BETWEEN THE CIVIL WAR AND 1922

PRIOR to the Civil War there was comparatively little need for specialized consumer credit agencies. The major capital needs and financial emergencies of the household were met by social conventions or were absorbed by family groups, church parishes, or the community as a whole. Needs growing out of marriage and the establishment of a new home, for instance, were met by the institution of the dowry, by the bride's hope-chest, by savings which the groom was expected to have accumulated during the period of courtship, and by contributions of useful goods from relatives and friends. Emergencies of family life, such as childbirth, sickness, and death, brought into speedy action the community's voluntary forces for assistance.

The Civil War, naturally, did not change the inherent instinct of helpfulness. But it marked for many communities the beginnings of a breakdown in the social cohesiveness that made mutual assistance possible. The victory of the North was followed by the sacrifice of raw-material producers, in the interests of protectionism, for the manufacturing industries of the northeastern and central states. Growing industrial cities attracted masses of wage-earners to man their machines. Still other wage-earners were needed to feed, clothe, house, and transport those who were employed directly in production.

The populations of these industrial cities were drawn from farms which had become unprofitable with the exploitation of the western prairies, from decadent towns isolated by the development of railroad transportation, and from overpopulated or politically oppressed sections of Europe. They were transplanted from intimate communities, in which they had enjoyed the security of partial self-sufficiency and the protection of family and neighborhood facilities for mutual assistance, to impersonal cities, where their means of subsistence depended on the continuous flow of pay-checks, and their nearest neighbors were usually anonymous.

They came to the city with little money and with substantial needs for household goods. Most of them were soon earning much larger cash incomes than they had ever earned. But they were poorly equipped by training and experience to deal with the market economy into which they were suddenly thrown. Costs of living increased in proportion to incomes and there were only slim margins in family budgets for the acquisition of durable household goods or for protection against the inevitable emergencies that must now be borne by the single household. Moreover, incentives to thrift disappeared with intimate community life. Family traditions, conservative consumptive habits, and reputations for stability gave way to competitive standards of living as the principal basis for prestige.

These changes help to explain two important developments in the field of consumer credit which began shortly after the Civil War. One was the extension of instalment merchandising to low-income classes; the other, the rise of the small loan business.

Expansion of Instalment Sales

The conservative credit policies which had characterized instalment selling during the period covered by the previous chapter broke down in many areas shortly after the Civil War. Liberalization of terms occurred first among furniture dealers in the new industrial centers of the Middle West. The proletariat of these cities needed household goods and could buy them only on credit. In order to tap this market it was necessary to offer easy terms to persons formerly considered to be unacceptable instalment credit risks. By 1870 furniture dealers in the principal industrial cities had begun to sell goods on small down-payments and long-term contracts to wage-earners of very modest incomes.

Instalment sales of pianos, organs, and stoves also expanded rapidly in some areas. More and more dealers were compelled by competitive pressures to offer instalment terms. Down-payment requirements appear to have been reduced and the period of payment extended in order to attract purchasers of modest incomes. An advertisement of a musical instrument dealer in New York City in 1870 offered 100 pianos, melodeons, and organs on contracts calling for "$5.00 to $25 monthly until paid,"[1] which probably means that payment schedules for some instruments covered several years. Sewing machines also were sold on increasingly liberal terms. In the 1870's sewing machines were being sold by house-to-house canvassers throughout the country for as little as $1.00 down and 50 cents a week.

It was probably the credit policies of the sewing-machine companies and their agents that led to the prompt extension of easy-payment selling from one community to another. Local merchants, watching the selling practices of agents for sewing-machine companies and hoping to sell furniture, pianos, stoves, and other durable goods to the same customers, must have concluded that what was good for the goose should be good for the gander. In the principal cities the growth of department stores appears to have stimulated instalment selling by driving many furniture dealers to offer instalment terms in order to compete.[2]

Instalment selling was also extended to the merchandising of goods that speedily lost value with use and could not be effectively repossessed. Book publishers are said to have applied instalment techniques to the sale of encyclopedias and book sets as early as 1871. In the late 1870's specialized instalment furniture houses began to sell all kinds of household equipment, including bedding, rugs, clocks, sets of dishes, and kitchenware, on instalment payments; and a few clothing stores began to specialize in sales of suits, coats, and dresses on contracts which called for a down-payment of one-fifth of the purchase price and weekly payments over a period of two months.[3] In the early 1880's some merchants began to sell watches and jewelry on instalment payments.

Thus, during the 1870's and 1880's instalment selling expanded progressively on three fronts: First, it was extended geographically; second, it was extended to additional fields of merchandising; and third, it was extended to lower-income classes and to poorer credit risks. Furniture sales on small down-payments and long-

[1] New York Times, April 3, 1870, p. 7.

[2] Changes in Conducting Retail Trade in Boston since 1874, *in* the Annual Report of the Massachusetts Bureau of Statistics of Labor for the year 1899, pp. 45, 54.

[3] *Ibid.*, p. 49.

term contracts to poor white workers appear to have been common in the South by 1875 and within a few years similar terms were being offered to colored workers. Likewise, in the cities of the Northeast instalment sales were extended first to native and then to immigrant laborers.

The part played by the "customer-peddler" in the growth of instalment selling among immigrants represents an interesting chapter in the history of consumer credit. The rising tide of immigration in the 1870's and 1880's brought to New York and other industrial cities large numbers of non-English-speaking wage-earners who settled in foreign language communities. Wherever language was a barrier between these groups and the sources of supply of goods and services, the customer-peddler, who was usually an English-speaking member of the foreign language group, entered the picture. A newly married couple, for instance, might appeal to a customer-peddler for assistance in purchasing their furniture. His function was to take them to a number of stores with which he had established connections, to advise in the selection of goods, and then to collect the purchase price by instalment payments. Such a transaction frequently marked the beginning of a relationship which continued for many years—the peddler standing ready to provide similar services at births, confirmations, graduations, marriages, and deaths.

Merchants competed for the favor of customer-peddlers by providing free office space, by offering substantial discounts, and by extending liberal credit privileges. But the discounts which the peddler received from merchants and professional people seldom increased the prices paid by his customers materially above fair retail values, and his special knowledge of markets and the credit service which he rendered were usually worth the cost. The intimacy of the relationship between the peddler and his customers and the solidarity of the foreign language group with which he dealt generally compelled scrupulous honesty and fair dealing.[1]

[1] Although the importance of the customer-peddler has declined in recent years because the language barriers which created this business are disappearing, a solid block on East Broadway in New York City is still confined to stores whose business is transacted almost exclusively with customer-peddlers. For some customer-peddlers practices have changed little since the 1880's, but the decline in this business has driven others into dubious instalment-selling activities. Many of the

An indication of the growth of instalment sales in the first few decades after the Civil War is provided by a study of chattel mortgages recorded in Illinois which was published in the 1888 report of the Illinois Bureau of Labor Statistics. Since the term "chattel mortgage" was interpreted to include title-retaining instruments, the figures given in the report presumably cover all recorded instalment contracts. But these figures also include loans secured by chattel mortgages, which cannot be isolated. The report indicates that practically all mortgages on pianos, organs, and sewing machines were purchase-money liens. On the other hand, a considerable part of the chattel mortgages on household furniture represented loan contracts.

TABLE 1.—NUMBER AND AVERAGE AMOUNT OF CHATTEL MORTGAGES ON CERTAIN TYPES OF PERSONAL PROPERTY RECORDED IN ILLINOIS IN 1870,[a] 1880, AND 1887

Nature of security	Year	Cook County (Chicago)		Peoria County (Peoria)		Other counties		All counties	
		Number	Average amount	Number	Average amount	Number	Average amount	Number	Average amount
Pianos, organs, and sewing machines	1870	324[a]	$269	4	$398	108	$259	436	$268
	1880	1,339	189	5	98	780	148	2,124	174
	1887	2,104	127	31	171	755	131	2,890	129
Furniture and wearing apparel	1870	4,549[a]	276	44	504	472	486	5,065	298
	1880	9,691	152	80	234	867	228	10,638	159
	1887	22,839	151	331	115	1,245	222	24,415	154

[a] The 1870 records for Cook County were destroyed by the Chicago fire. Consequently, the records for 1875 were used.

Table 1 gives the number and average amount of mortgages on pianos, organs, and sewing machines and on household furniture and wearing apparel recorded in Illinois during the years 1870, 1880, and 1887 for the counties that contained the two principal cities and for the remainder of the state. These data cannot be interpreted with any degree of certainty or precision. The possibility that the practice of recording liens may have increased and the inclusion of substantial numbers of small loan contracts among the mortgages on furniture are particularly confusing elements.

so-called "jewelry lenders," who preyed upon New York City employes and against whom prosecutions were brought in 1937, began their business careers as customer-peddlers.

But we have found no reason to doubt the general accuracy of the conclusions which these data suggest: that there was a remarkable increase in instalment selling during these years; that the expansion of instalment selling began first and continued at the most rapid rate in the larger industrial cities; and that the expansion occurred largely in the field of low-priced goods, and presumably among low-income classes.

Similar data are available for the city of Minneapolis as the result of a study by the Minnesota Bureau of Labor of title-retaining instruments and chattel mortgages filed in the city clerk's office during the year 1893.[1] Purchase-money liens, which were segregated from chattel mortgages given to secure loans, were distributed among various types of commodities as follows:

Type of commodity	Number of instruments filed
Household goods	9,227
Musical instruments	993
Livestock	41
Merchandise	79
Farm machinery	4
Miscellaneous	591
Total	10,935

The Bureau pointed out that liens were seldom filed in connection with instalment sales made by house-to-house canvassers, particularly those selling books, clocks, rugs, and other household goods.

The purchase price of goods represented by the liens filed was $773,000 of which $111,000 was paid in cash as down-payments. The average period of payment was 5.35 months, but for musical instruments (presumably pianos and organs) the average term was about two years. Although no comparative figures were given for earlier years, the report indicates that instalment sales had grown very rapidly during the preceding twenty years.

The Low-Grade Instalment Business

The extension of instalment selling to wage-earners whose incomes were low and frequently irregular and who were free from

[1] Biennial Report of the Minnesota Bureau of Labor, 1893–1894.

the disciplines of intimate community life brought new collection problems. The liberalization of terms and the application of instalment selling to cheap merchandise and to semi-durable goods weakened the merchant's security, while the change in the quality of credit risks made default more common. Repossessions were numerous, and wage assignments and garnishment process were used more and more frequently as additional collection weapons.

Sewing-machine companies left the determination of credit policies almost entirely to their agents, who were paid a commission on sales and collections. Consequently, sewing machines were frequently sold on exaggerated stories of what the housewife could save or earn by owning one, and the less sound the sale the greater was the pressure necessary to collect the debt. Even local merchants frequently used agents as house-to-house canvassers and made them responsible for collections.

While many merchants and agents engaged in instalment selling attempted to deal fairly with their customers, the business lent itself readily to fraud and abuse, and in the 1890's it attracted a large disreputable fringe. Prices were frequently raised far above fair retail values, and in order to sell these goods, high-pressure methods were used, down-payments were reduced, and periods of payment were extended. In some instances the goods delivered were of lesser value than the goods displayed to the purchaser when he signed his contract. The "add-on" contract, by which goods previously purchased were included as additional security for the payment of a new instalment contract, appears to have been initiated in the 1890's. Many merchants relied upon wage assignments and garnishment process exclusively as the means of enforcing collections; and an unholy alliance developed in many areas between marshals, constables, and justices of the peace, on one hand, and instalment merchants or their agents, on the other.

A particularly abusive section of the instalment-selling business preyed upon colored laborers in the South and non-English-speaking immigrants in the North and Middle West. Agents for instalment houses took advantage of the gullibility, ignorance, and illiteracy of these groups to exchange goods of dubious value for promises to pay. Watches, jewelry, clothing, and bric-a-brac were sold for many times their true value. Collections were enforced frequently by threats of imprisonment and occasionally by physical violence.[1]

While the "low-grade" instalment business or "borax houses,"[2] as their successors are known today, never accounted for more than a small fraction of the total volume of instalment sales, the abusive fringe brought some measure of disrepute upon the whole field of instalment selling. This disrepute has never been completely overcome; nor have the abuses been fully remedied. The instalment device continues to facilitate sharp practice and fraud among a considerable number of the enterprises that use it.

Rise of the Small Loan Business

The extension of instalment selling to low-income classes was paralleled by the rise of a business which specialized in small personal loans to wage-earners at very high rates of charge. To some extent the developments in the field of instalment selling were the cause of the small loan business. The instalment purchaser stood to lose a substantial equity if he defaulted in his payments toward the maturity of his contract; or the attachment of his wages might mean dismissal from his job. Consequently, even extremely high interest rates might not deter him from borrowing to meet instalment payments. But in a larger sense, both instalment selling to low-income groups and high-rate moneylending were common outgrowths of the new social environment. Urban wage-earners needed not only capital financing for their households, but also some means of refinancing these credits and of meeting maladjustments between income and expenses that occurred only too frequently in spite of the best-made plans.

The small loan business appears to have begun in Chicago about

[1] For an excellent description of the practices of the low-grade instalment business in New York City at the beginning of the twentieth century, see The Fake Instalment Business, by Henry R. Mussey, University Settlement Society, New York, 1903. Reproduced in 1936 by the Russell Sage Foundation.

[2] Two explanations of the origins of the term "borax house" to describe stores which sold shoddy merchandise on the instalment plan have been given to the writer: (1) As the result of the Twenty-Mule-Team trademark of a prominent distributor of packaged borax, the term referred originally to stores that employed pullers-in or otherwise used high-pressure selling methods. (2) As the result of the premium practices of borax distributors, the term originally referred to stores which sold the kind of goods which could be had in exchange for coupons clipped from borax boxes. The latter explanation seems to be the more convincing.

1870 and to have spread rapidly thereafter to the principal cities of the East and Middle West. Successful lenders organized chain systems of offices and by this means the business was soon extended to industrial communities throughout the United States. By 1910 there were two chains with more than 100 offices and many of more than 30 offices; and there were hundreds of independent local offices.

There were two principal types of business. One group of lenders lent sums ranging from $10 to $200 on the security of chattel mortgages on household furniture at rates ranging from 6 to 15 per cent a month. Another group lent sums ranging from $5.00 to $50 on wage assignments at rates ranging generally from 10 to 40 per cent a month. A few lenders made both types of loans. But, for the most part, the furniture and salary loan businesses remained distinct. A third group of lenders soon began to make loans on unsecured promissory notes. But they relied heavily on their ability to attach wages, and this business resembled salary-lending with respect to the size of loans and rates of charge.

Because of its illegality the small loan business tended to attract lenders who were willing to risk the penalties and opprobrium of usury for a large profit. Some lenders, particularly in the chattel mortgage field, relied upon the goodwill of their customers and attempted to deal fairly with them. But the business as a whole was characterized by deception with respect to charges and abusive collection practices.[1]

Many communities soon became painfully aware of the existence of this business. In Boston, as early as 1888, public-spirited citizens attempted to counteract its abuses by organizing a company to make loans on household furniture at the lowest rate consistent with a moderate profit; and several similar companies were organized in other cities during the next two decades. In other areas efforts were made to suppress the small loan business by prosecuting moneylenders, by strengthening the penalties for usury, or by denying lenders the use of certain forms of security.

In 1907 and 1908 the Russell Sage Foundation financed studies of the salary and chattel loan businesses that disclosed their anti-

[1] For a more elaborate description of the small loan business before 1910, see Regulation of the Small Loan Business, by Robinson and Nugent, Russell Sage Foundation, 1935, pp. 32–73.

social characteristics, the widespread demand for small loans, the unfortunate results of repression of these businesses, the need for legitimate lending agencies to supply the demand, and the importance of subjecting the existing small loan business to public supervision.[1] Publication of these studies was followed promptly by widespread efforts to remedy conditions in the small loan field. The Foundation attempted to encourage the organization of additional limited dividend companies to make chattel mortgage and pledge loans.[2] New types of credit agencies were also developed—the first credit union and the first industrial banking company were organized within a year after the publication of the studies mentioned.

The organization of new credit agencies, however, failed to eliminate abusive practices in the small loan business and those seeking remedies gradually turned toward the regulation of all lending in sums of $300 or less. Massachusetts, in 1911, and New Jersey, in 1914, enacted regulatory laws based upon recommendations of the Department of Remedial Loans of the Russell Sage Foundation. In 1916 that Department, with the assistance of a group of moneylenders who were willing to submit to regulation, drafted a model regulatory act, known as the Uniform Small Loan Law, which has since served as the basis for legislation in most industrial states.[3]

[1] Wassam, Clarence W., The Salary Loan Business in New York City, Charities Publication Committee, New York, 1908; Ham, Arthur H., The Chattel Loan Business, Charities Publication Committee, New York, 1909. A summary of the findings of these studies is given in Regulation of the Small Loan Business, pp. 87–89.

[2] These companies were known as "remedial loan associations." The first such enterprise was the Collateral Loan Company of Boston which was organized in 1859 to make pledge loans. By 1906 similar companies had been organized for pledge loans in New York and Chicago, and for furniture loans in Boston, Worcester, Cincinnati, Newark, and Detroit. After 1910 the number of remedial loan associations increased rapidly until 1915, when there were 41 such companies. Some have continued to operate as semi-philanthropic institutions, others have been liquidated or sold to commercial enterprises, and still others have gradually lost their original semi-philanthropic character. For a further description of these companies, see Regulation of the Small Loan Business, pp. 74–84; 103–105; 146–149; and The Provident Loan Society of New York, by Rolf Nugent, Russell Sage Foundation, 1932.

[3] The Uniform Small Loan Law has been amended five times. The sixth and current draft was published in 1935 in pamphlet form by the Russell Sage Foundation. For a description of the development of statutory regulation of the small loan business, see Small Loan Legislation, by Gallert, Hilborn, and May, Russell Sage Foundation, New York, 1933; and for judicial interpretations of the statutory law, see Annotations on Small Loan Laws, by F. B. Hubachek, Russell Sage Foundation, New York, 1938.

Licensed lenders, like their unregulated predecessors, used household furniture and wage assignments as their principal securities. Loans were generally payable by instalments over periods of ten to twenty months and charges were computed on outstanding balances at rates ranging generally from 2 to 3½ per cent a month. The first regulatory laws tended to reduce the total amount of loans because some lenders were unable to operate profitably at the rates permitted by law. Within a few years, however, the remaining lenders had generally adjusted their businesses to the conditions imposed by regulatory laws, and large numbers of new enterprises were being organized to engage in the small loan business under license.[1]

Development of the Credit Union and the Industrial Banking Company

The growth of the regulated small loan business, or the personal finance business as it is now generally known, was paralleled by the growth of two other specialized consumer loan agencies: the credit union and the industrial banking company. While the personal finance company had its origins in, or derived its techniques from, the unregulated chattel mortgage and salary loan businesses, the credit union and the industrial banking company had no indigenous prototypes. Their techniques and to some extent their form were derived from the co-operative credit institutions which were developed in Germany about 1850.[2] But in spite of their similar origins, the credit union and the industrial banking company developed independently in this country and they differed materially in form.

The credit union, modeled after the Raiffeisen credit societies of Germany, was introduced into New England through Canada, and it retained the co-operative form of its European predecessors. Credit unions are generally organized within groups of people who have some specific mutual interest, such as employment by a com-

[1] For a further description of the regulated small loan business and the changes which followed the enactment of regulatory laws, see Regulation of the Small Loan Business, pp. 162–215.

[2] For a description of the development of these co-operative credit institutions, see The Evolution of People's Banks, by D. S. Tucker, Columbia University Press, New York, 1922.

mon employer; membership in the same church, labor union, or club; or residence in the same neighborhood. They undertake to accumulate the savings of their members by selling shares and accepting deposits, and to use these funds for loans to members.

The industrial banking company developed first on the Virginia seaboard. Like credit unions, industrial banking companies undertook to pool the savings of persons of modest means for loans to members of the same class. But the industrial banking companies were private profit-making corporations. They were generally organized by promotional companies which sold part or all of the stock of each operating company to local business men and charged fees for promotion, for the use of a trade name, for operating forms, and for supervision.

The first credit union in the United States was organized in 1909 within a French Canadian parish in Manchester, New Hampshire, by Alphonse Desjardins,[1] who had pioneered in the organization of similar institutions in the province of Quebec. About the same time, Pierre Jay, then bank commissioner for the state of Massachusetts, became interested in co-operative credit societies. With the aid of Mr. Desjardins he drafted a bill authorizing the operation of credit unions, which was enacted by the Massachusetts legislature in 1909. In 1913 a credit union bill drafted by representatives of the Russell Sage Foundation was enacted in New York, and in 1915 John Sprunt Hill was instrumental in the passage of a similar bill in North Carolina. By 1920 there were 142 credit unions operating in six states. The following year Edward A. Filene established the Credit Union National Extension Bureau in Boston, which began an active campaign for additional enabling acts and for additional credit unions.

In the year following the enactment of the first credit union law Arthur J. Morris organized the Fidelity Savings and Trust Company of Norfolk under the Virginia banking laws to conduct what has since become known as an industrial banking business. During the next few years other "Morris Plan" companies were organized in many cities, generally as business corporations. By 1922, 94

[1] See The Co-operative People's Bank, by Alphonse Desjardins, Russell Sage Foundation, New York, 1914.

such companies had been organized.[1] The promotion, enfranchisement, and supervision of these institutions were carried out by the Morris Plan Corporation of America and its predecessors. Otherwise, most of them were independent agencies, owned and controlled by local stockholders.[2]

Somewhat similar groups of affiliated industrial banking companies were promoted by the Trustees System in the South and Middle West; by the Hood System and the Morgan Plan in the South; by the Citizens and Wimsett Systems, which organized hundreds of affiliated companies extending from coast to coast; and by other concerns of lesser importance.

The credit union and the industrial banking company made loans in sums ranging generally from $25 to $1,000, usually on the security of endorsed notes. Loans were payable by instalments, usually over the period of a year. Commercial banks, which long before had used endorsements as security for loans, customarily required at least one "good name" on their notes. But the credit union and the industrial banking company accepted as endorsers persons whose economic status was similar to that of the borrower. Consequently, they were able to lend to those who could not obtain access to bank credit.

Credit unions operate almost universally under special enabling statutes which permit them to charge interest at the rate of 1 per cent a month on unpaid balances and to charge fines for delinquency. The industrial banking companies attempted at first to operate without special enabling legislation. Interest at the maximum legal rate and an "investigation fee," amounting usually to 2 per cent of the note, were discounted from the note and fines were charged for delinquency; and instalment payments were credited, not to the principal of the loan, but to the purchase of a non-interest-bearing certificate which was canceled against the loan when instalment payments had been completed. The legality of this device in relation to the usury laws was questionable in most

[1] Herzog, Peter W., The Morris Plan of Industrial Banking. A W. Shaw Co., Chicago, 1928, pp. 77–82.

[2] In recent years some former Morris Plan companies have given up their Morris Plan franchise. Others that were formerly independent are now wholly owned or controlled either by industrial banking companies which are members of the Morris Plan system or by one of several holding companies affiliated with the system.

jurisdictions, and special enabling statutes have since been enacted in many states to authorize these transactions.

Development of Intermediary Financing Agencies

The widespread application of instalment techniques to sales of durable consumers' goods required the investment of substantial sums in customer receivables. Sewing machines and book sets were sold generally by agents for manufacturing companies which used their own capital, supplemented frequently by bank loans, to carry the receivables which grew out of their agents' sales. Furniture and pianos, on the other hand, were sold largely through dealers whose capital and bank-credit lines were frequently too limited to permit a large investment in receivables. The expansion of instalment sales of these dealers appears to have been facilitated by manufacturers who shipped their products on increasingly liberal credit terms.

Credits extended to dealers by manufacturers were related at first to inventories rather than to instalment receivables. But since these credits permitted dealers to shift their own capital from inventories to receivables, they played just as important a part in consumer financing as if they had been granted specifically for this purpose. Later, credits extended to dealers began to bear a still closer relationship to retail financing. The case of Cole *v.* Mann (62 N. Y. 1), tried in 1875, indicates that by that year piano manufacturers had begun to finance dealers' conditional sales as well as their inventories, and by 1890 this practice appears to have become common throughout the piano industry. Instalment payments on conditional sales contracts recognizing the title of the manufacturer to the goods were generally made to the dealer who periodically turned over the proceeds to the manufacturer. But in some instances, particularly where the dealer's honesty or solvency was in doubt, the manufacturer required payments to be made directly to him or to a local bank.

In 1904 the Foster-Armstrong Company, which was engaged in the manufacture of pianos in Rochester, New York, organized a subsidiary, the Fidelity Contract Company, for the purpose of purchasing retail instalment contracts from Foster-Armstrong dealers. So far as we have been able to ascertain this was the first instalment finance company in the United States. In 1907 the Fidelity Contract Company changed its name to the Commercial Security Company and began to buy paper arising out of instalment sales of pianos manufactured by other companies. A few years later it added phonograph paper to its portfolio; and in 1915 an affiliate, the Bankers Commercial Corporation, was organized under the Banking Law of New York State to finance retail sales of automobiles.[1]

Some of the early instalment finance companies, like the Fidelity Contract Company, began as affiliates of manufacturing enterprises. Some were organized by insurance agents as a means of increasing their automobile insurance business; and others by retail dealers. But many of the earliest and most prominent instalment finance companies had their origins in enterprises originally established to finance accounts receivable.

Although their operations resembled in some respects financial transactions of much earlier periods, modern accounts-receivable finance companies originated near the beginning of the present century. These companies supplied cash to business firms that were unable to obtain sufficient bank credit by purchasing their receivables at a discount. At first purchases were confined to the obligations of business enterprises, such as receivables due from companies engaged in processing goods to raw-material producers, receivables due from wholesalers and jobbers to manufacturers, and receivables due from retailers to wholesalers, jobbers, and manufacturers. Later some companies began to buy retail open-book accounts and then retail instalment accounts.

It is impossible to determine the exact date when the accounts-receivable finance companies began to purchase retail receivables. In his study of instalment selling, the late Professor Seligman indicated that the predecessor of the Mercantile Credit Company of Chicago bought some retail open-book accounts as early as 1904.[2] But purchases of retail instalment contracts did not begin until

[1] In 1918 the Bankers Commercial Corporation was consolidated with the Commercial Security Company to form the Bankers-Commercial Security Company, Inc., and in 1937 the name of the corporation was again changed to Bankers Commercial Corporation.

[2] Seligman, E. R. A., The Economics of Instalment Selling. Harper and Bros., New York, 1927, vol. 1, pp. 35–38.

several years later. The Commercial Investment Trust Corporation began to finance piano dealers' receivables in 1909. Other accounts-receivable finance companies entered the field of retail instalment financing during the next few years and by 1916 at least a dozen such companies were purchasing instalment contracts arising from retail sales of pianos and automobiles.

Manufacturers of carriages, stoves, furnaces, plumbing equipment, and washing machines followed in the footsteps of the piano industry in financing dealers' receivables. But it was the automobile industry which gave intermediary financing a position of major importance in the field of consumer credit. The size of the market for automobiles depended upon the facilities for buying on credit. Automobile dealers, recruited from the ranks of bicycle and carriage dealers, mechanics, and blacksmiths had little capital to meet the requirements of increasing credit sales, and manufacturers, using their funds for plant expansions, required cash payment for deliveries to dealers. Banks were extremely wary of loans secured by a commodity whose location could be shifted so readily and they looked askance at long-term credits for the purchase of such luxuries. The instalment finance company stepped into the breach between the consumer who wished to buy an automobile on partial payments and the dealer who wanted to make the sale but lacked the capital to finance it.

So far as we have been able to discover the first automobile financing was done by W. P. Smith and Company of Seattle, which began as early as 1910 to finance instalment sales of commercial vehicles as an adjunct to its insurance business. The earliest passenger car financing appears to have been undertaken in San Francisco at the close of 1913 by L. F. Weaver, a wagon and carriage dealer.[1] A few months later C. Trevor Dunham, who was engaged in the insurance business in Philadelphia, also began to finance passenger cars. In the spring of 1915 the Guarantee Securities Company was organized in Toledo, Ohio, to finance the retail sales of Willys-Overland dealers. Several months later the Commercial Credit Company and the Commercial Investment Trust Corporation entered the field. By 1917 there were at least 25 enterprises financing instalment sales of automobiles and several of these had

[1] The Economics of Instalment Selling, vol. 1, p. 43.

begun to buy contracts from dealers over large geographic areas. After the conclusion of the World War there was a rapid increase in the number of instalment finance companies.

From 1915 to the close of the period covered by this chapter most instalment finance companies specialized in automobile financing. A few confined their purchases to piano or electric appliance contracts; and some handled miscellaneous paper arising from sales of automobiles, furniture, phonographs, vacuum cleaners, washing machines, water pumps, and a host of other durable articles.[1]

Developments Among Banks and Pawnbrokers

The dramatic growth of unregulated lending and the subsequent rise of the specialized cash-lending agencies had little effect upon the credit policies of banks and pawnbrokers.

Commercial banks as a whole appear to have increased their consumer loan business gradually throughout the period from the Civil War to 1922. The continuous growth of the class of managerial and professional employes and other classes of consumers who were acceptable, if not fully satisfactory, credit customers increased the potential number of consumer borrowers; while the introduction of new types of family capital goods enlarged the credit needs of these groups. The expansion of consumer loans did not occur in all banks. Some banks restricted their credit customers to large-scale business enterprises. Others avoided consumer loans either because they were influenced by the traditional objections to nonproductive loans or because cost-accounting studies indicated such loans to be unprofitable.

In the light of the rapid growth of unregulated lending and the subsequent rise of the specialized cash-lending agencies, it is scarcely necessary to add that in most urban communities commercial banks failed to supply the demand for consumer loans. In general, banks were willing to lend only to the best risks among consumer applicants, but many circumstances influenced their credit policies. The nature of the available collection weapons was an important factor. Where state laws gave debtors liberal homestead exemptions, as in

[1] The writer is indebted to officers of the concerns mentioned for supplying by correspondence much of the information contained in this section; and to Milan V. Ayres, of the National Association of Sales Finance Companies, who read this section of the manuscript and made helpful suggestions.

Texas, or exempted salaries and wages from attachment, as in Pennsylvania, even substantial equities in real estate or large salaries were inadequate bases for credit. The usury laws also had an influence. Where the legal maximum rate was high, credit policies were more liberal and consumer loans tended to form a more important part of note-portfolios. Where the statutes authorized a minimum interest charge or a periodic fee, some banks began to specialize in small personal loans.

The most important determinant of the extent of consumer loans by banks appears, however, to have been the nature of the community. Liberal credit policies could readily be maintained in small stable communities where the financial worth, earning capacity, family history, and personal qualities of applicants were matters of common knowledge. In metropolitan cities, on the other hand, the difficulties of appraising credit worth on any basis other than the ownership of readily negotiable collateral led to the denial of bank credit to classes of consumers whose credit needs were supplied by banks in intimate communities.

There appears to have been no change in the technique of making consumer loans until the latter part of the period under discussion. In 1917 and 1918 several urban banks in Connecticut, North Carolina, and Virginia began on a small scale to make loans to salaried people on terms similar to those offered by industrial banking companies. Loans were made on endorsed notes payable over the period of a year, and interest and an investigation fee were discounted. Instalment payments were usually credited to an hypothecated deposit account.

About the same time a few banks in rural communities in the Middle West began to finance automobile purchases on a very small scale.[1] These practices spread to other areas during the next few years, and by 1920 as many as 30 banks may have been providing some form of instalment lending or instalment financing service. At first these services were limited to regular deposit customers, but the experience was so favorable that some banks began to solicit other borrowers. It was not, however, until the beginning of

[1] The Bank of Tomah, Wisconsin, informed the writer that it began in 1910 to finance the purchase of pianos for its customers. Otherwise, so far as the writer has been able to determine the first instalment financing by banks was initiated in 1917.

the period which will be described in the succeeding chapter that banks began to segregate these loans in personal loan departments.

Both the number of pawnbrokers and their loan balances increased substantially during the period from the Civil War to 1922. Pawnbroking was subjected in many states to municipal regulation and in a few states to state regulation. The only notable change in the pawnbroking business was the establishment of limited dividend companies to make pledge loans. The low rates and efficient management of these companies led to their rapid growth in some areas.

Developments Among Open-Book Credit Merchants and Service Agencies

The practices of open-book credit merchants as a whole appear to have changed but little during the period under discussion. Independent merchants dealing in low-priced goods continued to extend credit between dates when incomes were paid as a courtesy to regular customers who did not abuse the privilege. There were, however, conflicting tendencies among various types of merchants with respect both to the period for which open-book credit was granted and to the proportions of cash and credit sales.

In agricultural areas some storekeepers continued to extend credit from one crop to another throughout the period from the Civil War to 1922; but others began in the early 1870's to press for monthly settlements or cash payments. The curtailment of credit appears to have been due in part to the long deflation of prices after the conclusion of the Civil War, which increased the difficulties of collection, and in part to the crisis of 1873–1875, which ruined some wholesalers and manufacturers and induced others to curtail their credits to retailers. Many storekeepers who had relied upon trade credits to finance long-term agricultural receivables were compelled by the lack of working capital to insist upon more frequent settlements. The restriction of retail credit in agricultural areas appears to have continued very gradually until the outbreak of the World War and probably accounts for some of the pressure for the creation of government agencies to provide agricultural credits.

In industrial communities the continuing trend toward more frequent paydays in industry appears, at least during the 1870's and

1880's, to have reduced very gradually the average term for which credit was commonly granted to industrial wage-earners by open-book credit merchants. After 1875, among independent drug stores, grocers, and shoe stores, the proportion of credit sales appears to have declined;[1] and after 1880 large-scale chain enterprises, selling primarily for cash began to enter these fields of retailing.[2] On the other hand, among department stores and among clothing, jewelry, and furniture stores, other than those which had begun to sell on the instalment plan, there appears to have been a rather consistent expansion of open-book credit-granting, particularly after the turn of the twentieth century.

The expansion of open-book credit-granting in the clothing, jewelry, furniture, and department store fields was induced by the competition of instalment merchants. Many of the "quality" stores shunned any association with instalment merchandising because of the taint given this business by low-grade merchants. But they felt the competition of the more reliable instalment houses and in order to meet it they liberalized their charge-account policies and began tacitly to accept partial payments on open-book accounts.

Many open-book credit furniture stores gradually became instalment stores in fact if not in name. Department stores, however, continued to do business largely on a cash or open-book credit basis throughout the period under discussion. After the World War a few prominent department stores offered instalment terms under the name "budget plan" or other euphonious titles which dodged the word "instalment." Others avoided mentioning instalment terms in their advertisements, but were willing to arrange deferred payments at the request of customers.

The progressive elaboration of the division of labor during the period under discussion created new types of agencies which extended credit in connection with the sale of consumers' services.

[1] Annual Report of the Massachusetts Bureau of Statistics of Labor for the year 1899, pp. 43–45.

[2] While the principal development of chain stores has occurred since 1880, the multiple-unit store is of much earlier origin. In 1803 Andrew Jackson was operating three or more stores in different parts of Tennessee and James and Archibald Kane were operating a similar group of affiliated stores in Albany, New York, and in nearby villages. (See Retail Stores in the United States, 1800–1860, by Fred Mitchell Jones, *in* the Journal of Marketing, October, 1936, p. 139.)

Hospitals, laundries, and cleaning and dyeing establishments brought into the market system some of the functions formerly performed by the household. Funeral directing was taken over from the church and embalming from the furniture dealer. Public utilities were organized to supply light and fuel to households. And toward the end of this period introduction of the automobile led to the development of a large business for "servicing" this addition to the stock of family capital goods.

Small laundries and cleaning and dyeing establishments readily attained a creditor position similar to that of the small merchant, and large-scale laundering and cleaning enterprises attempted to maintain a similar status by making their drivers responsible for collections. Public utilities had a powerful collection weapon in the right to suspend service for nonpayment of accounts; the credits of funeral directors were supported by statutes giving them prior claims to the proceeds of insurance policies; and the garage found protection in the mechanics' lien.

Apart from the development of new types of service creditors, the most notable occurrence in this area was a gradual change in the character of credit extended by the curative professions. More and more physicians and others rendering curative services adjusted their charges to the patient's ability to pay and then insisted upon payment of his account. This tendency arose among professional creditors as a measure of self-defense, but it was facilitated by the growth of preventive, as distinguished from emergency, professional services.

Quantitative Movements of Consumer Credit

For a large part of the period under discussion, as for the period before the Civil War, intensive efforts have failed to yield data that provide a satisfactory guide to the outstanding amount of consumer credit or to its rate of growth. Open-book credit granted by retail merchants, which continued to constitute the largest part of consumer credit, probably declined relative to the volume of retail sales between 1875 and 1915 by virtue of more frequent settlement dates in agricultural areas and the decreasing proportion of credit sales among druggists, grocers, and shoe stores. In the light of the expansion of open-book credit-granting in some fields and the rapid growth of population and retail sales, however, there can be little doubt that there was no absolute decline in the outstanding amount of open-book credit. After 1875 instalment sales credit and cash loans began to comprise a more and more substantial segment of consumer credit, and their rapid growth undoubtedly contributed to a progressive expansion of consumer credit prior to the World War.

There were probably many irregularities in this growth which could be recognized if we had balance sheets for even a small sample of consumer credit agencies. But it was not until the last decade of the period under discussion that receivable figures were available for significant samples. While these data are fragmentary and far from satisfactory, they permit some general conclusions concerning the effect of the World War and the post-war depression on consumer credit movements.

For the period from 1915 to 1922 the most adequate data are available for the specialized cash-lending agencies. Our estimates of total loan balances of credit unions, industrial banking companies, and regulated small loan companies cover this period.[1] We have also obtained year-end receivable figures for 25 credit unions, for 8 industrial banking companies, for 16 regulated small loan companies, and for 7 pawnbrokers, which were in business throughout this period. It was necessary to select credit unions in New York and Massachusetts. But for other types of agencies our samples are well scattered geographically.

Table 2 gives annual percentage changes in loan balances for these groups of cash-lending agencies. The total loan balances of credit unions, industrial banking companies, and regulated small loan companies grew rapidly throughout the period from 1915 to 1922, although rates of growth were reduced during the periods of the war and the post-war depression.[2] The "all-company" series were materially influenced by the organization of new units. For instance, the rapid growth of industrial banking in 1916 and 1917 was caused largely by the organization of additional Morris Plan

[1] See pp. 360–361, 372–373, 388–389.

[2] Failure of the "all-company series" for small loan companies to expand in 1916 was caused by the enactment of more stringent small loan laws in Ohio and Massachusetts.

companies, and the rapid growth of the regulated small loan business in 1917 by the enactment of regulatory laws in several important states in that year. These influences are eliminated in the "identical-company" series, which generally show smaller rates of growth and indicate more clearly the influence of the war and the post-war depression. The decline in the loan balance of pawnbrokers in 1916 was due to a break in diamond prices, but the decline in the loan balance of identical credit unions in 1921 was a depression phenomenon. It will be noted that the movement of loan balances of small loan companies tended to lag behind the movements of other series.

TABLE 2.—TRENDS OF LOAN BALANCES OF CASH-LENDING AGENCIES, 1916 TO 1922

(Per cent change during each year)

Year	Credit unions		Industrial banking companies		Regulated small loan companies		Identical pawnbrokers[a]
	All unions	Identical unions	All companies	Identical companies[a]	All companies	Identical companies[a]	
1916	+87	+73	+137	+52	0	+15	−3
1917	+61	+36	+78	+26	+70	+17	+3
1918	+54	+51	+31	+10	+13	+11	+4
1919	+60	+40	+42	+21	+13	+13	+11
1920	+57	+37	+24	+10	+21	+21	+13
1921	+32	−2	+13	+21	+23	+14	+5
1922	+36	+9	+15	+20	+19	+6	+6

[a] The influence of movements of loan balances of certain very large enterprises was reduced in computing the "identical company" series for industrial banking companies, regulated small loan companies, and pawnbrokers.

For retail merchants the data are less satisfactory. Receivable figures for certain mail-order houses, department stores, furniture stores, and grocery stores were obtained from Poor's and Moody's Manuals, from published annual reports, and by correspondence with individual enterprises. But the resulting series are representative only of large enterprises. The figures for mail-order houses cover the period from 1915 to 1922 for three major enterprises, but we were obliged to make arbitrary adjustments in the receivables of one enterprise in order to exclude real estate mortgages. The series for department stores includes figures for 10 large stores, well distributed geographically.[1] For furniture stores satisfactory figures were obtainable only for a chain enterprise which operated stores in a large number of western cities and for one large Chicago store. For grocery stores efforts to obtain satisfactory figures for local enterprises were unsuccessful and our series includes figures only for five chain-store enterprises for the period from 1919 to 1922.

TABLE 3.—TRENDS OF RECEIVABLES OF IDENTICAL MAIL-ORDER HOUSES, DEPARTMENT STORES, FURNITURE STORES AND GROCERY STORES, 1916 TO 1922

(Per cent change during each year)

Year	Mail-order houses	Department stores	Furniture stores	Grocery stores
1916	+107	+12	..	..
1917	+44	+4	−1	..
1918	+10	+8	−6	..
1919	+81	+38	+25	..
1920	+43	+10	+16	+5
1921	−34	−7	−5	+35
1922	−18	+8	+20	−13

Table 3 shows the percentage changes in the receivables of those groups of merchants. It will be noted that the World War and the post-war depression affected various types of retailing in different ways. The war did not prevent an expansion of receivables of mail-order houses and department stores, but the receivables of furniture stores appear to have declined.[2] The post-war depression caused a violent contraction of receivables of mail-order houses, because of the break in agricultural prices; small declines in the receivables of department stores and furniture stores; and a substantial increase in the receivables of grocery stores. While the expansion of grocery store receivables may be exaggerated by this sample, many small grocers have informed us that their receivables increased during the post-war depression.

Still less satisfactory data are available for manufacturers of pianos and household equipment and for instalment finance com-

[1] Further expansion of this sample was handicapped by the fact that many stores combined cash and receivables in their reports for this period.

[2] The inadequacy of the furniture store sample should be remembered in drawing conclusions.

panies. We have obtained year-end receivable figures for five major piano manufacturers for the period from 1915 to 1922. It was possible to segregate retail instalment paper from dealers' accounts during this period for two enterprises only. But retail instalment paper represented the major part of the receivables of these concerns and the relation between instalment paper and dealers' accounts remained relatively constant. Consequently, we have included all the receivables of other companies in our series.

Receivable figures were obtained for eight manufacturers of household equipment, which either sold directly to the consumer or bought retail instalment contracts from their dealers.[1] For the concerns whose products were sold through dealers, the figures obtained include dealers' accounts as well as instalment paper. But, since dealers' accounts appear to have been used generally to finance retail credits and since a shift in manufacturers' receivables from dealers' accounts to instalment paper was probably accompanied by a shift of instalment paper from the books of dealers to the books of manufacturers, total receivables of manufacturers appeared to be the most accurate index of the amount of credit extended for the purchase of household goods. Hence, no attempt was made to segregate instalment paper from dealers' accounts for these enterprises.

For instalment finance companies, receivable figures were obtained for five major enterprises for the period from 1919 to 1922.

Table 4 gives annual percentage changes in the receivables of these groups of enterprises. Receivables of piano manufacturers were reduced by the war, but they continued to increase through the post-war depression. Receivables of household equipment manufacturers grew throughout the war years, but declined substantially in 1921. For instalment finance companies fragmentary data suggest that there was little change in receivables during the war and a rapid growth in receivables after the armistice. Figures for five companies indicate a rapid growth in 1920, a sudden decline in 1921, and a substantial expansion in 1922. A considerable number of instalment finance companies began business in 1921, and

[1] Two of these enterprises manufactured sewing machines; two manufactured vacuum cleaners; one, gas and electric ranges; one, plumbing equipment; one, roofing; and one, washing machines.

their growth tended to offset the decline in the receivables of older companies.

TABLE 4.—TRENDS OF RECEIVABLES OF IDENTICAL PIANO MANUFACTURERS, HOUSEHOLD EQUIPMENT MANUFACTURERS, AND INSTALMENT FINANCE COMPANIES, 1916 TO 1922

(Per cent change during each year)

Year	Piano manufacturers	Household equipment manufacturers[a]	Instalment finance companies
1916	+7	+17	..
1917	+1	+8	..
1918	−7	+9	..
1919	−1	+27	..
1920	+9	+11	+44
1921	+7	−17	−12
1922	+8	+16	+48

[a] The influence of movements of receivables of several very large enterprises was reduced in computing this series.

It is impossible to draw reliable conclusions concerning aggregate movements of consumer credit between 1915 and 1922, largely because small merchants and professional services are not represented in our samples. The series would undoubtedly have been smoothed somewhat by the inclusion of all enterprises. Making allowance for this bias in our data, it seems likely that consumer credit expanded rapidly in 1916, moderately in 1917 and 1918, and rapidly again in 1919 and during the early part of 1920. The post-war depression certainly brought a sudden decline in the receivables of many important types of consumer credit agencies which was followed promptly in most instances by a rapid recovery. Differences in timing of the declines among various types of agencies and in various areas, the continued growth of the cash-lending agencies, and the counter-movement of the receivables of merchants dealing in necessities certainly minimized the amplitude of the cyclical movement, and probably came close to offsetting it entirely.

CHAPTER IV

CONSUMER CREDIT BETWEEN 1923 AND 1938

THE periods described in the two preceding chapters have more than a chronological significance. The period from 1800 to the Civil War was one in which consumer credit was granted almost entirely as an incidental by-product of some other activity. Among the credit-granting agencies of that period, only the pawnbroker could be considered a specialist in consumer credit; and his specialization was far from complete and was not of his own choosing. The primary purpose of the retail merchant, who was the predominant source of consumer credit before the Civil War, was to sell merchandise. However, some goods could be sold more readily by permitting payment at a later date, and some customers found it convenient to make periodic settlements for small frequent purchases. These circumstances led inevitably to the granting of credit to some customers and competition compelled extension of similar privileges to others.

The second period, from the Civil War to 1922, witnessed the development of a number of agencies whose primary purpose was the granting of consumer credit. First, the unregulated small loan business and the remedial loan company, then the instalment finance company, the credit union, the industrial banking company, and the personal finance company joined the list of consumer credit agencies. These new specialized agencies supplemented rather than supplanted the earlier "by-product" agencies. The latter agencies, however, began to take on some of the attributes of the former. Many merchants, particularly those selling on the instalment plan, began to realize that they were selling not only goods but credit service as well, and they undertook to make credit-granting profitable by charging higher prices for credit sales.

The Civil War represented a significant turning point in the history of consumer credit. The year 1922, however, marked no such change. It was selected as the terminus of the second historical period largely because our estimates of receivables for most types of consumer credit agencies begin with 1923 and it seemed desirable to treat in one chapter the period for which summary measurements were available. Yet in some respects, the chronological division between the present and the preceding chapter is a logical one.

By the close of the year 1922 the principal techniques of consumer credit had been developed and the *dramatis personae* of this volume was, for all practical purposes, complete. No technical developments comparable with the rise of the specialized cash-lending agencies or with the beginnings of instalment financing occurred during subsequent years, and the history of the period from 1923 to 1938 is a record of quantitative and qualitative changes among established institutions. But the events of this period were no less striking than those of preceding periods. The completion of the cast of characters marked the beginning of what, for our purpose, constitutes the principal drama.

Expansion of Consumer Credit Between 1923 and 1929

The outstanding amount of consumer credit doubled between the beginning of 1923 and the fall of 1929. Thus, the long period of gradual growth was culminated by a few years of enormous expansion. All types of consumer credit agencies participated in this expansion; but the most rapid growth occurred among the new specialized agencies, which used instalment payment techniques, and among the older agencies whose receivables arose as by-products of instalment sales.

Behind the disproportionate growth of instalment payment credit, as compared with open-book credit, was the increase in consumers' expenditures for durable goods. The automobile, the electric washing machine, and the suction cleaner had been introduced or perfected during the period immediately preceding the World War. The war had been accompanied by a substantial increase in real wages, which brought these goods within budgetary reach of a large part of the population. But the expansion of sales had been limited by war-time restrictions on production, by disruptive price changes between 1919 and 1921, and by the inadequacy of facilities for financing instalment sales. The exploitation of this new market was therefore largely postponed until after 1921, when the rapid growth of instalment finance agencies made possible a substantial expansion of credit sales of these goods. During the 1920's new types of consumers' durable goods, notably the radio, the mechanical refrigerator, and the automatic furnace, were put on the market. These goods, like those introduced in the preceding period, found their way into American households largely by the easy-payment route.

Expansion of Automobile Financing

The expansion of consumer credit between 1923 and 1929 was dominated by the growth of credit sales of automobiles. War-time restrictions on production and the shortage of instalment credit facilities had put greater restraints upon sales of passenger automobiles than upon the sales of most other types of consumers' durable goods. The remarkable growth of instalment finance companies after the World War solved the problem of retail financing, and the automobile industry led the revival of business in the fall of 1921. From the beginning of 1922 to the fall of 1929 the growth of passenger car sales was paralleled by an even more rapid growth in the number of instalment finance companies and in the net amount of retail automobile instalment sales contracts, referred to hereafter as retail automobile paper, held by these companies.

Table 5 compares the growth of passenger car production with that of retail automobile paper held by instalment finance companies and certain automobile dealers. The paper held by dealers in Massachusetts increased only slightly more rapidly than production, but the paper held by instalment finance companies increased far more rapidly.[1] It seems probable that the increased availability of credit induced instalment purchases of automobiles by many consumers who would otherwise have been cash-buyers. But the most substantial cause of the greater growth of retail paper as compared with production was the expansion of automobile sales in markets which could only be reached by offering liberal credit terms. There can be little doubt that the long succession of three and four million-car-years could not have been maintained if the

[1] Table 5 tends to understate the extent of the growth of automobile financing relative to production. The index of production is based upon the number of cars produced, while the indices of automobile receivables reflect retail prices, which declined consistently during the period covered by the table.

limits of the potential market had not been progressively extended by the expansion, liberalization, and improvement of facilities for financing retail sales.

TABLE 5.—INDICES OF PASSENGER CAR PRODUCTION IN THE UNITED STATES AND OF RETAIL AUTOMOBILE PAPER HELD BY ALL INSTALMENT FINANCE COMPANIES IN THE UNITED STATES AND BY CERTAIN AUTOMOBILE DEALERS IN MASSACHUSETTS, 1923 TO 1929

(1929 = 100)

Year	Passenger car production (Number of cars)	Estimated retail automobile paper held at close of year by	
		All finance companies	Automobile dealers in Massachusetts[a]
1923	78.3	23.0	..[b]
1924	68.9	30.0	..[b]
1925	80.7	56.0	65.0
1926	82.4	70.0	73.0
1927	64.3	61.0	69.0
1928	83.7	78.0	84.0
1929	100.0	100.0	100.0

[a] Index based upon the amount of notes receivable reported on the balance sheets of 276 identical automotive sales and service establishments in Massachusetts, which accounted for approximately 30 per cent of the sales of such establishments in Massachusetts.
[b] Figures not available.

The growth of instalment sales of automobiles was stimulated not only by the desire of manufacturers and dealers to expand their markets, but also by changes in the relationship between dealers and finance companies which increased the incentive of dealers to make credit sales. During the early history of automobile financing instalment finance companies generally purchased retail paper subject to the endorsement of the dealer and withheld part of the purchase price as a reserve for loss. Under these circumstances dealers who could not afford to carry their own paper preferred to sell for cash.

In 1924, however, many independent finance companies began to buy automobile paper on a "non-recourse" basis in order to obtain a competitive advantage over the "recourse" companies affiliated or otherwise associated with manufacturers. Since dealers who sold their paper without recourse received the full cash price of the car and had no responsibility for completion of the contract, the incentive to sell for cash was removed. The recourse companies, in turn, undertook to meet this competition by eliminating the "hold-back" and by establishing a "dealers' loss reserve" out of the charge paid by the automobile buyer for credit terms.[1] Since these reserves generally exceeded losses by a considerable margin, they amounted to a dealer's bonus for instalment sales. Many non-recourse companies responded by including in their finance charge a dealer's bonus which has come to be known as the "pack."[2]

Thus, during the 1920's the automobile dealer first had an incentive to sell for cash, then became equally willing to sell for cash or on instalment terms, and finally had a strong incentive to sell on deferred payments. The incentive for credit sales has continued to the present time. It has frequently been said that the major part of the net profit of automobile dealers is represented by income from instalment finance companies.[3]

Although capital for the expansion of credit sales of automobiles came directly from the instalment finance companies, commercial banks were the ultimate source of a large part of credit extended to automobile purchasers. The very earliest instalment finance companies relied heavily upon the use of bank credit to supplement their working capital. Later, the principal instalment finance companies began to sell their short-term notes to banks, either directly or through commercial paper brokers. It was common practice to hypothecate as security instalment contracts equal to 125 per cent of the amount of these notes. The generally excellent experience of banks with finance company notes led to their acceptability as prime short-term investments.

The instalment finance company, therefore, was an intermediary agency not only in the sense that it acquired contracts to which it was not originally a party, but also in the sense that it served to

[1] For a dramatic record of the development of competition for dealers' favor between "recourse" and "non-recourse" companies, see the transcript of the Hearing on the Code of Fair Practice and Competition for the Finance Company Industry, National Recovery Administration, October 26, 1933.

[2] Some instalment finance companies have given dealers several rate charts containing a constant series of financing charges with different packs, with the understanding that they may use any rate chart they wish. It is a remarkable fact that many automobile buyers who shop carefully for the best trade-in values, fail to compare costs of financing. Consequently, some dealers offset excessive trade-in allowances by increasing the pack.

[3] See, for instance, N-A-S-F-C News, published by the National Association of Sales Finance Companies, Chicago, April, 1935, p. 3.

bridge the gap between the consumer and the commercial bank. The instalment finance company performed the function of investigating credit applicants, making collections, repossessing goods in cases of default, and of guaranteeing banks against loss.

Expansion of Instalment Sales of Other Consumers' Goods

The growth of instalment sales of automobiles tended to remove the stigma which instalment selling had acquired at the hands of low-grade instalment merchants in the 1890's. All social and economic classes were represented among instalment purchasers of automobiles; hence instalment buying acquired respectability. Although the easy-payment system continued to provide material for vaudeville comedians, cartoonists, and other humorists during the 1920's, its use was no longer symbolic of poverty, prodigality, or gullibility. Moreover, new-car financing was relatively free from the abuses which had stigmatized other forms of instalment selling. Since the goodwill of customers was at stake, manufacturers exerted a beneficent influence upon the practices of controlled or associated finance companies and competition forced most of the independent finance companies to adhere to these standards.

These changes were reflected in the growth of instalment sales of other types of consumers' durable goods. On one hand, some merchants who had formerly shunned or minimized instalment merchandising began aggressively to promote instalment sales. On the other hand, many families that would formerly have deferred their purchases until they had accumulated the full purchase price now accepted without hesitation the credit terms offered by dealers in durable household goods.

The changing attitude of consumers, particularly in the middle-income classes, was encouraged by a change in sales techniques. It had been the practice of most dealers who were willing to accept instalment payments to assume that each prospective purchaser was a cash or charge-account customer, and an instalment buyer was compelled, frequently to his embarrassment, to request deferred-payment terms. But in the 1920's it became common practice for dealers in durable household goods to assume that each prospective purchaser was a deferred-payment customer. Thus, the instalment buyer was saved from possible embarrassment, while the cash or charge-account customer might take pride in his superior cash position.

Apart from the automobile three groups of consumers' durable goods contributed most substantially to the expansion of instalment credit during the period from 1923 to 1929. The first group included goods which had previously been sold on instalment terms —household furniture, electric washing machines and suction cleaners, sewing machines, kitchen ranges, stoves, and other less important household equipment. Total sales of these goods increased rapidly and instalment sales increased even more rapidly than total sales.

The second group included goods which had long been offered to consumers, but not on instalment terms. Among these were heating and plumbing equipment, roofing, insulation, and other types of building materials. Difficulties of repossession and limitations of dealers' capital had previously restrained instalment merchandising in these fields. During the 1920's, however, manufacturers of these products began to encourage instalment selling by creating facilities for financing dealers' sales.

The third and most important group included goods which were first introduced to the mass market during the period under discussion—radios, mechanical refrigerators and dishwashers, oil burners, and automatic furnaces and stokers. From the beginning these goods were sold to a very large extent on instalment payments, and their markets appear to have been expanded by the progressive improvement of credit facilities and liberalization of credit terms.

Of the principal types of consumers' durable goods, only the piano failed to contribute to the expansion of instalment credit throughout the period under discussion. Piano sales, which had been restrained by improvements in the phonograph after 1915, recovered between 1922 and 1925 and piano receivables increased substantially. In the latter year, however, the radio began to undermine the market. In spite of the further liberalization of credit terms, sales declined and piano receivables were reduced between 1926 and 1929.

There was also an acceleration of the trend toward instalment sales of semi-durable and luxury goods. Chain-store systems were established to sell men's and women's clothing, sporting goods, watches, and jewelry to low-income groups on long-term, low down-payment contracts. Family clothing stores originated the device of consolidating a number of small purchases into a single account to be liquidated by partial payments. Several mail-order houses rapidly increased their sales of clothing on instalment terms. Even "quality" stores moved in the same direction. Many department stores began to promote instalment sales of fur coats, jewelry, and draperies; and some jewelers who dealt predominantly with the wealthy began to display modest announcements that partial payments could be arranged.

The capital necessary to finance the expansion of credit sales of these products was measured, in the aggregate, in terms of billions of dollars. This capital came from many sources.

Instalment finance companies were a leading source of funds for financing the more expensive and readily repossessed types of goods. They carried most of the refrigerator paper; a substantial part of the paper arising from sales of automatic furnaces, power-driven washing machines and dishwashers, and the more expensive radio models; and a smaller portion of the paper arising from sales of other types of household equipment. The part played by instalment finance companies in these fields increased throughout the period under discussion. New finance companies were organized, frequently by manufacturers or with their sanction, to specialize in financing household appliances, heating or plumbing equipment, and other types of goods. Many automobile finance companies were compelled to explore other fields of financing by the increasing competition for automobile paper after 1925, by the shutdown in the Ford plant in 1927, and by the establishment of the factory-controlled Universal Credit Company to finance the sale of Ford products in 1928.[1]

Public utilities supplied part of the capital for financing credit sales of kitchen ranges and other household appliances which increased the consumption of gas and electricity. Local banks financed some instalment contracts for heating, plumbing, and roofing installations, particularly when the purchaser had a substantial equity in his home. Manufacturers financed other such contracts,

[1] Control of the Universal Credit Company has since passed from the Ford Motor Company to the Commercial Investment Trust Corporation.

and they carried a considerable part of the paper arising from sales of pianos, sewing machines, suction cleaners, automatic furnaces, and many other products. Department stores, furniture stores, and clothing stores generally carried their own instalment paper. And some specialized dealers in radios, pianos, and household appliances carried part or all of the instalment paper arising from their sales.

But these were only the direct sources of capital for financing the expansion of instalment sales of consumers' durable goods other than automobiles. Behind the credits extended directly to consumers by merchants were credits granted to merchants by manufacurers, wholesalers, and commercial banks. Commercial banks also supplied part of the funds which instalment finance companies and manufacturers invested in retail instalment contracts; and commercial bank loans underlay part of the credit granted by manufacturers and wholesalers to merchants for carrying instalment contracts.

Growth of Cash-Lending

The expansion of cash-lending was almost as dramatic as the growth of instalment selling. The most rapid growth occurred among the specialized agencies which were developed after 1910, but even the older agencies participated in the expansion.

The number of regulated small loan offices increased from about 600 in 1923 to about 3,500 in 1929, while their loan balances increased sixfold. Although this tremendous increase reflects the enactment of regulatory laws in additional states, it did not prevent the loan balances of unregulated lenders from almost trebling during the same period. Chain systems accounted for most of the growth both of regulated and unregulated offices.

The expansion of loan balances of regulated small loan companies was retarded during the early 1920's by a lack of access to the capital markets. Investors and bankers were suspicious of this new business. Part of the funds for expansion came from the reinvestment of profits, part from the sale of shares of partnerships to neighbors, relatives, and friends of those engaged in the business, and part from the sale of securities by house-to-house canvassers. In 1928, however, one large chain company, the Household Finance Corporation, sold an issue of preferred stock through a prominent underwriting house. Thereafter investment markets were opened to small loan company securities and bank credit became available on more liberal terms.

The number of industrial banking companies, credit unions, and personal loan departments of commercial banks also increased rapidly. In 1923 there were about 190 industrial banking companies and 200 credit unions in the United States; by 1929 there were some 620 of the former and almost 1,000 of the latter. During this period the loan balances of industrial banking companies more than trebled and the loan balances of credit unions more than doubled. The segregation of personal loan departments began around 1923. Their number and loan balances grew slowly until 1928 when a personal loan department was organized by the National City Bank of New York. The publicity which attended the entrance of what was then the largest bank in the world into the small loan field encouraged many banks to organize similar departments, and their growth was rapid thereafter.

In spite of the substantial growth of these new specialized consumer loan agencies, pawnbrokers, and banks which made accommodation loans to consumers continued throughout the 1920's to account, together, for the major part of the total amount of consumer loans. The consumer loan balances of these latter agencies increased less rapidly, however, than those of their specialized competitors. Pawnbrokers suffered from the diversion of consumers' expenditures from jewelry to automobiles and household appliances. The limited expansion of accommodation loans by banks was of the banks' own choosing. Although many country banks increased their consumer loan balances as the demand for such loans increased, many urban banks were convinced by cost-accounting studies of the unprofitableness of small personal loans and restricted them so far as possible.

Expansion of Open-Book Credit-Granting by Retail Merchants

There were no dramatic developments among merchants and service creditors who extended open-book credit. The tendency of receivables to increase less rapidly than sales, noted in the discussion of the preceding period, appears to have been reversed after the outbreak of the World War; and from 1923 to 1929 a rise of receivables in relation to sales appears to have been common to all types of open-book credit merchants and to many types of service creditors. Collection percentages indicate clearly a gradual increase in the period of liquidation. It seems likely also that there was an increase in the ratio of credit sales to total sales. This must have been true at least for merchants who, during the late 1920's, used their charge-account services as the basis for sales promotion campaigns and sent representatives to solicit charge accounts among clerks and stenographers of large corporations.

The expansion of open-book credit was stimulated in many instances by interstore and interproduct competition for the consumer's dollar. For many types of merchandising credit accommodation became an important element in competition. The most liberal credit policies tended to become the rule. Merchants hesitated to press desirable customers for prompt payment for fear of driving them to more lenient competitors. For types of articles which felt most strongly the competition of the automobile and of the new household gadgets that attracted the consumer's eye and his money, manufacturers and dealers discussed the possibility of instalment sales. Where this was impracticable, the alternative was frequently more liberal open-book credit terms. This tendency is exemplified by many jewelry stores whose declining sales were accompanied by increasing receivables.

The growth of multiple-unit merchandising appears to have had a surprisingly small influence upon the aggregate movement of open-book credit granted by merchants during the period from 1923 to 1929. In the department store field stores which had formerly been independent enterprises generally continued to extend open-book credit after their absorption by chain systems. In fact, parent companies frequently supplied additional working capital and liberalized the credit policies of local units in order to increase the volume of sales. In many other fields some of the chain stores extended open-book credit in much the same manner as their single-unit competitors.

In some types of retailing, notably in the limited price, clothing, and grocery fields, chain stores selling exclusively or predominantly for cash cut heavily into the business of local merchants who customarily extended open-book credit. But the single-unit stores appear to have lost cash customers to a much greater extent than credit customers. Many local enterprises that were driven out of business by chain-store competition had insufficient working capital to extend credit on a significant scale; and many of the more substantial survivors liberalized their credit policies as a means of meeting the competition of cash-selling chain stores.

Many grocery or clothing chains that had formerly sold exclusively for cash began during the period under discussion to acquire open-book credit receivables. Some enterprises, particularly in the drug, shoe, and women's dress trades, openly introduced charge-account systems. Other enterprises, particularly in the grocery field, adhered nominally to a cash-selling policy, but made concessions to the convenience of preferred customers or allowed managers reasonable revolving funds for carrying customers' accounts.

Expansion of Credits for Services

The receivables of physicians, dentists, hospitals, and other persons and institutions rendering curative services expanded between 1923 and 1929 not only because their billings for services increased but also because they tended increasingly to look upon their patients' accounts as valid assets and to insist upon collections. This tendency was exemplified by the recurrent discussion of collection problems in professional circles, by the importance of medical care as a reason for borrowing from cash-lending agencies, by the use of instalment contracts by many hospitals, surgeons, obstetricians, and dentists, and by the organization of special facilities for financing or collecting medical accounts.

The business of laundries, cleaning and dyeing establishments, garages, and other service industries increased rapidly during the period under discussion and their receivables expanded even more rapidly by virtue of the increasingly general use of open-book credit in these fields.

The growth of credits for services induced a rapid growth of collection agencies. Even before the World War groups of physicians and dentists had employed men to collect their delinquent accounts on a commission basis. These collectors gradually extended their services to small business men engaged in open-book credit-selling, who, like practitioners in the curative services, lacked special collection facilities. By 1923 many of these collectors had opened offices and were offering their services to all types of creditors. Thereafter, collection agencies grew rapidly.[1] That this business should have begun with the curative services rather than with small business men is probably to be explained by the survival among the professions of the idea that personal collection effort was unprofessional.

Deflation of Consumer Credit

The expansion of consumer credit came to an end soon after the stock-market collapse in September, 1929. Deflation began first in the field of instalment credit arising out of the sale of durable consumers' goods, then among open-book credit agencies, and finally among the cash-lending agencies.

Sales of automobiles dropped promptly and substantially after September, and sales of furniture, radios, most types of household appliances, and many other durable consumers' goods soon followed the same course. The decline in sales of these goods, which were sold predominantly on instalment terms, reduced new credit commitments below the sum currently payable on old instalment accounts. Consequently, instalment credit was thrown into liquidation. The retail automobile paper held by instalment finance companies fell by 25 per cent between September, 1929, and September, 1930. The drop in receivables secured by most other types of durable commodities was less precipitate but substantial.

Changes in the receivables of open-book credit merchants occurred more gradually. Clothing stores and department stores sold many goods the purchase of which could be deferred or avoided entirely. For these stores there was a prompt decline in sales and a gradual liquidation of receivables after the 1929 Christmas season. Purchases of food and drugs, on the other hand, could not be so readily avoided, and, although the sales of food and drug stores

[1] Collection agencies have been omitted from the list of creditors for which estimates of receivables have been developed. Most collection agencies do not acquire title to their receivables but merely attempt collection for a commission on behalf of the creditor; consequently, they are properly excluded from our estimates. Other collection agencies buy accounts receivable from the original creditor and the omission of these receivables tends to understate the total amount of consumer credit. However, the total amount of receivables purchased by collection agencies is negligible and the data upon which estimates might be based are fugitive.

declined gradually, their receivables increased as the incomes of many customers dwindled or stopped and accounts became frozen.

The receivables of service creditors followed similar trends. It is notable that sales of many types of service declined as readily as the sales of clothing stores and department stores. Even the medical and dental professions and hospitals found that their services could be postponed or avoided to a considerable degree. Surgeons performed fewer major operations and private hospital rooms were frequently empty. There were fewer new accounts to replace those that were being paid off and, although many accounts became slow or frozen, receivables appear to have declined.

The expansion of loan balances of cash-lending agencies continued in the aggregate until well into 1930. Accommodation loans by banks were the first to react to the changed business outlook and their subsequent decline was the most substantial. For industrial banking companies and credit unions the decline began early in 1930 and loan balances at the close of that year were lower than at the close of 1929. Loan balances of personal loan departments organized before 1929 followed a similar pattern. But the continued growth of the recently organized departments offset the decline of older ones until late in 1930, and the aggregate loan balance increased between the close of 1929 and the close of 1930.

Pawnbrokers and regulated small loan companies continued to increase their loan balances at a rapid pace through the year 1930. The decline in the loan balances of most small loan and pawnbroking offices began in February, 1931, when veterans' bonus certificates were first made available for loans at low rates. But the rapid growth in the number of small loan offices continued through 1931 and for some states aggregate loan balances at the close of 1931 were higher than at the close of 1930.

While veterans' bonus loans tended to reduce the loan balances of cash-lending agencies,[1] they had the opposite effect upon the receivables of instalment finance companies. Whereas the liquidation of the former gathered momentum during 1931, the liquidation of the latter noticeably slowed up during the spring and sum-

[1] Loans made against adjusted service certificates have been treated, like loans against savings bank passbooks or against life insurance policies, as a form of dissaving.

mer months. It seems probable that the purchase of automobiles on instalment payments was stimulated by the fact that many consumers were suddenly given an anchor to leeward.

But the stimulation of the bonus loans was short lived and by the fall of 1931 all forms of consumer credit except the receivables of drug stores and food stores were being liquidated at an accelerating pace. The total amount of consumer credit declined by 7 per cent in 1930, by 15 per cent in 1931, and by 23 per cent in 1932.

Termination of the Deflation

Rapid liquidation continued until the spring of 1933, when some types of consumer credit suddenly reversed their downward trend. In the aggregate expansion appears to have begun in the fall of that year, but the pattern of the movement between April and October is confused by the diverse trends of various types of credit. The expansion, like the liquidation, began at different times for different types of creditors. Instalment credit began to expand first, and the expansion of other types of credit followed at intervals.

Automobile financing led the expansion of consumer credit as it has led its liquidation. The receivables of instalment finance companies increased moderately in April, 1933, and more substantially during the next few months. Except for seasonal declines during the two succeeding winters, expansion continued into August, 1937.[1]

Many other types of durable consumers' goods also contributed to the initiation of the credit expansion in the late spring of 1933. The most important of these was the mechanical refrigerator. The market for this product had only been scratched by 1929, and sales continued to rise through 1931 as the result of decreases in price and liberalization of financing terms. Except for an interruption in 1932, refrigerator paper continued to expand from the early 1920's to the fall of 1937. It cushioned the decline in receivables of instalment finance companies and contributed substantially to the subsequent rise. Since refrigerators generally were sold on long-term contracts and low down-payments, a sudden increase in credit sales tended to create a substantial increase in receivables. Sales of

[1] The seasonal movement that was characteristic of automobile receivables for many years was smoothed in 1935 by the lengthening of terms of repayment and by a change in the date of introduction of new models.

washing machines and vacuum cleaners, which had fallen precipitately after 1929, also increased substantially in 1933, and contributed to the early expansion of instalment receivables.[1]

For merchants who dealt in durable household goods other than household furniture, receivables were generally higher at the close of 1933 than at the close of 1932. For most other merchants the decline of receivables continued throughout 1933. For food dealers generally the liquidation of accounts that had become frozen during the depression years continued throughout most of the recovery period. The liquidation of accounts for professional services continued into 1934, while for most other service creditors recovery came more promptly.

For all cash-lending agencies aggregate loan balances at the close of 1933 were lower than at the close of 1932. The aggregate loan balances of credit unions and personal loan departments of banks began to expand during the summer of 1933, largely because of the organization of new units. For previously established units liquidation continued into the spring of 1934. The loan balances of industrial banking companies and the accommodation loans of banks seem to have turned upward early in 1934. Aggregate loan balances of regulated small loan companies also began to increase early in 1934, when the growth of the small loan business in New York and New Jersey, where small loan laws had recently been liberalized, began to offset the continued liquidation elsewhere. Exclusive of these two states, total loan balances of these companies continued to decline slowly until February, 1935. For "commercial" pawnbrokers the reduction of loan balances continued into the spring of 1934, but for "remedial" pawnbrokers it continued into 1935.

Expansion of Consumer Credit During the Recovery Period

Once initiated, the expansion of receivables of consumer credit agencies continued slowly at first and then at an increasingly rapid pace. For consumer credit as a whole, the expansion gained

[1] Sales of oil burners and mechanical stokers also resisted the cyclical downswing after 1929, and receivables growing out of sales of these products declined only moderately. But liquidation of these receivables appears to have continued into 1934.

momentum until April, 1937. There was an expansion of 9 per cent in 1934, of 16 per cent in 1935, of 22 per cent in 1936, and of 12 per cent in 1937. The rate of expansion during the first four months of 1937 was certainly greater than for any similar period between 1923 and 1937, and it probably exceeded that for any similar period in the history of consumer credit.

The expansion of consumer credit after 1933 was dominated by automobile financing. Instalment finance companies increased their holdings of automobile paper by 42 per cent in 1934, by 39 per cent in 1935, by 57 per cent in 1936, and by approximately 25 per cent between the close of 1936 and the end of August, 1937. Before the end of 1936 retail automobile paper held by instalment finance companies had exceeded its 1929 peak. Between March, 1933, and August, 1937, the amount of such paper increased almost sixfold.

This remarkable expansion occurred in spite of the fact that several other types of agencies had begun to enter the field of retail automobile financing on a large scale. As previously noted, some commercial banks had begun in 1917 to finance instalment sales for local piano and automobile dealers. This practice increased prior to 1929, but did not reach substantial proportions. After the summer of 1934, however, large numbers of commercial banks began to buy retail instalment paper on an increasing scale and by the close of 1937 about 10 per cent of all retail automobile paper appears to have been held by commercial banks. The year 1934 also saw the entrance of many small loan companies into the field of retail financing. This development was induced by the continued liquidation of small loan balances long after instalment credit had begun to rise. Although some small loan companies withdrew from this field after the revival of the demand for small loans, the small loan business in many areas continued to increase its holdings of retail receivables at a rapid pace. Competitive reductions of discount rates on automobile paper by the major finance companies tended, however, during the latter part of the recovery period to reduce the proportion of automobile paper in the portfolios of small loan companies.

Retail automobile paper expanded far more rapidly than the dollar volume of automobile sales. The disproportionate rise of retail receivables is to be explained principally by three circumstances. First, and by far the most important, terms of financing were liberalized. Down-payment requirements were reduced, and periods of repayment were progressively lengthened.[1] The average period of repayment increased from about twelve months in 1929 to about seventeen months in June, 1937. Second, used-car financing increased disproportionately to new-car financing. Third, the proportion of automobiles sold on time-payments appears to have increased.

The expansion of instalment receivables for other types of durable goods involved smaller sums and smaller rates of growth. Credit sales of refrigerators, vacuum cleaners, and washing machines increased rapidly and receivables arising from these sales increased even more rapidly because of the lengthening of the period of repayment. It has been impracticable to segregate the instalment paper arising out of sales of these products. But figures for specialized finance companies give some guide to the general movement. The receivables of a company that finances washing machines increased threefold between the spring of 1933 and June 30, 1937, and the receivables of another company that deals principally in refrigerator and vacuum-cleaner paper increased fourfold between the close of 1933 and the close of 1936. The rate of growth of this paper declined during 1936 and increased again during the first half of 1937.

One of the most notable developments in the field of instalment financing during the recovery period was the federal government's program for encouraging the modernization and repair of homes by insuring credits extended for this purpose under Title I of the National Housing Act. The protection given by this insurance made it possible to finance on relatively long-term contracts, without down-payment, many types of repairs and equipment installations which had not previously been available on such favorable credit terms.

The importance of this program lay in its indirect rather than

[1] The lengthening of the period of repayment received a powerful stimulus toward the close of 1935 when the Universal Credit Company initiated the "$25 a month plan" for Ford cars. For some models the reduction of instalment payments to $25 a month required that the term of repayment be extended beyond twenty-four months.

in its direct influence upon the expansion of consumer credit. The outstanding amount of insured contracts of less than $2,000 never exceeded 280 million dollars. Part of this sum was extended to producers and part would have been extended if insurance had not been available. But it induced an expansion of credit in two collateral fields. First, it tended to break down the standards with respect to down-payment and duration of contracts that were in force in many fields of durable-goods financing. The immediate impact of Title I financing was felt by household "fixtures," such as oil burners and refrigerators. But inter-commodity competition soon extended the pressure for liberalization of financing terms to other fields. Second, it introduced many banks to the field of consumer credit. A large part of the subsequent growth of personal lending and instalment financing by commercial banks can be traced to initial experiences with insured contracts for the modernization of homes.

Organization of the Electric Home and Farm Authority had a similar stimulating effect upon instalment financing. It encouraged the liberalization of terms by buying relatively long-term paper and it induced many public utilities to finance the sale of household appliances in order to increase the consumption of gas and electricity.

Among "quality" stores the recovery period witnessed the acceleration of the trend toward instalment terms which had characterized the late 1920's. Department stores, furniture dealers, clothing stores, sporting goods stores, and jewelers, which catered to customers of substantial incomes, began aggressively to promote instalment sales of durable goods; and many department stores and clothing stores adopted the device of grouping purchases of "soft goods," as wearing apparel and semi-durable and perishable household supplies have been called, into a single instalment account. The importance of soft-goods financing, however, has frequently been exaggerated. The sums involved were small and the period of repayment was usually short.

Of all types of general merchandising the most rapid expansion of customer receivables occurred among mail-order houses. These institutions applied the instalment plan to sales of all manner of goods ranging from dresses and automobile tires to refrigerators and farm lighting plants. Receivables on the books of four major companies increased fourfold between the close of 1932 and the close of 1937.

The expansion of loan balances of the cash-lending agencies was rapid after 1934. Personal loan departments of banks and credit unions experienced the greatest growth; but all other agencies except pawnbrokers contributed substantially to the expansion. For the cash-lending agencies as a whole, the rate of growth accelerated progressively. There was an expansion of 10 per cent during 1934, of 21 per cent during 1935, of 26 per cent during 1936, and of about 15 per cent, or a rate of 30 per cent a year, during the first half of 1937. The rapid expansion during 1936 occurred in spite of the fact that the bonus payments in June resulted in substantial reductions in the loan balances of pawnbrokers and of regulated and unregulated small loan companies.

Growth of the cash-lending agencies during this period was accompanied by a breakdown of the traditional specialization with respect to security among various types of lenders. The industrial banking companies and personal loan departments, which had specialized in endorsed note loans, began to buy retail instalment contracts, to lend on unsecured notes to persons whose incomes were stable and substantial, and to make direct loans on the security of automobiles. Small loan companies, which had specialized in loans on household furniture and wage assignments, began on a large scale to make loans on unsecured notes and on automobiles. As already indicated, they also began to buy retail instalment paper. Although they competed directly with instalment finance companies in many fields, they also extended their services to commodities which the latter companies had avoided. Some small loan companies bought contracts arising out of instalment sales of coal; and others handled sales contracts for clothing, furniture, luggage, tires, outboard motors, air conditioning units, cameras, and household motion-picture equipment. Even the unregulated lender began to buy instalment paper from clothing houses, sporting goods stores, and other merchants who sold low-priced goods on instalment contracts.

End of the Expansion in 1937

The rate of expansion of instalment credit arising out of the sale of durable goods appears to have begun to decline in the spring of 1937. At the end of March insurance of modernization contracts under the National Housing Act was terminated, and liquidation of this type of paper began. In June and July several prominent instalment finance companies made a concerted effort to tighten the terms of instalment financing and this effort was supported by bankers who were beginning to view with alarm the depreciation in the quality of instalment paper which secured finance company notes. It seems certain also that many consumer credit agencies had reached the limits to which they were willing and able to expand their bank credit, and that unfavorable conditions in the investment market caused them to delay the sale of securities.

The expansion of retail automobile paper held by instalment finance companies ended in August, 1937, and the growth of other types of instalment paper ended shortly thereafter. Receivables arising from sales of household appliances and furniture began to decline in October; and the expansion of consumer credit as a whole appears to have ended in that month. Except for creditors whose receivables had a strong upward seasonal movement, only credit unions and personal loan departments continued to expand their loan balances to the close of the year.

The termination of the expansion in 1937 was much less abrupt than in 1929, partly because the decline in credit sales of durable goods occurred more gradually, and partly because the rate of liquidation of individual instalment contracts was reduced by the longer periods of repayment. But once initiated, the deflation gained momentum much more rapidly than in 1929. There were no important durable consumers' goods with unexploited markets and there was no continuing growth of cash-lending agencies to cushion the decline.

By January, 1938, the rate of contraction of consumer credit appears to have exceeded 120 million dollars a month. The contraction continued at a gradually accelerating pace until the late summer of 1938. Although the rate of contraction was slowed progressively thereafter by a renewal of large-scale public spending,

TABLE 6.—ESTIMATED RECEIVABLES OF RETAIL MERCHANTS IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Millions of dollars)

Year	Apparel stores	Auto-motive dealers	Country general stores	Drug stores	Food stores	Fuel and ice dealers	Furniture and household equipment stores	General merchan-dise stores	Hard-ware stores	Jewelry stores	Miscel-laneous stores	Total
1923	287	578	129	30	419	125	757	452	78	87	49	2,991
1924	304	552	129	31	458	123	806	474	78	89	51	3,095
1925	331	662	131	33	494	113	925	516	85	98	56	3,444
1926	374	685	133	35	523	148	1,023	567	89	107	61	3,745
1927	412	628	138	40	549	151	1,068	587	95	110	63	3,841
1928	435	721	142	45	594	172	1,156	623	105	116	68	4,177
1929	482	817	148	49	653	182	1,246	681	108	123	75	4,564
1930	445	796	152	51	673	186	1,073	631	94	91	69	4,261
1931	389	630	156	52	695	163	866	565	82	75	61	3,734
1932	295	473	147	53	598	150	594	442	74	51	48	2,925
1933	260	561	132	52	580	140	554	431	72	49	47	2,878
1934	266	611	134	51	570	154	583	462	78	52	49	3,010
1935	292	677	139	49	577	156	641	504	79	55	52	3,221
1936	325	758	145	47	594	169	747	576	82	65	58	3,566
1937	354	814	152	49	617	187	807	617	87	72	62	3,818

gradual liquidation appears to have continued until the spring of 1939.

Year-end Receivables by Types and Classes of Creditors

Estimates of the outstanding amounts of consumer receivables at the close of each year from 1923 to 1937 by types of creditors are presented in four accompanying tables. Table 6 gives receivable figures for various types of retail merchants; Table 7, for various types of service creditors; Table 8, for intermediary financing agencies; and Table 9, for cash-lending agencies.

TABLE 7.—ESTIMATED RECEIVABLES OF SERVICE CREDITORS IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Millions of dollars)

Year	Private practitioners in the curative services	Hospitals	Funeral directors and embalmers	Laundries and cleaning and pressing establishments	Public utility companies	Correspondence schools	Total
1923	232	11	27	26	25	16	337
1924	250	12	28	28	26	17	361
1925	287	14	30	31	29	18	409
1926	315	16	33	36	31	19	450
1927	336	18	35	41	34	17	481
1928	368	20	41	48	37	16	530
1929	416	23	43	56	42	16	596
1930	399	22	41	53	44	14	573
1931	370	21	36	48	43	13	531
1932	346	20	31	41	43	10	491
1933	328	21	28	38	44	8	467
1934	313	21	28	38	42	9	451
1935	324	24	31	40	43	10	472
1936	358	27	35	44	45	11	520
1937	383	29	38	47	47	13	557

With the exception of drug stores and public utility companies, receivables of each type of consumer credit agency expanded during the 1920's, contracted during the early 1930's, and then expanded again. But there were significant differences in the timing and amplitude of these fluctuations. For instalment finance companies, furniture and household equipment stores, jewelry stores, and banks that made accommodation loans, receivables declined abruptly in 1930. For country general stores, food stores, and regulated small loan companies, on the other hand, receivables reached a peak in

1931. Receivables of instalment finance companies rose sharply between the close of 1932 and the close of 1933, while for many types the low point for receivables occurred at the close of 1934. Receivables of instalment finance companies fluctuated the most violently and appeared to be most sensitive to changes in business conditions. It may be observed that receivables arising from sales of goods the purchase of which could be readily postponed or avoided tended to fluctuate promptly and violently in response to changes in business conditions, while receivables arising from sales of current necessities generally reacted slowly and their fluctuations were moderate.

TABLE 8.—ESTIMATED RECEIVABLES OF INTERMEDIARY FINANCING AGENCIES IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Millions of dollars)

Year	Instalment finance companies	Banks		Manufacturers	Total
		Small-scale instalment financing	Modernization loans (F.H.A.)		
1923	248	4	..	104	356
1924	328	6	..	119	453
1925	593	9	..	135	737
1926	750	11	..	149	910
1927	702	11	..	149	862
1928	909	14	..	157	1,080
1929	1,192	16	..	165	1,373
1930	973	17	..	148	1,138
1931	749	16	..	113	878
1932	452	13	..	83	548
1933	515	19	..	80	614
1934	696	30	17	88	831
1935	997	50	113	102	1,262
1936	1,550	98	153	126	1,927
1937	1,809	143	93	128	2,173

Table 10 combines the summary figures for each of the four general classes of consumer credit agencies into a series of estimates for consumer credit as a whole. Chart 1 gives a graphic description of the movements of receivables for the four major classes of creditors. Because a ratio scale was used and because the curves were formed by drawing a straight line between year-end points, this chart tends to minimize the magnitude of fluctuations of receivables and the abruptness of changes in trend. It will be noted that receivables of intermediary financing agencies fluctuated most sub-

TABLE 9.—ESTIMATED RECEIVABLES OF CASH-LENDING AGENCIES IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Millions of dollars)

Year	Banks		Credit unions	Industrial banking companies	Pawn-brokers	Regulated small loan companies	Unregu-lated lenders	Miscel-laneous agencies	Total
	Personal loan departments	Non-depart-mentalized consumer loans							
1923	1	426	14	62	80	45	21	24	673
1924	1	465	17	80	87	56	25	28	759
1925	2	563	20	105	94	75	27	34	920
1926	3	626	23	136	100	98	33	34	1,053
1927	6	681	27	163	107	137	35	35	1,191
1928	18	786	29	193	111	193	41	38	1,409
1929	43	879	32	219	119	263	49	46	1,650
1930	45	799	31	218	125	287	53	40	1,598
1931	39	563	29	184	117	289	49	29	1,299
1932	31	378	27	143	99	257	40	18	993
1933	29	302	27	121	87	232	37	13	848
1934	39	347	32	125	82	245	45	15	930
1935	72	422	44	156	85	267	61	18	1,125
1936	131	546	66	191	85	301	80	22	1,422
1937	216	678	93	221	94	351	99	26	1,778

stantially and they were subject to a strong secular growth during the period covered by our estimates.

TABLE 10.—ESTIMATED RECEIVABLES OF ALL CONSUMER CREDIT AGENCIES IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937, BY MAJOR CLASSES OF CREDITORS

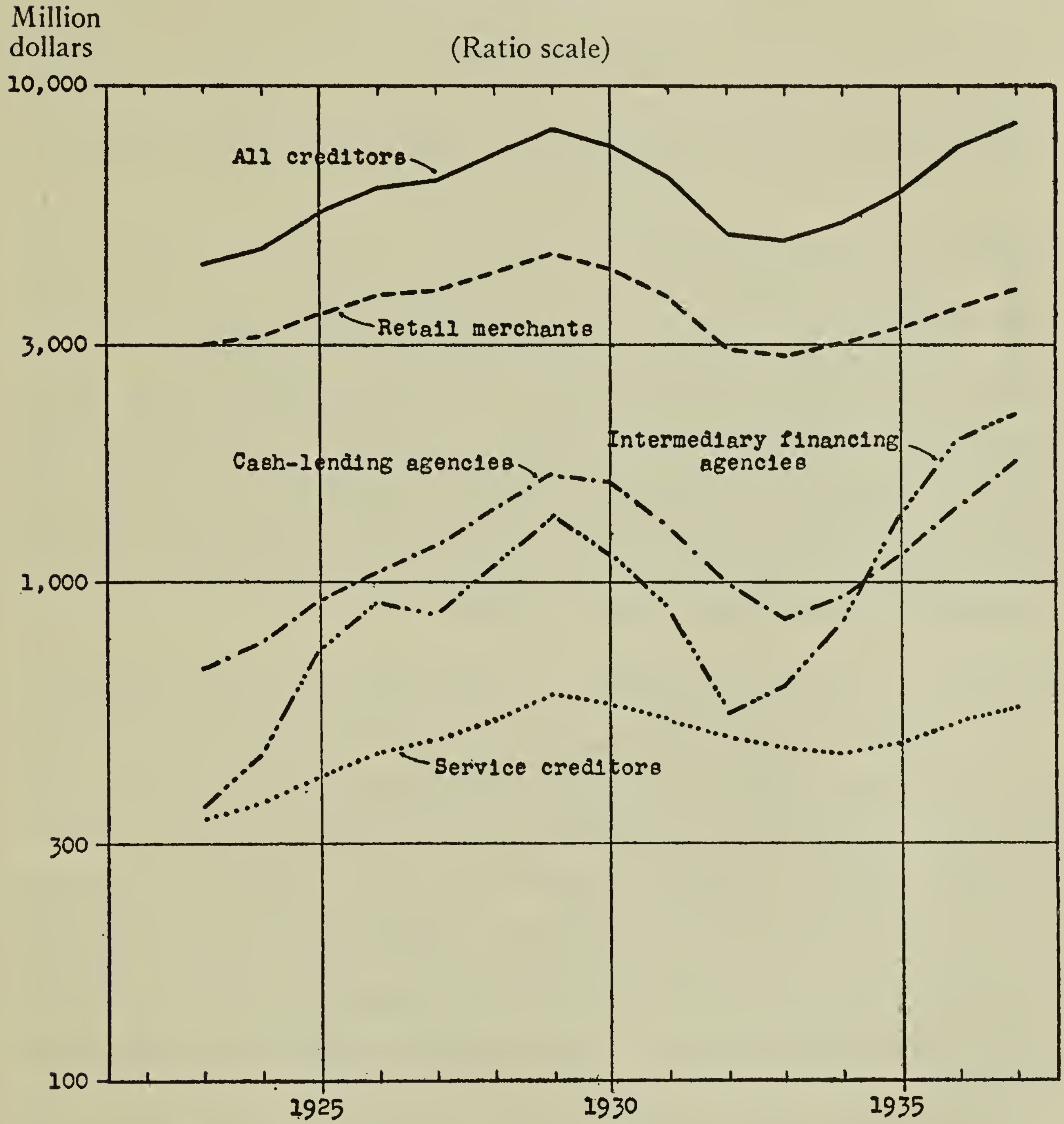
(Millions of dollars)

Year	Retail merchants	Service creditors	Intermediary financing agencies	Cash-lending agencies	All creditors	Increment or decrement	Index of consumer credit (average 1923 to 1937 = 100)
1923	2,991	337	356	673	4,357	..	70.1
1924	3,095	361	453	759	4,668	+311	75.1
1925	3,444	409	737	920	5,510	+842	88.6
1926	3,745	450	910	1,053	6,158	+648	99.0
1927	3,841	481	862	1,191	6,375	+217	102.5
1928	4,177	530	1,080	1,409	7,196	+821	115.7
1929	4,564	596	1,373	1,650	8,183	+987	131.6
1930	4,261	573	1,138	1,598	7,570	−613	121.7
1931	3,734	531	878	1,299	6,442	−1,128	103.6
1932	2,925	491	548	993	4,957	−1,485	79.7
1933	2,878	467	614	848	4,807	−150	77.3
1934	3,010	451	831	930	5,222	+415	84.0
1935	3,221	472	1,262	1,125	6,080	+858	97.8
1936	3,566	520	1,927	1,422	7,435	+1,355	119.6
1937	3,818	557	2,173	1,778	8,326	+891	133.9

Detailed descriptions of the methods by which these estimates were constructed are given in Part III of this volume. For many types of creditors, the estimates are undoubtedly very close; but for others, satisfactory basic data could not be obtained and the resulting estimates are not fully reliable. The reader who will follow the discussion in Part III of the difficulties which were met in assembling data for certain types of creditors and who will be guided by the writer's appraisal of the validity of various estimates will need little further warning that for many areas the estimates offered here are at best crude approximations.

Our summary estimates probably understate the outstanding amounts and cyclical movements of consumer credit. Many agencies that extend credit to consumers have been omitted from our calculations, and allowances for omissions in estimates based upon data solicited from individual institutions are undoubtedly conservative. In the aggregate the amounts of consumer credit excluded from our estimates appear to exceed the amounts of producer

CHART 1.—ESTIMATED OUTSTANDING AMOUNTS OF CONSUMER CREDIT AT THE CLOSE OF EACH YEAR, 1923 TO 1937, BY MAJOR CLASSES OF CREDITORS



credit included in them. Use of corporate reports and particularly of income tax reports as the principal basis for estimates tends in some indeterminate degree to understate cyclical fluctuations of receivables. Charge-off policies are frequently directed toward minimizing taxes. Many small corporations postponed writing off accounts recognized to be uncollectible in 1931, 1932, and 1933 until later years when there were profits against which to charge them.

Nevertheless, the errors inherent in our estimates for consumer credit as a whole are probably not sufficiently great to affect substantially the conclusions that will be drawn from these figures in succeeding chapters.

CHAPTER V

SECULAR AND CYCLICAL MOVEMENTS AND THEIR CAUSES

THE preceding historical chapters have been concerned primarily with the leading events in the field of consumer credit, rather than with the forces underlying these events. It was neither practicable nor desirable to excise completely from these chapters all reference to causal forces. But in order to facilitate the historical exposition detailed discussion of some of the more important social and economic forces that induced the secular, or long-term, growth and cyclical fluctuations of consumer credit has been postponed for treatment in this chapter.

General Characteristics of Quantitative Movements

The chronological periods defined by quantitative movements of consumer credit differ from those established for discussion of the history of consumer credit agencies. The strong secular growth of consumer credit continued, apparently with negligible interruptions, from 1800 to the fall of 1929. This long period of expansion was followed by a very brief but extremely rapid cyclical decline until the spring of 1933. Thereafter, consumer credit expanded rapidly until the fall of 1937, when another cyclical contraction was initiated.

Each of these three periods appears to have been characterized by an acceleration of the established trend. During the long period of growth from 1800 to 1929 the outstanding amount of consumer credit appears to have expanded at a gradually accelerating rate. There were, of course, interruptions. For the period before 1915 it is impossible to measure or even to identify these interruptions. But, if we may judge by the fragmentary data for the periods of the World War and of the post-war depression, they were brief and of minor proportions. During the period from 1923 to 1929 for which quantitative data are available, the expansion was very rapid, but irregular. The rate of expansion accelerated between the close of 1923 and the close of 1925. It slowed down in 1926 and again in 1927, only to increase in 1928 and in 1929. The contraction between the autumn of 1929 and the spring of 1933 and the expansion between the spring of 1933 and the autumn of 1937 were subject to a more pronounced and more consistent acceleration. The annual amount of contraction more than doubled between 1930 and 1932, while the annual amount of expansion trebled between 1934 and 1936.

These trends are illustrated by Chart 2, which compares movements of consumer credit with changes in the national income during the period from 1909 to 1937. The consumer credit curve contains the figures given in the preceding chapter for the period from 1923 to 1937. It is based on fragmentary data for the period from 1915 to 1922, and for early years we have merely given to the curve the form suggested by our historical investigations. The figures for national income are those developed by Professor Kuznets for the period between 1919 and 1935,[1] extrapolated to 1909 with the aid of Professor King's estimates,[2] and to 1937 with the aid of estimates published by the Department of Commerce.[3]

It will be noted that movements of consumer credit correspond roughly with changes in the national income. Cyclical movements of both series coincide closely in point of time, although their amplitudes varied. The evidence available to us suggests that during the depression of 1920–1921 consumer credit declined only slightly in spite of a substantial decline in the national income. But during the depression of 1930–1933 the rate of contraction of consumer credit was fully as great as the rate of decline in the national income.

Except for the period of the World War consumer credit appears to have been subject to a secular growth as compared with the national income. Failure of consumer credit to expand as rapidly as the national income during the years 1917 and 1918 was due to

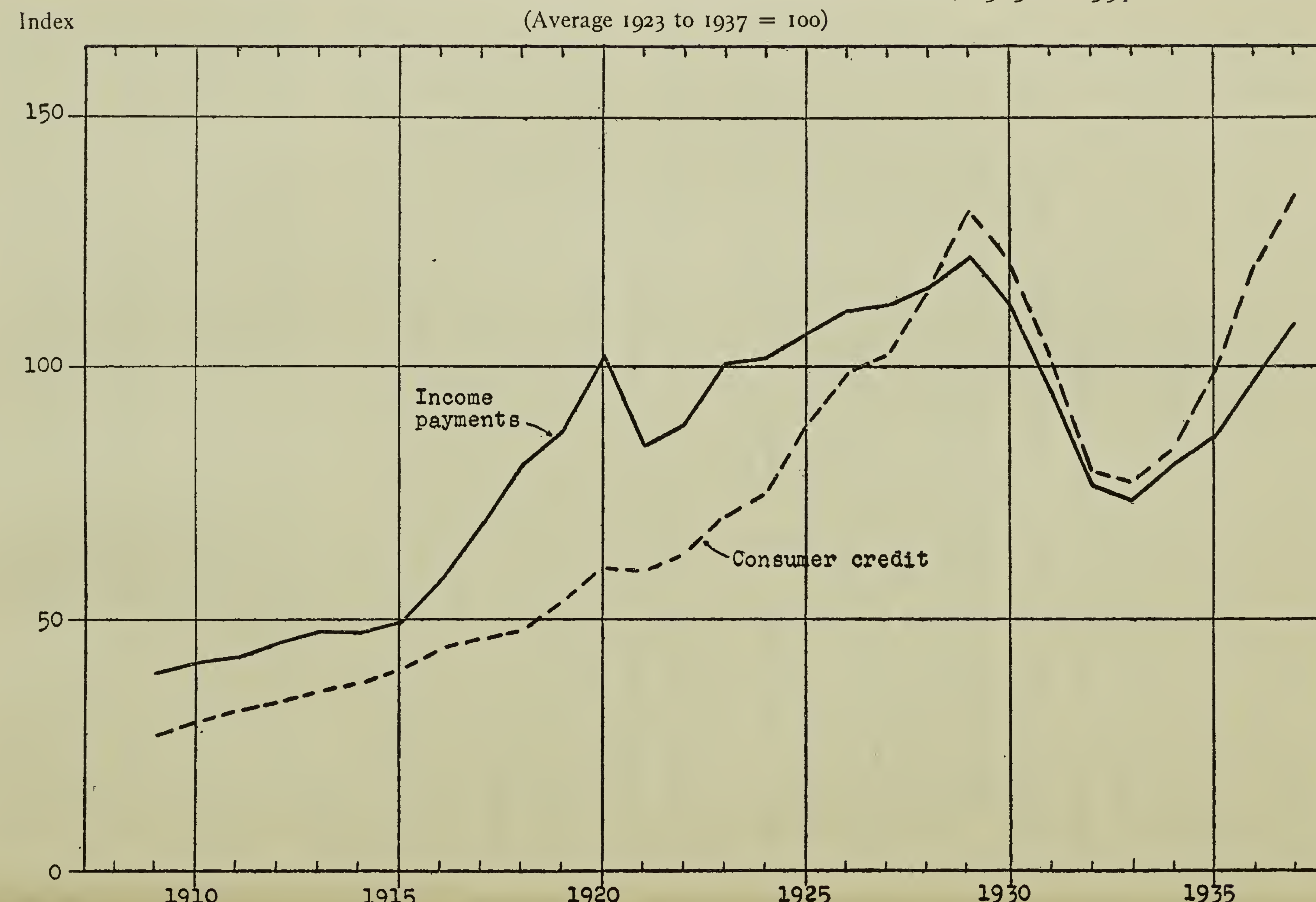
[1] Kuznets, Simon, National Income and Capital Formation, 1919–1935. National Bureau of Economic Research, New York, 1938, Table 6, p. 24.

[2] King, Willford I., The National Income and Its Purchasing Power. National Bureau of Economic Research, New York, 1930, Table 8, p. 74.

[3] United States Department of Commerce, Survey of Current Business, June, 1938, Table 2, p. 13.

CHART 2.—ESTIMATED VOLUME OF INCOME PAYMENTS DURING EACH YEAR AND ESTIMATED OUTSTANDING AMOUNT OF CONSUMER CREDIT AT THE CLOSE OF EACH YEAR, 1909 TO 1937

(Average 1923 to 1937 = 100)



the diversion of productive resources and incomes to military purposes under the regulations of the War Industries Board and the social pressures for the purchase of government bonds. The deferment of purchases of consumers' durable goods during this period was no doubt partially responsible for the very slight contraction of consumer credit during the post-war depression and for its rapid growth thereafter.

It has frequently been suggested that the sale of government bonds on the instalment plan to wage-earners and salaried workers during the World War was partly responsible for the remarkable growth of instalment merchandising following the war. The widespread instalment sale of government bonds may have had some effect, but it seems unlikely that it was an important factor in the subsequent expansion of instalment sales of consumers' durable goods. Certainly most consumers needed little introduction to the partial-payment plan, which had been in common use not only among building and loan associations and life insurance companies, but also among furniture stores and piano dealers long before the outbreak of the World War.

Functional Categories of Consumer Credit and Their Movements

It will facilitate discussion of the forces underlying quantitative movements to distinguish three general types of consumer credit whose movements have differed materially and have been influenced by different sets of forces. These types are to be identified by their effects upon consumers' balance sheets. But such balance sheet changes indicate differences in the uses to which credit is put. Consequently, these types of consumer credit will be called "functional categories" in order to avoid confusion with types of creditors established for purposes of statistical measurements and with types of credit that grow out of the different techniques of credit-granting.

As noted in Chapter 1, consumers may use credit to finance the acquisition of family capital goods, to finance an expansion of current consumption in relation to current income, or to finance current expenditures between dates when incomes are paid. All consumer credit transactions may be allocated to one or another of these use-classes. Differences between them are highly significant for our present purpose.

When a consumer uses credit to acquire goods that have some degree of durability, he expands both sides of his balance sheet. If, as is usually the case, the purchaser is required to make a down-payment exceeding the amount of depreciation that occurs when the article passes into his hands and to make periodic payments exceeding its subsequent normal depreciation, the additional liability resulting from the credit purchase will have been more than offset by an additional asset created by the credit purchase. Credit arising from such transactions—in which the additional liability is compensated by an additional asset—will be referred to as "consumers' capital financing."

The second category is the antithesis of the first. When a consumer uses credit to expand his expenditures for consumption in relation to his income, he expands his liabilities without a compensatory increase in his assets. In other words, his net worth will have been reduced by as much as his credit has been expanded. Credit arising from such transactions—those which create a liability without a compensatory asset—will be referred to as "consumers' deficit financing."

Credit used to finance consumers' expenditures between dates when incomes are paid, which will be referred to as "income-period financing," bears some relation both to consumers' capital financing and to consumers' deficit financing, but represents nevertheless a distinct functional category. On one hand, like consumers' deficit financing, it is used primarily to acquire non-durable goods; consequently, it creates no compensatory assets. On the other hand, like consumers' capital financing, it does not result in a decline in net worth. The increasing liability arising from additional credit purchases between income-payment dates is offset by accruing earnings that will provide the means of liquidating the debt on settlement dates.

Since this volume is primarily concerned with measurements of consumer credit at a given period of time and with net increments and decrements in the outstanding amount of consumer credit occurring between two dates, the terms "consumers' capital financing," "consumers' deficit financing," and "income-period financing," like the term "consumer credit," will be used unless otherwise noted to refer to an outstanding amount at a given date. Where necessary for clarity, this meaning will be re-enforced by use of such phrases as "amount of . . . at" or "outstanding amount of." The word "volume" or such phrases as "made during" or "done during" will indicate reference to quantities measured over a period of time.[1]

In general, credit arising from instalment sales of consumers' durable goods may be accepted as consumers' capital financing. The major part of the open-book credit extended for the purchase of goods and services represents income-period financing, although some part is capital financing and some part is deficit financing. Loans of cash-lending agencies involve both capital financing and deficit financing. Some such loans are used for the purchase of durable consumers' goods, and others to refinance initial credit commitments for durable goods. Since instalment contracts are usually reduced more rapidly than the goods by which they are secured depreciate, many loans for refunding instalment contracts may properly be identified with capital financing.

Techniques of credit-granting and types of creditors are, however, inadequate criteria for allocating receivables to these functional categories. Whether the receivables of open-book credit merchants and service creditors represent income-period financing or deficit financing frequently cannot be accurately appraised even by the creditor himself. And among the cash-lending agencies, the reasons for borrowing given by applicants frequently fail to indicate the proper classification of these loans.

In addition to the problem of allocating the receivables of various types of creditors for any one time, there is also the problem of accounting for secular and cyclical changes in these allocations. It is quite clear, for instance, that there has been a substantial secular growth of capital financing among the receivables of cash-lending

[1] The vocabulary of business and finance lacks terms which clearly distinguish quantities measured over a period of time from quantities measured at a moment of time. Such terms as "credit," "loans," "instalment contracts," or "financing" may appear either in balance sheets, where they refer to an outstanding amount as of a given date, or in income statements, where they refer to a volume of transactions taking place between two dates. When used apart from balance sheets and income statements, however, their meaning is ambiguous and these ambiguities have frequently given rise to confusion and misunderstanding.

agencies. And it is equally clear that there are substantial cyclical increases in deficit financing among the receivables of retail merchants, service creditors, and many of the cash-lending agencies during depression periods.

TABLE 11.—ESTIMATED OUTSTANDING AMOUNTS OF CONSUMERS' CAPITAL FINANCING, INCOME-PERIOD FINANCING, AND CONSUMERS' DEFICIT FINANCING IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

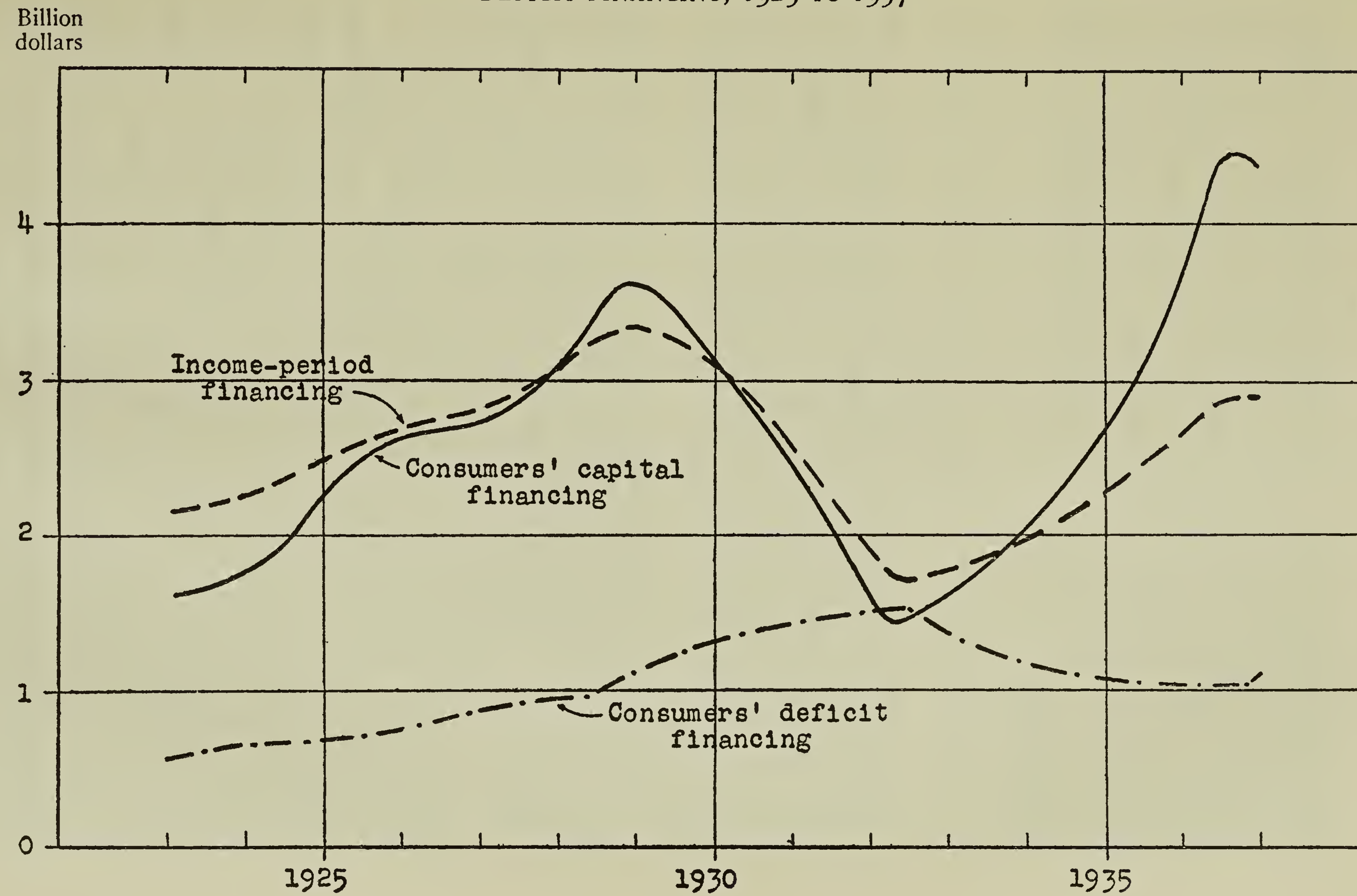
(Millions of dollars)

Year	Consumers' capital financing	Income-period financing	Consumers' deficit financing	Total
1923	1,610	2,150	597	4,357
1924	1,730	2,270	668	4,668
1925	2,300	2,500	710	5,510
1926	2,670	2,700	788	6,158
1927	2,660	2,800	915	6,375
1928	3,170	3,060	966	7,196
1929	3,710	3,340	1,133	8,183
1930	3,140	3,100	1,330	7,570
1931	2,440	2,550	1,452	6,442
1932	1,560	1,890	1,507	4,957
1933	1,620	1,830	1,357	4,807
1934	2,040	2,000	1,182	5,222
1935	2,710	2,290	1,080	6,080
1936	3,760	2,660	1,015	7,435
1937	4,330	2,900	1,096	8,326

These comments illustrate but do not exhaust the difficulties of measuring empirically the movements of consumers' capital financing, income-period financing, and consumers' deficit financing. But the distinctions between these categories of consumer credit are so important to an analysis of quantitative movements that crude estimates of the amounts in each category at the close of each year during the period from 1923 to 1937 have been undertaken. The figures given in Table 11 have been computed by allocating fixed or varying proportions of the receivables of each type of creditor to one or more of the three functional categories. Although large errors are inherent in them, these estimates indicate with sufficient accuracy for our purpose the general tendencies of these categories during the period covered.

The striking differences in the movements of these categories of consumer credit are illustrated by Chart 3. All three are subject to

CHART 3.—MOVEMENTS OF INCOME-PERIOD FINANCING, CONSUMERS' CAPITAL FINANCING, AND CONSUMERS' DEFICIT FINANCING, 1923 TO 1937



wide cyclical fluctuations. Income-period financing and consumers' capital financing move directly with the business cycle, while consumers' deficit financing moves inversely with the cycle. Consumers' capital financing has been by far the most dynamic element. This category has not only increased substantially in importance throughout the period from 1923 to 1937, but has fluctuated more violently since 1929 than most other economic phenomena. Such diverse movements reflect differences in motivating forces.

Forces Underlying Movements of Income-Period Financing

Until recent years income-period financing was the largest of the three functional categories of consumer credit. During the first half of the nineteenth century its predominance was overwhelming. Since then, however, there has been a remarkable growth of consumers' capital financing that challenged the dominance of income-period financing in the late 1920's and substantially surpassed it after 1934.

Income-period financing arises almost universally from open-book credit sales which, throughout the history of consumer credit, have been associated primarily with goods and services for current consumption. Consequently changes in the outstanding amount of income-period financing are the direct results of changes in one or more of three factors: (1) the volume of retail sales of services and of non-durable goods; (2) the proportion of such goods sold on credit; and (3) the length of time for which credit is granted.

As noted in the preceding chapter, there have been significant changes both in the ratio of credit sales to total sales of services and non-durable goods and in the period for which credit was extended. Disregarding for the moment short-term fluctuations and examining long-term changes in perspective, there appears to have been a secular increase in the proportion of credit sales of services and non-durable goods between 1800 and 1938, although the rate of increase was probably reduced progressively after the 1880's; and there appears to have been a secular reduction in the term for which credit was extended after 1870 which became less important and perhaps ended entirely after the outbreak of the World War.

These tendencies were to some extent interrelated with respect to cause and effect. On one hand, the increasing generality of open-book credit-selling contributed to the hazards of long-term credits and stimulated more frequent settlements; and, on the other hand, the shortening of the period for which credit was granted facilitated the further expansion of open-book credit-selling. But there were many independent forces which contributed even more substantially to these secular changes.

The relative growth of open-book credit-selling was influenced by the growth of industrial communities which increased disproportionately the number of people who received regular periodic incomes and facilitated more frequent shopping, by the gradual rise of real incomes of the rank and file of the population which made it practicable to extend open-book credit to occupational groups that had formerly been considered poor credit risks, and by the increasing use of checking-accounts in place of cash among middle-class families which increased the convenience of periodic settlements for small frequent purchases. While these forces contributed to the practicability of open-book credit-selling from the standpoint of the credit grantor or increased the usefulness of periodic settlements to the credit recipient, competition among merchants and service creditors supplied the immediate driving force behind this expansion of open-book credit-selling. When one merchant or service agency offered credit terms to certain customers, others were generally compelled to do likewise or lose part of their clientele.

The decline in the term for which credit was granted occurred largely in agricultural areas. It was facilitated by the growth of rural banks; and it was stimulated by deflationary tendencies of agricultural prices which, except for the period of the World War, have persisted since 1866 and by improvement of transportation facilities which destroyed the partial monopoly of the local storekeeper and brought his long-term credit prices into competition with the short-term credit and cash prices of urban merchants and mail-order houses. In urban areas there was some contraction of the period for which open-book credit was extended as the result of the tendency toward more frequent wage-payments.

The effect of cyclical forces upon the extent of credit sales of services and non-durable goods and upon the period for which such credit was extended appears to have changed with the passage of time. Fragmentary evidence presented in Chapter 2 suggests that before the Civil War merchants tended to liberalize their credit policies when demand was slack.[1] Goods that would otherwise have been sold for cash were sold for credit and the period for which credit was customarily extended was lengthened. During recent years, however, the period for which credit was voluntarily extended by open-book credit merchants appears, if anything, to have been reduced rather than increased when incomes were declining, and there is some evidence that the ratio of credit sales to total sales among open-book credit merchants has tended to decline during periods of depression.

The first Retail Credit Survey of the Department of Commerce,[2] which covered the year 1927 and furnished some data for the years 1925 and 1926, indicates that for most types of retail merchants there was an increase in the proportion of open-book credit sales during 1925 and 1926 and a slight decrease during 1927. No similar data are available until 1930, when the Department of Commerce began to publish semi-annual, and, after 1933, annual credit surveys. For the retail enterprises reporting in 1930, the proportion of open-book credit sales increased slightly during the first half of the year. During the second half of 1930 and during 1931, 1932, and the first half of 1933, the proportion of open-book credit sales declined. During the second half of 1933 and during 1934, 1935, and 1936, there was a gradual increase in the proportion of open-book credit sales.[3]

Changes in the proportion of open-book credit sales and in the period for which credit was granted played a relatively unimportant

[1] See pp. 49, 63–64.

[2] United States Department of Commerce, National Retail Credit Survey. U. S. Government Printing Office, Washington, 1930.

[3] United States Department of Commerce, semi-annual retail credit surveys for 1930, 1931, 1932, and 1933 and annual credit surveys for 1934, 1935, and 1936. Herman T. Lacrosse is the author of most of these surveys. Because of differences in the component enterprises for each survey, it is possible to draw conclusions concerning the trend of open-book credit sales only by comparing the proportion of open-book credit sales for each period with the proportion reported for the preceding period by the same group of enterprises. Otherwise comparisons are misleading. See, for instance, the figures derived from the retail credit surveys by Arthur H. Hert in his article Charge Accounts of Retail Merchants *in* Annals of the American Academy of Political and Social Science, March, 1938, p. 113.

role in quantitative movements of income-period financing. Secular changes in these two factors occurred gradually over a long period of time and were to some extent compensatory; and cyclical fluctuations, at least in recent years, have been comparatively slight. The most powerful force behind quantitative movements of income-period financing has come from the secular growth and cyclical fluctuations of retail sales of services and non-durable goods. Such sales expanded rapidly with only minor interruptions from 1800 to 1929. This expansion was in part a direct consequence of the growth of population. But the rate of expansion of such sales far exceeded the rate of growth in population, and it reflected the gradual rise of per capita productivity and the progressive expansion of the market system as the household lost more and more of its productive functions to the specialized entrepreneur.

Chart 4 compares our year-end estimates of income-period financing with Professor Kuznets' estimates of the annual flow of consumers' perishable and semi-durable goods.[1] These series of figures are not, of course, fully comparable. Our estimates of income-period financing include receivables arising from sales of services, while consumers' outlays for services have been excluded from Professor Kuznets' figures, partly because his estimates for services absorb the errors in his calculations of other items and partly because his estimates for services are not available for the full period. Changes in consumers' outlays for services appear, however, to have been closely related to changes in the flow of consumers' perishable and semi-durable goods. Consequently, the chart probably indicates with some degree of reliability the relationship between the movement of income-period financing and the flow of services and non-durable goods.

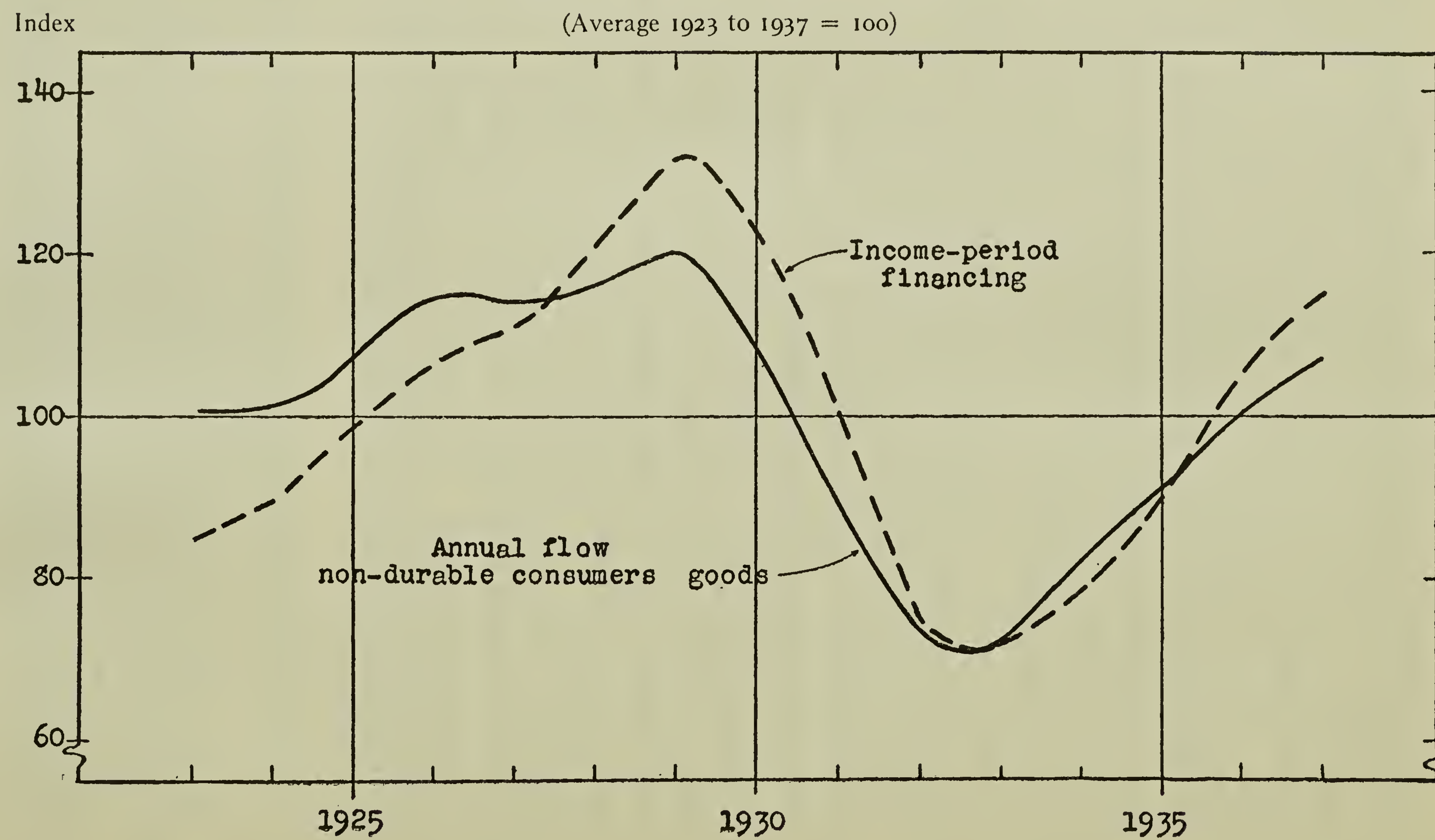
Forces Behind Movements of Consumers' Capital Financing

Some of the "term" credits extended for periods of three, six, and twelve months in connection with the sale of high-priced con-

[1] Kuznets, Simon, National Income and Capital Formation, 1919–1935, National Bureau of Economic Research, New York, 1938, App. Table 8, p. 85. Figures for the years 1936 and 1937 were taken from Commodity Flow and Capital Formation in the Recent Recovery and Decline, 1932–1938, by Simon Kuznets, National Bureau of Economic Research, New York, 1939, p. 2.

CHART 4.—MOVEMENTS OF INCOME-PERIOD FINANCING AND ANNUAL FLOW OF PERISHABLE AND SEMI-DURABLE GOODS, 1923 TO 1937

(Average 1923 to 1937 = 100)



sumers' goods at the beginning of the nineteenth century could probably be called consumers' capital financing. But this category of consumer credit was undoubtedly negligible until instalment-selling techniques were applied to the sale of household furniture. Thereafter, it grew rapidly, but still accounted for a small part of the total amount of consumer credit at the close of the Civil War. Beginning in the 1870's, however, there was an acceleration of the rate of growth, and consumers' capital financing began to contribute substantially to the secular growth of consumer credit as a whole. With the development of facilities for financing instalment sales of automobiles, consumers' capital financing became the most important element in the secular growth and cyclical movements of consumer credit.

As previously indicated in Chapter 3, industrialization provided the social conditions for the expansion of instalment merchandising and cash-lending. The social conventions which had supplied the capital needs of families in intimate communities broke down with the development of industrial metropolises, and the wage-earning proletariat of these cities became dependent for its capital needs upon business enterprises especially equipped to extend long-term credits. But machine production did more than create the social conditions for an increase in consumers' capital financing. It also provided powerful economic pressures for its expansion.

It was characteristic of most types of machine production that manufacturing costs declined with an increase in the scale of output.[1] Consequently, subject to changes in raw-material costs, additional units could be produced more cheaply than the preceding units. Following the successful use of the instalment plan for the sale of furniture, other industries producing durable consumers' goods explored the possibility of expanding their markets by offering instalment terms. First the sewing-machine industry, then piano and organ manufacturers, and then book publishers discovered that even on long-term, low down-payment paper arising from sales to wage-earners losses were less than the savings in costs of production that resulted from the expansion of the market. For

[1] Under conditions of perfect competition diminishing costs could occur only over a period of time. But under conditions of imperfect competition, which were common in machine-production industries, costs of manufacture might, even in the short run, decline with an increase in output.

the piano industry, which continued to have some elements of handicraft production, costs declined only moderately with increased output. But pianos could be repossessed, reconditioned, and resold without substantial losses. For the sewing-machine industry there were larger losses, but there were also more substantial decreases in marginal costs.

One of the most interesting examples of the relation between marginal cost differentials and losses from credit sales was the business of the so-called subscription book publishers who sold encyclopedias and other book sets on very liberal credit terms. Market values of most book sets dropped precipitately when they passed into the hands of consumers, and repossessions were therefore generally impracticable. These publishers either hired agents to collect instalment payments or sent out a series of collection letters ranging from polite reminders to an attorney's notice that legal proceedings were contemplated if payment were not made by a certain date.

Both collection systems were expensive and, in spite of them, losses were high. But the marginal cost of publishing additional copies of books once they were set up in type was exceedingly low. The fixed costs of the subscription book publishers were authors' fees, and expenses of editing, type-composition, and administration. The prime costs, or those applicable to the production of marginal units, consisted of expenditures for paper, press-time, binding, and shipping. The publisher had to recover his fixed costs from what he believed to be his normal market. Thereafter, sales could be profitably expanded if they yielded more than the prime costs. Since prime costs were recovered in the down-payment or at the most after a few instalments had been paid, it was profitable to extend liberal terms even to very dubious credit risks if it resulted in sales which would not otherwise have been made.

Thus, the extension of instalment credits to low-income classes was at first subsidized by the difference between average and marginal costs. This subsidy gradually disappeared as the proportion of durable goods sold on instalment terms increased and as price competition compelled fixed costs to be spread over the whole market. Costs of extending credit were then loaded upon the credit buyer either through credit-price mark-ups or through carrying charges. But the manufacturer's stake in the instalment sale as a means of increasing his market continued. Manufacturers whose products were sold through retail dealers frequently supplied the funds for carrying retail instalment credits either by purchasing instalment contracts from the dealer or by granting liberal credits against dealers' inventories.

For consumers' capital financing, as for income-period financing, competition supplied the immediate pressure for growth. It is characteristic of the market for consumers' durable goods that competition takes place not only in the field of price, but also in the field of credit terms. For a large section of the market the amount required as a down-payment and the amount of periodic instalments are more important elements in determining the size of the market than the total purchase price.

This fact is amply illustrated by merchandising practices in recent years. The principal selling-point of the instalment clothing and furniture business which deals with Negroes in the South is the amount of the weekly payment. Many instalment buyers interviewed by the writer did not even know the total purchase price of the article. This extreme situation prevails only among ignorant groups of consumers. But that similar tendencies affect merchandising policies in other sections of the market is indicated by radio programs of automobile manufacturers. During 1936 and the early months of 1937 the keynote of sales promotion programs was not the purchase price, but the easy terms upon which new cars could be bought. One manufacturer of relatively expensive cars stressed the fact that even people of modest means could own its product because the trade-in allowance would probably cover the down-payment and instalment payments were as low as those required for lower-priced cars.

Competition in credit terms affected not only various enterprises selling the same product but also the markets for other commodities. The industries which successfully applied instalment merchandising expanded at the expense of other industries. Since the former were generally the mass-production industries, increased markets permitted lower costs and lower selling-prices, which in turn permitted the expansion of sales to still lower market strata by means of easy-payment terms. Other industries for which instalment merchandising was not impracticable were driven to offer instalment terms in self-defense.

Thus, competition led to a cumulative expansion of consumers' capital financing. On one hand, it tended to induce a shift of consumers' expenditures to products which were the natural subjects of capital financing. On the other hand, it brought new types of goods into the field of capital financing. The growth of specialized cash-lending agencies also contributed to this cumulative expansion. Many instalment buyers misjudged their ability to meet instalment payments or failed to provide for emergencies which upset their plans for repayment. Cash-lending agencies supplied a refinancing service for these buyers, which became more and more important as instalment credits were liberalized. Consequently, capital financing grew even more rapidly than the receivables of instalment merchants and finance companies would indicate.

Consumers' capital financing was the most dynamic element not only in the secular growth of consumer credit, but also in its cyclical movements. Obviously the violent fluctuations of consumers' capital financing between 1929 and 1937 were caused by changes in the volume of sales of consumers' durable goods. But in order to understand these movements, it is necessary to revert to the discussion of the meaning of "consumption" which was introduced in Chapter 1.

The very high level of consumers' capital financing in 1929 and 1937 indicated that the use-value of durable goods in the hands of consumers was high. There was no such decline in consumption of durable goods as is indicated by the decline in sales after 1929. Consumers merely exhausted use-values which had been accumulated during better times. Consumption of stocks of durable goods in consumers' hands is indicated by the decline in capital financing between the fall of 1929 and the spring of 1933. But the decline in consumers' capital financing was more rapid than the depreciation of consumers' inventories because rates of repayment, even after liberal allowances for refinancing, were more rapid than rates of consumption.

Fluctuations of sales of consumers' durable goods are psychological as well as economic phenomena. The period of usefulness of such goods is flexible and most durable goods in normal times are discarded before they are completely worn out. Postponement of replacements generally represents the renunciation, not of satisfactions from the use of durable goods, but of greater satisfactions from the use of new durable goods.

The choice between replacement of old durable goods and continuance of their use, or in other words, between the accumulation or liquidation of inventories of use-values, is materially affected by the consumer's outlook for the immediate future. The consumer is well aware that the penalty for failure to keep an instalment contract is the loss through repossession of whatever equity he has accumulated; in fact, there may even be a deficiency-judgment under some contracts. When the prospect for continuation of his present income is uncertain, he is naturally unwilling to trade assured use-values of present goods for even more attractive use-values that might be lost entirely. Besides, the attractiveness of new goods appears to decline in periods of depression. In good times purchases of new durable goods bring satisfactions in use and in prestige. But during periods of depression, to buy new durable goods is to flaunt one's prosperity in the face of neighbors' distress and to invite pressures for contributions to relief funds and for assistance to impoverished relatives and friends.

Cyclical movements of consumers' capital financing have tended to increase in amplitude. One of the causes has been the increasing amplitude of the business cycle itself. But two other factors also appear to have played important parts. The first was the gradual exhaustion of the frontier for the expansion of consumers' capital financing. The second was the variation of instalment credit terms.

So long as there were important unexploited fields to which consumers' capital financing could be applied, periods of depression appear to have stimulated its extension and thereby minimized cyclical contractions. The extension of instalment selling to low-income groups and the rise of the small loan business occurred during the depression of 1873–1879. The development of the first instalment finance companies and specialized cash-lending agencies occurred during the period of relative business stagnation which preceded the World War; and large numbers of instalment finance companies and cash-lending agencies were organized during the depression of 1920–1921.

The depression of 1930–1933 also gave impetus to the search for new fields for consumers' capital financing. Instalment finance companies began to finance insurance premiums and opened offices in areas which had previously been considered unattractive. Large numbers of specialized cash-lending agencies were organized, and their services were extended to unexplored fields. Small loan companies began to finance purchases of coal, low-priced used cars, and automobile repairs. But the unexploited fields were relatively unimportant, and the cyclical decline of consumers' capital financing was cushioned only slightly by its extension to these fields. When the second severe contraction began in the fall of 1937, the frontier for consumers' capital financing was virtually exhausted and the full impact of the cyclical movement was felt probably for the first time.

Changes in the terms upon which instalment credit was available have not played a substantial role in cyclical movements until the last few years. During the long secular growth of consumers' capital financing prior to 1929, credit terms appear to have been gradually liberalized. The depression of 1930–1933 prevented further liberalization, but there was no marked restriction of terms during that period. From the closing months of 1934 to the summer of 1937, down-payment requirements were progressively reduced and the duration of contracts progressively lengthened in many fields of instalment merchandising. Thereafter, down-payment requirements were increased and periods of repayment were reduced.[1] These changes accelerated the expansion of consumer capital financing during the recovery period and its contraction during the subsequent recession.[2]

[1] A study of the trend of instalment terms prepared by Malcolm L. Merriam, chief of the Installment Credit Unit of the Department of Commerce, released by that Department on March 4, 1938, under the title The Trend of Installment Terms, December 1936–1937, indicates that between December, 1936, and December, 1937, the terms for refrigerators and automobile paper were tightened substantially; the terms for radios, washing machines, and gas and electric ranges were tightened moderately; and there was little change in the instalment terms upon which jewelry, furniture, and soft goods were available to purchasers.

[2] For a discussion of the effects of changes in credit terms upon the outstanding amount of credit, see pp. 238–241.

Forces Underlying Movements of Consumers' Deficit Financing

Consumers' deficit financing is the oldest category of consumer credit. It appears to have existed in all societies in which the means of subsistence were private property. It may arise from extravagance, but far more commonly it arises from unforeseen increases in family expenditures or from unavoidable decreases in family incomes. For instance, childbirth, sickness, death, the necessity of moving to another home, a special tax assessment, or many other emergencies which require unusual expenditures, may compel recourse to borrowing or result in the accumulation of debts to merchants and service creditors. Or the disability of the wage-earner, a salary cut, or a lay-off may reduce the family income below operating expenses and compel deficit financing.

Some deficit financing is granted voluntarily. Many merchants and service creditors, particularly during the nineteenth century, carried regular customers through periods of crop failure, illness, or slack work; and it has always been a primary function of the cash-lending agencies to supply funds to meet emergency expenditures. In other instances deficit financing arises without the knowledge and consent of the creditor. Individual open-book creditors are generally unable to determine accurately their customers' budget situations, and what they believed to be income-period financing frequently is found when the settlement date arrives to have been deficit financing.

It is exceedingly difficult to measure consumers' deficit financing because it represents varying proportions of the receivables of many types of creditors. Since they are the residual items in our calculations, our estimates for this category are even less reliable than those for other categories. These estimates, however, tend to confirm the general pattern of movement which is indicated by the historical development of consumer credit and by the testimony of individual creditors. Consumers' deficit financing appears to have been subject to a gradual secular growth, which accelerated after the Civil War and gradually came to a halt during the last decade. It has tended to increase during periods of depression and to decline during periods of prosperity. But the amplitude of its movement has diminished in relation to the amplitude of the business cycle.

Many factors contributed to the secular growth of consumers' deficit financing during the nineteenth and the early part of the twentieth century. One factor was the growth and liberalization of income-period and capital financing. The disappearance of family and neighborhood facilities for mutual assistance, the breakdown of social pressures for thrift, and the elimination of traditional fears of debt were important influences. But perhaps the most important factor was the increasing frequency of financial emergencies in family life under the impact of growing dependence upon the market and rapid technological changes.

The counter-cyclical movements of consumers' deficit financing were caused by changes in consumers' incomes. Although unexpected increases in expenditures occurred both in good and bad times, decreases in incomes were heavily concentrated in depression periods. Creditors who were willing to carry customers through periods of unemployment or part-time work must have experienced a rapid rise of receivables during periods of depression. But with the growth of industrial cities, the rise of large-scale merchandising, and the deepening, widening, and prolongation of depressions, this practice became increasingly hazardous and accumulation of slow receivables during depression periods became involuntary rather than voluntary. Nor could the new specialized cash-lending agencies supply deficit financing to persons whose incomes were suddenly interrupted. Of all the cash-lending agencies only the pawnbroker was willing to lend to the unemployed or to those whose incomes were too low to permit immediate partial payments.

Recognition of the responsibility of federal and state governments for unemployment relief has also contributed both to the modification of the counter-cyclical movements of consumers' deficit financing and to the interruption of its secular growth. The changing attitude toward recipients of relief payments, the less onerous conditions upon which such payments have been made available, and the greater liberality of allowances have limited the need for consumers' deficit financing. Some part of the relief payments in recent years have even been used to liquidate previous deficit-financing commitments.

Because of the confusion concerning the meaning and significance of the term "consumption," the growth of consumer credit has frequently been mistaken for a growth of consumers' deficit financing. Many writers during the late 1920's and the early 1930's referred to the expansion of consumer credit as an irresponsible plunge into debt on the part of the American family and claimed that living beyond our means was an important cause of the depression.

But these generalizations were absolutely untenable. No one who has any knowledge of the psychological attitude of families toward household finances or any acquaintanceship with the circumstances under which credit is available to consumers could accept such a conclusion as valid. The expansion of consumer credit could not have occurred on such a scale if individual credit commitments had generally conflicted with accepted standards of family budgeting. During the 1920's the consumer was expanding both sides of his balance sheet. His increasing short-term liabilities on open-book account were generally counter-balanced by increasing "quick" assets in the form of earned wages, salaries, drawing accounts, rents, interest, and dividends, that would shortly be paid. His increasing funded obligations were generally more than offset by the increasing use-values of goods by which these obligations were secured.

The consumer was merely applying to his own affairs the pay-as-you-use principle which had long been accepted in corporate accounting practice. His primitive bookkeeping system did not permit elaborate accrual accounting. Consequently his books were kept on a cash basis and he canceled his short-term liabilities against assets earmarked for their payment and his funded obligations against the value of articles by which they were secured. From his point of view he had not gone into debt—he had merely committed himself to spend $10, $20, or $40 a month for the current use and eventual ownership of a radio, a refrigerator, or an automobile.

It is true, of course, that some consumers were irresponsible and increased their consumption to the limits of their credit capacity, that other consumers exercised bad judgment in estimating their capacity to pay, and that still others had their reasonable expectations upset by circumstances beyond their control. Consequently, the growth of consumers' capital financing and income-period financing was accompanied by an increase in consumers' deficit financing. But the latter category certainly played a relatively small part in the tremendous aggregate expansion of consumer credit during the 1920's.

Consumers' deficit financing would form a much larger segment of consumer credit if consumers were the only parties to such transactions. Many consumers are incapable of grasping the most elementary principles of budgeting, and many others are incapable of resisting the appeal of goods that can be acquired for little cash. But beyond certain narrow limits, the extension of credit to such people represents losses to consumer credit agencies. The techniques of credit-granting are essentially processes of limiting the credit of irresponsible debtors. While there are many loopholes in the defenses, no consumer credit agency that failed generally to exclude such applicants for credit service could long survive.

Other Factors Influencing Quantitative Movements

We have discussed thus far the principal causes of the movements of functional categories of consumer credit. But there were many other forces which affected movements of consumer credit as a whole. We shall attempt in this section to mention only a few of the most important of these.

One factor that contributed to the secular growth of consumer credit was the development of specialized consumer credit agencies. So long as consumer credit-granting was merely a by-product of the sale of goods and services, handed out like Christmas candy or New Year's calendars to dependable customers, there were no incentives to the expansion of credit for its own sake. Concessions from customary credit standards were wrung, if at all, from an unwilling merchant or service agency under fear of losing customers to more lenient competitors. This situation, however, was changed entirely by the development of agencies that specialized in the sale of credit service at a profit. Small loan companies, personal loan departments of banks, instalment finance companies, and other specialized agencies, like profit-making enterprises in other fields, searched aggressively for ways of expanding the market for their services. The competitive drive for business developed new types of financing and brought credit facilities within the reach of new groups of consumers.

We have already indicated in previous chapters the important part which bank credit played in the secular growth of consumer credit. At first, bank credit reached the consumer primarily through loans to merchants, who in turn extended credit to the consumer; then banks began to lend directly to preferred classes of deposit customers; later they began to buy commercial paper secured by instalment contracts; and finally, many banks began to participate generally in direct consumer financing by purchasing retail instalment contracts and by making loans to many classes of consumers. Except for cyclical fluctuations the aggregate amount of consumer credit extended directly or indirectly by commercial banks has increased progressively, and it seems probable that at least 40 per cent of the total sum extended to consumers in the peak months of 1937 came directly or indirectly from commercial banks.

The increased availability of bank credit for consumer financing contributed not only to the secular growth but also to cyclical movements of consumer credit. Whether we compare fluctuations of receivables for various types of agencies or for various agencies of the same type, the amplitude of cyclical movements is generally greater for those that rely upon banks for a large part of their funds. There appear to be two principal reasons for this relationship.

First, the increased use of bank credit contributed to a tendency of consumer credit agencies to "play the cycle." Since the risks involved in the extension of consumer credit vary with the trend of employment and income payments, most consumer credit agencies were willing to maintain more liberal credit policies during the upswing of the business cycle than in the downswing. So long as the agency was limited to its own capital, there was little practical advantage in encouraging a further expansion of receivables by more liberal credit policies in times of prosperity when its capital was already fully employed; and there was little reason for liquidating receivables by tightening credit policies during periods of depression, when there were no profitable outlets for the funds that would thus be made available. The use of bank credit, however, facilitated liberalization of credit policies during periods of prosperity, and encouraged restriction of credit when the first signs of a business recession clouded the horizon.

Second, the banks themselves frequently exerted pressure upon consumer credit agencies to liquidate their loans in periods of depression. There were many examples during the depression of 1930–1933. In some instances the depression impaired the liquidity or even the solvency of the consumer credit agencies and banks perhaps properly refused to renew their loans to such agencies. In other instances banks were compelled to call the loans of consumer credit agencies because depositors were demanding their money and many other types of assets were frozen. But in many instances, in 1931 and 1932, banks in good condition called the loans of eminently sound consumer credit agencies. A few years later the same banks were aggressively soliciting the further expansion by the same customers of credit lines which already far exceeded the level at which they had previously been called.

The direct participation of banks and institutions with banking characteristics in consumer financing appears to have had a similar effect upon cyclical movements. As agents for depositors, these institutions were much more sensitive to cyclical fluctuations than those which used their own capital. One banker in a recent public address pointed with pride to the fact that his personal loan department had reduced its loan balance by 56 per cent between January 1 and July 1, 1932. A similar desire for liquidity during times of depression is noticeable among other personal loan departments, industrial banking companies, and even among some credit unions.

Reductions in the price of consumer credit service have been an important factor in the secular growth of consumer credit. Charges for identical services have been generally reduced since the Civil War by technical improvements, which have made possible lower operating costs, and by increasing competition, which has reduced profit margins.[1] Over the long period these price reductions have tended to increase substantially the demand for consumer credit services.

[1] It should be noted, however, that prices are exceedingly "sticky" in the whole field of consumer credit. Among the instalment finance companies, for instance, competition has been expressed during certain periods in additional compensations to dealers rather than in reductions of financing charges. Similar conditions have existed in many other sections of the field.

But fluctuations in the price of consumer credit services have played little or no part in minimizing cyclical fluctuations of demand. Pure interest represents but a small fraction of the price charged for all types of consumer credit service; the major part is represented by expenses of operation and compensation for risk. Whatever savings have accrued to consumer credit agencies through reductions in "the interest rate" during periods of depression appear to have been more than offset by increased costs and higher losses. Reductions in the price of consumer credit service have come generally during periods of prosperity and there has been some tendency for charges to increase during periods of depression.

Even if charges for credit service were fully sensitive to changes in demand, price fluctuations would probably not contribute materially to a reduction in the amplitude of cyclical movements of consumer credit. All forms of credit-granting necessarily involve the selection of risk. No agency which lends money or extends credit for any purpose or to any class of customers could long remain solvent if it offered its wares without restriction to all who were willing to promise to pay the price asked. Consequently, the price of credit is a poor measure of its availability.[1]

We have already indicated that bank credit becomes less readily available to consumer credit agencies during periods of depression. A similar tendency prevails with respect to the credit extended by consumer credit agencies. The capacity to liquidate credit commitments depends upon the margin between family income and family expenses. During periods of prosperity incomes tend to increase more rapidly than many essential expenses, such as rent, food, insurance, and many types of service. But during periods of depression incomes tend to decline more rapidly than many of the items in family budgets can be reduced. Hence, credit capacities of consumers fall, and even if willingness to use credit remained the same, the amounts which could be safely extended would decline.

The policies of consumer credit agencies must necessarily be based upon trends of employment and consumer incomes. The extension of credit is a matter of the present, but its repayment is a

[1] For an excellent discussion of the relation of the interest rate to the demand for and the supply of credit, see The Rate of Interest, by Richard M. Bissell, Jr., *in* the American Economic Review, March, 1938, pp. 23–40.

matter of the future. For many types of consumer credit agencies credit policies must be based upon the prospects for employment and incomes a year or more hence. Such anticipations of economic conditions by consumer credit agencies add materially to the cyclical movement of consumer credit as a whole.

It has been indicated that reductions in money-market interest rates during depressions have not served to minimize cyclical contractions of consumer credit. It does not follow, however, that quantitative movements of consumer credit may not be affected by changes in the interest rate. The bargain price of money certainly played a part in the remarkable expansion of consumer credit between 1934 and the autumn of 1937. With money available to many of the major consumer credit enterprises at unprecedented levels of 2 per cent a year or even less and with the earning capacity of funds invested in consumer credit agencies at 6 per cent or higher for many types of enterprises, it was extremely profitable to expand operations on the basis of bank credit. It seems likely that the low cost of money had a great deal to do with the liberalization of credit policies during this period, particularly in the field of instalment financing. Since unit operating costs had been increased rather than reduced, it was more profitable to increase the amount and duration of instalment contracts than to increase the number of contracts.

The low interest rate, however, was probably a less important factor in the expansion of consumer credit between 1933 and 1937 than the increased availability of bank credit to consumer credit agencies. The demand for productive loans had failed to revive; and banks, under constant pressure of excess reserves, and with their favorable experience with loans to consumer credit agencies during the previous depression in mind, actively solicited the expansion of credit lines of consumer credit agencies. Cheap money provided a favorable condition for expansion, but it would not have had the same effect if banks had been less willing to lend for purposes of consumer financing.

PART II

ECONOMIC CONSEQUENCES OF CONSUMER CREDIT FLUCTUATIONS

CHAPTER VI

CONSUMER CREDIT AND PRODUCTION UNDER CONDITIONS OF FULL EMPLOYMENT

IN THE preceding chapter it was indicated that consumer credit fluctuations have been induced by various cyclical forces. Consumers' capital financing and income-period financing fluctuate directly with, and their movements are to a large extent the consequence of, changes in the volume of retail sales. The volume of retail sales is controlled in turn by the level of employment, by the volume of income payments, and by consumers' anticipations of future developments. Although consumers' deficit financing tends to move counter to the business cycle,[1] its fluctuations are no less a consequence of changes in employment and income payments.

Our historical inquiries suggest that consumer credit as a whole may in the past have tended to increase when incomes declined. Throughout the nineteenth century the counter-cyclical rise of consumers' deficit financing during periods of depression was probably of sufficient magnitude to more than counterbalance the apparently rather slight cyclical contractions of consumers' capital financing and income-period financing.

It is clear, however, that this is no longer true. Consumers' deficit financing continues to expand in response to abrupt declines in incomes. But the amplitude of its movement has been reduced in relation to the amplitude of the business cycle by the growth of large-scale merchandising and by the increasingly hazardous nature of such credits under present-day conditions. On the other hand, the categories that fluctuate directly with the cycle have grown disproportionately, and the amplitude of their movements has increased with the gradual exhaustion of the frontier for the extension

[1] The term "business cycle" will be used in this study to refer to substantial variations in the rate of production, after adjustment for seasonal and secular changes, without implying the periodicity or automatism of such variations.

of such services.[1] Consumers' capital financing, which fluctuates most violently with the business cycle, now dominates the aggregate movement of consumer credit. During the last fifteen years, at least, consumer credit as a whole has fluctuated directly and substantially with the business cycle.

What are the consequences of this change? Granted that consumer credit movements are influenced by the rate of production and income payments, to what extent do consumer credit fluctuations, in their turn, exercise a motivating influence upon these phenomena? What part have consumer credit fluctuations played in recent cyclical movements? What is their relationship to the problem of maintaining economic stability? Answers to these questions will be sought in the chapters that constitute Part II of this volume.

Theoretical Aspects of the Problem

Consumer credit fluctuations do not occur, nor can they be reproduced, in a vacuum. They are motivated by many economic and social forces, which in turn are interrelated with respect to cause and effect, and it is impossible to determine empirically the relative importance of these forces as causal factors. Similarly, the wide fluctuations of production, incomes, and employment, which may be accepted as symptomatic of business cycles, are also the resultants of many interrelated forces, and it is possible to isolate the influence of consumer credit fluctuations only by means of theoretical analysis.

The essential theoretical element in the interpretation of the consequences of consumer credit movements is the relationship between monetary purchasing power and production. The real income of any social unit is measured by the goods and services which it produces, and it may be taken for granted that real national income is identical with the national product. But the situation changes when we deal with nominal incomes—with monetary purchasing power. What is the effect of a change in monetary purchasing power upon the real national income? Can production be

[1] New frontiers may, of course, be created by the development of new types of consumers' goods. But such opportunities for the extension of consumer credit service are most likely to occur during periods of rising incomes, and they may be expected to increase rather than to diminish the amplitude of cyclical movements of consumer credit.

increased by increasing the flow of money in the income stream? Does a contraction of monetary purchasing power tend to reduce production?

With respect to details there have been almost as many interpretations of the relationship between monetary purchasing power and production as there were writers who sought to interpret it. But it is possible to distinguish among them three general theoretical schemes.

Beginning with the classical economists one group of writers argued that the economic system naturally and automatically tends to produce equilibrium between purchasing power and output. These writers took a condition of full employment as the point of departure for their theoretical analysis. From this assumption it followed necessarily that production was conditioned only by the availability of productive factors and that a change in the flow of purchasing power could have no effect upon the total volume of production, or the real national income.

Another group of writers, on the other hand, asserted that the capitalist system tends by its very nature to provide the masses with insufficient purchasing power to absorb all the goods which industry produces, and that this situation is responsible for chronic unemployment and for periodic crises. This theory, which had its origins at the beginning of the nineteenth century, recurred with some modifications in the exploitation doctrine of the socialists and in the monetary doctrines of modern under-consumptionists. For these writers an expansion of purchasing power in the hands of consumers could postpone the consequences of overproduction and might presumably even increase production.

Very recently a third group of writers has offered still another analysis of the relationship between purchasing power and production. Admitting that the economic system does not automatically tend to produce equilibrium between demand and supply with full employment, these writers pointed to the roles which savings and investment play in the flow of incomes. For them the relation between purchasing power and production was determined by the relationship between savings and investment: an expansion of investment relative to savings would increase purchasing power relative to costs of production; and a contraction of investment relative to savings would reduce purchasing power relative to the costs of production.

Some writers have interpreted consumer credit movements under the assumption of full employment. Others have discussed this phenomenon under the assumption of a chronic inadequacy of purchasing power or of incomplete utilization of the productive factors. It scarcely needs to be said that materially different results are obtained when the analysis is undertaken under one or another of these theoretical frameworks. Differences in approach account in large part for the confusion which has surrounded the interpretation of consumer credit movements.

Other writers have been content to assert the impossibility of drawing conclusions concerning the consequences of consumer credit movements. In reviewing a statement made before a congressional committee by Chester A. Phillips of Iowa State University, who expressed the belief that instalment credit contributed to the oscillatory character of American business, the editor of Time-Sales Financing contended that the influence of such movements is "a matter of opinion which can be argued but which cannot be conclusively proven."[1] Harold G. Moulton expressed a similar view when he asserted that "the most that can be said [for the relationship of instalment credit to business fluctuations] is that any and every kind of debt is a complicating factor when a serious depression develops."[2] Such comments, however, contribute nothing to an understanding of consumer credit movements. To accept them is to admit the bankruptcy of economic science as a means of interpreting dynamic phenomena.

In this chapter and in the succeeding one an analysis of the relationship of consumer credit fluctuations to production will be undertaken: first, under the assumption of full employment and second, under the assumption of incomplete utilization of the factors of production. In each chapter some of the comments made by other writers will be discussed, and an appraisal of the validity of the assumptions underlying these comments will be attempted.

[1] Time-Sales Financing, September, 1938, p. 12.

[2] See Dr. Moulton's foreword to A Current Appraisal of Instalment Selling, by Henry Ittleson, Chairman, Commercial Investment Trust Corporation, New York, published by the Corporation in 1937.

Classical Interpretation of Consumer Credit Fluctuations

For the classical economists the principal problem associated with consumer credit was its effect upon the formation of capital. The rate of production, they believed, depended upon the availability of capital: in order to continue the employment of labor in productive work, it was necessary that the resources devoted to production be constantly restored; and in order to increase productivity, it was necessary that improvement of techniques and elaboration of the division of labor be facilitated by an increase in capital. Any diversion of the flow of savings from productive to consumptive uses tended therefore to restrict the growth of production and to restrain the rise in standards of living.[1]

The classicists appear to have believed that consumer credit was generally used for extravagant expenditures which they condemned as a social waste. Some of these writers recognized a distinction between expenditures for goods which were immediately consumed and goods which would continue for some time to serve a useful purpose. Expenditures for household furniture and durable clothing, even though extravagant, were preferable to expenditures for ephemeral goods because they increased the total stock of goods and therefore the national wealth.[2] But neither type of expenditure contributed to an increase in productive facilities, and both were objectionable if they occurred at the expense of the flow of savings into productive use.

The classical school failed to discuss specifically the consequences of expansions and contractions of consumer credit. But the outlines of the analysis which they would have applied are clearly indicated by their description of the general characteristics of the economic system. This analysis may be stated as follows:

An expansion of consumer credit would increase demand for consumers' goods. As a result prices of consumers' goods would increase, profits would rise, and the consumers' goods industries would

[1] See The Wealth of Nations by Adam Smith, Book 2, chaps. 1 and 3; The Principles of Political Economy and Taxation by David Ricardo, chaps. 20 and 21; and Principles of Political Economy by John Stuart Mill, Book 1, chaps. 4 and 5.

[2] See, for instance, Adam Smith's comments at the end of chap. 3, Book 2, in The Wealth of Nations.

expand. But prosperity in the consumers' goods industries would be accompanied by a corresponding depression in the producers' goods industries, which would facilitate the transfer of productive factors to the consumers' goods industries. A contraction of consumer credit would have precisely the opposite effect. When consumers repaid their obligations, the flow of savings into productive use would be restored or accelerated, and demand for producers' goods would increase. Demand for consumers' goods would be proportionately depressed and productive factors would be shifted back to the producers' goods industries.

If funds for the expansion of consumer credit were provided by banks—that is, if this credit represented "expansion"[1] credit—consumer credit fluctuations would be accompanied by changes in the general price level. But these price changes would not affect the analysis. When consumer credit was expanding, prices of consumers' goods would increase more rapidly than prices of producers' goods; and the disproportionate rise in prices of consumers' goods would induce a shift of productive factors to the consumers' goods industries just as effectively as if prices of producers' goods had declined reciprocally. Similarly, when consumer credit was contracting, the disproportionate decline in prices of consumers' goods would induce the shift of productive factors back to the producers' goods industries.

In brief, the classical economists appear to have believed that an expansion of consumer credit would, in the long run, influence the rate of production by retarding the flow of capital into production; and they would probably have asserted that fluctuations of consumer credit would, in the short run, influence the types of goods produced but not the total volume of production.

Assumptions Underlying the Classical Analysis

The foregoing analysis is directly attributable to the classical equation of exchange which was first formulated early in the nineteenth century by a French economist, Jean Baptiste Say.[2] He described exchange as essentially a process of barter between pro-

[1] For the distinction between "expansion" and "transfer" credit see p. 28.

[2] A Treatise on Political Economy, Book 1, chap. 15; Book 2, chaps. 2 and 5.

ducers. Each person's purchasing power was represented by goods which he himself brought to the market. Consequently, total purchasing power must be equal to the total product. Say's equation of exchange was accepted by his contemporary, Ricardo.[1] Several decades later John Stuart Mill amplified and restated it as follows:

> Those who think so [that there might be a deficiency of purchasing power] cannot have considered what it is which constitutes the means of payment for commodities. It is simply commodities. Each person's means of paying for the productions of other people consists of those which he himself possesses. . . . Could we suddenly double the productive powers of the country, we should double the supply of commodities in every market; but we should, by the same stroke, double the purchasing power.[2]

Therefore, Mill concluded,

> . . . in whatever manner the question is looked at, even though we go to the extreme verge of possibility to invent a supposition favorable to it, the theory of general overproduction implies an absurdity.[3]

Both Say and Mill believed that the flow of money would be uninterrupted and flexible. Say pointed out that commodities used as the means of exchange were in themselves industrial products, and an increase in the value of money (that is, a decline in the prices of other commodities) would stimulate additional production of monetary metals. Moreover, if metallic money became scarce, merchants would develop substitutes, such as bank notes, bills of exchange, and open credits.

In reply to those who contended that the circulation of money might be interrupted by savings, both writers asserted that savings represented a transfer and not a diminution of purchasing power, since sums withheld from consumption would be used for the productive employment of labor and would thus be returned to the market. This doctrine received further support from the develop-

[1] Ricardo, David, The Principles of Political Economy and Taxation, chap. 21. Ricardo in his chapter on machinery (chap. 31) makes some references to the effects of the introduction of machinery which are not fully consistent with the views of Say and later classical writers.

[2] Mill, John Stuart, Principles of Political Economy. D. Appleton and Co., New York, 1892, vol. 2, p. 107.

[3] *Ibid.*, p. 110.

ment of a theory of interest. One of Mill's contemporaries, N.W. Senior, explained that since it was irksome to forego satisfactions of immediate consumption, savings commanded a price; and this price, expressed as a rate of interest, performed for the capital market the same equilibrative function that commodity prices performed for the markets for goods. A decline in the rate of interest would increase investment and decrease savings, while an increase in the rate of interest would have the opposite effect. Hence, there could be no oversaving.

But the validity of the equation of exchange, at least for Mill,[1] was not dependent upon the flow of money. He assumed, with most classical writers, the existence of large numbers of competing enterprises, no one of which could have any substantial effect upon the market as a whole; the mobility of the factors of production within national boundaries; and the primacy of economic motives. From these assumptions two corollaries were derived. The first was the full employment of all "willing" factors of production. There could be, for instance, no involuntary unemployment of labor because wages would fall to the point where demand would absorb any quantity offered at the prevailing price. The second corollary was the orthodox doctrine with respect to money. Money was merely the oil which facilitated the market mechanism. One had to tear away the screen of monetary transactions in order to recognize that exchange, in its true nature, was essentially the barter of commodities in accordance with their relative values.

Thus, purchasing power would remain identical with output regardless of the quantity-flow of money.[2] Because the factors of production were fully employed, an increase in the flow of nominal purchasing power would merely raise the general price level without influencing the volume of production. The purchasing power of each individual contributor to the social product would continue to represent the relative value of his contribution and the sum of

[1] In his later writings, Say introduced modifications in his original equation which reduced it to a tautology. See Hans Neisser's General Overproduction: A Study of Say's Law of the Market *in* Journal of Political Economy, August, 1934, vol. 42, no. 4, pp. 433–465.

[2] In terms of the quantity-theory equation, $MV = PT$, and increase in MV (the quantity-flow of money) was assumed to affect P (the price level), but not T (the volume of transactions).

the purchasing power of all contributors must equal the values of the total product. A decrease in the flow of nominal purchasing power would, on the other hand, reduce the general price level without influencing the total volume of production. Each contributor to the social product would be compelled by competition to accept the price which his contribution brought in the market. But the aggregate incomes of all contributors would continue to equal the value of the total product. Hence there would be no deficiency of purchasing power.

Mill's doctrine of the equality of purchasing power and production, which became an important cornerstone of classical theory, accounts not only for the objections of the classical economists to consumer credit but also for their failure to discuss the short-run relationship between consumer credit movements and output. The rate of production was conditioned only by the availability of productive factors and to tap the flow of savings for consumers' expenditures was to limit the formation of capital, upon which increasing productivity depended. Since the available factors of production were always fully employed, an expansion of consumer credit could expand the production of consumers' goods only at the expense of the producers' goods industries, and a contraction of consumer credit would result only in a shift of productive factors back to the producers' goods industries.

The classical writers believed their assumptions to be fully consistent with reality. Whether or not this was true, certain historical developments seem to have given these assumptions some degree of validity as working hypotheses. The tremendous demand for capital equipment, the rapid growth of foreign markets and world population, the emigration of surplus workers to the frontiers, and the expansion of monetary purchasing power through the development of credit institutions probably produced throughout the nineteenth century the semblance of flexibility and a *de facto* equilibrium by keeping actual or potential demand in the ascendancy.

Observations of Later Orthodox Theorists

The neo-classicists, with their new tools of marginal analysis, did little to change the classical equation of exchange. They refined their predecessors' concept of supply and gave to the demand function, which the classicists had neglected, a position of independent importance in the determination of value. The neo-classical school was primarily interested in the equilibrium of demand and supply for individual commodities. But the existence of composite demand and supply schedules which would automatically equate purchasing power and output was generally implied.

These writers inherited not only the tradition of the classical school but also the period of experience which seemed to confirm the classical assumptions by pragmatic tests. With the passage of time, however, it became increasingly apparent that the growth of the economic system was uneven and that there were periods when production declined. Some neo-classicists recognized the inapplicability of traditional doctrine to problems of dynamics and either discarded the classical assumptions for study of economic development or confined their analysis to static relationships. But others continued to use the classical assumptions of price flexibility and full employment as the point of departure for the analysis of dynamic movements.

Since the latter group of writers could not deny the existence of periodic disequilibrium,[1] they undertook to explain it in terms of frictions, time-lags, monopolistic controls, state interference, and errors of judgment on the part of entrepreneurs. These short-run disturbances, they believed, temporarily interrupted, but could not in the long run prevent, the natural and automatic adjustment of total demand to total supply under conditions of full employment. In other words, while the economic system was not always in equilibrium, it was at all times in the process of equilibration; and to focus attention upon short-term interruptions was to neglect the true underlying nature of the system.

Most members of the neo-classical school appear to have considered Mill's statement of the doctrine of equilibrium between purchasing power and production too primitive and they avoided reaffirming it in his terms. Some failed to discuss the issue specifically, and one looks in vain in the writings of others for lucid and

[1] Since not only current output but also the factors of production are elements of supply, the term "disequilibrium" will be used to describe a condition of incomplete utilization of the factors of production regardless of the relationship between current purchasing power and current output.

unambiguous declarations on the subject.[1] Yet the classical equation of exchange, dependent as it is upon the assumption of full employment and price flexibility, has frequently been applied to present-day dynamic problems.[2]

Adherence by some neo-classicists to Mill's statement of the equation of exchange was reflected in their interpretation of consumer credit movements. As late as 1911 Professor Taussig said that a loan to a spendthrift "causes labor to be directed to producing truffles and champagne, not factories and machinery."[3] Or in the more appropriate terms of a still more recent writer, W. F. Crick:

> Instead of a new asset of a primarily or secondarily productive character, the community has a variety of only remotely productive or actually non-productive assets, the property of its individual members. Instead of a factory or a modernized plant or a fleet of lorries, the community has a number of motor-cars and pianos; instead of a screw in a ship it possesses a saxophone.[4]

Interpretation of consumer credit movements along classical lines appears to have prevailed until well into the twentieth century, and this interpretation has had an important influence upon attitudes

[1] This general lack of clarity and conclusiveness is illustrated by F. W. Taussig's comments in Principles of Economics (Macmillan Co., New York, 1911, p. 54–61). Like Mill, Professor Taussig discussed the possibility of an inadequacy of purchasing power or of a satiation of desire for goods. "The first of these," he contended, "is quite conceivable, tho' highly improbable. The second, so long as human wants remain extensible, is not conceivable." But these conclusions were subject to important qualifications. Accumulation, he said, proceeds blindly for short periods and may result in a "tendency toward over-production" in large segments of industry. The remedies—a change in the direction of production and the reduction of savings through low interest rates—would occur automatically in the long run, but might be delayed. Moreover, there could be a "breakdown of the machinery of exchange . . . due to the fact that confidence has been shaken, credit disturbed, the usual course of production and sale subjected to shock." These phenomena "may indeed be ascribed in part to some real 'over-production'."

[2] See, for instance, The Reciprocal Tariff Policy and the Proposed Government Spending Programme, by Winthrop W. Aldrich, published by the Chase National Bank, New York, 1938, pp. 10–12.

[3] Taussig, F. W., Principles of Economics, vol. 1, p. 81.

[4] The Economics of Instalment Trading and Hire-Purchase, Sir Isaac Pitman and Sons, Ltd., London, 1929, p. 60. It should be noted that Mr. Crick's comment was made under the assumption of a stable output. He believed, however, that the same tendency would prevail under conditions of increasing output unless savings exceeded the "ideal rate," that is, the rate at which savings could be absorbed in profitable producers' investments.

of the business community and the general public toward consumer credit.

Attacks Upon the Classical Equation of Exchange

The doctrine of equilibrium between purchasing power and production did not escape attack. Socialists and the under-consumptionists asserted that the classical assumptions were utterly inconsistent with reality. They pointed to a world which lacked the nice orderliness heralded by classical theory—a world in which poverty existed in the midst of plenty, and in which for long periods markets were glutted and people willing and able to work were unable to find employment.

The early under-consumptionists contended that the classical equation of exchange was untenable under conditions of large-scale production and impersonalized markets. Producers, compelled to speculate on the existence of a market for their products and to dispose of their wares regardless of production costs, must cut wages to the lowest possible level in order to survive. Consequently, competition tended to reduce the purchasing power of the masses and to cause general overproduction.[1]

Karl Marx denied the classical assumption of full employment by asserting that the existence of a reserve of unemployed workers was a necessary condition to operation of the capitalist system. Absorption of this labor reserve permitted expansion of production in certain fields without a consequent decline in other fields; on the other hand, accumulation of capital and technical progress constantly tended to recreate the labor reserve.[2] Marx may also be classified as an under-consumptionist on the basis of several passages in his writings,[3] but elaboration of the socialist theory of under-consumption was the work of Marx' followers. Rosa Luxem-

[1] See, for instance, *Études sur l'Économie Politique,* by J. C. L. Simonde de Sismondi, Treuttel and Wurtz, Paris, 1838, Tome II, pp. 301–306. Detailed discussions of Sismondi's theories are given in *L'Oeuvre Économique de Simonde de Sismondi,* by Albert Aftalion, A. Pedone, Paris, 1849, pp. 46–47, 87–120; and in Value Theory and Business Cycles, by Harlan L. McCracken, McGraw-Hill Book Co., New York, 1936, 2d ed., pp. 14–36.

[2] Marx, Karl, Capital. Charles H. Kerr and Co., Chicago, 1906, vol. 1, pp. 689–695.

[3] *Ibid.,* vol. 3, pp. 299–302.

burg, for instance, contended that the capitalist, unable to sell his whole product in the domestic market because of the inadequate wages paid to labor, was compelled to seek foreign markets.[1]

For the later under-consumptionist writers—J. A. Hobson[2] and C. H. Douglas in England,[3] and William Trufant Foster and Waddill Catchings[4] in the United States—money was the root of the trouble. Funds were diverted from the money stream as it moved from consumers to entrepreneurs and back to consumers again, and these diversions resulted necessarily in an inadequacy of purchasing power and consequently in overproduction. Each offered a different explanation of how such diversions of purchasing power occurred.

Of these writers only Dr. Foster and Dr. Catchings made specific reference to consumer credit movements. Their earliest volume, Money, failed to mention consumer credit; their second, Profits, devoted two paragraphs to consumer credit[5]; and their third, Business Without a Buyer, devoted a chapter to this subject.[6] The increasing attention given to consumer credit in these volumes was probably due in part to the rising interest in the economic significance of this phenomenon in the United States between 1923, when the first volume was published, and 1927, when the third was published. But it was probably influenced also by the necessity of reconciling the prosperity of that period with the under-consumption doctrine propounded by these writers. They contended that the chronic tendency of the economic system to provide consumers with insufficient incomes to buy the products of industry at profitable prices could be temporarily offset by expansion of consumer credit.

The issues between the classical and socialist doctrines could not be adequately joined. The gulf between these schools of thought extended beyond the field of economics and it was generally im-

[1] *Die Akkumulation des Kapitals*, Frankes Verlag, Leipzig, 1921.

[2] See Economics of Unemployment, Allen and Unwin, London, 1922; The Industrial System, P. S. King and Son, London, 1927, chap. 3; and Poverty in Plenty, Macmillan Co., New York, 1931.

[3] Social Credit, Norton and Co., New York, 1933. See particularly pp. 78–105.

[4] Money; Profits; and Business Without a Buyer, Houghton Mifflin Co., New York, 1923, 1925, and 1927 respectively.

[5] Pp. 329, 411.

[6] Pp. 57–76.

possible to find a common ground or mutually intelligible terminology for the discussion of specific problems. Neither was there an opportunity for the classical and the under-consumption theories to come to grips. The under-consumptionists failed to demonstrate why the equilibrating devices described by classical theory did not function. For instance, while asserting the fact of oversavings, they neglected to attack the interest rate mechanism upon which orthodox theory depended for equalizing savings and investment. Instead, they attacked Say's equation of exchange, which was impervious because under certain definitions of terms it was a truism. Theorists who inherited the classical tradition disdained such opponents and thereby dodged issues which were increasingly embarrassing to them.[1]

It is not without its irony that the task of demonstrating the fallacies of the under-consumptionist literature fell principally to the socialists. As one socialist writer remarked:

> If the economist refuted Douglas on orthodox lines he would be compelled to imply that capitalism was a balanced economy and there was no permanent and inevitable over-production. But in the face of the actual crisis this looks a little silly. Only a socialist economist can go on with the argument and . . . show that capitalist accumulation necessarily over-expands the productive equipment relative to the purchasing power which it distributes.[2]

This writer drew upon Marxist doctrine to support his objections to Major Douglas' scheme. But in several instances he also relied upon ideas which were closely identified with classical doctrine. He said, for instance, that Douglas did not understand that "whatever resources are diverted to the channels of capital equipment must represent a corresponding lessening of the resources devoted to consumption goods."[3] Mrs. Robinson has noted a similar reassertion

[1] See, however, Professor Hayek's review of Foster and Catchings' Road to Plenty, *in* Economica, May, 1931. By offering a prize for the best criticism of the ideas expressed in Profits, Dr. Foster and Dr. Catchings prompted a large number of critical essays, some of which were published in Pollak Prize Essays, Pollak Foundation for Economic Research, Newton, Mass., 1927. Few of these criticisms, however, relied entirely upon classical doctrine as the basis for attack.

[2] Lewis, John, Douglas Fallacies. Chapman and Hall Ltd., London, 1935, pp. 1–3.

[3] *Ibid.*, p. 36.

of orthodox principles in John Strachey's comments on the underconsumption theorists.[1]

Tests of the Classical Analysis of Consumer Credit Movements

Our estimates of the year-end amounts of consumer credit and Professor Kuznets' estimates of capital formation shed some light upon the accuracy of the analysis along classical lines of the consequences of consumer credit movements and upon the validity of the assumptions underlying this analysis during recent years. Table 12 compares our estimates of the increments and decrements in the

TABLE 12.—CHANGE IN AMOUNT OF CONSUMER CREDIT, VOLUME OF NET CAPITAL FORMATION, AND FLOW OF CONSUMERS' DURABLE GOODS AND OF GOODS DESTINED FOR BUSINESS USE, DURING EACH YEAR, 1924 TO 1937

(Millions of dollars)

Year	Increment or decrement in consumer credit	Volume of net capital formation[a]	Annual flow of	
			Consumers' durable commodities[a]	Goods destined for business use[a]
1924	+311	+6,823	7,900	7,558
1925	+842	+10,644	9,056	11,137
1926	+648	+9,734	9,445	11,668
1927	+217	+8,859	8,890	10,402
1928	+821	+8,168	9,174	9,916
1929	+987	+10,082	9,913	13,903
1930	−613	+3,879	7,550	8,152
1931	−1,128	−278	5,748	4,393
1932	−1,485	−4,513	3,806	655
1933	−150	−3,506	3,882	1,858
1934	+415	−2,130	4,686	2,771
1935	+858	+1,517	5,918	6,156
1936	+1,355	+5,524	7,342	9,022
1937	+891	+8,182	7,664	12,463

[a] Figures for the volume of net capital formation and for the annual flow of consumers' durable commodities and of goods destined for business use are those given by Simon Kuznets in National Income and Capital Formation, 1919–1935; and in Commodity Flow and Capital Formation in the Recent Recovery and Decline, 1932–1938. Professor Kuznets' estimates of net capital formation exclude increments and decrements in the value of durable goods, other than residential buildings, held by consumers. Figures for the flow of goods destined for business use represent the sums of his figures for the flow of producers' durable commodities, business construction, and net change in business inventories. Corrected figures for the period from 1932 to 1935, given in Commodity Flow in the Recent Recovery and Decline, 1932–1938, have been substituted for those given in the earlier volume.

[1] Robinson, Joan, Some Reflections upon Marxist Economics, *in* Essays on the Theory of Unemployment, Macmillan Co., New York, 1937, pp. 246–255.

outstanding amount of consumer credit with Professor Kuznets' estimates of the volume of net capital formation and of the flow of consumers' durable commodities and goods destined for business use.

Consumer credit fluctuations were generally much smaller than Professor Kuznets' estimates of net capital formation, which exclude increments and decrements in the value of durable goods held by consumers. But they were frequently substantial and never insignificant in comparison with the latter figures. The figures for the annual flow of consumers' durable goods and of goods destined for business use were, on the other hand, generally of similar magnitude.

If the classical analysis of consumer credit fluctuations were correct, we should expect to find a tendency for movements of consumer credit to be reciprocals of changes in the rate of net capital formation. But instead of moving in the opposite direction, consumer credit fluctuated directly with the volume of net capital formation. The volume of net capital formation was largest when the expansion of consumer credit was greatest; and the negative volume of capital formation was greatest when consumers were returning funds most rapidly to the capital market. The most notable section of the table is that covering the period from 1924 to 1929, when the assumption of full employment was most likely to be tenable. But for this period the direct relationship between fluctuations of consumer credit and the rate of net capital formation is particularly close.

Variations in the figures for the annual flow of consumers' durable goods and goods destined for business use are equally interesting. If the classical assumptions were correct, it might be anticipated that the flow of consumers' durable goods would tend to fluctuate inversely with the flow of goods destined for business use. Here again, however, we find the contrary to be true. With the single exception of the year 1928, which was affected by the shut-down of the Ford plant in 1927, changes in the flow of consumers' durable commodities were positively correlated with changes in the flow of goods destined for business use.

Concurrent movements of consumer credit and net capital formation and of the flow of consumers' durable goods and goods destined for business use are not necessarily inconsistent with the assumption of full employment. In an economy that was growing by virtue of increasing population and improving technology, it would be perfectly possible under this assumption for consumption to increase *pari passu* with capital formation. Since, however, the increase in population and in productivity per man-hour occurred gradually and with some degree of regularity, these changes can scarcely account for concurrent variations in rates of growth, to say nothing of concurrent declines. Changes in the price level or reciprocal variations in consumers' expenditures for services and non-durable goods might also account for these concurrent fluctuations. But similar movements are still indicated when nominal figures are adjusted for changes in the price level; and expenditures for services and non-durable goods have fluctuated directly with the flow of consumers' durable goods.

One arrives, therefore, at the conclusion that these data fail either to confirm the analysis of consumer credit fluctuations along classical lines or to support the assumptions underlying this analysis. Expansion of consumer credit did not deter expansion of the flow of goods into business use. On the contrary, expansion in one of these fields appears to have stimulated expansion in the other, and contraction in one field appears to have induced contraction in the other. Apparently, instead of having to choose between "truffles and champagne," and "motor-cars, pianos, and saxophones," on one hand, and "factories and machinery" and "motor-lorries and ships," on the other hand, the choice of the American community during this period lay between acquiring or doing without both types of goods at the same time.

Looking back upon a decade of chronic unemployment, idle capital, and partially utilized productive capacities, it is not difficult to conclude that for most of these years the assumption of full employment has not been substantiated and classical theory is incapable of providing a proper analysis of the consequences of consumer credit movements. It would be erroneous to conclude, however, that the classical analysis lacks validity at all times and under all circumstances. During the period of the World War, particularly, it seems likely that a condition of full employment was approximated. As was contemplated by classical analysis under these circumstances, the expansion of government borrowing on the basis of bank credit was expressed in an increase in prices; and the increase in the demand for military supplies and equipment led to an expansion of war industries at the expense of other types of production. The extent of the reaction of consumer credit during this period is disguised in our figures by the general increase in the price level. If our dollar figures were expressed in real values, they would probably indicate a deflation of consumer credit between April, 1917, and November, 1918.

The classical analysis of the consequences of consumer credit fluctuations is certainly tenable if and when the assumption of full employment of the factors of production becomes a reality. Under other conditions it leads to erroneous conclusions.

CHAPTER VII

CONSUMER CREDIT AND PRODUCTION UNDER CONDITIONS OF INCOMPLETE UTILIZATION OF PRODUCTIVE FACTORS

THE rapid growth of instalment sales of automobiles during the early 1920's led to widespread interest in the extent, the advantages, and the dangers of instalment selling in particular and of consumer credit in general. In 1925 Milan V. Ayres studied the extent of instalment selling for the American Bankers Association;[1] early in 1927 Wilbur C. Plummer's study of the social and economic aspects of instalment buying was published;[2] and later in the same year the late E. R. A. Seligman's two-volume study of the economics of instalment selling was published.[3] Publication of these studies stimulated a copious discussion in which economists, journalists, and business men participated.

Discussion of the Economic Consequences of Instalment Selling in the 1920's

The discussion of the economic consequences of instalment selling during the late 1920's centered primarily in the question of the soundness of instalment credit—or, in other words, the collectibility of accounts under adverse business conditions. Some participants asserted that the consumer's credit position was so badly extended that a business depression would lead to widespread failures of consumer credit agencies, accompanied by disastrous repercussions upon the financial system as a whole. Other writers pointed out that the extent of the growth of consumer credit had been exaggerated, that only a small segment of the total amount of bank credit had been used for consumer credit expansion, and that

[1] The results of this study were presented by Mr. Ayres in a paper before the Third National Automotive Financing Conference in 1926, which was published by the National Association of Finance Companies.

[2] Social and Economic Consequences of Buying on the Instalment Plan, *in* Supplement of Annals of the American Academy of Political and Social Science, January, 1927.

[3] The Economics of Instalment Selling. Harper and Bros., New York, 1927.

collection experience under localized depression conditions had been favorable.

This issue seems to have been decided by actual events in favor of the defenders of consumer credit. In spite of a further marked expansion prior to 1930, instalment contracts were liquidated under conditions of severe depression generally in an orderly manner. There were relatively few failures among the specialized consumer credit agencies and there were certainly no serious repercussions upon the financial system of the country as the result of consumer defaults.

With respect to the effect of the expansion of consumer credit upon production, discussion was far less extensive but opinion was similarly divided. Some contended that an expansion of consumer credit could not increase purchasing power in the long run, but could only advance the date when purchasing power becomes effective. The immediate stimulating effects of instalment selling upon production, they believed, would gradually dwindle as the credit capacity of the public became saturated, and in the end only the original amount of purchasing power would be available to absorb the production of plants which had been artificially expanded during the period of consumer credit expansion.[1]

Several writers carried the argument still farther by asserting that the stimulating effects of expanding consumer credit upon production would later be compensated by the depressing effects of the contraction that must necessarily follow. N. R. Danielian contended that effective demand was equal to normal income plus the credit increment, under conditions of expanding consumer credit, and to normal income less the credit decrement under conditions of contracting consumer credit.[2] Thus, while expansion of consumer credit would stimulate production, contraction of consumer credit would restrict production. Similar opinions were expressed by Joseph E. Shafer[3] and Charles E. Persons.[4]

[1] See, for instance, the editorial entitled Where Instalment Buying Breaks, *in* the New Republic, April 7, 1926.

[2] The Theory of Consumer Credit, *in* the American Economic Review, September, 1929, p. 410.

[3] An Explanation of the Business Cycle, *in* the American Economic Review, December, 1928, pp. 617–628.

[4] Credit Expansion, 1920 to 1929, and Its Lessons, *in* Quarterly Journal of Economics, November, 1930, pp. 129–130.

William T. Foster, applying the under-consumption thesis which he and Dr. Catchings had developed, also predicted an unfortunate aftermath to the expansion of consumer credit. Elaborating the analysis given in Business Without a Buyer, he asserted that the maintenance of equilibrium between production and consumption required a constantly increasing rate of expansion of consumer credit because it was necessary to compensate not only for the chronic inadequacy of purchasing power but also for the further reduction caused by credit costs. This situation, he concluded, could not last, and a depression must necessarily follow.[1]

Another group of writers asserted, on the other hand, that the increase in production which resulted from an expansion of consumer credit would tend to increase the incomes of consumers, thus providing the means of liquidating credit commitments.

This point of view was expressed by the late Professor Seligman as follows:

Instalment selling, it is said, does not increase the demand for the commodity, but simply advances the time when the demand becomes effective: it cannot result in any general increase in purchasing power, for the growth of present sales is certain to be offset by a decrease in future sales. . . .

The argument rests on the assumption that the income of each member of the community remains constant from year to year and that, accordingly, there can be no increase in the general fund available for purchasing power. But can there be any increase in production called for by this temporary increase of purchasing power, as a result of instalment credit, without affecting the incomes of the individuals? Is it not a fact that in the long run, at least, production and purchasing power are correlated? . . .

Instalment credit, in other words, does not simply advance purchasing power; it may augment purchasing power.[2]

Alvin Johnson arrived at a somewhat similar conclusion:

The principle involved is that instalment buying, if sufficiently general, clears itself . . . the net economic effect remaining is an important addition to the goods at the command of society created by resources that would not have been so fully utilized if instalment buying had not existed.[3]

[1] The Basic Meaning of the Growth of Instalment Selling, *in* Proceedings of the Academy of Political Science, January, 1927, pp. 112–118.

[2] The Economics of Instalment Selling, vol. 1, pp. 279–283.

[3] No Danger in Instalment Buying, *in* the New Republic, April 28, 1926, pp. 305–306.

John M. Clark appears to have been unwilling to support fully Professor Seligman's argument. But he believed that consumer credit might help to solve the problem of the time-lag between production and effective demand in a growing economic system. He said:

We are accustomed to say that the supply of one thing constitutes demand for something else, and that therefore supply—of the right things—creates its own demand. This undoubtedly has truth in the long run, and explains why our enormous increases of productive power have found a market and have not merely resulted in a proportionate amount of unemployment. But there is a critical stage in the process, when enlarged productive power has not yet found its market and when the potential desire for goods has not yet been translated into effective demand. . . . it seems probable that instalment buying can help an industry over this deadlock. . . .

This is a doctrine to be accepted tentatively and with much caution . . . and the utmost that a skeptical economist should be ready to concede at present is that there may be conditions of transition under which the magic will work.[1]

These comments referred only to the effect of an expansion of consumer credit. Professor Seligman apparently did not contemplate the possibility that the process of increasing production and purchasing power as the result of consumer credit expansion might be reversed by a contraction of consumer credit.

Denial of the Classical Assumptions

Participants in this discussion of the relationship between consumer credit fluctuations and production had one common theoretical characteristic: they all discarded the classical assumptions. It was generally conceded that expansion of consumer credit was not necessarily a detriment to the accumulation of productive resources.[2] Expansion of instalment sales credit had been accompanied by a remarkable expansion of productive facilities; and a large part of the goods sold on instalment credit tended to increase

[1] Control of Trade Practices by Competitive and Other Forces, *in* Proceedings of the Academy of Political Science, January, 1927, pp. 106–107.

[2] See, for instance, Dr. Plummer's comments in Social and Economic Consequences of Buying on the Instalment Plan, *in* Supplement of the Annals of the American Academy of Political and Social Science, January, 1927, pp. 14–19, 31–40.

the productivity of the household. More important from the standpoint of this volume, it was generally conceded that in the short run an expansion of instalment credit would lead to increased production. This admission denied the existence of full employment. Unless there were unused productive capacities, it would be impossible to increase production merely by increasing effective demand.

In spite of this heresy with respect to the classical assumptions, some of the principles of classical theory were applied to the problem. Say's equation of exchange recurs in Professor Seligman's observation that production and purchasing power are correlated, in Dr. Johnson's comment that instalment buying "clears itself," and in Professor Clark's guarded statement concerning the identity of demand and supply. But the implications of the equation were changed completely by denial of the existence of full employment of the factors of production.

Classical theorists asserted not only the identity of purchasing power and production, but also the decisive position of production in the equation. For them purchasing power was necessarily the dependent variable of production. For Professor Seligman and Dr. Johnson, on the other hand, purchasing power might be an independent variable in the equation of exchange. An increase in purchasing power might induce an expansion of production. This relationship was generally admitted by participants in the discussion. The division of opinion developed when Professor Seligman carried his argument a step farther. An increase in production induced by expansion of instalment credit would, he said, increase consumers' incomes and consequently their purchasing power. Thus, the process of expanding both sides of the equation of exchange simultaneously by the bootstrap of expanding instalment credit might presumably continue until a condition of full employment was reached.

The discussion of the late 1920's failed to carry conviction either for the point of view of Professor Seligman, who saw no problems in the expansion of instalment credit, or for the point of view of those who predicted that expansion would be followed by a contraction which would decrease effective demand and reduce the rate of production. Nor did the experience of the depression furnish conclusive proof of the accuracy of one or the other of these contentions. Professor Seligman's nice reasoning was not effectively contested, and his conclusions were offered as evidence that consumer credit was innocent of any share in the decline of business activity. But more and more writers began to attribute part of the decline in the demand for goods to the repayment of obligations contracted by consumers during the period of prosperity.[1]

This lack of conclusiveness is to be explained, we believe, in terms of the unsatisfactory state of dynamic theory throughout the period from the early 1920's to very recent years. Except in a few circles classical doctrine had been effectively discredited for the analysis of dynamic movements. But no satisfactory body of theory had been constructed to take its place. Discussion of the economic consequences of consumer credit fluctuations took place in this partial theoretical vacuum.

Development of New Principles for Dynamic Analysis

The socialists and the under-consumptionists denounced orthodox doctrine as a meaningless ritual practiced by the apologists for the existing order or by academicians isolated from the real world and astigmatic to its problems; and they could justly claim that their doctrines permitted a more realistic explanation of many of the post-war developments. But the most telling criticism of the classical doctrine of equilibrium between purchasing power and production came from those trained in the traditional discipline, who directed their attacks toward the devices which had been relied upon to produce equilibrium. One group of writers directed attention to the shortcomings of the interest rate as the means of equalizing savings and investment. Others pointed to the existence of price rigidities and described the effects of inflexible costs upon profits when the quantity flow of money was reduced. Still others cast doubt upon the validity of the assumptions underlying the form of the demand and supply curves of the neo-classicists and upon the necessity for intersection of these curves at a point of equilibrium.

These criticisms were largely destructive, and they were not fol-

[1] See, for instance, What Delays Revival; Effect of Instalment Buying on the Return of Prosperity, by Isadore Lubin, *in* the New Republic, June 10, 1931, pp. 92–93.

lowed immediately by the development of a body of theory which was capable of explaining dynamic movements. Toward the beginning of the present decade, however, economists associated with the orthodox tradition began to contribute a new literature which took incomplete utilization of the factors of production as its point of departure. The first attempts to build an integrated theoretical structure were made in 1936 by two British economists, Messrs. Keynes[1] and Harrod.[2]

This new body of dynamic theory is still in the process of development. With respect to details many controversial issues have yet to be resolved and many of its formulations are in need of refinement. But its essential principles have met with a remarkable degree of acceptance. Fortunately, for our purpose, it is possible generally to avoid those elements to which seemingly valid objections have been raised. It is important, therefore, to re-examine the effects of consumer credit fluctuations on the basis of the principles of this new theoretical structure.

Since Mr. Keynes has given us the most comprehensive description of economic relationships under conditions of disequilibrium, it seemed desirable to adhere so far as possible to his analysis in interpreting the consequences of consumer credit fluctuations. But we have found it difficult to apply the precise formulations of the General Theory to our problem, and we have reluctantly attempted certain modifications.

We shall, for instance, impute changes in the flow of incomes to differences between savings and investment; while Mr. Keynes in his General Theory, though not in his earlier Treatise on Money,[3] has asserted that savings and investment are necessarily equal. These seemingly divergent views can, we believe, be reconciled in terms of differences in definitions. We shall use the term "investment" to refer to intentional expenditures which result in capital formation. Thus, our definition excludes fluctuations of inventories

[1] Keynes, John Maynard, General Theory of Employment, Interest, and Money. Harcourt, Brace and Co., 1936.

[2] Harrod, R. F., The Trade Cycle. Clarendon Press, Oxford, 1936.

[3] Harcourt, Brace and Co., New York, 1930, vol. 1, pp. 123–184. Differences between this volume and the General Theory with respect to the relationship of savings to investment arise primarily from differences in definitions that were induced to some extent by differences in approach.

resulting from unexpected changes in demand which would come within Mr. Keynes' definition. We shall use the term "savings" to refer to intentional savings by income recipients, thus excluding part of the cash balances which Mr. Keynes would include in his definition of savings, but which for us would represent merely a change in the quantity of purchasing power flowing through the income circulation.

Mr. Keynes' broad definitions of savings and investment serve admirably to illustrate his thesis that a society cannot save more than it invests nor invest more than it saves—a thesis which we believe to be incontrovertible. But however useful his definitions for this purpose, they create difficulties for the exposition of dynamic forces and for the practical application of his principles to empirical problems. These difficulties seem to be minimized by the use of definitions which permit description of dynamic movements in terms of differences between savings and investment.

In several less important details we shall modify Mr. Keynes' formulations for the sake of simplicity; and at some points, particularly with respect to the multiplier, we shall substitute principles that have been applied to empirical problems by John M. Clark[1] and by Gerhard Colm and Fritz Lehmann.[2] We believe, however, that these modifications change the form rather than the substance of Mr. Keynes' analysis.

The principles given hereafter are applicable, unless otherwise noted, only under conditions of incomplete utilization of the factors of production. For this analysis to be valid it is necessary that there be available not only ample supplies of the traditional factors of production—land, labor, and capital—but also an ample reserve supply of money, or credit, or what would have the same effect, a flexible velocity of money. Unutilized productive factors must also be properly distributed qualitatively and geographically. Because of the relative immobility and inflexibility of many factors of production it is possible to have shortages in certain areas, in certain industries, or in certain skills while there remain large islands of unemployed workers and idle productive equipment. Should such

[1] Economics of Planning Public Works. National Planning Board, Washington, 1935.

[2] Public Spending and Recovery in the United States, *in* Social Research, May, 1936, vol. 3, no. 2, pp. 129–166.

"bottlenecks" develop in strategically important industries, an expansion of effective demand may express itself primarily in increased prices long before a balanced condition of full employment is reached.

After these preliminary observations, the pertinent theoretical principles may be briefly stated as follows:

1. Real national income, or the total output of goods and services, is determined by effective demand, or the sum of expenditures for consumption and for investment.

2. Nominal national income is the sum of the outlays of entrepreneurs to the factors of production, including the positive or negative incomes (profits or losses) of entrepreneurs. If income recipients as a whole spend or invest their entire income—that is, if savings and investment are equal—nominal national income will be fully translated into effective demand, and the receipts of entrepreneurs will equal their outlays.

3. If at any moment investment exceeds savings, idle money or credit will be drawn into the income circulation. Consequently, prices will tend to rise, although the rise will be limited by the existence of idle productive factors; inventories will decline; profits will increase; and entrepreneurs may be expected to increase their rate of output and employment. If savings exceed investment, money or credit will be withdrawn from the income circulation. Consequently, prices will decline or inventories will accumulate; profits will decrease; and entrepreneurs may be expected to decrease their rate of output. Thus, the relation between savings and investment determines the immediately succeeding movement of real and nominal incomes.

4. The relation between savings and investment is determined by the rate of spending (the proportion of the nominal national income which is spent for consumption) and by the rate of investment (the proportion of the nominal national income which is expended for investment). If identity between savings and investment is to be constantly maintained, a change in one of these factors must be accompanied by a compensating change in the other. Even if the rate of spending should remain relatively stable with increasing nominal income, larger and larger sums must be absorbed in investment in order to maintain equilibrium.

5. Injection of idle money or credit into the income circulation tends to produce a multiple expansion of effective demand, by virtue of its primary, secondary, and tertiary effects. The "primary effect" is an immediate increase in effective demand equal to the income increment. But the initial increment may be used by subsequent income recipients to increase their expenditures for consumer goods. The magnitude of these subsequent increased spendings, which will be called the "secondary effect" of the initial income increment, depends upon the marginal rate of spending. If, for instance, each successive recipient should spend half of the increment in his income for consumption, the secondary effect would be equal to the primary effect; and if each successive recipient should spend three-fourths of the increment for consumption, the secondary effect would be three times the primary effect.[1] Finally, the expansion of demand for consumers' goods and the increase in profits resulting from the primary and secondary effects of an initial income increment may induce a "tertiary effect," that is, a further expansion of investment.[2] These multiple effects may occur over a substantial period of time or they may be telescoped by anticipations into a very brief period.

6. The withdrawal of money or credit from circulation tends to produce a multiple contraction of effective demand in much the same manner as an increment tends to produce a multiple expansion.

7. The ratio between the ultimate change in effective demand and an initial income increment or income decrement will be referred to as the multiplier. Since an initial increment or decrement tends to disappear through leakages, the multiplier is limited.

8. A continuous increase in investment with respect to savings will produce a continuous multiple expansion in effective demand. So long as there remain unused and useful factors of production,

[1] If the rate of spending were 50 per cent, the secondary effect of an initial increment in incomes would be the sum of the infinite geometric series, $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \ldots = 1$; if the rate were 75 per cent, the secondary effect would be the sum of the series $\frac{3}{4} + \frac{9}{16} + \frac{27}{64} + \ldots = 3$.

[2] In describing the "primary," "secondary," and "tertiary" effects of an initial income increment, we have used the terminology employed by Professors Colm and Lehmann in Public Spending and Recovery in the United States, pp. 130–133. John M. Clark appears to have used the term "secondary effects" to cover both secondary and tertiary effects as defined here. For an excellent description of the multiple effects of an initial income increment, see Professor Clark's discussion in Economics of Planning Public Works, chap. 9, pp. 80–104.

properly distributed qualitatively and geographically, an increase in effective demand will be expressed primarily in an increase in real national income. Thereafter the expansion of effective demand will be absorbed entirely in an increase in prices, unless it is terminated by exhaustion of the supply of money or credit. A continuous contraction of investment in relation to savings will finally be terminated by the reduction of real and nominal national incomes to the point where savings are brought in line with investment.[1]

Forces Influencing the Income Stream

The principles just enumerated were designed to provide a theoretical framework for the analysis of dynamic movements in the economy as a whole, and their shortcomings for the analysis of specific segments of the economy are immediately apparent when we attempt to apply them to the interpretation of the consequences of consumer credit fluctuations. British writers who contributed to the development of modern dynamic theory have generally overlooked the significance of consumer credit. Some American writers who participated in this development have been aware of the importance of this phenomenon to business fluctuations.[2] But the terminological refinements necessary to fit the analysis of consumer credit movements nicely into the general theoretical scheme have not yet been attempted.

Review of the forces which influence the circulation of incomes will bring us to a better understanding of the shortcomings of these principles for our purpose. The income circulation may be described as an endless stream of funds moving from entrepreneurs to the factors of production in the form of disbursements for wages, salaries, commissions, rents, interest, drawing accounts and dividends, and back again to entrepreneurs in the form of receipts from the sale of goods and services. Measured over a period of time as it comes to entrepreneurs in the form of demand for goods, this stream of funds is called effective demand; and measured over a

[1] Mr. Keynes apparently did not foresee the possibility that the rate of savings might have to be reduced to a negative quantity. The American experience, however, certainly indicates this possibility.

[2] See, for instance, Strategic Factors in Business Cycles by John M. Clark, National Bureau of Economic Research, New York, 1935, pp. 45–46, 198, 221.

period of time in the form of outlays to factors of production, this stream is called nominal national income.

The income stream, while endless, varies in volume. The values of effective demand or nominal national income differ when measured over different periods of equal length. The process of saving constantly transfers funds into what may be called the financial circulation, thereby reducing the flow of funds between entrepreneurs and the factors of production, which we have designated as the income circulation. On the other hand, the process of investment tends to restore or even to increase the income stream by transfers from the financial circulation.

Both savings and investment are the resultants of conflicting forces. The volume of savings is being constantly offset by dissavings. Usually savers predominate and the volume of savings is positive. But it is possible for savings to be negative, in which case dissavings may act, like investment, as an income-increasing force. Similarly the volume of investment is constantly being offset by disinvestment. The volume of investment is usually positive, but if disinvestment exceeds investment, the net volume of disinvestment tends, like savings, to reduce the flow of funds in the income circulation.

Now these positive and negative elements of savings and investment create no problems so long as we are dealing with the economy as a whole. They are fully resolved in the relationship between aggregate savings and aggregate investment, and this relationship is controlling for the flow of income funds. But when an attempt is made to examine the contribution of a single phenomenon or of a specific segment of the economy to the expansion or contraction of the national income, it becomes necessary to identify income-increasing outlays and income-decreasing withdrawals, regardless of whether such outlays represent investment or dissavings or whether such withdrawals represent savings or disinvestment.

Savings of individual income recipients, which will be called "individual savings," constitute, under most circumstances, the primary force for the contraction of the income stream.[1] It might be

[1] It should be noted, however, that business savings and business disinvestment may in some instances represent even more potent forces for contraction of the income stream.

contended that such savings should be treated as an income-decreasing withdrawal within households because individual income recipients are consumers and their savings are frequently governed by household budgets. However, since most income recipients are also producers, and since individual savings are used not only to finance investments within the household but to some extent to finance business and public investments, it seems tenable to attribute these savings to the economy as a whole rather than to the household. The latter treatment, moreover, has important practical advantages. It permits us to attribute business savings and dissavings, public savings and dissavings, and the savings and dissavings associated with consumer credit fluctuations respectively to business enterprises, to public agencies, and to households.

If the national income is to remain stable it is necessary for individual savings to be compensated by income-increasing outlays originating among business enterprises, public agencies, or households, which will be described as "producers'," "public," or "consumers' stimulating outlays." At certain times, however, business enterprises, public agencies, and households may contribute to a contraction of the flow of income funds. Net income-decreasing phenomena originating in these sectors will be referred to as "producers'," "public," or "consumers' depressing withdrawals."

Characteristics of Stimulating Outlays and Depressing Withdrawals

What are the criteria for distinguishing stimulating outlays and depressing withdrawals in various sectors of the economy? As already indicated, it is the transfer of funds to and from the income circulation which produces income-increasing and income-decreasing effects. But how is this transfer accomplished? Let us first examine the circumstances under which investment expands the flow of funds in the income circulation, and then attempt to determine the conditions under which similar consequences may be anticipated from other types of expenditures.

The income-increasing effects of investment depend essentially upon two qualities which are usually associated with expenditures for capital goods. First, investment must be treated as a capital outlay. It is the fiction of accounting and not the real flow of capital goods which provides income-increasing effects. By means of the device of charging investments to capital account, total outlays during a given period may exceed total receipts without conflicting with orthodox budgeting principles, and these increased outlays become the incomes of the factors of production in the succeeding period. Second, investment must be financed in such a way that the additional income funds introduced in one area are not compensated by a withdrawal in another area.

Among business enterprises expenditures for capital goods are generally charged to capital account and they are commonly financed by the use of idle cash balances, by raising additional capital, or by borrowing. Under these circumstances incomes of those who produced the additional capital goods are increased without a corresponding reduction in incomes of other factors of production, and this addition to the income stream is withdrawn only gradually through charges to current expense for depreciation or depletion.

There are, however, circumstances in which producers' investment lacks income-increasing effects. Some small businesses have such crude bookkeeping systems that the capitalization and subsequent amortization of outlays for capital goods is impractical; and other enterprises may at certain times charge expenditures for capital goods to current expense in order to create hidden reserves, to avoid demands for larger dividend payments, or to minimize income taxes. In these instances expenditures for investment must either be recovered currently from customers in the price of the product or be reflected in a decline in incomes of those who share in the profits of the enterprise.

Similarly, if outlays of business enterprises for capital goods are financed by withholding the distribution of profits to shareholders, that is, by business savings, income-increasing effects cannot be expected. There was perhaps a time when management and ownership of business enterprises were so nearly identical that business savings generally reflected the decisions of individuals with respect to the division of their incomes between spending and saving. But it seems certain that stockholders of large corporations which now account for the bulk of business savings base their decisions to spend or to save primarily upon their cash incomes and not upon their equities in undistributed business profits. Consequently, an increase in business savings by these corporations is not likely to be compensated by a decline in individual savings.

Among public agencies expenditures for capital goods are seldom represented by formal balance sheet entries. Nevertheless, the distinction between current expenditures and capital expenditures is usually reflected in the fiscal policies of public agencies. It has been customary to defer the cost of capital expenditures and to cover only current expenses by taxation. Since public agencies almost universally are debtors, there are generally no idle cash balances available for financing public investment. Hence, capitalization of public investment is usually accomplished by expansion of the public debt.

The stimulating effects of public expenditures for capital goods are generally determined, therefore, by the extent of public borrowing to finance them. When public expenditures for highways, public buildings, dams, and other goods that represent additions to the social wealth are treated as current expenditures and are financed by an increase in tax revenues, incomes of taxpayers are reduced by as much as incomes of those engaged on public works projects are expanded and no increase in the national income can be anticipated.[1] When, on the other hand, expenditures for public works are financed by borrowing, incomes of those employed on public works projects are increased without a corresponding decrease in the expendable incomes of other income recipients.

The formation of capital, with which investment is identified, may also occur within households. Expenditures for automobiles, refrigerators, household furniture, and other durable consumers' goods are to households what machinery and equipment are to business enterprises and what highways, schools, and waterworks are to public agencies. The stimulating effects of consumers' investment also depend upon accounting treatment and upon the method of financing. So long as consumers treat their outlays for household capital goods as current expenditures and limit their total outlays to their incomes or to a given percentage of their incomes, no stimulating effects can be expected from an increase in consumers' investment. But when such expenditures are charged

[1] This is, of course, too simple a generalization. Some forms of taxation, by tapping idle cash balances, may not decrease the flow of income funds.

to capital account, consumers' outlays may exceed the sums allocated to consumptive expenditures without conflicting with savings programs, and stimulating effects may be anticipated from them.

Consumers' budgets are almost universally too crude to permit the formal capitalization of outlays for durable goods. Even the most painstaking family accounting systems seldom go beyond the maintenance of a record of income and classified expenditures, and there is usually no provision for posting journal entries to capital accounts. But a *de facto* capitalization may be accomplished by deferred-payment purchases or by borrowing. Under these circumstances capitalization of the outlay takes place on the balance sheet of the consumer credit agency rather than on the balance sheet of the consumer.

It seems clear that investment may lack stimulating effects. The income stream is expanded by investment only when investment is charged to capital account and is financed by other means than by an increase in savings.[1] But is investment the only phenomenon capable of expanding the income stream? Are there not other types of outlays, unrelated to capital formation, which may also have stimulating effects?

Answers to these questions are to be found most readily in the field of public expenditures. The stimulating effects of public expenditures do not depend in the least upon the creation of useful assets. So long as they are financed by borrowing, government outlays for relief payments or for the maintenance of services inject new funds into the income circulation, and their effect upon the nominal national income is identical with that of outlays for public works. Thus, public dissaving as well as public investment has the capacity to increase the income stream.

An identical situation prevails within households. The effect of consumers' outlays upon the income stream does not depend upon the acquisition of additional household goods. The important criterion is the method of financing. An outlay for a surgical opera-

[1] It will be noted that the two conditions upon which the stimulating effects of investment depend are, in fact, identical in terms of the real flow of goods. If investment is charged to current expenditures, there is an increase in real savings which is not reflected in the income statement of the investing agency. The importance of the nominal or bookkeeping aspects of investment, however, leads us to distinguish these two conditions.

tion or for current household expenses serves to increase the flow of income funds just as effectively as an outlay for an automobile, for a refrigerator, or for household furniture, provided that these expenditures are financed by borrowing.

Business enterprises cannot be expected to undertake outlays that produce red figures in their income statements. But stimulating outlays representing dissavings may occur even in this field. For instance, some corporations may choose to maintain a stable dividend in spite of declining profits. To the extent that such dividend payments cause total outlays to exceed receipts, the income stream is expanded as effectively as if these expenditures were used to acquire productive assets.

Some business dissavings, however, lack income-increasing effects. While substantial corporations may for a time voluntarily pay dividends in excess of profits, the great majority of business enterprises are unwilling or unable to do so. Most business dissavings are unintentional. They occur during periods of depression because individual firms are unable to cut their expenses as rapidly as their receipts decline. Like unintentional investments in business inventories, they serve to fulfill the equation between total savings and total investment. But they have only a transitional significance; both phenomena may induce a reduction in outlays to the factors of production in the succeeding period.

In summary, any expenditure which increases outlays in relation to receipts expands the income stream and therefore represents a stimulating outlay. Such outlays may occur in any of the economic units through which the income stream passes. They are usually associated with expenditures for capital goods, but they may also result from deficit expenditures. It follows, also, that any phenomenon that reduces outlays in relation to receipts tends to contract the income stream. Individual savings constitute the primary depressing withdrawal. But depressing withdrawals may also take the form of disinvestment or the restoration of funds drawn from the financial circulation for previous deficit spending.

The importance of the distinctions between intentional and unintentional savings and investment becomes clear when we attempt to reconcile these observations with Mr. Keynes' principles. Under Mr. Keynes' definitions the equality of savings and investment is a truism. It is perfectly clear, however, that total stimulating outlays are not necessarily equal to total depressing withdrawals; otherwise the national income would remain stable under all circumstances. Consequently, certain elements of Mr. Keynes' "investment" and "savings" must lack stimulating or depressing effects. Under definitions of savings and investment which exclude unintentional elements, it can be demonstrated that the difference between stimulating outlays and depressing withdrawals during any period is identical with the difference between investment and savings. Consequently, our observations concerning stimulating outlays and depressing withdrawals represent merely a restatement and not a denial of Mr. Keynes' thesis.

Consumer Credit Fluctuations and Production

Our analysis in the preceding section has indicated that an expansion of consumer credit, whether it arises from investment or from deficit spending, represents a stimulating outlay; and that a contraction of consumer credit, whether it arises from disinvestment or from the repayment of previous deficit spending, represents a depressing withdrawal.

Fluctuations of consumers' capital financing measure the stimulating outlays and depressing withdrawals resulting from consumers' investment and disinvestment in durable household goods; and fluctuations of consumers' deficit financing measure the stimulating outlays and depressing withdrawals resulting from consumers' deficit spending and its repayment. Income-period financing cannot be clearly associated either with investment or with deficit spending, but its fluctuations have effects similar to those of the other categories. An expansion of income-period financing reflects in part the accumulation of stocks of semi-durable and ephemeral goods and it is therefore comparable to an expansion of credit by business enterprises for an intentional increase in inventories. In other respects an expansion of income-period financing is comparable with borrowing by public agencies on tax anticipation notes to finance current services or with borrowing by business enterprises to finance the processing of goods. In each instance additional funds are injected into the income stream.

It will be noted that the stimulating effects of an expansion of consumer credit do not depend upon the period of repayment of component transactions. New instalment contracts are constantly being offset by payments on previous contracts, just as new open-book credit commitments are constantly being offset by the liquidation of previous commitments. It is true, of course, that the longer the period of amortization, the greater the stimulating effects of a given increment in income funds. But this is just another way of saying that the longer the period of amortization, the more gradual the subsequent liquidation of consumer credit.

The discussion in the preceding section has indicated that the stimulating effects of investment originating within business enterprises, public agencies, or households may be offset by an increase in saving within the same sectors. It is possible, also, for the income-increasing forces in one sector to induce compensatory income-decreasing forces in another sector. Thus, the net stimulating outlay or depressing withdrawal attributable to one sector may not be a satisfactory measure of the relative contribution of that sector to an expansion or contraction of the national income.

We need not be concerned here with possible interrelationships between income-increasing and income-decreasing forces among business enterprises and public agencies. But before we can safely undertake to interpret the significance of expansions and contractions of consumer credit it is necessary to indicate the extent to which consumers' stimulating outlays and depressing withdrawals may be associated with compensatory forces in other sectors of the economy. There appear to be two principal points of contact between consumer credit movements and other income-increasing and income-decreasing phenomena: (1) their relationship to business savings; and (2) their relationship to individual savings.

The relationship between consumer credit and business savings arises from the fact that a large part of the total amount of consumer credit is extended by business enterprises, which may in turn finance their receivables by withholding dividends from shareholders. It is impossible to determine accurately the extent to which an expansion of consumer credit induces an increase in business savings because bank loans and new capital financing cannot be identified specifically with consumer receivables and because the capital for such financing frequently passes through several hands before it reaches the consumer. Several considerations suggest, however, that compensatory business savings have had only a very small and diminishing influence upon the stimulating effects of expansions of consumer credit during the period covered by our estimates.

First, a minor but increasing fraction of consumer credit is financed directly by banks and by institutions with banking characteristics, and the business savings which arise from this segment are negligible. Second, since it is consistent with accepted accounting practice to balance quick assets against short-term obligations, there has been a general tendency for consumer credit agencies to finance expansions of their receivables by bank loans or by credits from wholesalers or manufacturers, which in turn finance their receivables by bank loans. Consequently, an expansion of receivables is far less likely to be financed by business savings than are other capital outlays. Third, an increasingly predominant segment of consumer credit is extended by agencies which have ready access to bank credit or to the securities markets, while agencies that lack bank-credit facilities for financing an expansion in their receivables are generally small individual proprietorships, in which business savings are almost identical with individual savings.

The relationship between consumer credit and individual savings and dissavings presents a somewhat different problem. Obviously, expansions and contractions of consumers' deficit financing are similar in their nature and in their effects to individual dissaving and saving. If income recipients, instead of borrowing or using credit to finance deficit expenditures, should withdraw their savings (or what amounts to practically the same thing, if they borrow on savings bank passbooks, life insurance policies, building and loan shares, or other securities), and subsequently restore the sums withdrawn by allocations from their incomes, the effects upon the income circulation would be identical with the effects of fluctuations of consumers' deficit financing. Similarly, if income recipients should finance their outlays for household capital goods by withdrawing and restoring their savings, the effects of these transactions would be identical with the effects of fluctuations of consumers' capital financing.

These observations raise a serious question concerning the propriety of treating the movement of consumer credit balances as an independent phenomenon severable from individual saving and its reciprocal, individual spending. Might not the variations of outlays with respect to incomes that we have attributed to consumer credit fluctuations be produced by fluctuations of individual spending and saving even if consumer credit facilities did not exist? To the extent that such facilities are used merely as a convenient substitute for the withdrawal and repayment of individual savings, consumer credit movements are without significance except as a reflection of the decisions of individual income recipients to spend or to save.

But there are reasons for believing that this is not the case. Again, precise measurements are impossible and we are obliged to rely upon an examination of the conditions that are likely to control this relationship. We know, for instance, that a substantial proportion of those who use consumer credit facilities have no savings whatsoever apart from their household goods, and that the savings of many others are in such form that they cannot be used to expand their expenditures in relation to income. We know, also, that many who buy on credit would be unwilling to withdraw their savings in order to pay cash for the same goods. Some who have accumulated savings by painful self-restraint are fearful of their ability to restore them once they are withdrawn; others whose savings are earmarked for specific emergencies or objectives are unwilling to impair their cash reserve for other purposes; and still others, somewhat irrationally, would consider it improvident to use their savings to pay cash for goods which they buy without hesitation on credit.

Although those who would be unable or unwilling to substitute the withdrawal of savings for the expansion of credit undoubtedly constitute an overwhelming majority of the customers of consumer credit agencies, there remain nevertheless a considerable number for whom the use of savings as a substitute for credit buying would present no real handicaps. But even for this group the pattern of expenditures would probably change substantially if consumer credit facilities did not exist. Sheer inertia would induce many to postpone substantial expenditures until cash had been accumulated out of incomes, and expenditures for durable and semi-durable goods would probably be distributed more evenly with respect to time because such outlays would be more sensitive to price changes and to the need for replacements and less sensitive to the trend of incomes.

It seems reasonable to conclude that compensatory influences in other sectors of the economy induced by expansions and contractions of consumer credit are relatively unimportant, and we shall therefore treat the movement of consumer credit balances as an independent income-increasing or income-decreasing force in appraising its influence upon the economy as a whole.

After this unavoidable digression, let us return to our immediate problem—the interpretation of the relationship between consumer credit fluctuations and production under conditions of incomplete utilization of the factors of production. The analysis may be stated as follows:

An expansion of consumer credit injects additional funds into the income circulation. This increment in income funds increases receipts of entrepreneurs without increasing their outlays chargeable to costs of production. Hence the increment need not be recovered in the price of the current product in order to maintain the same rate of profit, and the increased receipts of entrepreneurs must result either in a decline of inventories or in a rise of prices and profits. Since the existence of idle productive factors may be expected to restrain a rise in prices, these increased receipts are likely to be expressed primarily in a decline in inventories and in an increase in production to restore these inventories. In this way the initial increment tends to be passed on in additional outlays to factors of production in the succeeding period. To the extent that the initial increment is spent or invested by subsequent recipients, the flow of incomes and production will continue at the accelerated rate. To the extent that it is absorbed by individual savings without a compensating increase in stimulating outlays in other sectors, the increment will dwindle and disappear.

Since savings of individual income recipients as a whole may be expected to increase absolutely, if not relatively, as incomes increase, the fate of the initial increment in income funds induced by expansion of consumer credit will depend to a large extent on the reaction of producers' investment to the increase in incomes. However, by increasing demand for goods and by strengthening prices, an expansion of consumer credit tends to create the need for additional productive equipment, to increase the marginal efficiency of capital, and, therefore, to encourage both intensive and extensive investment. Thus, through its tertiary effect upon producers' investment, an expansion of consumer credit may create the means of absorbing the additional savings that may be expected to result from an increase in incomes and may even induce a cumulative expansion of incomes.

Contraction of consumer credit has an opposite effect. Repayment of consumers' obligations transfers funds to the financial circulation from the income circulation and decreases receipts of entrepreneurs in relation to their outlays. Inventories become excessive, prices weaken, profits decline, and production is curtailed. Through curtailment of production, the initial decrement in income funds persists in the form of smaller outlays to the productive factors in the succeeding period. Since declining demand for goods and declining profits destroy incentives for producers' investment, a contraction of consumer credit tends to induce depressing withdrawals among business enterprises and may therefore compel a cumulative contraction of incomes and production.

Tests of the Validity of the Analysis

In spite of the rapid strides which have recently been made in providing a statistical basis for appraisal of the validity of the principles underlying the foregoing analysis, the data are still too crude and require too many arbitrary adjustments to provide satisfactory verification. For the moment, at least, the only practicable test of these principles is their capacity to provide a convincing explanation of actual events. As John M. Clark has pointed out, one basic reason for believing that certain outlays produce cumulative effects is the fact that business cycles exist, and the way in which they gather momentum seems to afford fairly convincing evidence of the existence of a multiplier.[1]

The analysis given above appears to be fully reconcilable with the data available to us. It accounts for concurrent movements of consumer credit and of producers' capital formation during the

[1] Economics of Planning Public Works, p. 83.

period from 1923 to 1937; and it provides the basis for determining the cause-and-effect relationship between fluctuations of consumer credit and production. Obviously, many forces contributed to the substantial changes in the volume of production between 1923 and 1937; but, as will be demonstrated in the succeeding chapter, expansions and contractions of consumer credit were highly important causal elements.

This analysis sheds light upon some of the problems for which the discussion of the late 1920's failed to provide convincing or generally acceptable solutions. The dependence of production upon demand, it will be remembered, was generally admitted. But some writers, asserting that expansion of consumer credit could do no more than advance the time at which demand becomes effective, saw only the dangers of the prospective contraction; while others, asserting that an expansion of consumer credit would increase incomes as the result of its effect upon production, saw only the advantages of expansion and failed to see that the process might be reversed by a contraction. Under the principles enumerated here, however, the contribution of consumer credit both to the expansion and to the contraction of incomes becomes clear.

A noteworthy commentary upon the discussion of the collectibility of consumer credit is also provided. It will be remembered that the precision with which instalment contracts had been liquidated under adverse business conditions in certain areas was given as evidence that there was little to fear from the expansion of consumer credit in the late 1920's; and this argument has recurred in more recent literature. But as we have just seen, it is this very liquidity—the willingness and ability of consumers to divert part of their incomes to the liquidation of debts when incomes decline—that constitutes the principal danger in the extensive use of consumer credit. When production and incomes decline and consumer credit begins to contract, we find ourselves on the horns of a dilemma: as individuals, self-preservation compels consumers to get out of debt and creditors to press for payment; but the sum of these individual efforts is inimical to group interest of creditors and debtors, to say nothing of the well-being of the economy as a whole.

CHAPTER VIII

CONSUMER CREDIT AND NATIONAL INCOME, 1923 TO 1938

THE two preceding chapters have presented an analysis of the economic consequences of consumer credit fluctuations in terms of theoretical principles. It was concluded that so long as there remain unused and useful productive resources, properly distributed qualitatively and geographically, expansion of consumer credit will tend to induce a multiple expansion of incomes and production, while contraction of consumer credit will tend to induce a multiple contraction of incomes and production. When a condition of full employment is reached, however, accelerated expansion of consumer credit will be reflected in an increase in prices and in a shift of production from producers' to consumers' goods.

In this chapter an attempt will be made to apply the analysis of the preceding chapters to actual developments in the United States during the period covered by our year-end estimates of consumer credit. What part did the expansion of consumer credit play in the boom of the 1920's, and in the recovery between the spring of 1933 and the summer of 1937? And what was the role of the contraction of consumer credit in the depression of the early 1930's, and in the recession which began in the autumn of 1937?

Relative Magnitudes of Consumer Credit Fluctuations

Some writers have insisted that consumer credit movements could have little influence upon business trends because the amounts involved were relatively insignificant. It is true, of course, that the outstanding amounts of consumer credit are overshadowed by other items in the national balance sheet. At its two peak periods, in the late fall of 1929 and in the early fall of 1937, the total amount of consumer credit exceeded 8 billion dollars, which is certainly not an inconsiderable sum. But the long-term private debt was estimated at 84.5 billion dollars in 1930 and 75 billion dollars in 1934;[1] the total net public debt was 28.4 billion dollars at the close of 1929 and 44.4 billion dollars at the close of 1937;[2] and total bank deposits exceeded 55 billion dollars in 1929 and 53 billion dollars in 1937.

Such comparisons, however, are invalid for our purpose. The significance of consumer credit for cyclical movements lies in the magnitude of its fluctuations and not in the magnitude of its outstanding amount at any given time. Consequently, in order to appraise the relative importance of consumer credit as an income-increasing or income-decreasing force, it is necessary to compare the magnitude of consumer credit fluctuations with that of other phenomena which have the capacity to induce expansion or contraction of incomes.

For purposes of this comparison use will be made of the classification of stimulating outlays and depressing withdrawals established in the preceding chapter. Consumer credit fluctuations will be treated as stimulating outlays and depressing withdrawals originating within households; and an attempt will be made to compare their magnitude with that of income-increasing and income-decreasing forces originating within business enterprises and within public agencies. In the latter two sectors of the economy, stimulating outlays result either from intentional investment (to the extent that such investment is not financed by compensatory savings) or from deficit spending; and depressing withdrawals result from disinvestment or from repayment of previous deficit spending. Individual savings will be treated as a depressing withdrawal attributable to the economy as a whole.

Within this classification expenditures for residential buildings might be treated as producers' investment if they are to be rented to tenants, and as consumers' investment if they are to be occupied by their owners. But for the sake of simplicity, all residential construction will be treated as producers' investment. This solution

[1] Horton, Donald C., Long Term Debts in the United States. U. S. Department of Commerce, Government Printing Office, Washington, 1937, p. 6.

[2] Hart, Albert Gailord, Debts and Recovery. Twentieth Century Fund, New York, 1938, p. 233.

not only avoids some of the statistical problems that have led to the exclusion of real estate mortgage loans from our estimates of consumer credit but also recognizes the important differences between investments in houses and investments in other types of family capital goods.

Calculations of producers', public, and consumers' stimulating outlays and depressing withdrawals will be attempted for three periods: (1) the period between the close of 1923 and the close of 1929, which will be called the prosperity period; (2) the period between the close of 1929 and March 31, 1933, which will be called the depression period; and (3) the period between March 31, 1933, and August 30, 1937, which will be referred to as the recovery period.

Producers' Stimulating Outlays and Depressing Withdrawals

Estimates of producers' stimulating outlays and depressing withdrawals were based upon data presented by Simon Kuznets in National Income and Capital Formation, 1919–1935, and in his supplementary bulletin, Commodity Flow and Capital Formation in the Recent Recovery and Decline, 1932–1938, to each of which reference has previously been made. The procedure was to estimate the total volume of producers' investment by years, and then to subtract from these totals estimates of compensatory business savings or to add to them estimates of stimulating business dissavings.

For measurements of producers' investment we have used the sum of Professor Kuznets' figures for net business capital formation including changes in inventories, for net capital formation in residential construction, and for changes in net claims against foreign countries. During the period from 1923 to 1931 net changes in the stock of monetary metals were also added. Since changes in stocks of domestically produced monetary metals were shifted to business inventories in Professor Kuznets' figures for the years after 1931, the inclusion of this item for the period indicated was necessary in order to maintain comparability. It is true that figures for changes in stocks of monetary metals before 1932 included the international flow of gold. But since international movements of gold resulted in reciprocal changes in monetary stocks and in claims against foreign countries, their inclusion or exclusion has no effect upon the totals used.[1]

Estimates of compensatory business savings and stimulating business dissavings were based upon Professor Kuznets' figures for the annual volume of positive and negative business savings, which had been adjusted for changes in inventory valuations and for gains and losses in the sale of capital assets. Changes in inventory valuations are usually reflected in income accounts, but gains and losses from the sale of capital assets are usually credited or debited to surplus or reserve accounts. Consequently, for our purpose it seemed desirable to restore to Professor Kuznets' figures his adjustments for the latter item during the period from 1929 to 1935 for which these adjustments were identified. No attempt has been made to revise the figures for other years. As previously indicated, all positive business savings do not represent compensatory depressing withdrawals and all negative business savings do not represent additional stimulating outlays. Hence, still further adjustments in the total positive and negative figures for business savings were necessary.

There appears to be no adequate method of distinguishing between compensatory and non-compensatory business savings. Since stockholders of large corporations that accounted for a predominant part of the total volume of producers' investment during the period from 1923 to 1937 were likely to govern their expenditures by their cash incomes without regard to accumulating equities in undistributed corporate profits, most business savings during this period undoubtedly represented a compensatory increase in savings that offset the stimulating effects of investment. But for some corporate shareholders and entrepreneurs, particularly in small businesses, business savings represented an alternative to individual savings. If there had been no opportunities for profitable investment in their businesses, these savings would have taken some other form. For want of a more adequate measure, it was assumed

[1] In National Income and Capital Formation Professor Kuznets listed changes in monetary stocks as a form of public capital formation. His shift of changes in domestically produced stocks to business inventories suggests that he now considers this item to be an element in business capital formation. Much can be said in justification of either point of view or of attributing this item, like individual savings, to the whole economy rather than to any specific sector. For convenience, however, Professor Kuznets' latter treatment will be followed.

that 70 per cent of all positive business savings represented an offset to the stimulating effects of producers' investment. These estimated compensatory business savings were subtracted from the volume of producers' investment.

The difficulties of distinguishing between stimulating and nonstimulating business dissavings are equally great. Whatever their nature, business dissavings have the immediate effect of introducing additional funds into the income stream. But, as has been indicated in the preceding chapter, dissavings of business enterprises commonly result from the failure of receipts to cover costs of production and they may induce enterprises to discharge employes, to shut down plants, or otherwise to reduce their outlays to the factors of production in the succeeding period. Since our estimates of stimulating outlays and depressing withdrawals cover relatively long time-periods, injections of income funds that are promptly withdrawn should be excluded from our calculations.

Whether business dissavings have stimulating effects for purposes of our calculations depends upon many factors, the most important of which appear to be the financial condition of the enterprise, the relationship of receipts to prime costs, and entrepreneurs' anticipations of business conditions in the immediate future. Dissavings that impair the working capital or credit of business firms may be expected to compel immediate retrenchment; while dissavings by enterprises that have ample cash and credit resources may occur without inducing, or at least without accelerating, the reduction of outlays in the succeeding period. Dissavings that reflect the failure of business enterprises to recover their prime costs are far less likely to have income-increasing effects than dissavings that reflect failure to regain depreciation charges, because, in the former case, losses may be minimized by reducing or discontinuing production. Business dissavings may be expected to have much more substantial stimulating effects when the trend of demand and prices is upward or when improvement in markets is expected than when continuation of unfavorable business conditions is anticipated.

No data are available by which the proportion of business dissavings that has stimulating effects can be accurately determined, and only the crudest approximations are possible. But the proportion of business dissavings that had stimulating effects clearly increased after the spring of 1933. During 1930, 1931, 1932, and the first quarter of 1933 business dissavings exceeded business disinvestment, suggesting that many enterprises were unable to recover their prime costs; demand was rapidly shrinking and, except for brief glimmers of optimism in some fields, the immediate business outlook continued to be dark. After the spring of 1933, however, the prospect of increased production costs, the N.R.A. Codes, rising prices, and expansion of demand apparently induced many entrepreneurs to continue or even to increase their outlays to productive factors in spite of continuing losses. Consequently, we have assumed that 50 per cent of the volume of business dissavings had stimulating effects during the years 1930, 1931, and 1932 and the first quarter of 1933; that 60 per cent had stimulating effects during the last three quarters of 1933; that 70 per cent had stimulating effects in 1934; and 80 per cent in 1935.

There are unintentional elements in Professor Kuznets' figures for changes in business inventories and for positive business savings. Part of the expansion of inventories in any one year may have resulted from the failure of demand to meet expectations and part of the positive business savings in any one year may have represented profits which would later be distributed to shareholders. Since the influence of these unintentional items is minimized by dealing with substantial time periods, no attempt has been made to exclude them.

Public Stimulating Outlays and Depressing Withdrawals

Estimates of public stimulating outlays have been based upon figures from various sources. For the prosperity period our estimate represents the net increment in the public debt between the close of 1923 and the close of 1929. Year-end figures for the obligations of state and local governments were obtained by interpolation from figures for June 30 published by the Secretary of the Treasury.[1] Year-end figures for the federal debt were obtained by subtracting the balances in the general fund from the gross federal

[1] Annual Report of the Secretary of the Treasury for the year ended June 30, 1935, pp. 424–426.

government debt as reported in the daily treasury statements for December 31 of each year.

For the depression and recovery period figures for public income-increasing expenditures calculated by Arthur D. Gayer, H. H. Villard, Lauchlin Currie, and Martin Krost, and published by Professor Gayer, have been used.[1] Through the courtesy of Dr. Currie, we have substituted revisions of the Currie-Krost estimates of federal income-increasing expenditures for the period from 1932 to 1937. Figures for state and local government income-increasing expenditures given by Professor Gayer ended with 1935, and our estimates for these items in 1936 and 1937 represent crude extrapolations based upon fragmentary data.

Consumers' Stimulating Outlays and Depressing Withdrawals

As previously indicated, consumer credit fluctuations have been used as the measure of consumers' stimulating outlays and depressing withdrawals. But it may well be asked whether there are not, within households, income-increasing and income-decreasing forces in addition to consumer credit fluctuations which should be covered by our calculations. The discussion in the preceding chapter has indicated that effects similar to those attributed to expansions and contractions of consumer credit may be anticipated if consumers should use their own funds to finance deficit expenditures or investments in household goods.

The use of previous savings to finance deficit expenditures is, of course, very common. One of the purposes of saving is to meet emergencies which require expenditures in excess of incomes. But in spite of the similarity of the effects of deficit spending financed by previous savings and deficit spending financed by credit expansion, no real problem is presented by the treatment of one as individual dissaving, and the other as a stimulating outlay. Individual saving and its reciprocal, individual spending, do not necessarily play a purely passive role in dynamic movements. If a substantial number of consumers should suddenly decide to spend more than their incomes or to save a smaller portion of their incomes, the resulting decrease in saving and increase in spending would provide

[1] Gayer, Arthur D., Fiscal Policies, *in* American Economic Review, March, 1938, Supplement 1, pp. 99, 107.

just as effective a stimulant to the national income as a positive increase in stimulating outlays. Treatment of fluctuations of consumers' deficit financing as phenomena distinguishable from individual saving and dissaving is justified, on the other hand, by the fact that consumers' deficit financing generally reflects deficit spending by those who could not or would not use their savings for this purpose.

The situation changes, however, when consumers use their own funds to finance the purchase of family capital goods. Obviously, such outlays reflect investment and not consumption. Consumers' investment financed by the withdrawal of previous savings, like consumers' investment financed by the expansion of credit, permits consumers' outlays to exceed or to fall short of the sums allocated to current spending without a change in the true rate of saving, and it is erroneous to treat either form of investment and disinvestment as an element in individual spending and saving.

There can be little doubt that some consumers finance their purchases of durable goods by means of the withdrawal and subsequent restoration of previously accumulated savings. But the practice appears to have been sufficiently rare to be neglected for purposes of our calculations. A major part of the sales of family capital goods to ultimate consumers—probably more than 75 per cent of the dollar volume—is financed directly or indirectly through consumer credit agencies.[1] Thus, the largest part of the total volume of consumers' capital outlays is reflected in our estimates of consumer credit. Moreover, it seems possible to attribute a very large percentage of the cash sales to three classes of income recipients for whom the capitalization of outlays for durable goods is either inconvenient or unnecessary.

In the first class are those with substantial incomes, for whom outlays properly distributable over many income periods recur so frequently that it is convenient to treat each as a current expenditure. In the second class are those whose principal incomes are represented by infrequent payments. For instance, most farmers receive their principal incomes from the sale of a single crop; many

[1] That is, 75 per cent of the dollar volume of retail sales of consumers' durable goods involve deferred payment terms. By virtue of substantial down-payments, particularly in the automobile field, considerably less than 75 per cent of the total purchase price of such goods is supplied initially by consumer credit agencies.

workers in seasonal industries receive a large part of their annual incomes within a few months; partnerships and individual proprietorships frequently yield small drawing accounts until profits are calculated at the end of the fiscal year; and many salesmen and attorneys receive their principal incomes following the consummation of a substantial sale or the conclusion of important litigation. For these groups and the many others that could also be cited, it is impracticable to distribute capital expenditures over many income periods, and such outlays are generally charged directly against peak incomes. In the third class are those who receive windfall incomes. There is a continuous flow of more or less fortuitous lump-sum payments through inheritances, lotteries, prizes, stock-market profits, unusual dividend payments, payment of interest arrearages, compensation for injuries, management or employe bonuses, and government benefits, which together account for a substantial fraction of the cash purchases of durable goods.

One further question must be answered before consumer credit fluctuations can be accepted as the measure of stimulating outlays and depressing withdrawals originating within the household. We have assumed that a decline in the outstanding amount of consumer credit is accomplished by repayment of consumers' obligations. But what if the decline occurs as the result of an increase in charge-offs for uncollectible accounts? Although it is clear that the contraction of consumer credit during the depression period was accomplished primarily by payments from individual incomes, part of the contraction, perhaps as much as 10 per cent, was accounted for by an increase in charge-offs. A reduction of consumer credit balances resulting from charge-offs, however, generally has the same effect upon the income stream as a reduction accomplished through repayment by debtors. In the field of consumer credit losses are to be expected and they are almost universally treated as an operating expense. Under these circumstances an increase in charge-offs reduces the receipts of consumer credit agencies in relation to their outlays just as effectively as the liquidation of consumer credit by payments from individual incomes reduces the receipts of other entrepreneurs in relation to their outlays.

Our estimates of producers', public, and consumers' stimulating outlays during the three periods isolated for study are given in

Table 13. These figures are necessarily crude, but the potential error is not so great that they may not be used as fairly reliable measures of the relative magnitude of the income-increasing and income-decreasing forces which have their origins in these sectors of the economy.

TABLE 13.—ESTIMATED VOLUME OF PRODUCERS', PUBLIC, AND CONSUMERS' STIMULATING OUTLAYS AND DEPRESSING WITHDRAWALS DURING CERTAIN PERIODS

(Plus signs indicate stimulating outlays; minus signs depressing withdrawals. Amounts are in billions of dollars)

Type of outlay or withdrawal	Prosperity period (close of 1923 to close of 1929)	Depression period (close of 1929 to March 31, 1933)	Recovery period (March 31, 1933 to August 31, 1937)
Producers'	+30.1	−0.6	+5.8
Public	+0.2	+6.4	+12.9
Consumers'	+3.8	−3.6	+3.8
Total	+34.1	+2.2	+22.5

Consumer Credit Expansion and National Income During the Prosperity Period

The treatment of business and public savings as offsetting items in the determination of producers' and public stimulating outlays compels us, for the sake of consistency, to define the national income as total income payments. Professor Kuznets' studies supply us with figures for income payments in the United States. But it is necessary to add to these figures the portion of positive business savings which have been treated as the equivalent of individual savings. If there had been no opportunity for the reinvestment of the profits of unincorporated enterprises and closely held corporations, these latter business savings would presumably have been paid out as dividends or as entrepreneurial withdrawals and added to the sum of individual savings. Hence, we shall treat them as though they had been distributed as income payments, saved as individual savings, and returned to various enterprises to finance investment.

The following tabulation indicates these adjustments in Professor Kuznets' figures and shows the increase in adjusted income payments during the prosperity period:

Year	Income payments[1]	Non-compensatory business savings	Adjusted income payments	Increase over 1923
		(Billions of dollars)		
1923	65.85	0.73	66.58	..
1924	66.76	0.64	67.40	0.82
1925	69.92	1.01	70.93	4.35
1926	72.82	1.43	74.25	7.67
1927	73.38	0.61	73.99	7.41
1928	75.82	0.84	76.66	10.08
1929	79.81	0.39	80.20	13.62
Total, 1924 to 1929	438.51	4.92	443.43	43.95

The annual volume of income payments increased by some 14 billion dollars between 1923 and 1929. But the total volume of income payments during the prosperity period was roughly 44 billion dollars larger than the sum that would have been paid had the annual volume remained at the 1923 level.

What was the contribution of consumer credit expansion to this increase in income payments? Obviously the prosperity of this period was attributable to the large volume of stimulating outlays, estimated at 34 billion dollars. Of this total, consumer credit expansion accounted for 3.8 billion dollars—a little more than 11 per cent. Public stimulating outlays were negligible because liquidation of the federal government debt all but offset the income-increasing expenditures of state and local governments. The most important factor was the large volume of producers' investment, which provided an income-increasing force almost eight times as large as that attributable to the expansion of consumer credit. Consequently in terms of its relative contribution to the total volume of stimulating outlays, it is clear that consumer credit expansion was a minor though certainly not a negligible force.

Appraisal of the contribution of consumer credit expansion to the increase in incomes during the prosperity period may, however, be approached in another way. What would the trend of the national income have been if consumer credit had not expanded? When this question is asked, attention is directed to the marginal rather than to the relative significance of consumer credit expan-

[1] National Income and Capital Formation, 1919–1935, Table 6, p. 24.

sion. Throughout the prosperity period income recipients were saving part of their incomes, and a substantial volume of stimulating outlays was necessary even to maintain the 1923 level of income payments. The increase in incomes may therefore be attributed to the amount by which the actual volume of stimulating outlays exceeded that necessary to absorb individual savings at the 1923 income level.

Direct computation of the volume of individual savings is impracticable and the data are still too crude to permit use of differences between income payments and consumers' outlays as the measure of individual savings. But it seems possible to estimate the volume of individual savings at the 1923 income level from the volume of stimulating outlays in 1923 and 1924. Fortunately for this purpose the volume of income payments was negligibly higher in 1924 than in 1923, and various indices of business activity stood at very nearly the same level at the beginning of 1923 and at the close of 1924. Moreover, the involuntary accumulation of inventories that occurred during 1923 appears to have been corrected in 1924. Hence it seems reasonable to conclude that the volume of stimulating outlays during this two-year period closely approximated the volume of individual savings.

The total volume of stimulating outlays during 1923 and 1924 was about 10.2 billion dollars. Allowing for a slight expansion of the income stream, the annual volume of individual savings at the 1923 income level appears to have approximated five billion dollars. If the rate of saving had remained constant, the total volume of stimulating outlays during the prosperity period would have had to approach 30 billion dollars in order to maintain the initial volume of income payments. Assuming no change in the rate of saving, the increase in income payments may, therefore, be attributed to a marginal stimulating outlay of approximately four billion dollars. This sum is roughly commensurate with the stimulating outlay contributed by consumer credit expansion.

It might be argued along classical lines that if consumer credit had not expanded the capital invested in the expansion of consumers' obligations would have been put to other uses. There is little evidence, however, that the expansion of consumer credit represented a diversion of capital from employment in other fields. Prior to 1929, when interest rates rose in response to the Federal Reserve Board's efforts to restrain the stock-market boom, the prosperity period appears to have been characterized by the general availability of idle productive factors, including an ample supply of capital for producers' investment. On the contrary, it seems probable that the volume of producers' investment would have been smaller had the expansion of consumer credit not occurred.

Both of these approaches provide useful clues to the interpretation of the significance of consumer credit expansion during the prosperity period. But neither the calculation of the relative magnitude of the contribution of consumer credit to the total volume of stimulating outlays nor the calculation of the relationship between consumer credit expansion and the marginal stimulating force that induced the expansion of incomes provides a satisfactory basis for examining the part played by consumer credit in the complex cause-and-effect relationships of economic forces out of which the prosperity of the late 1920's was compounded.

Various types of stimulating outlays are generally interrelated with respect to cause and effect. An expansion of producers' investment tends to increase incomes. As noted in Chapter 5, however, increasing incomes encourage expansion of income-period financing and of consumers' capital financing by increasing the volume of retail sales and by increasing the income margins available for instalment purchases of durable goods. But, as noted in Chapter 7, expansion of consumer credit tends to induce further expansion of incomes, which in turn stimulates producers' investment by increasing profits and by raising demand to the point where new productive equipment is needed. Since business enterprises tend to regulate their inventories in terms of days' or months' supply rather than in terms of physical quantities, expansion of incomes also leads to expansion of investments in stocks of raw materials, of goods in process of production, and of finished goods. Even public investment may be influenced by stimulating outlays in other fields. For instance, it seems clear that the investment of state and local governments in school buildings and highways during the 1920's would have been less substantial if the tax base had not been expanded by increasing incomes and by increasing sales of gasoline that resulted from growth of the number of automobiles in use.

Thus, the prosperity of the late 1920's was a product of the action and reaction of a number of economic forces. Each of these forces contributed to the expansion of incomes. But some were basic causal forces, and some were merely the resultants of other prime causes. If the significance of the expansion of consumer credit during the prosperity period is to be properly interpreted, it seems necessary to supplement the quantitative calculations previously given by qualitative analysis directed toward determining which of the various stimulating outlays were prime causes and which were consequences of prime causes.

Even if it be admitted that the increase in incomes beyond the 1923 level was dependent upon a marginal stimulating outlay commensurate with that contributed by the expansion of consumer credit, it does not follow that consumer credit expansion caused the increase in incomes. It is conceivable that the expansion of consumer credit during the prosperity period might have been entirely the consequence of an expansion of incomes induced by the high level of producers' stimulating outlays—a tertiary effect of producers' investment, which contributed in its own right to the expansion of incomes but which was nevertheless wholly dependent upon the initiating force of producers' investment. Several considerations, however, lead to belief that such an interpretation is far from correct and that consumer credit expansion was, in fact, one of the important prime causes underlying the increase in incomes during the prosperity period.

Let us revert for a moment to the institutional development of consumer credit during the 1920's, described in some detail in Chapter 4. The period between 1923 and 1929, it will be remembered, witnessed a tremendous expansion of consumers' capital financing that could be attributed only in part to the expansion of incomes. The rapid increase in the number and in the resources of instalment financing agencies permitted large-scale expansion of instalment sales of automobiles and washing machines and immediate exploitation of the easy-payment market for new types of consumers' durable goods, such as mechanical refrigerators and radios. Both the example and the competition of the automobile industry induced extension of instalment selling to types of durable goods that had not generally been available to consumers on instalment terms, such as plumbing, heating, and roofing installations, and led to the popularization and intensification of instalment selling of types of consumers' goods that had long been offered on easy-payment terms.

There was a similar growth in the number and resources of specialized cash-lending agencies. Between 1923 and 1929 the number of industrial banks trebled, the number of credit unions increased fivefold, and the number of regulated small loan offices sixfold. In 1929 there were several hundred personal loan departments of commercial banks where there had been none in 1923. These new institutions provided additional facilities for financing and refinancing purchases of consumers' capital goods, and they permitted a shift of consumers' deficit financing from relatives and friends, where such financing had but negligible stimulating effects, to the balance sheets of business enterprises, where an expansion of deficit financing represented an income-increasing outlay.

Even among open-book credit merchants, the expansion of consumer credit was not solely a product of the expansion of incomes. In most fields of merchandising in which open-book credit selling was prevalent, receivables increased far more rapidly than sales, reflecting an increase in the proportion of sales made on credit, an increase in the period for which credit was granted, or both.

The expansion of consumer credit during the prosperity period would have been less rapid if incomes had not increased, and it probably could not have occurred at all if incomes had declined substantially. But given a condition of relatively stable incomes, the institutional developments within the field would undoubtedly have induced a substantial expansion. In this sense, a large part of the stimulating outlays attributable to expansion of consumer credit may be said to have represented an initiating factor—a prime cause—in the prosperity of the 1920's.

This conclusion is supported by examination of changes in the annual volume of producers' and consumers' stimulating outlays occurring between 1923 and 1929. The volume of stimulating outlays originating within business enterprises declined between 1923 and 1924 and remained below the 1923 level until 1929. On the other hand, the volume of consumers' stimulating outlays followed an irregular but rising trend. We have estimated the expansion of consumer credit in 1923 roughly at 450 million dollars. The expansion was smaller in 1924 and 1927, but substantially larger in 1925, 1926, 1928, and 1929. Since the expansion of incomes after 1923 must be explained in terms of an increase in stimulating outlays in relation to individual savings, the rising tendency of the annual contributions of consumer credit expansion to the total volume of stimulating outlays is significant.

There were certainly other prime causes of the prosperity of the 1920's. The most important with respect both to timing and to magnitude was residential construction. During the World War home building had failed to keep abreast of the depreciation of residential real estate, to say nothing of the additional housing needs arising from the increase in population and from the rise of real incomes of industrial workers. The expansion of residential construction that followed the conclusion of the World War was interrupted by the decline of prices in 1920, but was renewed in January, 1921, several months before indices of production and general business activity began to turn upward. It is noteworthy that the rise of automobile production and the renewal of the expansion of residential construction occurred almost simultaneously.

Investments in new industries may also be treated as prime causes. But the industries that made their appearance in the 1920's involved relatively small investments in productive equipment, and some of them tended to supplant existing industries. For instance, the radio industry tended to supplant the piano and phonograph industries; and the mechanical refrigerator industry tended to supplant enterprises engaged in the manufacture and distribution of ice and ice boxes. It is possible that the additional investment in the radio and mechanical refrigerator industries may have been largely offset by the consequent disinvestment in the industries that were supplanted. In the aggregate, new industries appear to have been relatively unimportant as a prime cause of the prosperity of the 1920's.

A large part of the total volume of producers' investment, other than residential construction, was a consequence of the high and increasing level of incomes. This is certainly true of the expansion of business inventories which accounted for a substantial portion of the total volume of producers' investment. Additional investments in the automobile, rubber tire, and oil industries can be considered in part to have been a direct consequence of the expansion of consumer credit. And in many other fields the substantial investments that occurred during the prosperity period probably would not have been made had not the increase in incomes brought demand for goods to the point where additional plant facilities were required.

In the final analysis, however, neither the large volume of producers' investment nor the expansion of consumer credit can account fully for the continued increase in income payments during the prosperity period. We have estimated the volume of individual savings at the 1923 income level at approximately five billion dollars, which indicates a rate of saving of 7.6 per cent. During the prosperity period a total volume of stimulating outlays of 34 billion dollars—only four billion dollars greater than the sum necessary to absorb individual savings at the 1923 income level—produced an increase in income payments of 44 billion dollars. In other words, the multiplier applicable to the marginal stimulating outlay was 11, indicating a marginal rate of saving of 9 per cent. The explanation for this extraordinarily low marginal rate of saving, which is contrary to theoretical expectations, is to be found, we believe, in the rising stock market.

Calculations of the national income properly exclude increases in market values of securities and profits from the sale of securities by non-professional traders. But there can be little doubt that some such profits were spent for consumers' goods and that increments in the value of security holdings were taken into consideration when income recipients determined what part of their cash incomes would be saved. Thus, the marginal rate of saving was minimized by the large public participation in a rising stock market.

In summary, it seems necessary to credit the prosperity of the late 1920's largely to three prime causes: The first, and by far the most important, was the expansion of residential construction. The second was the rapid development of instalment merchandising and the growth of consumer credit facilities. The third was the rising stock market. The prosperity of the late 1920's hung by a relatively narrow thread; and it seems probable that the further expansion of incomes after 1923 could not have occurred if any one of these factors had not been present.

Consumer Credit Contraction and National Income During the Depression Period

Expansion of the national income was terminated in September, 1929, when the stock market began to fall. Thereafter, income payments declined at an accelerating rate, as the following figures indicate:

Year	Adjusted income payments (Billions of dollars)	Decrease as compared with 1929 (Billions of dollars)
1929	80.20	..
1930	73.62	6.58
1931	62.57	17.63
1932	49.78	30.42
1933 (3 months)	11.30	8.75
Total, January 1, 1930, to March 31, 1933	197.27	63.38

The precipitate decline in incomes was induced by the even more precipitate decline in stimulating outlays. The total volume of such outlays fell from 8.1 billion dollars[1] in 1929 to 2.7 billion in 1930, to 1.1 billion in 1931, and to −1.5 billion in 1932. Producers' stimulating outlays dropped from 6.8 billion dollars[1] in 1929 to 2.1 billion in 1930, to −0.1 billion in 1931, and to −2.3 billion in 1932. Consumer credit began to contract toward the close of 1929 and this liquidation reduced the income stream by 0.6 billion in 1930, by 1.1 billion in 1931, and by 1.5 billion in 1932. Only public stimulating outlays continued to expand after 1929. As the result of declining revenues and increasing demands upon public resources income-increasing public expenditures approximated 6.4 billion dollars during the depression period.

By comparing the contributions of business enterprises, public agencies, and households to the total volume of stimulating outlays during the depression period with those that would have been made had their 1929 contributions been continued, it is possible to arrive at a rough approximation of the relative magnitude of the

[1] This figure is exaggerated by unintentional investments in business inventories.

changes that occurred in producers', public, and consumers' stimulating outlays. If producers' stimulating outlays had continued at the 1929 rate, their contribution to the total volume of stimulating outlays during the depression period would have been 22.3 billion dollars. Since the actual volume was −0.6 billion dollars, the contribution of business enterprises may be said to have declined by 22.9 billion dollars. The contribution of consumer credit to the total volume of stimulating outlays would have been 3.2 billion dollars if the 1929 rate of expansion had continued. But the actual contribution during the depression period was −3.6 billion dollars, which represented a decrease of 6.8 billion dollars. The actual contribution of public stimulating outlays was 5.4 billion dollars greater than that which would have resulted had the 1929 rate been continued.

The net change in the total volume of stimulating outlays during the depression period was a decline of 24.3 billion dollars. Of this decline the change in the contribution of consumer credit accounted for 28 per cent. Since a substantial part of the total volume of producers' investment in 1929—at least a billion dollars, and probably more—represented an involuntary investment in inventories, it would probably be more accurate to impute a third of the decline in stimulating outlays to the change in the trend of consumer credit.

The change in the trend of consumer credit does not appear to have had any share in the initiation of the decline of incomes. Like the cessation of investments for the purpose of expanding productive capacities, the contraction of consumer credit was a consequence rather than a cause of the decline in income payments.

It seems probable, however, that the capacity of consumer credit to contribute an independent causal force toward the expansion of incomes had been virtually exhausted. By the close of 1929 the institutional development of consumer credit was approaching its natural limits under existing conditions; instalment merchandising techniques had been extended to all the important fields in which they were practicable; and large numbers of consumers had expanded their obligations to the limit of their capacities to pay. Further expansion of consumer credit had therefore become increasingly dependent upon continuous expansion of incomes. It is not without interest that the sharp decline in business activity early in 1924 had comparatively little influence upon the rate of expansion of consumer credit. A similar decline in 1927 had a more substantial effect upon consumer credit, but failed to prevent its continued expansion. But the decline in business activity in the fall of 1929, when consumer credit was expanding very rapidly, promptly induced a contraction.

There was a similar weakening of residential construction as a basic causal force. The volume of net investment in residential construction declined after 1925 and continuation of home building as a stimulating force after 1927 appears to have been almost wholly dependent upon the progressive increase in incomes. Throughout the whole economy further expansion of incomes had come to depend increasingly upon stimulating outlays which were in themselves consequences of the expansion of incomes. This anomalous situation appears to have been made possible by the peculiar characteristics of new era psychology. Business men, frequently under the guidance or inspiration of faculties of leading universities, had become conscious of trends. Hence, a rise of incomes induced investment not only to meet the need for additional productive capacities created by the immediate increase in demand but also to meet the still greater need that could be anticipated by extrapolating the rising trend of demand into the future.

While exhaustion of residential construction and consumer credit expansion as basic motivating forces created the condition for the rapid decline in incomes during the depression period, the initiating factor was undoubtedly the collapse of the stock market. The stock market could not have been expected continuously to provide the speculative profits that had minimized the rate of saving during the latter part of the prosperity period. Once deflation of security prices had begun, the influence of the stock market upon the rate of saving was reversed. Instead of spending part of their profits for consumers' goods and services, speculators now contributed part of the income that would otherwise have been spent for consumers' goods toward the strengthening of depleted margins in trading accounts; and many whose fortunes had crumbled attempted to save a new "stake" with which to re-enter the market when conditions should become favorable for another upswing.

Once the decline in incomes had begun, producers' investments that depended upon the expansion of incomes rapidly disappeared. This decline in stimulating outlays with respect to savings reduced profits, weakened the incentive for other types of producers' investment, and induced further reduction of incomes. The reduction of incomes compelled contraction of consumer credit, which, in turn, reduced profits, contributed to the further weakening of incentives for investment, and induced still further reduction of incomes. And so the vicious deflationary spiral gathered momentum through the interaction of many forces—a decline in one compelling a decline in the other.

Consumer Credit Expansion and National Income During the Recovery Period

The end of the deflation of incomes came in the spring of 1933, when manufacturers, believing that the policies of the new federal government administration would result in higher costs of production, rapidly increased their output. Between March and July the Federal Reserve Board's index of production increased from 59 to 100. But the boom was short lived. Effective demand fell short of entrepreneurs' outlays; inventories increased; and production declined. By November the index of production had dropped to 72.

The expansion of production in the spring of 1933 induced, in addition to an increase in inventories, some additional investments in power machinery. But producers' investment remained, on balance, substantially negative. After March public deficit spending tended to decline. When the brief industrial boom ended, it seems probable that incomes and production would have dropped promptly to the March level or below had it not been for a change in the trend of consumer credit. The increase in income payments between March and July and anticipations of higher prices induced an expansion of consumers' capital financing and income period financing.[1] The expansion in these categories was offset at first by liqui-

[1] While the speculative increase in production between March and July, 1933, certainly provided the initial stimulus for the expansion of consumer credit, it seems probable that the expansion would not have continued in the face of declining production if it had not been for the President's Reemployment Agreement initiated in August which, by supporting the level of income payments during the decline in production, provided the psychological basis for the expansion of credit by wage-earners.

dation of delinquent accounts (consumers' deficit financing). But by summer a slow expansion of the aggregate amount of consumer credit had begun. In December a sharp increase in federal government expenditures added an additional stimulating influence. Thereafter, the national income increased progressively until August, 1937.

The positive contribution of consumer credit to expansion of the income stream during the latter part of 1933 was very modest—probably less than 25 million dollars a month. But it increased substantially in later years; in 1934 it approximated 35 million dollars a month; and in 1935, it approximated 70 million dollars a month. Federal income-increasing expenditures involved more substantial sums. From December, 1933, to the close of 1934, such expenditures averaged 270 million dollars a month; and during 1935 the monthly rate was increased to about 290 million dollars. Between June, 1933, and the close of 1935, federal expenditures contributed some 7.5 billion dollars to the total volume of stimulating outlays, while consumer credit expansion contributed about 1.5 billion dollars.

But these figures fail to indicate the relative importance of public spending and consumer credit expansion in the reversal of the trend of incomes. Throughout 1932 and the first quarter of 1933, consumer credit was being liquidated at a rate of 122 million dollars a month. Hence the change in trend of consumer credit increased the previous volume of stimulating outlays by about 144 million dollars a month during the latter part of 1933, by about 157 million dollars a month in 1934, and by about 194 million dollars a month in 1935. Income-increasing expenditures of the federal government, on the other hand, had approximated 150 million dollars a month during 1932 and the first eleven months of 1933. Consequently, the change in federal expenditures increased the volume of stimulating outlays only by about 120 million dollars a month in 1934 and by about 140 million dollars a month in 1935. Between June, 1933, and the close of 1935, the change in the rate of federal deficit expenditures contributed about 3.2 billion dollars to the expansion of the volume of stimulating outlays, while the change in trend of consumer credit contributed about 5.1 billion dollars. In this sense consumer credit was of greater quantitative importance than public spending in the reversal of the trend of the national income.

Expansion of the national income between the summer of 1933 and the close of 1935 must be credited entirely to the primary and secondary effects of consumers' and public stimulating outlays. Producers' stimulating outlays remained negative until well into 1935. That there should have been no immediate recovery of certain types of producers' investment was fully to be expected. Stocks of goods were generally excessive in relation to demand, and in many industries inventories were gradually liquidated throughout 1934 and the early part of 1935. In spite of the depreciation of plant and equipment and the recovery of consumer demand, potential productive capacities at the close of 1935 were still high as compared with output. Consequently, expansion of consumers' and public stimulating outlays induced little expansion of producers' investment during the early part of the recovery period.

But what of the types of producers' investment which might be expected to precede and to create consumer demand—those that depend upon the interest rate and upon new technical developments? Many political factors may be cited to explain the lack of such investments. Regulations of the Securities and Exchange Commission probably restrained or delayed some such investments. Increased taxation of large incomes and the capital gains tax undoubtedly made equity financing more difficult by limiting the supply of "risk" capital and by reducing the attractiveness of speculative investments as compared with tax-exempt securities. The unorthodox fiscal policies of the federal government may have deterred some types of investment, and the mutual distrust which characterized the relations between the federal government and a substantial segment of business enterprise was certainly not conducive to anticipatory investments. Enactments designed to encourage the unionization of labor probably made increasingly hazardous the fine cost-calculations upon which certain types of investment depend.

The relative importance of some of these factors probably increased during the latter part of the recovery period, but their influence appears at all times to have been minor as compared with the fact that there were no technical developments during this period which provided new opportunities for investment on a substantial scale. There was, for instance, no new industry comparable with the railroad, the public utility, or automobile industry, each of which had in the past absorbed a tremendous volume of savings.

As early as the beginning of 1935, residential construction had begun to expand under the influence of increasing incomes, lower interest charges, and federal mortgage insurance. But this expansion was largely offset by an increase in amortization payments on existing properties. The transfer of several billion dollars of mortgage loans to the Home Owners' Loan Corporation tended to speed up the aggregate rate of amortization and the same tendencies prevailed among private lending agencies. Although state moratorium laws relieving mortgage debtors of amortization payments were still in force, lending agencies succeeded in removing increasing numbers of contracts from these restrictions by conceding lower interest rates in exchange for rapid amortization.

When, in the spring of 1936, producers' investment began to make a substantial contribution to the total volume of stimulating outlays, this development was attributable almost entirely to the tertiary effects of consumer credit expansion and public spending. Increasing demand and the consumption of surplus stocks had brought inventory ratios to normal levels and inventories began again to expand with the flow of goods. While inventories were being liquidated, production could lag behind the level of demand, but with the reversal of the trend of inventories, production had to exceed the current level of demand. This change and the continued increase in demand for goods began to compel expansion of productive facilities in some industries.

The tertiary effects of expansion of consumers' and public stimulating outlays were long delayed, and they occurred first on a surprisingly small scale. Business men generally doubted the capacity of public spending to produce a lasting recovery and they anticipated that the expansion of incomes would be terminated either by a breakdown of public credit, which had been predicted by economists in whom the business community had confidence, or by the balancing of the federal budget, which the administration had frequently promised. Both the credit crisis and budget balancing were predicted for a future date which was continually postponed. But the incentives for most types of producers' investment were governed by still longer-term prospects. Believing that the upward trend of demand could not safely be extrapolated, business enterprises restricted their investments to those necessary to meet demand that could be immediately foreseen.

The veterans' bonus payment, by its very nature, provided an even less effective incentive for producers' investment than did other forms of public spending. The fact that the bonus was to be paid was widely advertised in advance, and business men were well aware that veterans' expenditures would increase the demand for many types of products. But it was generally anticipated that the bonus would provide only a temporary stimulus. Consequently, even where the time-interval between legislative authorization and final payment of the bonus permitted expansion of productive facilities to meet the anticipated increase in demand, the prospect of a later decline of demand tended to discourage such expansion.

The bonus was paid on June 15, 1936, in redeemable government bonds and checks for fractional amounts. The total value of bonds and checks delivered to veterans approximated 1.7 billion dollars, of which some 1.4 billion dollars were converted into cash before the end of the year. Some of this money was hoarded, some was used to liquidate consumer credit, and some was deposited in savings accounts or used for business purposes. But a substantial part, probably as much as 0.8 billion dollars, appears to have been spent for consumers' goods and services. The largest bonus expenditure occurred in June and July, but some expenditures appear to have been deferred until October, November, and even December.[1]

Although business enterprises appear to have gauged fairly accurately the primary effects of the bonus payment, they certainly underestimated its secondary effects. Few business men would have been willing to concede that the bonus expenditures could have multiple effects. The only comparable outlay had been the loans against veterans' adjusted service certificates in February, 1931, which had caused scarcely a ripple in the declining demand

[1] The primary effect of the bonus payments on consumers' expenditures, however, cannot be measured solely by the amount of bonus bonds converted into cash. Some of those who kept the bonds as investments probably increased their expenditures from current income as the result of this increase in their assets.

for consumers' goods. But the leakages in 1931 were far greater than in 1936, and the bonus expenditures continued to circulate with comparatively little loss. By virtue of the accelerating rate of expansion of consumer credit, the rapid recovery of producers' investment, and the deferment of part of the bonus expenditures, the demand for consumers' goods not only failed to decline after June but actually increased substantially.

In December, 1936, two other stimulating outlays gave additional impetus to the increase in the demand for consumers' goods. First, an unusually large sum was distributed by business enterprises in Christmas bonuses to employes. Second, as a result of the undistributed profits tax, the largest dividend payments in the history of the country were disbursed at the close of the year. By means of these payments that part of the flow of income funds which had been captured by business enterprises as profits was thrown back into the income circulation. Before the close of 1936 many consumers' goods industries were unexpectedly operating at close to full capacity and additional productive facilities were immediately necessary. Belatedly, plans for plant expansion were put into execution and during the next few months there was a very rapid expansion of producers' investment.

Public stimulating outlays were maintained during 1936 at a somewhat lower rate than in 1935, except for the veterans' bonus payments which brought federal income-increasing expenditures during 1936 to 4.1 billion dollars—some 0.7 billion above the 1935 total. But after the enormous outlays of June federal deficit expenditures dropped back to the 1935 level, and beginning in January, 1937, they were further reduced. For the first nine months of 1937 federal income-increasing expenditures averaged 84 million dollars a month as compared with a monthly average of 345 million dollars in 1936. Thus, toward the very end of the recovery period leadership in the expansion of incomes switched from public agencies to business enterprises.[1]

The expansion of consumer credit continued to account for a

[1] It should be remembered that changes in public stimulating outlays were frequently accomplished by changes in income rather than in expenditures. For instance, the initiation of the payroll taxes under the Social Security Act in January, 1937, reduced public stimulating outlays without a noticeable change in the amount of public expenditures.

significant part of the total volume of stimulating outlays. In 1936 the volume of consumers' stimulating outlays approached 1.4 billion dollars, as compared with producers' stimulating outlays of 2.4 billion dollars. During the first four months of 1937 consumer credit expansion appears to have contributed as much as 145 million dollars a month toward the expansion of the income stream.

Looking at the recovery period as a whole, public deficit spending was by far the most important quantitative factor in the expansion of incomes. Fifty-seven per cent of the total volume of stimulating outlays originated among public agencies. By virtue of their rapid expansion in 1936 and 1937, producers' stimulating outlays accounted for 26 per cent of the total; while consumer credit expansion accounted for 17 per cent of the total.

It is possible to draw only exceedingly crude conclusions concerning the relationship between the stimulating outlay contributed by consumer credit expansion and the marginal stimulating outlay that was responsible for the increase in incomes during the recovery period. There is no convenient basis for estimating accurately the volume of income-increasing outlays necessary to absorb individual savings under the conditions prevailing at the beginning of the recovery period. The total volume of stimulating outlays, however, may be used as a rough measure of the volume of individual savings in each year, and the ratio between these outlays and the volume of income payments as a crude approximation of the rate of saving. These calculations are given below:

Year	Adjusted income payments	Increase over first quarter 1933	Stimulating outlays	Stimulating outlays as per cent of income payments
	(Billions of dollars)			
1933 (last 3 quarters)	36.6	2.7	0.8	2.2
1934	52.4	7.2	2.4	4.6
1935	56.3	11.1	5.9	10.5
1936	64.9	19.7	7.8	12.0
1937 (first 8 months)	45.3	15.2	5.6	12.4
Total	255.5	55.9	22.5	8.8

By combining figures for the last three quarters of 1933 and for the full year 1934, in order to minimize the inaccuracies inherent in measurements over short periods, the rate of saving at the beginning of the recovery period may be estimated at 3.6 per cent. Application of this figure to the annual rate of income payments that prevailed during the last three quarters of 1933 provides an estimate of 1.8 billion dollars for the annual volume of stimulating outlays necessary to sustain the income level that prevailed at the beginning of the recovery period. Since this period covered four years and five months, total stimulating outlays approximating 7.8 billion dollars would have been necessary in order to sustain the initial rate of income payments throughout the recovery period. The rise of income payments may therefore be attributed to a marginal stimulating outlay of some 14.7 billion dollars of which the expansion of consumer credit accounted for only 26 per cent.

It will be noted that the multiplier applicable to the marginal outlay of 14.7 billion dollars was low: 3.8, as compared with a multiplier of 11 during the prosperity period. The difference is to be accounted for primarily by the increasing rate of saving indicated by the calculations given above. As incomes increased individuals tended to save an increasing part of each subsequent increment in their incomes. Although there was a substantial rise in prices of stock exchange securities, the stock market failed to minimize the marginal rate of saving as it had in the late 1920's. This appears to have been due in part to the capital gains tax, in part to the much smaller public participation in the market, and in part to the fact that many speculators looked upon their gains as the recoupment of previous losses.

There can be little doubt that federal deficit spending was the primary causal force behind the expansion of incomes during the recovery period. There is every reason to believe that the increase in incomes could not have continued between the close of 1933 and the middle of 1936 without a substantial volume of public stimulating outlays.

The expansion of consumer credit was to a considerable extent a consequence of increasing incomes and therefore a tertiary effect of federal deficit expenditures. But in two respects it may also be said to have played some part as a basic causal force. First, the value of durable goods in the hands of consumers had depreciated substantially by the spring of 1933 and, given any degree of confidence on the part of consumers in the continuation of their incomes even at the then prevailing level, some expansion of consumers' capital financing could be confidently anticipated. Second, the general reduction in down-payment requirements and lengthening of periods of repayment would probably have contributed to the expansion of consumer credit even if incomes had remained stable. By the spring of 1937, however, households were again well stocked with durable goods and the liberalization of terms was approaching its practical limits. Thereafter expansion of consumer credit was almost entirely dependent upon the further expansion of incomes.

The revival of producers' investment which began in 1936 appears, on the other hand, to have been almost entirely dependent upon the increase in incomes. Expansion of inventories accounted for more than half of the total volume of producers' investment during 1936 and the first eight months of 1937; and a major part of the remainder was attributable to expansion of productive capacities in well-established industries.

Consumer Credit in the Recession of 1937–1938

The national income began to decline in September, 1937. Reversal of the upward trend occurred because the volume of stimulating outlays declined relative to the volume of individual savings. Public stimulating outlays reached their peak in the summer of 1936 and declined rapidly thereafter. This decline was offset at first by the accelerating expansion of consumer credit and by the extraordinarily rapid growth of producers' investment. Although the expansion of consumer credit continued until September, 1937, the rate of increase declined after March. The rapid growth of producers' investment ended abruptly in the spring of 1937, and by summer, producers' stimulating outlays had begun to decline.

The expansion of producers' investment was stopped by bottlenecks, principally in the steel industry. New productive equipment generally required the use of steel and the steel industry was already operating at a high percentage of effective capacity by the close of 1936. Part of the expansion of public expenditures had been expressed in orders for armaments and turbines; the railroads had entered the market for rails, locomotives, and streamlined trains; but more important quantitatively, the expansion of consumers' expenditures had in very large degree taken the form of purchases of automobiles, refrigerators, washing machines, automatic furnaces, gas and electric ranges, and a host of other personal and household articles that required the use of substantial quantities of iron and steel. Consequently, business enterprises seeking new productive equipment found themselves competing with ultimate consumers for the small margin of unused capacity of the steel industry.

The Federal Reserve Board's index of iron and steel production (1923–1925 = 100) increased from 83 in January, 1936, to 142 in March, 1937, and to 146 in May. In spite of the lower capacity of the steel industry as compared with 1929, production for May exceeded the highest monthly rate in 1929; and the practical limits of capacity appear to have been reached. As was to be expected, steel prices rose. The composite price of iron and steel rose from $32.79 per ton in June, 1936, to $40.39 per ton in April, 1937—a rise of 23 per cent.

There was also a substantial increase in costs of residential construction. An analysis of the average cost of labor and materials for a standard six-room house in 24 cities indicated a rise of more than 8 per cent in building costs between October, 1936, and April, 1937.[1] To some extent this increase in costs represented the response of effective monopolies, both in labor and in building materials, to the increasing demand. But the increase in wage-rates and in building material prices probably could not have occurred had it not been for the dispersion of the supply of skilled labor and the depreciation of productive capacities during the long period of inactivity in the construction industry.

Increases in price performed their historic function of limiting the demand, and the growth of investments in buildings and in steel-consuming equipment was brought to a halt. But prices were not sufficiently flexible to respond promptly to the subsequent decline in demand. Residential construction declined rapidly after April. Steel-consuming investments remained relatively stable until June and then began gradually to decline.

[1] An Analysis of the Building Cost Index, *in* Federal Home Loan Bank Review, August, 1938, pp. 395–398.

The decline in the rate of expansion of consumer credit appears to have been a consequence rather than a cause of the diminishing rate of increase in income payments. But once initiated, the reduction of the contribution of consumer credit to the total volume of stimulating outlays became a powerful deflationary force. By October, 1937, consumer credit had begun to contract and by January, 1938, the liquidation of consumer credit appears to have been withdrawing funds from the income stream at a rate in excess of 120 million dollars a month. The rate of contraction accelerated in succeeding months. Thus, in the recession of 1937–1938 the contraction of consumer credit gained momentum much more rapidly than in the depression which began in the fall of 1929.

CHAPTER IX

CONSUMER CREDIT AND NATIONAL ECONOMIC POLICY

IN THE preceding chapter it has been shown that during recent years consumer credit fluctuations have been quantitatively important and that they have had a substantial influence upon movements of the national income. The direction and timing of consumer credit fluctuations, however, are of even greater significance than their magnitude. Since consumer credit expands with increasing incomes and contracts with declining incomes, the expansion of consumer credit accelerates and prolongs the boom, while its contraction deepens, widens, and prolongs the depression.

During the early stages of recovery, when there are idle productive factors waiting to be called into employment by an increase in effective demand, the expansion of consumer credit provides a welcome stimulus to the national income. But when full employment is approached even in a few industries, the continued expansion of consumer credit may, as we have seen, produce unfortunate consequences. Moreover, every expansion carries with it the threat of a subsequent contraction, and contractions may be expected to occur when there are already maladjustments in other sectors of the economy and when the liquidation of consumers' obligations is most dangerous to the maintenance of economic stability.

Obviously, consumer credit fluctuations are important to a government which accepts responsibility for maintaining a high level of employment and for smoothing the business cycle. What are the dangers, and what are the advantages of consumer credit fluctuations? What is their significance for the problem of maintaining economic stability? How might their destructive potentialities be minimized? And how might their favorable potentialities be used as an instrument of economic policy? An attempt to answer these questions will be made in this chapter.

Consumer Credit Fluctuations and the Automatic Stabilizing Forces

The fact that booms and depressions have been terminated in the past without recourse to government intervention indicates that there are, or at least that there have been, automatic forces which produce some measure of economic stability. The literature of economic theory has described many such forces, of which three appear to be the most important: (1) Changes in the interest rate, which were expected to stabilize the flow of income funds by equating savings and investment; (2) changes in the general price level, which were expected to maintain equality between the total flow of incomes and the total value of goods produced; and (3) changes in the rate of saving, which were expected to produce a disproportionate increase in savings when incomes were increasing and to reduce savings disproportionately when incomes were declining. Let us examine in turn the effect of consumer credit fluctuations upon the functioning of each of these automatic stabilizing forces.

Interest Rate

Among classical theorists the interest rate was expected to influence both the volume of savings and the volume of investment. When savings were excessive the resulting decline in the interest rate was expected to discourage saving and to encourage investment; and when investment was excessive the resulting rise in the rate of interest was expected to encourage saving and to discourage investment.

It seems doubtful, however, that a change in the interest rate has any clearly predictable effect upon the volume of savings under present conditions. Some income recipients may save more when interest rates are high than when interest rates are low, but others are likely to react in precisely the opposite way. Many persons save in order to create an estate which will protect their dependents and provide the means of livelihood in their old age, and a decline in the interest rate, by decreasing the yield on investments, may compel an increase in savings in order to meet these objectives. Also, banks rely upon interest income to defray the costs of services rendered to checking-account depositors, and a decline in the interest rate may compel banks to increase their minimum-balance requirements, thus inducing depositors whose balances are below the minimum to increase their savings.

There can be little doubt, on the other hand, that declining interest rates tend to encourage and rising interest rates to discourage producers' investment. But the volume of producers' investment is affected by many other factors, notably by the nature of new inventions, the rate of profit, the level of output in relation to productive capacity, the trend of consumer demand, the credit capacity of individual firms, and the state of business confidence. Many of these forces tend to minimize or even under certain circumstances to offset the stabilizing influence of the interest rate.

For instance, an increase in the volume of investment in relation to savings tends to increase profits, production, incomes, and consumer demand. These consequences provide additional incentives for a further expansion of producers' investment. Rising profits tend to increase the marginal efficiency of capital and the credit capacity of individual firms; increasing consumer demand tends to encourage the expansion of productive capacities; and the favorable trend of business activity induces confidence among business enterprises and among those who supply the funds for new investment. Thus, if an equilibrium between savings and investment is to be restored, the rate of interest must rise with sufficient vigor to offset not only the initial maladjustment but also the additional incentives for the further expansion of producers' investment which were created by such maladjustment.

Similarly, an increase in the volume of savings in relation to investment tends to reduce profits, production, incomes, and consumer demand; and these consequences in turn reduce the incentives for producers' investment. Declining profits reduce the marginal efficiency of capital and the credit capacity of individual firms; the reduction of consumer demand makes further expansion of productive capacities unnecessary; and the downward trend of business activity leads to fears for the future by business enterprises contemplating investment and by prospective purchasers of securities. Hence, if the interest rate is to produce an equilibrium between savings and investment it must not only offset the initial excess of savings but also compensate for the further destruction of the incentives for investment which result from such excess.

Consumer credit fluctuations contribute an additional and even more powerful disruptive influence. The increase in incomes that accompanies an increase in investment encourages expansion of consumer credit, which in turn increases profits, production, incomes, and consumer demand. Similarly, the decline in incomes that accompanies an increase in savings encourages a contraction of consumer credit, which in turn decreases profits, production, incomes, and consumer demand. Thus, the movement of consumer credit supplements the forces which tend to offset the restraining influence of the interest rate. But more important, the expansion and contraction of consumer credit is relatively impervious to the interest rate. As pointed out in Chapter 5, pure interest represents but a small part of the charge for consumer credit service, and it is inconceivable that modest changes in the interest rate would exercise a significant measure of restraint upon the expansion of consumer credit when incomes were increasing or upon the contraction of consumer credit when incomes were declining.

There is, of course, no one controlling interest rate. The rate of interest on prime commercial paper and short-term government notes is highly sensitive to changes in the demand and supply situation in the short-term money market. But there are many other interest rates which are far less sensitive and which represent even more important influences upon the volume of investment. Movements of the interest rate for commercial bank loans, for loans on real estate mortgages, and for corporate bonds, are likely to be moderated by convention, by institutional frictions, or by their long-term character. In the light of the relative inflexibility of many elements in the constellation of interest rates, it seems unlikely that automatic fluctuations of interest rates can be relied upon to produce equilibrium between savings and investment. The increasing amplitude of consumer credit fluctuations has certainly contributed substantially to the forces that minimize the stabilizing effects of interest rate movements.

Price Mechanism

If the classical assumption of complete flexibility of prices were tenable, a decline in nominal incomes would occur without a decline in real incomes. But experience of the last few decades makes it clear that prices are not flexible in all segments of the economy, since changes in nominal incomes have been followed very promptly by changes in output.

It seems unlikely that the price level has at any time since the advent of machine production been sufficiently flexible to absorb a substantial change in nominal incomes without a change in output. There can be little doubt, however, that price rigidities have tended to increase and that the area of administered prices has grown disproportionately in recent years. In some segments of the economy, particularly in agriculture and in non-cartelized industries producing for the world market, prices continue to have some degree of flexibility. But even in these areas there have been frequent attempts to stabilize domestic prices by government intervention.

It would take us too far afield from the immediate area of this study to discuss the many forces that have led to the growing rigidity of prices. But it seems necessary to call attention to one of these forces which has a bearing upon our immediate problem. Price rigidities result in part from the cyclical inelasticity of demand for certain products. If a decline in prices could induce a substantially greater demand, those who control pricing policies would certainly allow prices to fall in response to declining demand. But for many types of products, the modest decreases in price that could be made without incurring substantial losses are unlikely to produce a significant increase in demand when incomes are declining.

Because of the reliance of the consumer and the consumer credit agency upon future incomes for the means of payment, credit merchandising tends to concentrate demand for consumers' durable goods into periods of increasing incomes, and this tendency contributes to the inelasticity of demand for such goods when incomes begin to decline. To the extent that the contraction of consumer credit accelerates a decline in national income, it contributes generally to a relatively similar change in the elasticity of demand for all types of products. If the decline in incomes were evenly distributed it might be said that the entire demand curve was shifted downward. Because the decline in incomes is unevenly distributed, however, the shape of the demand curve is also changed.

In spite of the relative rigidity of prices in many fields, the price level does decline with decreasing nominal incomes and rise with increasing nominal incomes. But the disproportionality of price movements for various commodities limits the stabilizing effect of these changes in the price level by creating additional maladjustments between costs, prices, and incomes in various industries. Consumer credit provides a further disruptive influence. Debtors whose incomes have been affected by maladjustments in prices attempt to bring their obligations into line with their incomes, and they may be expected to devote part of their reduced incomes to the liquidation of previous commitments instead of to the purchase of goods.

Rate of Saving

Family budget studies have indicated that the proportion of incomes set aside for savings increases as one moves from lower to higher-income groups. It has been assumed that the relationship between incomes and the rate of saving observed for different income levels at the same moment of time would also hold in some degree for changes in incomes occurring over a period of time, and that fluctuations of the rate of saving would therefore represent a stabilizing force.

The calculations in the preceding chapter have indicated that except for the period of the late 1920's, when there was a large public participation in a rising stock market, the rate of individual saving did in fact fluctuate directly with incomes. When incomes increased, the amount of stimulating outlays necessary to absorb individual savings was increased disproportionately; and when incomes declined, the amount of stimulating outlays necessary to absorb individual savings was reduced disproportionately. But changes in the rate of saving were surprisingly small. In spite of the precipitate decline in incomes during the depression of 1930–1933, the volume of individual savings declined less rapidly than the volume of investment.

There are probably many reasons for the relatively small changes in the rate of saving. First, a large part of the saving of individuals takes the form of fixed payments on life insurance policies, retirement annuities, building and loan shares, and similar partial payment contracts. These forms of saving become fixed costs in family budgets; they resist reduction when incomes are declining and they are unlikely to be expanded substantially when incomes increase. Second, a very considerable portion of consumers' incomes in a wealthy country such as the United States is devoted to expenditures for goods and services which may be postponed or avoided when incomes decline. Hence, expenditures for non-necessities absorb part of the variation in incomes which would otherwise have to be absorbed by changes in savings. Third, low-income groups spend all but a very small margin of their incomes both in good and bad times and they generally have little savings which can be drawn upon to supplement declining incomes.

Consumer credit fluctuations tend to interfere with the modest stimulating influence attributable to changes in the rate of saving. The instalment buyer is generally aware of spending only the amount of the down-payment and of each subsequent instalment. From his standpoint his savings represent the differences between his income and his actual cash outlays. From the standpoint of the productive mechanism, however, consumers' spendings are synonymous with retail sales and individual saving represents that part of income payments which is not returned to entrepreneurs in the form of receipts from the sale of consumers' goods.

When consumer credit is expanding, retail sales exceed consumers' spendings and the volume of individual savings that must find employment in productive enterprises is curtailed. When consumer credit contracts, the volume of retail sales falls short of consumers' spendings and the volume of savings which must find employment in productive enterprises is expanded. Since consumer credit tends to expand with increasing incomes and to contract with declining incomes, these fluctuations tend to minimize the stabilizing effects of movements of the rate of saving.

Consumer Credit Fluctuations and Monetary Policy

In spite of their limitations it seems probable that the automatic stabilizing forces continue to have some degree of effectiveness in restraining the upswing of the business cycle. But experience in the depression of 1930–1933 and in the recession of 1937–1938 leaves little doubt that these automatic forces cannot be relied upon to terminate a decline in incomes. The declining rate of population growth, the lack of large-scale opportunities for investment in new industries, the closing of the frontier, and the political uncertainties which have prevented foreign investments all have played a part in reducing the effectiveness of these stabilizing forces. But the increasingly disruptive influence of consumer credit fluctuations may have been as important as any other single factor. It is certainly more than a coincidence that the downswing of the business cycle acquired the characteristics of a vicious circle when consumer credit began to fluctuate directly and substantially with the national income.

The ineffectiveness of the automatic stabilizing forces has led to experimentation with two types of social effort to maintain economic stability. On one hand, central banks have attempted to supplement the automatic functioning of the interest rate by means of their rediscount and open-market policies. On the other hand, governments have undertaken to terminate the downward spiral of deflation by deficit spending.

It is generally conceded that automatic movements of the interest rate are likely to be too moderate and too slow to maintain equilibrium between savings and investment. But many writers have argued that booms could be terminated and depressions avoided if central banking authorities would undertake promptly and vigorously to control the available quantity and cost of credit in the interests of stabilizing the volume of investment.

It seems probable that booms can be restrained if the monetary controls generally available to the central banking authorities are exercised with sufficient vigor. Stimulating outlays cannot continue to expand in the face of restraint of credit and rapidly rising interest rates. But it is difficult to restrain a boom by the exercise of these controls without inducing a subsequent recession. Restraints upon the volume of producers' investment must be the more severe because of the cumulative forces for further expansion that are induced by an initial excess of investment over savings, and because of the relative insensitivity of movements of consumer credit to changes in the interest rate. When the volume of investment is curtailed and expansion of incomes is brought to a halt, the incentives for expansion of producers' investment and the stimulating effects of expansion of consumer credit tend to disappear, and it seems likely that only an immediate reversal of central bank policy could prevent a decline in incomes.

If aggressive central bank action designed to stimulate producers' investment were undertaken promptly at the first sign of recession, it seems possible that a contraction of incomes might be prevented. But once a decline in incomes has gained momentum there appears to be little hope that the deflationary spiral can be broken by any weapons available to central banks. With profits disappearing, even the most substantial reduction in interest rates within the power of central banks would be unlikely to stop a decline in the volume of producers' investment.

Moreover, so long as incomes were declining, it is inconceivable that a change in money-market interest rates could restrain the deflation of consumer credit. In order to stabilize incomes it would be necessary to induce an actual increase in producers' investment to compensate the liquidation of consumer credit. This, however, is certainly beyond the power of central bank policy, since the contraction of consumer credit would continue to reduce profits, incomes, and consumer demand.

Consumer Credit and Fiscal Policy

Public deficit spending is an exceedingly powerful instrument of economic policy and there can be little doubt of its effectiveness as a means of stabilizing or increasing the national income, provided its scale is sufficiently large. Its strategic importance lies in the fact that it represents in itself a stimulating outlay, while the automatic stabilizing forces and the controls exercised by central banks represent merely influences upon the volume of private stimulating outlays and depressing withdrawals which may be offset by other forces. Unlike producers' and consumers' stimulating outlays, the volume of public stimulating outlays may be consciously determined in the interests of economic stability.

It would be a mistake, however, to conclude that public deficit spending is a satisfactory cure-all for the ills of an unstable economy. While it is certainly capable of attaining its immediate objectives, public deficit spending has severe practical limitations and the possibility of creating new economic problems is inherent in its use.

The credit capacity of a democratic government probably has practical limits. Since recurrent budget deficits create real problems of public finance, the device of public spending must be used as sparingly as possible. Also, it is extremely difficult under democratic processes to spend public funds in such a way as to get the best economic results. Timing is of prime importance. But since public spending programs are dependent upon legislative appropriations, they are likely to be initiated belatedly when the decline in incomes has already gained momentum. Similarly, public expenditures create vested interests in public benefits, and political pressures and social objectives are likely to delay reduction of expenditures when the termination of deficit spending becomes desirable.

The Public Spending Program of 1931

Unfortunately, discussions of the effects of public deficit spending have been confined very largely to the recovery period when the national income rose rapidly in response to an increase in federal government expenditures. It is frequently overlooked that a substantial increase in deficit spending in 1931 failed to produce similar results. Between 1930 and 1931 public deficit expenditures increased from an average of 100 million dollars a month to an average of 200 million dollars a month without preventing an acceleration of the deflation of incomes. Between 1933 and 1935, on the other hand, an increase in the rate of public deficit spending from about 130 million to about 280 million dollars a month was accompanied by a 30 per cent increase in the national income.

Differences in the effects of public spending in these two periods are attributable primarily to differences in the volume of individual savings and in the trend of consumer credit. Both the rate of saving and the volume of income payments were higher in 1931 than in 1934, and it seems likely that the volume of savings in 1931 was at least 1.5 billion dollars greater in 1931 than in 1934. Consequently, the volume of stimulating outlays necessary to compensate individual saving was substantially higher in 1931 than in 1934.

The change in the trend of consumer credit appears to have been equally important. Between 1930 and 1931 the rate of liquidation of consumer credit increased from about 50 million dollars to about 100 million dollars a month. Consequently, the stimulating effects of the increase in public deficit expenditures were cut in half by the accelerated liquidation of consumer credit, and half the total volume of public stimulating outlays was absorbed by the leakages attributable to consumer credit contraction. During 1934 and 1935, on the other hand, public deficit spending was supplemented by an expansion of consumer credit which averaged 50 million dollars a month for the two-year period. Thus, while public deficit expenditures were only 80 million a month higher in 1934 than in 1931, the change in trend of consumer credit made a difference of some 230 million dollars a month in their stimulating effects.

It is impossible to compute with any degree of accuracy the amount of public deficit spending which would have been necessary to stabilize the national income in 1931. Even to offset the existing leakages, a substantially higher rate of spending would have been necessary. But, under the prevailing psychological conditions, the first reaction to a further increase in public spending would probably have been an increase in the rate of saving and an acceleration of the liquidation of business inventories and consumer credit. It seems possible that public deficit expenditures would have had to approach half a billion dollars a month before the deflationary effects of savings and of producers' and consumers' disinvestment upon the flow of incomes could have been offset.[1]

The political feasibility of a public spending program of such magnitude in 1931 may well be questioned. It would certainly have met with the general opposition of economists and business leaders. And its administrators would have faced the almost overwhelming task of quickly finding ways of spending tremendous sums without creating additional frictions within the private economy. Consequently, the failure of the Hoover administration to undertake such a program can be readily understood. But, on the basis of the experience of intervening years, it seems clear that

[1] It should be noted, however, that if the public spending program had been initiated much earlier—say in the winter of 1929 or in the spring of 1930—much smaller federal deficit expenditures would have been necessary to stabilize the flow of incomes.

there was no effective alternative to a policy of increasing public expenditures as rapidly as possible until the national income was stabilized. The difficulties would have been great, but the stakes were high. Such a policy might have avoided the terrible social consequences of the accelerating deflation between 1931 and the spring of 1933. If accompanied by a program designed to facilitate international exchange, that is, by reversal of the policy expressed in the Smoot-Hawley Tariff Act, the course of world history might have been changed.

Moreover, a policy of stabilizing the national income, regardless of the immediate cost in terms of public deficit expenditures, would probably have been the least expensive in the long run even from the narrow standpoint of the federal budget. Once the decline in incomes had been terminated, the liquidation of consumer credit would probably have come to a halt rather promptly, which would have permitted the reduction of public spending by 100 million dollars a month or more. The accelerated liquidation of business inventories would undoubtedly have continued for some time, but the very rapidity of the liquidation would soon have restored a normal relationship between inventories and the flow of goods. Relieved of the pressure of declining incomes, it seems probable also that an aggressive interest rate policy might have succeeded in maintaining a positive volume of investment in residential buildings and in new productive equipment.

If the leakages directly attributable to declining incomes—such as contraction of consumer credit, liquidation of business inventories, and failure to reinvest depreciation charges—had been eliminated at the outset, public deficit spending could probably have been reduced rather promptly to the level which actually prevailed in 1932 or below without reducing the national income. As it was, the substantial deficit expenditures of the federal government in 1931 were partially wasted. It is true that they cushioned the deflation of incomes and thereby deferred the collapse of the credit structure. But, failing to halt the decline in incomes, they served primarily to facilitate the process of disinvestment by producers and consumers and they accomplished little in the way of inducing the creation of additional wealth.

In the absence of new industries which offered opportunities for substantial private investment, it seems unlikely that the federal budget could have been balanced without a material reduction in the volume of savings. But with incomes stabilized and the rate of deficit expenditures minimized, the nature of the problem could have been studied, alternative remedies proposed and discussed, and a carefully integrated policy formulated. As it was, reduction of the volume of savings was accomplished by the cruel, costly, and inequitable process of income deflation.

The Public Spending Program of 1934–1935

The public spending program initiated at the close of 1933 faced no such immediate handicaps as that of 1931. The country was ready and willing to follow a new and aggressive leadership into untried fields, and developments in economic theory led an important minority of economists to sanction public spending as a recovery measure. As already noted, the stimulating effects of the deficit expenditures of the Roosevelt administration were enhanced by the reduction of the volume of savings and were supplemented by the accelerating expansion of consumer credit which had begun even before public expenditures were increased.

The difficulties of finding satisfactory solutions for the problem of recurrent budget deficits appear, however, to have increased rather than diminished between 1931 and the latter part of 1933. The intervening deflation of incomes had reduced the rate of output far below potential productive capacities and there was little hope of inducing a positive volume of producers' investment at the prevailing level of incomes. Consequently, public spending policy was directed toward the expansion rather than toward the stabilization of incomes. There was no opportunity, under these conditions, to test the extent of the maladjustment between savings and private investment. The revival of producers' investment was long delayed and the continuing expansion of incomes appeared to be as dependent upon public spending at the close of 1935 as at the close of 1933. But throughout this period pump-priming enthusiasts continued to anticipate prompt revival of a satisfactory volume of producers' investment as the result of public spending, while some skeptics insisted that a rapid rise of private investment would follow the balancing of the federal budget.

The public spending program was nevertheless accompanied by policies designed to increase consumption and to reduce savings. Tax policies were directed toward the restriction of business savings and the reduction of incomes which permitted excessive savings, while labor and relief policies were directed toward increasing the purchasing power of low-income classes. These policies were explained largely in terms of social rather than economic objectives, and they were adopted over the objections of business men and others who insisted that recovery should be given precedence over social reform.

The validity of the assumption of chronic oversaving could not be conclusively established. But it seems probable that the program would have had far more favorable results if its economic objectives had been clarified and if all policies had been made fully consistent with these objectives. Too many of the additional taxes imposed by federal, state, and local governments during the recovery period tended to restrict consumption and, therefore, to require further compensating deficit expenditures. And business men, noting that increasing incomes were accompanied by increasing deficits in spite of increasing taxes, feared that such a recovery could not last.

The Roosevelt administration appears to have been aware of the usefulness of consumer credit expansion as a stimulating force. Title I of the National Housing Act of 1934 was obviously designed to induce consumers to use their credit for repair and modernization of homes, and it seems likely that the stimulating effects of the activities of the Electric Home and Farm Authority were also recognized. But the significance of the expansion of consumer credit through private agencies and the influence of federal policies upon the rate of expansion appears generally to have been overlooked or at least underestimated.

Although consumer credit expansion contributed materially to the increase in the national income during the recovery period and the change in the trend of consumer credit played an even more vital role than the change in the rate of public deficit spending in the reversal of the trend of incomes, it does not follow that expansion of consumer credit could have been relied upon alone to produce an increase in the national income. Consumer credit expansion was both a cause and a result of the expansion of incomes. So long as producers' investment remained negative, the federal government budget could not have been balanced without inducing a decline in the national income, which in turn would have terminated the expansion of consumer credit. Neverthless, apart from federal expenditures, consumer credit expansion represented by far the most powerful stimulating force in the economy during the early part of the recovery period, and it might have been put to better use.

The revival of producers' investment would probably have occurred earlier, regardless of the current state of the federal budget, if it could have been demonstrated that recovery could continue in spite of a decline in federal deficit spending. By the beginning of 1935 it seems likely that the expansion of consumer credit had gained sufficient momentum to accomplish the feat of sustaining the expansion of incomes in spite of a modest decline in public deficit expenditures.

The use-values of durable goods in the hands of consumers had depreciated substantially during the depression of 1930–1933, and instalment credit was still at a low level at the close of 1934. The liberal credit terms available to consumers for purchases of durable household goods through the Electric Home and Farm Authority and on contracts insured under Title I of the National Housing Act were already compelling the liberalization of financing terms for many types of durable goods. More rapid expansion of consumer credit might have been stimulated by inducing major automobile finance companies to reduce their down-payment requirements and to extend the period of repayment. If but one of the major companies had been willing to do so, its competitors would have been compelled to follow.

Public Spending in 1936 and 1937

When the long-awaited recovery of producers' investment began in the spring of 1936 as the result of rapidly diminishing reserve productive capacities, federal income-increasing expenditures could have been reduced substantially without decreasing the national income. The reduction would probably have had to take place gradually. Uncompleted public works projects could not well have been jettisoned, and the social objectives of other types of expenditures could not have been sacrificed to economic objectives. But instead of a decline, there was actually a tremendous expansion of public deficit spending in the third quarter of 1936 by virtue of the payment of the veterans' bonus.

Whatever the merits of the bonus payment from the standpoint of the public obligation to veterans of the World War, the timing of its payment was certainly a disastrous mistake. The primary effect of the bonus payment was a sudden and substantial increase in the flow of income funds and its secondary effects were sustained and supplemented by the accelerating expansion of consumer credit and by the rapid rise of producers' investment. It was inherent in the very nature of the bonus payment that veterans' expenditures would be expressed primarily in purchases of consumers' durable goods. The employes' bonus payments of the Christmas period and the unprecedentedly large dividend distributions of the year-end, each of which represented to some extent the bunching of secondary effects of the bonus expenditures, also induced a disproportionate increase in expenditures for consumers' durable goods.

The rapid expansion of consumer credit between the middle of 1936 and the middle of 1937 tended not only to supplement the stimulating effects of the bonus payment, but also to increase the distortion of consumer demand initiated by the bonus payments. The progressive liberalization of instalment terms, particularly in the field of automobile financing, tended further to concentrate consumers' expenditures upon durable goods. Lengthening periods of repayment and decreasing down-payments brought high-priced durable goods within reach of progressively lower-income classes and tended to offset the effects of increasing prices, which might otherwise have shifted consumer demand into other channels and relieved the heavy industries of their overload.

Thus, consumers competed with business enterprises for the use of the productive capacities of the heavy industries at a time when it was essential that these capacities be available on favorable terms for the expansion of productive plant and equipment. The resulting bottlenecks and price distortions ended the expansion of producers' investment and the expansion of incomes. If it had been possible in June, 1936, to prevent further expansion of consumers' capital financing, the formation of bottlenecks might have been avoided. Expansion of incomes would have been less rapid; a larger part of consumers' expenditures would have been shifted to industries which were underemployed; and a reserve demand for consumers' durable goods would have been created.

The Public Spending Program of 1938

Public spending was the only effective weapon to combat the accelerating decline in incomes which began in the autumn of 1937. But federal deficit expenditures were further reduced during the succeeding months, thus contributing to the rapidity of the deflation. The renewal of public spending, like its termination, was too long delayed; and by the time a new public spending program was announced, incomes and production had lost a substantial part of their gain during the recovery period.

The initial effects of the public spending program of 1938 differed materially from those of the spending program of 1933. The increase in public deficit expenditures at the close of 1933 was accompanied by an increase in the rate of expansion of consumer credit, while producers' disinvestment continued without abatement. In the summer of 1938, on the other hand, expansion of public deficit spending was followed promptly by an increase in producers' investment, while consumer credit continued its liquidation.[1] These differences are to be explained in part by differences in the condition of industrial equipment; in part by differences in the level of consumer credit, in the period of repayment of instalment contracts, and in the state of consumers' inventories of durable goods; and in part by differences in the psychological reactions of consumers and producers to these spending programs.

The latter part of the recovery period had provided convincing evidence of the powerful stimulating effects of public deficit spending, and long before the new public spending program was announced many business men were urging renewed spending. With the efficiency of productive equipment, as measured by the most

[1] On the basis of inadequate samples it seems probable that liquidation of consumer credit as a whole continued into the spring of 1939, although the rate of liquidation was progressively reduced after the autumn of 1938. By June of 1939 a gradual expansion of consumer credit began on a broad front. The expansion appears to have accelerated through September, 1939, the latest month for which data are available to the writer.

advanced technology, at a low level and with the experience of capacity production fresh in the minds of many industrial executives, the stimulating effects of the new spending program were anticipated and some plans for plant expansion were put into execution even before these effects began to be felt. The consumer, on the other hand, was far better equipped with capital goods in 1938 than in 1933; and the unpaid balances on these goods were enormously greater in the summer of 1938 than in the summer of 1933. Moreover, fiscal policies of the federal government had failed to provide the security which income recipients wanted more than anything else; and the confidence of consumers, shaken by the most rapid deflation in the history of the country, could not be restored promptly by a renewal of public spending.

It seems likely that business men underestimated the stimulating effects of public deficit spending during the early part of the recovery of 1934–1937, principally because the spending program of 1931 had failed to stem the tide of deflation. It seems equally probable that business men overestimated the stimulating effects of public spending under conditions existing in 1938, principally because the contribution of consumer credit expansion to the rise of incomes during the preceding recovery period had been generally overlooked. During that period consumer credit expansion had contributed on the average some 75 million dollars a month to the expansion of the income stream; while during the first ten months of 1938, consumer credit contraction withdrew funds from the income circulation at an average rate approaching 150 million dollars a month. If there had been no change in the volume of individual savings or in the volume of producers' stimulating outlays, the rate of public spending in 1938 would have had to exceed that of the recovery period by 225 million dollars a month in order to offset the change in the movement of consumer credit.

The Control of Consumer Credit

The disruptive tendencies of consumer credit have increased with the increasing amplitude of its fluctuations. It seems likely, also, that the amplitude of its movements will continue to increase in the future. The part played by consumers' durable goods in the total volume of production has grown steadily during the past several decades, and with air-conditioning and television among the industries which may be expected to expand in the immediate future it seems probable that this growth will continue. The influence of consumers' capital financing, which contributes most substantially to the cyclical movements of consumer credit, will increase as the importance of consumers' durable goods increases. On the other hand, the influence of the counter-cyclical movements of consumers' deficit financing upon the aggregate movement of consumer credit will probably continue to decline by virtue of the gradual disappearance of merchants willing to carry customers through periods of unemployment or inadequate earnings, the improvement of services for determining the credit worth of consumers, further growth of large-scale merchandising, and increasing reliance upon the federal government for relief of the unemployed.

Here, indeed, is a large and increasingly important area of financial activity which tends almost inevitably to accelerate the boom and to deepen and to prolong the depression. Not only is it practically beyond the control of the central banking authorities, but it is also capable under certain conditions of rendering useless the already weakened instruments of central banking policy and of limiting substantially the effectiveness of public spending as a weapon for combating the cumulative forces of deflation. The desirability of controlling consumer credit fluctuations in the interest of stability will scarcely be doubted. It remains to be shown how such a control might be exercised.

Devices designed for the control of producers' investment are clearly ineffectual for the control of consumer credit. But a new set of tools of control lies within ready reach. The most volatile segment of consumer credit is that which arises out of instalment sales of consumers' durable goods. For these transactions the requirements of creditors with respect to down-payments and periods of amortization exert a powerful influence upon credit volume, and it seems probable that manipulation of these terms would provide the means of controlling the violent fluctuations of consumers' capital financing.

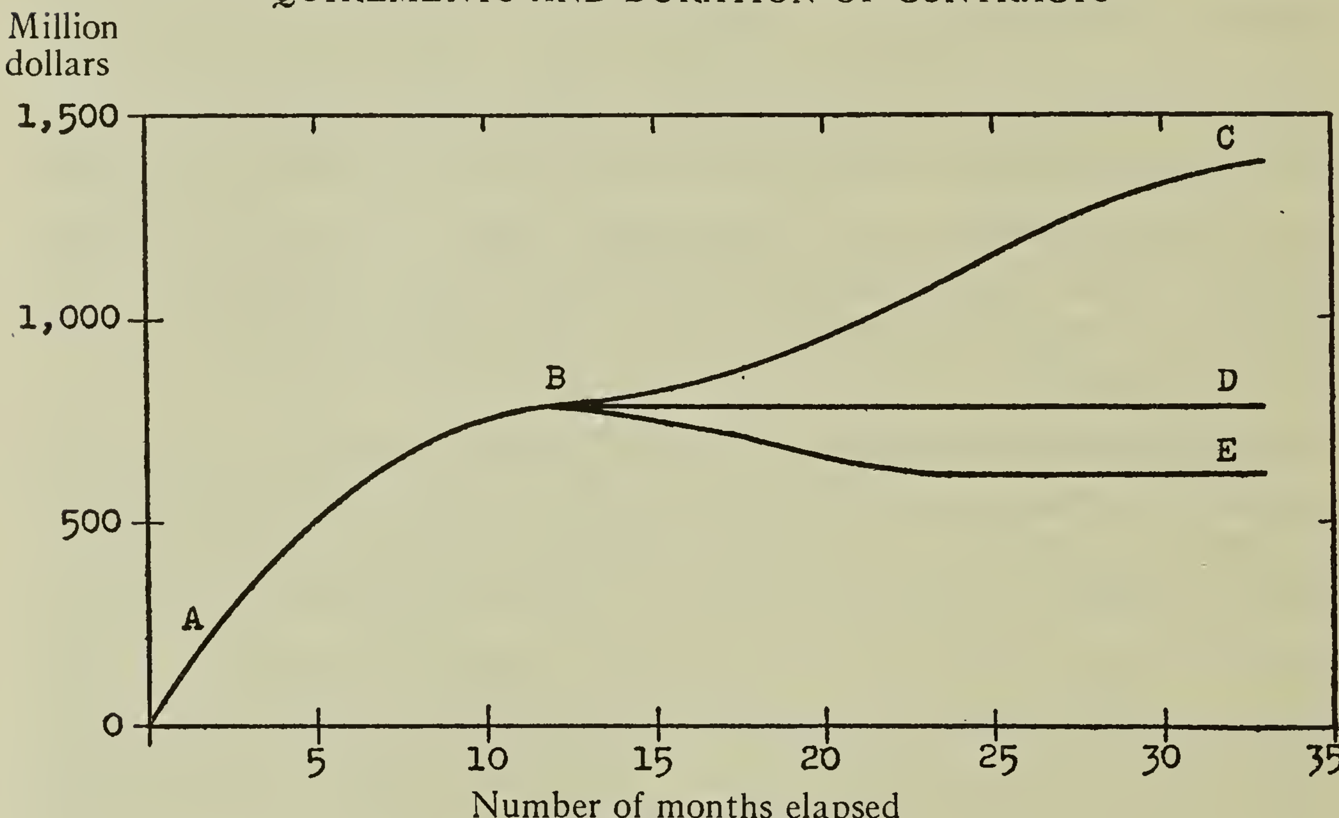
The strategic importance of down-payments and amortization periods lies in their influence upon the amount of credit involved in individual instalment transactions and upon the total volume of instalment sales of consumers' durable goods. Let us first examine the effects of changes in down-payments and amortization periods upon the amount of consumer credit which arises out of a given volume of instalment sales, and then indicate their effects upon the volume of sales.

For the sake of simplicity, we shall confine the discussion to instalment sales of automobiles. Suppose that 200,000 cars a month were sold for an average credit price of $900 on contracts calling for a down-payment of $300 and twelve monthly payments of $50 each. If all payments were made strictly according to contract, the outstanding amount of automobile instalment credit at the end of twelve months would be 780 million dollars, and this sum would remain stable thereafter so long as there were no change in the volume of instalment sales or credit terms. But suppose the credit terms were changed. What changes would occur in the outstanding amount of consumer credit if down-payments were reduced to $260 and unpaid balances were liquidated over a period of twenty months? And what changes would occur if down-payments were increased to $350 and unpaid balances were liquidated over a period of ten months?

The effects of these changes in credit terms upon the outstanding amount of consumer credit are illustrated graphically in Chart 5. It will be noted that even if there were no change in the total volume of credit sales, changes in credit terms would exert a powerful influence upon the trend of consumers' capital financing. Under the liberalized terms automobile credit would expand by 72 per cent during the succeeding twenty months. Under the restricted credit terms automobile credits would contract by 22 per cent during the succeeding twelve months.

The most substantial effects of changes in credit terms, however, are likely to result from their influence upon the volume of sales of consumers' durable goods. It is characteristic of the distribution of incomes in the United States that the number of families in each progressively lower income class increases rapidly until very low incomes are reached. In 1935–1936 the largest number of families fell in the $750 to $1,000 annual income class. More than half of all family incomes were between $250 and $1,250 a year, and 92 per cent were less than $3,000 a year.[1] Families whose incomes are less than $750 a year are generally excluded, by virtue of their poverty, from the market for the principal types of new consumers' durable goods. Consequently, the potential market takes the form of a pyramid, with the millions of families that receive incomes ranging from $750 to $1,250 at the base, with the progressively smaller numbers receiving progressively higher incomes forming the middle section, and with the few families receiving very large incomes at the apex.

CHART 5.—CHANGES IN OUTSTANDING AMOUNTS OF AUTOMOBILE CREDIT INDUCED BY CHANGES IN DOWN-PAYMENT REQUIREMENTS AND DURATION OF CONTRACTS



Line ABD: Down-payment 33⅓ per cent, 12 monthly payments.
Line ABC: Terms changed at point B to down-payment of 28.9 per cent and 20 monthly payments.
Line ABE: Terms changed at point B to down-payment of 38.9 per cent and 10 monthly payments.

For the upper section of this pyramid, changes in credit terms are likely to have comparatively little influence upon the volume of sales of consumers' durable goods. Although families whose incomes are substantial frequently use instalment terms, their budg-

[1] Consumer Incomes in the United States. National Resources Committee, Government Printing Office, Washington, 1938, Table 3, p. 18.

ets are usually readily adaptable to changes in down-payments and amortization periods. But for a considerable part of the far larger number of potential buyers in the lower section of the pyramid, access to the market at any given time is determined by the credit terms upon which durable goods may be purchased. There are, of course, cash buyers in the lower as well as in the upper income levels, and in both income groups there are families with substantial cash reserves. But particularly in the lower section of the pyramid cash reserves are earmarked for specific emergencies. Under the pay-as-you-use principle, down-payments and amortization payments represent consumptive expenditures, and, as such, for most families, they must be met out of current income. Consequently, a liberalization of credit terms tends to reduce, and a restriction of credit terms to increase, the current "cost" of durable goods in relation to income margins available for such purchases.

It is desirable that the agency selected to control the terms of credit sales of consumers' durable goods should have extensive facilities for collection and interpretation of statistical data concerning business conditions and consumer credit movements, that the continuity of its policies should not be broken by changes in political administrations, and that it should have some measure of freedom from pressures of partisan politics. The Federal Reserve System would seem to meet these standards more fully than other agencies. Moreover, it is through the banking system that control of the terms of instalment sales could be most readily exercised. Banks are the principal ultimate source of credit for financing purchases of automobiles, refrigerators, automatic furnaces, pianos, and washing machines. It should be possible, with very little modification of existing facilities for bank supervision, to limit the portfolios of banks to consumer credit paper which came within the down-payment and amortization standards fixed by the Federal Reserve System.

The range within which down-payments and amortization periods could be controlled through the banking system is limited, on one hand, by fears on the part of credit-granting agencies of the increased losses that would result from overly liberal credit terms, and, on the other hand, by the difficulty of enforcing too severe a restriction of credit terms. The effective range would undoubtedly be widened if representatives of consumer financing agencies and of manufacturers of consumers' durable goods participated in the formulation of policies with respect to control of credit terms. Both groups would have much to gain from the stabilization of demand for their services and products, and their trade associations could be valuable allies of the central banking authority in enforcing restrictions of terms and in encouraging liberalization of terms when these restrictions were removed.

The primary objective of the control of consumer credit terms should be the maintenance of some degree of stability in the outstanding amount of consumer credit. If this were accomplished, the effectiveness of the automatic stabilizing forces would be increased, and the amount of public spending necessary to overcome cyclical deflations would be reduced.

Secondarily, the manipulation of credit terms might be directed toward more general economic objectives. For instance, the expansion of consumer credit might be encouraged during the early stages of a recovery, when the volume of producers' investment had not yet reached substantial proportions, and curtailed thereafter. Provided that instalment terms had been sufficiently restricted during a period when the volume of producers' investment was large, it seems possible that recession could be prevented by prompt liberalization of terms at the first sign of exhaustion of demand for producers' capital goods.

Changes in instalment credit terms would have certain distinct advantages over the presently available weapons for maintaining economic stability. As compared with public spending, the control of instalment terms represents a highly flexible device. Terms could be modified very promptly in response to changes in business conditions, thereby avoiding the lags inherent in public spending programs requiring legislative appropriations. As compared with monetary controls available to central banks, changes in instalment terms would exert a more prompt, more direct, and more readily measurable check upon demand, and the dangers of inducing a substantial deflation would be minimized.

It would be foolhardy, however, to rely solely or even primarily upon changes in instalment terms as the means of maintaining economic stability. The effectiveness of such changes, even for the purpose of stabilizing the outstanding amount of consumer credit, depends upon some degree of stability of incomes. If incomes were declining rapidly, liberalization of instalment terms could not be expected to prevent a decline in purchases of consumers' durable goods. Part of the substantial number of persons whose incomes are affected relatively little by cyclical movements—for instance, public employes, employes of public utilities, and annuity recipients—might, it is true, be induced to buy their durable goods counter-cyclically. But the great majority of families whose incomes and security were affected by the cyclical decline would undoubtedly reduce their purchases of durable goods regardless of the liberalization of instalment terms. Consequently, under conditions of a rapidly declining national income, liberalization of instalment terms could cushion but probably could not prevent liquidation of consumers' capital financing, while the movement of income-period financing would be affected only in so far as the slower rate of liquidation of consumers' capital financing moderated the decline in incomes that would otherwise have occurred.

Manipulation of instalment credit terms is, therefore, a homeopathic remedy to be administered while the disease is incipient. Once a decline of incomes has gained momentum, public spending appears to be the only antidote capable of checking the virus of deflation. Through control of credit terms the amount of public spending necessary to terminate a rapid decline of incomes could be reduced, and the difficulties of timing could be partially offset. But such a control would necessarily be a supplement to, rather than a substitute for, stimulating government expenditures under conditions of rapidly declining national income.

The control of instalment credit terms is, of course, no remedy at all for a chronic inadequacy of investment with respect to savings. The people of the United States appear to save at the rate of some seven or eight billion dollars a year when incomes reach the levels attained in 1929 and 1937. Under conditions of a declining rate of population growth, a hazardous outlook for foreign investments, and a lack of technical developments which give promise of a large demand for private capital, it is difficult to see how such enormous sums can be absorbed year by year in private investment. This problem and its solution, however, lie beyond the field of the present study.

Prevention of deflation seems likely to represent in the long run a far more difficult and persistent problem for national economic policy than prevention of inflation. Under most circumstances it seems probable that inflationary tendencies could be readily checked by vigorous use of the weapons available to the central banking authorities or by reduction of federal government expenditures in relation to tax receipts, and the principal value of restricting instalment credit terms would lie in limiting the extent to which these more powerful and more clumsy restraints need be applied and in creating a reserve demand for consumers' durable goods that could be called upon when needed.

If, however, this country should become involved in a major war, the difficulties of controlling inflation would increase enormously. The successful prosecution of such a war would demand a tremendous expansion of federal government expenditures with which tax receipts could scarcely be expected to keep pace, even though the rate of taxation should be increased substantially. Military necessity would certainly take precedence over the maintenance of economic stability, and it would be impossible to create federal budgetary surpluses in the interest of checking inflationary tendencies. Similarly, the necessity for financing federal budget deficits on favorable terms would probably make impracticable the application of credit restrictions by central banks. Unless a large proportion of the heads of American families were inducted into the uniformed services or unless a considerable section of the United States were threatened with attack, the increase in money incomes that would result from federal military expenditures financed by borrowing and from private investments in war-material industries would undoubtedly induce an expansion of consumer credit. Because of the more widespread use and more general availability of consumer credit, the expansion would be far more substantial than the moderate expansion that occurred during the 1917–1918 period.

Under such circumstances control of consumer credit terms would be exceedingly important as a means of preventing consumers from contributing an additional inflationary force and of diverting productive resources to military use. It is true that this diversion could also be accomplished by social pressures for the sale of government bonds and by controls imposed by such agencies as the War Industries Board. But the effectiveness of these latter devices would be greatly enhanced by restricting the conditions upon which capital funds were available to consumers.

PART III

RECEIVABLES OF CONSUMER CREDIT AGENCIES

CHAPTER X

RECEIVABLES OF RETAIL MERCHANTS

THE four chapters which constitute Part III of this volume will be devoted to a description of the sources of data concerning the quantitative aspects of consumer credit and to an exposition of the methods by which estimates of the outstanding amounts of various types of consumer credit were developed. We have previously identified four general classes of agencies which extend credit to the consumer: retail merchants, service creditors, intermediary financing agencies, and cash-lending agencies. In the present chapter we shall describe the development of estimates of receivables for various types of retail merchants, and in the three succeeding chapters we shall describe the development of the series of estimates for service creditors, intermediary financing agencies, and cash-lending agencies.

The summary estimates cover a fourteen-year period from the close of 1923 to the close of 1937. For several of the specialized cash-lending agencies, however, it was possible to make fairly reliable estimates of loan balances for earlier years. The credit union and the industrial banking company series go back to the close of 1910 and the series for regulated small loan companies to 1912. Since the rapid expansion of consumer credit during the 1920's began in 1922, it would have been exceedingly useful to carry our summary estimates back at least to the close of 1921 and it was planned originally to do so. But the difficulties of securing reliable data for the earlier years proved to be so great that the original plan was discarded.

The estimates described in Part III have been limited to year-end receivables. Monthly figures, obtained from small samples of various types of consumer credit agencies for the period between the beginning of 1929 and the close of 1938, have been used as the basis for the comments upon intra-year movements in the preceding chapters. In co-operation with the National Bureau of Economic Research and the United States Department of Commerce, these monthly series are being expanded and improved and it is anticipated that monthly series representing the joint work of these three agencies will be published later in a special bulletin of the National Bureau of Economic Research.

General Procedure for Developing Estimates of Merchants' Receivables

From a quantitative standpoint retail merchants represent the most important of the four general classes of consumer credit agencies. At the close of 1923 they accounted for about two-thirds of the outstanding amount of consumer credit. Since then the receivables of the three other classes of creditors, particularly the intermediary financing agencies, have increased disproportionately. But throughout the period covered by our estimates consumers owed substantially larger sums to retail merchants than to any of the three other classes of creditors, and at the close of 1937 retail merchants still accounted for about 45 per cent of the total amount of consumer credit.

Throughout the period from 1923 to 1937 more than a million stores, on the average, were engaged in the types of retailing which are covered by our estimates of merchants' receivables. Owing to multiple-unit stores the number of enterprises engaged at any one time in these types of trade was some 15 per cent smaller. But because the average business life of retail enterprises was exceedingly short, the total number of enterprises represented in our estimates for the fourteen-year period probably approaches three million.

The validity of our estimates of the outstanding amounts of consumer credit as a whole clearly depends in very large degree upon the reliability of our figures for the receivables of retail merchants. But we have discovered no way of obtaining fully reliable figures apart from a census by an agency empowered to compel full and accurate reporting. In the absence of summary balance sheet data for the tremendous number of enterprises which estimates of merchants' receivables must cover, it has been necessary to rely upon relatively small samples.

For most types of retailing there are wide differences in the credit policies of individual stores, which are induced by a large number of variables—for example, differences in credit-granting techniques; the size, location, and affiliation of the store; the credit or price policies of its competitors; the financial structure of the enterprise, and its access to credit from banks, wholesalers, and manufacturers; the availability of collection weapons and of facilities for determining the responsibility of customers; the occupations and incomes of customers, and the intervals at which incomes are received; and the psychological attitude of the community toward family indebtedness. It has been impossible to obtain a random selection of enterprises. The use of small non-random samples as the basis for estimates is hazardous and a substantial degree of error is unavoidable.

In general, our procedure has been to construct estimates of the annual volume of retail sales for various types of merchants who extend credit to consumers; to obtain figures for annual sales and year-end receivables for sample enterprises of each type; to compute from these samples standard ratios of receivables at the close of each year to sales made during the year for each type of merchant, and to apply these standard ratios to the total volume of sales for each type of merchant.

Classification of Retail Merchants

In order to facilitate use of the data provided by the various retail censuses in constructing our estimates, we have based our classification of retail merchants upon the classification given in the United States Census of Distribution for 1929. But our classification neither includes all the types of retailing covered by that census nor corresponds precisely with census groupings. In some instances, our types of retail merchants are identical with major census groups; in other instances, they are identical with census sub-classes; and in still other instances, they represent combinations of census sub-classes.

It has seemed desirable to exclude entirely from consideration enterprises specializing in the sale of goods which are used generally for business, industrial, or professional purposes and enterprises engaged in types of trade in which it is the general practice to sell only for cash. The census sub-classes excluded for these reasons are as follows:

Census Groups	Census Sub-Classes	Reasons for Omission
General merchandise	Variety, 5-and-10, and to-a-dollar stores	Predominantly a cash business
Lumber and building	All sub-classes	Most of the credit created is not consumer credit
Restaurants and eating places	All sub-classes	Predominantly a cash business
Other retail stores	Cigar stores	Predominantly a cash business
	Farmers' supply dealers	Most of the credit created is not consumer credit
	Hardware and farm implement stores	Most of the credit created is not consumer credit
	News dealers	Predominantly a cash business
	Office, school, and store supply and equipment dealers	Most of the credit created is not consumer credit
	Scientific and medical instruments and supply dealers	Most of the credit created is not consumer credit
	Stationers and printers	Most of the credit created is not consumer credit
	Miscellaneous classifications (combined)	Most of the credit created is not consumer credit
Second-hand stores		Predominantly a cash business

Some consumer credit is eliminated by excluding these types of retailing. Enterprises which deal in goods used generally for business, industrial, or professional purposes generally make many credit sales to consumers. For instance, typewriters, safes, weight-reducing machines, and sun-lamps are frequently purchased and used as consumers' goods; lumber and building materials may be sold to home-owners for repairs or improvements as well as to building contractors and to landlords; and farm implement and supply dealers frequently sell household equipment and supplies. Similarly, some consumer credit-granting occurs among the enterprises which we have treated as cash stores. Many news dealers do business almost entirely on credit; many restaurants, particularly in clubs, extend credit on a large scale; and even cigar stores and limited price stores frequently maintain charge accounts for certain customers.

These types of retailing were excluded because it was impracticable to segregate consumer credit from producer credit among the receivables of merchants dealing primarily in producers' goods, and because it was hazardous to rely upon small non-random samples for enterprises in which credit-granting was infrequent. Since the excluded classes of retailing accounted for 18 per cent of the total volume of retail sales in 1929, their consumer receivables were probably not negligible even though such accounts were infrequent and payment periods short. But the amount of consumer credit excluded by these omissions was undoubtedly small as compared with the receivables of retail merchants as a whole. It should be remembered, also, that there are many business accounts among the receivables of the retail merchants covered by our estimates, and it seems likely that the exclusions tend roughly to offset the producer credit content of our receivable estimates.

Differences between our classification and the census groupings were induced by several considerations. So far as possible we undertook to limit our types of merchants to groups which had some degree of homogeneity, and this could be accomplished best by following the census sub-classes. But the census classification was based generally upon an analysis of sales by commodities and, lacking similar information for our samples, it was impossible in many instances to allocate sample enterprises accurately to census sub-classes. Where sample enterprises could be accurately allocated, samples for each sub-class were frequently too small to have any degree of reliability. The necessity of using major census groupings for analysis of sample data has raised many problems, the most important of which will be discussed at various points in this chapter.

The following tabulation indicates the relation between the classification used in the construction of estimates of receivables and the classification established in the 1929 Census of Distribution.

Our Classification	Relation to Census Groupings
Apparel stores[1]	Includes all sub-classes in the apparel group
Automotive dealers	Includes all sub-classes in the automotive group
Country general stores	Includes all sub-classes in the census group "general stores"
Drug stores	Same as census sub-class
Food stores	Includes all the sub-classes in the food group
Fuel and ice dealers	Same as census sub-class "coal and wood-yards—ice dealers"
Furniture and household equipment stores[1]	Includes all sub-classes in the furniture and household group
General merchandise stores[1]	Includes census sub-classes for department stores, dry-goods stores, and general merchandise stores
Hardware stores	Same as census sub-class
Jewelry stores	Same as census sub-class
Miscellaneous stores	Includes census sub-classes for book stores; florists; gifts—novelties—toys—cameras; luggage and leather goods stores; music stores (without radios); opticians and optometrists; sporting goods stores; monument and tombstone works

Development of Estimates of Retail Sales

Official figures for the volume of retail sales by types of stores became available for the first time in 1929, when the first Federal Census of Distribution was taken. Subsequent retail censuses taken in 1933 and 1935 provided similar figures for these years. On the basis of data from these three censuses and sales figures reported currently by a large number of retailers the Marketing Research Division of the United States Department of Commerce has constructed and released periodically estimates of the annual volume of sales by major retailing groups for the period since 1929. The federal census figures themselves have shortcomings that cannot be satisfactorily corrected, and these limitations are inherent in the Department of Commerce estimates.[2] Nevertheless, these esti-

[1] These types of merchants have been subdivided for purposes of computing receivable estimates.

[2] For example, the allocations of enterprises to census classes were not fully consistent in the various censuses; wholesale and retail sales figures were not mutually exclusive because the sales of enterprises engaged both in wholesale and in

mates were the best available and we have used them wherever possible as the basis for our sales estimates for the period from 1929 to 1937.

For drug and jewelry stores we have used Department of Commerce figures without modification. For apparel stores and for furniture and household equipment stores our total sales figures are identical with the Department of Commerce figures, but we have constructed independent estimates for certain subdivisions of these groups. Our sales figures for automotive dealers represent the sum of the Department of Commerce estimates for the automotive group and for filling stations; and our figures for general merchandise stores likewise represent the sum of the Department of Commerce estimates for department stores, dry-goods and general merchandise stores, and catalogue mail-order sales of general merchandise stores.

Our combined sales figures for food stores and for country general stores are based upon the sum of the Department of Commerce estimates for the food group and for farmers' supply and country general stores. Because the Department of Commerce combined these two latter types of stores in making sales estimates, it was necessary for us to make separate estimates for farmers' supply stores and to exclude these from the Department of Commerce's totals for farmers' supply and country general stores. The resulting estimates of sales for country general stores departed so materially from various indices of rural sales of general merchandise that we adjusted these estimates and absorbed the adjustments in the sales of the food group.[1]

For fuel and ice dealers and for miscellaneous stores, we were obliged to construct independent sales estimates. Our estimates for fuel and ice dealers represent interpolations and extrapolations of census figures based on sales of sample enterprises and other data.

retail trade were allocated to one or another of the divisions of the census; retail sales by manufacturers were generally excluded; and, in addition, doubts have been expressed concerning the comprehensiveness of coverage and the accuracy of reporting for certain types of trade.

[1] The difficulty of estimating sales for food stores and for country general stores arises from the fact that in the 1935 Retail Census certain stores previously classified as general stores were shifted to the food group, without indication of the extent to which previous census figures should be adjusted to make them comparable with the 1935 figures.

Our sales estimates for miscellaneous stores represent extrapolations of figures reported in the 1929 Census of Distribution in accordance with the subsequent movement of total retail sales.

For the period before 1929 we have found no reliable estimates of the volume of retail sales and we have been unable to induce statisticians working in this field to develop such estimates. The available indices of retail sales are generally limited to a few types of merchandising and they are strongly biased by the predominance of large progressive stores. The most helpful data that we have been able to discover are the estimates of consumers' expenditures for various commodities and services given in the Appendix of William H. Lough's High-Level Consumption[1] and the estimates of the flow of various commodities and services given in Simon Kuznets' Commodity Flow and Capital Formation.[2] For some types of merchants, sales estimates were based upon the sum of the Lough or Kuznets figures for specific commodities. For other types, it was necessary to combine commodity estimates after weighting them in accordance with the distribution of sales by commodities reported in the 1929 Census of Distribution. For still other types, we relied heavily upon sales figures supplied by trade associations or upon the trend of sales of stores in the Massachusetts and Wisconsin samples.

Estimates of sales for the period before 1929 were necessary to our calculations of merchants' receivables for these years. But these sales estimates are unavoidably crude and they should be used with caution. They represent no original research and they are based upon generally available data, the shortcomings of which have prevented similar estimates from being made by specialists in the field of retail trade. The movements of our sales figures as a whole check closely with Professor Kuznets' figures for consumers' outlays for durable, non-durable, and perishable goods.[3] But such a check fails to confirm the accuracy of our series for various types of stores.

[1] Lough, William H., High-Level Consumption. McGraw-Hill Book Co., New York, 1935.

[2] National Bureau of Economic Research, New York, 1938.

[3] National Income and Capital Formation, 1919–1935, Appendix Table 8, p. 85.

Sources and Characteristics of Sample Data

The sample data for computing standard ratios of receivables to sales have been drawn from several sources. We have made use of the summary figures published by the United States Department of Commerce in its periodic Retail Credit Surveys and the figures for sales, credit sales, and receivables for various types of retail stores in 1933 which were solicited jointly by the United States Department of Commerce and by the Department of Consumer Credit Studies of the Russell Sage Foundation.[1] For some types of retailing we have obtained figures for sample enterprises from published annual reports, from credit information services, from the credit files of manufacturers, and from the enterprises themselves. For our 1937 estimates we have relied heavily upon the study of retail sales and receivables in 1935, 1936, and 1937 made by Dun and Bradstreet, Inc.[2] But, for our series as a whole, we have relied primarily upon figures transcribed from state corporate income tax records of Massachusetts and Wisconsin.

The data obtained from the Massachusetts income tax records include figures for sales, accounts receivable, notes receivable, and charge-offs for bad debts for 1,123 domestic corporations which were continuously engaged in certain types of retail trade during the period from 1927 to 1935. Similar figures for 1925, 1926, and 1936 were transcribed for corporations in this sample that reported for these years.[3] The Wisconsin income tax data include figures for sales, notes and accounts receivable, and notes payable for 810 corporate stores engaged continuously in certain types of retail trade between 1927 and 1936, and for 850 similar corporations situated in five counties, which entered or went out of business during this period. For both of these Wisconsin

[1] These data were published by the Department of Commerce in a monograph entitled Consumer Debt Study, by Herman T. LaCrosse, U. S. Department of Commerce, Washington, 1935.

[2] A Preliminary Report of the Survey of Business Trends, 1935–1937, *in* Dun's Review, March, 1938, pp. 23–29; The Use of Commercial and Consumer Credit, *in* Dun's Review, May, 1938, pp. 18–28.

[3] For assistance in obtaining transcripts of the Massachusetts tax records, we are indebted to Commissioner Henry F. Long, without whose sympathetic co-operation the use of these records would have been impossible.

samples figures were obtained where possible for the years 1923 to 1926.[1]

Except for types of retailing that were excluded from the area of this study and for the reports of a few corporations that were omitted because the nature of the business could not be readily identified, or because they covered operations outside the two states, or for other specific reasons, the Massachusetts and Wisconsin samples include all corporations doing business within these states which met the conditions enumerated. We shall refer to corporations that were engaged continuously in business during the period from 1927 to 1935 in Massachusetts and during the period from 1927 to 1936 in Wisconsin as the "stable corporation" samples, and to the corporations that came into and went out of business in five Wisconsin counties as the "unstable corporation" sample.

By relying primarily upon samples taken from income tax records, we have sought to avoid the biases inherent in data transcribed from published reports or obtained by voluntary reporting. In general, published reports are available only for large corporations whose securities are widely held. For types of retail trade in which large enterprises are predominant, notably department stores, samples based upon published reports have some degree of validity. But for most types of retailing, the credit policies of such enterprises are unlikely to be typical. Voluntary reporting tends to introduce somewhat similar biases. Questionnaires are answered most readily by large, progressive enterprises which have good accounting records.

The use of income tax records, however, has not provided a fully satisfactory solution to the problem of obtaining sales and receivable figures for an adequate sample. In the first place, the enterprises for which sales and receivable figures were transcribed from the tax records do not represent random samples. These income tax samples are limited to two geographic areas;[2] they include only

[1] Transcripts of the Wisconsin records, which are open to public inspection, were made by Mr. and Mrs. Bristol Goodman under the direction of Harold M. Groves of the University of Wisconsin. We acknowledge with gratitude the co-operation of Professor Groves, the painstaking work of Mr. and Mrs. Goodman, and the many courtesies extended by the Wisconsin Tax Commission to facilitate the transcription.

[2] Our income tax samples were drawn from Massachusetts and Wisconsin, not because these states were considered to be representative of the country as a whole, but because they were the only ones for which tax records covering a satisfactory

corporations, while the great majority of enterprises engaged in retail trade are unincorporated; and except for the relatively small sample of unstable corporations for five counties in Wisconsin, they are restricted to enterprises that remained in business for a number of years. In the second place, the data given in the tax reports had certain technical shortcomings. Receivable ratios could not be determined for many of the large national chain store enterprises. Customer receivables could not be satisfactorily isolated from other receivable items, particularly in the Wisconsin sample. Some reports were for periods other than the calendar year. And it was frequently impossible to allocate sample enterprises to census sub-classes.

We have sought to minimize the weaknesses of the income tax samples by giving some weight to data obtained from other sources. But, in the final analysis, the accuracy of our estimates depends primarily upon the validity of the Massachusetts and Wisconsin samples, and it seems desirable at this point to discuss the influence of the shortcomings of our samples upon our estimates.

Influence of Limitations of Samples upon Receivable Estimates

In some respects Massachusetts and Wisconsin are desirable states for sampling purposes. Their laws governing enforcement of debts are neither especially severe nor exceptionally lenient as compared with the statutes of other states. Massachusetts is an industrial state, while Wisconsin is, on balance, agricultural. Taken together, the industries of these states were nicely distributed between heavy and light manufacturing and between durable and non-durable products. On the other hand, one need only recall the migration of industry from Massachusetts during the 1920's or contrast the characteristic dairy farming of Wisconsin with the predominant wheat, corn and hog, or cotton production of other

period of time were available to us. Efforts were made to obtain similar data for a state in the central industrial area, for a southern state, and for a western state, but in each instance practical difficulties intervened. Some states had only recently enacted corporate income tax laws, and some had destroyed their early tax records. In some states, the items reported were unsatisfactory; and in others, the method of filing or the difficulty of segregating retail enterprises made transcription impracticable. In still other states, statutory restrictions made the use of the tax records impracticable.

agricultural states to realize the shortcomings of samples limited to these two states.

That there are differences in the credit policies of retail merchants in different states is clearly indicated by the Massachusetts and Wisconsin income tax samples. For some types of merchants the levels of receivable ratios were similar in both states. But for food, drug, hardware, and shoe stores, the Wisconsin ratios were substantially higher than the Massachusetts ratios; while for furniture stores and for apparel stores other than shoe stores, the Wisconsin ratios were lower than those for Massachusetts. Year-to-year changes in receivable ratios for various types of merchants followed similar patterns in both states, but the Wisconsin ratios generally increased somewhat more rapidly than the Massachusetts ratios during the period from 1925 to 1929 and during the period from 1931 to 1933, and they declined more rapidly between 1933 and 1935.

It seems possible to explain these differences in receivable ratios in terms of the economic and social characteristics of the areas from which our samples were drawn. Differences in the level of the receivable ratios are probably attributable to the predominance of industry in Massachusetts and to the predominance of agriculture in Wisconsin. In industrial communities the relative mobility and occupational instability of a considerable part of the population limits open-book credit merchandising, and the weekly payment of wages not only facilitates cash payment for current necessities but limits the term for which open-book credit is customarily extended. In agricultural communities, on the other hand, the relative stability of the population, the more intimate relationship between the merchant and his customer, the longer intervals at which incomes are received, and the widespread ownership of farms, livestock, and equipment contribute to a higher level of open-book receivables. For types of merchandising in which instalment techniques are used extensively, however, the relationship between the receivable ratios in agricultural and industrial areas is reversed. Instalment selling, which generally produces higher receivable ratios than open-book merchandising, is far more common in industrial areas than in agricultural areas.

The more gradual rise of receivable ratios in Massachusetts during the late 1920's probably reflects the uncertainties resulting from the migration of industry from that state. The more rapid rise of the Wisconsin ratios between 1931 and 1933 and their more rapid subsequent decline probably reflect the greater willingness of merchants in agricultural communities to carry delinquent accounts.

These considerations have led us to assume generally that the receivable ratios for all merchants of each type in the United States would tend to fall between the receivable ratios for similar merchants in Massachusetts and Wisconsin. It is impossible to test the validity of this assumption. But the bias inherent in the geographic selection of samples is unlikely to result in an overstatement of the amplitude of cyclical movements of merchants' receivables. The boom of the 1920's was restrained in Massachusetts by the migration of industry and was tempered in Wisconsin by the deflation of agricultural prices. It seems probable also that the relative conservatism of the dominant racial groups in Massachusetts and Wisconsin tended to moderate the expansion and contraction of consumer credit as compared with other areas. At least, among the cash-lending agencies for which reliable state figures are available, the amplitude of cyclical movements of loan balances was generally greater for the United States than for Massachusetts or Wisconsin.

The principal samples were limited not only to two geographic areas, but also to corporate enterprises continuously engaged in business during a period of years. There appears to be no reason for believing that incorporation, in itself, has any material influence upon credit policies. But since incorporated enterprises are generally larger than unincorporated enterprises, our samples include a disproportionate number of large enterprises. In order to offset this bias, our data have generally been analyzed by size-classes and the results weighted in accordance with the size distribution indicated in the various retail censuses. This procedure involved difficult statistical problems which we shall discuss in a later section.

The use of stable enterprises for sampling purposes also introduces a substantial bias. The figures for unstable corporations in five Wisconsin counties provide a crude check upon the consequences of this limitation of our sample. For these five counties receivable ratios were computed for stable corporations and for all corporations; and, in selecting standard receivable ratios for each type of merchant, considerable weight was given to the effect of the inclusion of unstable corporations upon the movement of receivable ratios in these counties.

TABLE 14.—ABSOLUTE AND RELATIVE SIZE OF MASSACHUSETTS AND WISCONSIN STABLE CORPORATION SAMPLES, BY TYPE OF MERCHANT

Type of merchant	Number of stores in sample		Per cent of stores in state included in sample		Per cent of sales in state included in sample	
	Massachusetts[a]	Wisconsin	Massachusetts[a]	Wisconsin	Massachusetts	Wisconsin
Apparel stores	163	120	3.1	4.0	22.3	13.8
Automotive dealers	276	150	3.7	2.2	28.3	12.1
Country general stores	6	94	1.5	4.1	5.2	15.8
Drug stores	92	70	4.7	5.4	10.3	11.3
Food stores	120	31	0.5	0.3	7.9	2.5
Fuel and ice dealers	147	40	16.4	9.3	40.1	25.1
Furniture and household equipment stores	103	90	5.1	5.5	17.0	19.1
General merchandise stores	59	86	4.1	11.1	64.9	37.1
Hardware stores	70	81	8.0	8.5	21.0	23.8
Jewelry stores	44	23	5.6	3.7	40.6	21.3
Miscellaneous stores	43	25	2.7	3.5	25.3	9.4
Total	1,123	810	2.5	2.9	25.5	14.1

[a] The number of units in multiple-unit enterprises could not be determined in Massachusetts, hence the figures given are for the number of enterprises and not the number of stores.

Table 14 compares the number of stores and volume of sales represented in our Massachusetts and Wisconsin samples with the total number of stores and the total volume of sales in these states. The more adequate representation with respect to the volume of sales as compared with the number of enterprises indicates the extent of the size-bias in our samples.

Among the technical shortcomings of the data provided by tax reports, the most important was the underrepresentation of multiple-unit stores. In the Wisconsin sample it was necessary to exclude reports of all interstate chains because they reported the volume of Wisconsin sales without giving comparable balance sheet figures and to exclude reports of some intrastate chains because the number of units covered by the reports varied widely from year to year. The limitation of our Massachusetts sample to domestic corporations also excluded most of the national chain store enterprises operating in that state, and several chains operating under Massachusetts charters were excluded because their reports covered business done in other areas.

Both in Massachusetts and in Wisconsin some of the units of chain stores were separately incorporated. In other instances, however, consolidated reports covering several units were filed and this has created problems in allocating corporations to size-classes. The Wisconsin reports gave the number and location of units operated by the reporting corporation, and adjustments were made in assigning these enterprises to size-classes. But in Massachusetts it was frequently impossible even to identify reports covering multiple-unit operations, and in our calculations some multiple-unit enterprises in Massachusetts have no doubt been treated as single stores.

In the Wisconsin reports notes receivable were not segregated from accounts receivable and the reported receivable figures undoubtedly include some items which we would omit if they could be identified. But in the Massachusetts reports which segregated notes receivable and accounts receivable, relatively few corporations reported notes receivable and these generally represented types of retailing in which instalment merchandising was common. We excluded the notes receivable reported by Massachusetts corporations whenever the item remained constant for several years, whenever it was expressed in round figures for several years, and whenever it varied from year to year in round figures. The amounts excluded for these reasons, however, were relatively insignificant. It seems probable that the inclusion of extraneous items in the receivables of Massachusetts and Wisconsin corporations has a negligible influence upon our estimates.

The overwhelming part of the corporations in our samples gave figures for calendar years, but a considerable number reported for other fiscal-year periods. It seemed unwise either to attempt to interpolate calendar-year figures for these latter enterprises or to decrease our samples by excluding them. Consequently, reports for fiscal years ending in the first half of the calendar year were tabulated with reports for the close of the previous calendar year, and reports for fiscal years ending during the second half of the calendar year were tabulated with reports for the close of that year. Fortunately, a large part of the non-calendar-year reports were for the fiscal year ending January 31 and all but a few were for fiscal years ending in the first quarter of the calendar year.

For most types of merchants seasonal fluctuations of receivables are moderate and the use of small numbers of non-calendar-year reports has little influence upon our receivable estimates for these types. Our estimates tend, however, to understate the amount of receivables of department stores and jewelry stores at the close of the year because the receivables of these stores rise substantially in December as the result of Christmas sales and because many large department stores and jewelry stores reported for the year ending January 31. Since large department stores have a substantial weight in our calculations, our receivable estimates for department stores may be said to represent largely January 31 figures. For jewelry stores corporations reporting for January 31 had less weight in our calculations, but the resulting receivable estimates are somewhat lower than they would have been if year-end figures had been used exclusively.

Census allocations to sub-classes are based generally upon an analysis of sales by commodities. Since income tax reports gave only general descriptions of the type of business in which the corporation was engaged, it was frequently impossible to identify sample enterprises with census sub-classes. Consequently it was necessary in some instances to base estimates on census groups that include merchants specializing in the sale of a wide variety of commodities. For instance, our classification "automotive dealers" includes such diverse types of enterprises as automobile sales agencies, dealers in automobile accessories, garages, repair shops, and filling stations. To some extent the analysis of our data by size-classes tends to divide our samples into homogeneous groups, but the errors inherent in this treatment are large and it is impossible to determine their extent or their direction.

Development of Standard Ratios of Receivables to Sales

In developing receivable ratios which could be applied to our sales estimates, we have, for a number of reasons, treated our Massachusetts and Wisconsin data as separate samples and analyzed them independently. First, it seemed important to indicate differences in the level and in the year-to-year changes in the receivable ratios for these two geographic areas. Second, our Massachusetts sample was considerably larger than the Wisconsin sample with respect both to the number of enterprises and to the volume of sales, and Massachusetts figures would have far overweighed the Wisconsin figures had the two samples been merged. Third, it seemed desirable to appraise the reliability of our data for each state on the basis of the relationship of the samples to the universes from which they were drawn as well as on the basis of the number of enterprises and volume of sales represented in our samples.

In analyzing our samples the following procedure was used: (1) Samples were classified by type of merchant and then by size-classes based upon the volume of sales in 1929. For each type of merchant, we used from three to five size-classes, determined by the size-distribution of our sample and by the size-classes established in the retail censuses. (2) Sales and receivable figures were summed and ratios of aggregate receivables to aggregate sales by size-classes for each type of merchant were calculated. (3) Ratios of receivables to sales for individual enterprises were computed, and means and medians of these ratios for each size-class and for each type of merchant were determined, (4) The aggregate, mean, and median ratios for each size-class were weighted in accordance with the volume of sales reported for these size-classes in the 1929 Census of Distribution in order to obtain weighted ratios for each type of merchant.

These calculations gave us six series of ratios which we shall call "aggregate" ratios, "weighted aggregate" ratios, "mean" ratios, "weighted mean" ratios, "median" ratios, and "weighted median" ratios. The mean and weighted mean ratios were highly erratic and they were immediately discarded as unreliable measures of the relationship between receivables and sales. Particularly among small stores there were extremely wide variations among individual receivable ratios, and the means of these ratios were influenced substantially by the very high ratios for a few small stores. The process of weighting by size-classes tended to exaggerate the erratic movements of the mean ratios. The four remaining series of ratios, however, were plotted on logarithmic charts for further study.

The charts indicated that the year-to-year changes in the four series of ratios followed the same general pattern for each type of merchant. But for most types of merchants in each state there were substantial differences in the level of the various series of ratios. In general, the aggregate ratios were the highest; the medians were the lowest; and the weighted aggregate and weighted median series fell in between.

Each of these types of ratios had certain advantages and disadvantages for our purpose. Obviously, if we were dealing with a universe and not with a sample, aggregate ratios would provide the only accurate measure of the relationship between sales and receivables. But since our data were limited to samples that contained a substantial size-bias, these ratios gave excessive weight to the receivables of large stores. Large stores generally had the better facilities for collection; consequently aggregate ratios tended to exaggerate the extent of cyclical declines in receivables.

Median ratios, like aggregate ratios, have the merit of being derived directly from our data. They avoid the influence of the very high receivable ratios of certain small enterprises which caused the erratic movements of the means, and they minimize the influence of the size-bias in our samples. Medians, however, neglect the skewness of the distribution of individual ratios, which was usually positive, and the influence of differences in the size of the store upon the significance of each individual ratio. The median ratios for various size-classes were somewhat erratic because of the small numbers in each size-class and the process of weighting size-class medians tended to increase the potential error in the final ratios.

Weighted aggregate ratios would seem to preserve the advantages and avoid the shortcomings of simple aggregate ratios. If we could assume that our sample for each size-class was fully representative of all stores in that size-class, the weighted aggregate ratios would provide an accurate measure of the total amount of receivables. But the risk of exaggerating the influence of unrepresentative stores makes the use of such ratios hazardous.

In order to test the reliability of the weighted aggregates, we changed the size-class intervals and recalculated the weighted aggregate ratios. This experimentation indicated that, while year-to-year movements of the ratios were changed very little, it was possible generally to produce substantial differences in the level of the ratios by varying the class intervals. The samples for certain types of merchants were then grouped into size-classes based upon the volume of sales in 1933 and weighted aggregate ratios were recalculated. Again, there were marked differences in the level of the ratios as compared with those originally calculated, and for certain types of merchants there were significant differences in the magnitude of the year-to-year movements.

On the basis of these observations it seemed necessary not only to shift the weights assigned to various size-classes from year to year, but also to adopt a method of averaging which would avoid fortuitous differences arising from the selection of class intervals.

Our first step was to plot the individual ratios for each year, for each type of merchant, and for each state on separate graphs, using the ratios of receivables to sales as one co-ordinate and the volume of sales as the other. These scatter diagrams indicated that the spread of receivable ratios tended to decrease as the volume of sales increased and that there was some correlation between the magnitude of receivable ratios and the volume of sales. For certain types of merchants this correlation was positive; for others, negative; and for still others, both positive and negative, that is, the receivable ratios increased with size of store up to a certain point and then decreased, or vice versa. Moreover, the sign and the amount of correlation varied with the business cycle.

The distribution of sample enterprises was then studied in relation to the size-distribution of stores in the retail censuses and size-classes were selected to reflect most adequately the relationship between receivables and sales indicated by our samples. The medians of individual ratios appeared on the whole to give the best descriptive average for each size-class. Consequently, we circled the median ratios for each size-class and drew a smooth free-hand trend-line based upon, but not necessarily passing through, the medians.[1]

[1] In drawing this line some weight was given to the scatter of the individual ratios around the medians and to the representativeness of the size-class samples.

From this trend-line, receivable ratios for smaller size-classes were obtained.

The imputed size-class medians for 1929 and 1933 were then weighted in accordance with the volume of sales reported for each size-class in the retail censuses of these years. The 1929 weights were used for the years from 1923 to 1928. The weights for 1930, 1931, and 1932 represent interpolations of weights for 1929 and 1933. The 1933 weights were used for the years 1934, 1935, and 1936. These calculations provided a new series of weighted ratios, based largely on the medians, which we shall call "trend-line" ratios.

These trend-line ratios are subjective. In all instances there was a range of reasonable choice in drawing lines which would reconcile the size-class medians. But in other respects these ratios have distinct advantages for our purpose. As compared with various types of unweighted ratios, they tend to compensate the size-bias in our samples. As compared with other types of weighted ratios, they minimize the error arising from the selection of class intervals; they modify the influence of individual stores by permitting the general tendencies of all stores in the sample to influence the level of receivables for each size-class; and they reduce the weight given to any one size-class by increasing the number of practicable size-classes.

The series of trend-line and aggregate ratios for Massachusetts and Wisconsin were then plotted on logarithmic scale, using a separate diagram for each type of merchant. The series of aggregate ratios for stable enterprises and for all incorporated stores in five Wisconsin counties, and for the samples obtained from published balance sheets, credit information services, and voluntary reports were added to these diagrams; and finally we added the weighted aggregate ratios for 1935, 1936, and 1937 which resulted from the Dun and Bradstreet study. On the basis of these data standard receivable ratios for each type of merchant were developed.

Differences in the movements of these series of ratios for the same type of merchant were generally not large. The series of receivable ratios based upon samples obtained from published balance sheets, credit information services, and voluntary reports tended to increase less rapidly during the depression of 1930–1933 and to decline less rapidly during the recovery of 1934–1936 than the series based upon income tax data. The Massachusetts series increased somewhat less rapidly than the Wisconsin series during the late 1920's and during the depression period; but the Wisconsin series decreased somewhat more rapidly than the Massachusetts series during the recovery period.

With respect to the level of receivable ratios, however, there were frequently substantial differences between the various series. As already indicated, the level of the Massachusetts and Wisconsin ratios differed materially for some types of merchants. Receivable ratios for all incorporated stores in five Wisconsin counties were higher than the stable corporation ratios for some types of merchants, and lower for other types. Aggregate ratios were generally higher than comparable trend-line ratios, and the series obtained from published balance sheets and voluntary reports were generally near the level of the lowest series based upon income tax data. The Dun and Bradstreet ratios for some types of stores were very close to the level of the trend-line series, but for other types, notably for food and drug stores, they were substantially lower.

Each series was given some weight in the development of standard receivable ratios for the United States as a whole. But the trend-line series was relied upon most heavily, particularly for the general pattern of movement. With respect to the relative amplitude of their movements, the United States series for each type of merchant conforms closely with the mean of the Massachusetts and Wisconsin trend-line series. Slight modifications were made where unstable enterprises in Wisconsin had a substantial effect upon the amplitude of the movement. For the movement of the United States ratios between 1936 and 1937, we relied almost entirely upon the Dun and Bradstreet ratios.

With respect to the level of the ratios selected as representative of the United States, we departed more substantially from the trend-line series for Massachusetts and Wisconsin. Substantial weight was given to the level of Dun and Bradstreet ratios, particularly for food and drug stores, where our samples were biased by lack of an adequate representation of chain stores. For most types of merchants the United States ratios fall between the trend-line series for Massachusetts and Wisconsin; for some types of merchants they follow the lower of these two series; and for some types they fall below the level of the trend-line ratios for both states.

The space that can be reasonably devoted to description of the development of estimates of retail merchants' receivables does not permit reproduction of the charts or detailed discussion of the data upon which our estimates were based. Succeeding sections of this chapter will be limited to the presentation of our estimates of sales, receivable ratios and receivables for each type of merchant, and to very brief references to the special problems met in the development of these estimates.

Receivables of Apparel Stores

The apparel group includes such diverse types of merchandising as family clothing stores, men's clothing stores, women's dress shops, corset and lingerie shops, millinery stores, furriers, custom tailors, and shoe stores. Only in the case of shoe stores was it possible to allocate sample enterprises accurately to a census sub-class. So few of the other sample enterprises could be identified precisely with census sub-classes that it was considered necessary to group together all other sub-classes in the apparel group in developing our estimates.

In spite of the lack of homogeneity among sub-classes of apparel stores, this method of treatment probably introduces a smaller error in our estimates than might be anticipated. Three types of stores—men's clothing and furnishing stores, women's ready-to-wear specialty stores, and family clothing stores—accounted for about four-fifths of the sales in the apparel group, exclusive of shoe stores; and the sample enterprises which could be identified with these types of stores indicated no consistent differences in their credit policies. There were, however, substantial differences in the credit policies of many less important census sub-classes. Furriers and custom tailors, for instance, had relatively high receivable ratios, while millinery stores and corset and lingerie shops had relatively low receivable ratios. But so far as we were able to determine, types of apparel stores for which high receivable ratios were typical and for which low receivable ratios were typical were adequately represented in our sample.

Estimates of sales, receivable ratios, and the resulting estimates of receivables for shoe stores and other apparel stores and estimates of total receivables for all apparel merchants in the United States are given in Table 15.

TABLE 15.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF SHOE STORES AND OTHER APPAREL STORES, AND ESTIMATED RECEIVABLES OF ALL APPAREL MERCHANTS IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Shoe stores			Other apparel stores			All apparel stores—receivables at close of year
	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	
1923	810	1.7	13.8	3,177	8.6	273.2	287
1924	791	1.8	14.2	3,152	9.2	290.0	304
1925	779	1.9	14.8	3,163	10.0	316.3	331
1926	801	2.0	16.0	3,257	11.0	358.3	374
1927	804	2.1	16.9	3,350	11.8	395.3	412
1928	802	2.2	17.6	3,390	12.3	417.0	435
1929	807	2.3	18.6	3,434	13.5	463.6	482
1930	634	2.8	17.8	3,286	13.0	427.2	445
1931	514	3.1	15.9	2,982	12.5	372.8	389
1932	393	3.5	13.8	1,938	14.5	281.0	295
1933	425	2.9	12.3	1,498	16.5	247.2	260
1934	495	2.5	12.4	1,877	13.5	253.4	266
1935	511	2.5	12.8	2,145	13.0	278.9	292
1936	558	2.4	13.4	2,470	12.6	311.2	325
1937	589	2.5	14.7	2,606	13.0	338.8	354

Receivables of Automotive Dealers

For automotive dealers, as for apparel stores, the principal problem in developing receivable estimates arose from the wide variety of enterprises included in the class. But for automobile dealers this lack of homogeneity places more severe limitations upon the reliability of our estimates.

An attempt was made at first to divide our samples into four groups: automobile dealers, accessory dealers, garages, and filling stations. But any such classification has a high degree of artificiality. Most automobile dealers maintain extensive accessory and service departments; most garages sell used cars, accessories, and gasoline; and filling stations in increasing numbers sell tires and used cars. Further study of the samples indicated that classification by size tended to produce a more homogeneous grouping with respect to credit policies than the type designations given in the tax reports, and the effort to distinguish types of merchandising was therefore discontinued.

The difficulties inherent in the variety of types of enterprises defined as automotive dealers are increased by the fact that receivables arising out of the sale of automobiles are usually sold to intermediary financing agencies, while receivables arising out of

TABLE 16.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF AUTOMOBILE DEALERS IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	6,800	8.5	578
1924	6,730	8.2	552
1925	8,829	7.5	662
1926	9,134	7.5	685
1927	8,047	7.8	628
1928	9,010	8.0	721
1929	9,616	8.5	817
1930	7,800	10.2	796
1931	6,000	10.5	630
1932	3,843	12.3	473
1933	4,419	12.7	561
1934	5,309	11.5	611
1935	6,574	10.3	677
1936	7,974	9.5	758
1937	8,388	9.7	814

the sale of accessories, gasoline, storage, and repair services are generally carried by the merchant. Since automobile sales fluctuate far more violently than sales of automotive supplies and services, there is a tendency for receivable ratios of automobile dealers to decline in good times and to rise precipitately during periods of depression. But there is comparatively little uniformity in the pattern for individual automobile dealers because the relationship between automobile and other commodity sales differs substantially and because the number of firms which carry part of their own instalment receivables has diminished periodically. On the other hand, receivable ratios of enterprises dealing solely in automotive supplies and services tend to follow a more uniform pattern.

The estimated series of receivable ratios for automotive dealers represents the resultant of different movements of receivable ratios of these various components, and the reliability of the estimates of receivables depends more substantially than for any other type of merchant upon the extent to which these components are adequately represented in the samples or the degree to which an inadequate representation is compensated by size-class weights. The samples exclude many of the filling-station chains. But evidence available to us suggests that in this field credit-granting is at least as common among multiple-unit as among single-unit enterprises.

Table 16 presents estimates of sales, receivable ratios, and receivables of automotive dealers in the United States for the period from 1923 to 1937.

Receivables of Country General Stores

Since there were only six country general stores in our Massachusetts sample, estimates of receivables for this type of merchant were of necessity based primarily upon the more adequate sample from Wisconsin. Country general stores represent a relatively homogeneous group of merchants with respect to commodity sales, but credit policies of individual stores differ materially. The fact that receivable ratios for Massachusetts stores tended roughly to confirm the level and the pattern of the Wisconsin ratios may therefore be fortuitous, and our estimates may contain substantial errors arising from the geographic limitation and other biases inherent in the selection of samples.

Table 17 presents estimates of sales, receivable ratios, and receivables of country general stores for the period from 1923 to 1937.

Receivables of Drug Stores

The pattern of the year-to-year movements of receivable ratios for drug stores was clearly defined by the samples. The relative movements of the trend-line and aggregate ratios both for Massachusetts and Wisconsin were almost identical. But the levels at which these movements took place differed tremendously. The Wisconsin ratios varied between 4 and 9 per cent, while the Massachusetts ratios varied between 1.2 and 2.5 per cent. Since the Dun and Bradstreet ratios fell midway between the level of the Massachusetts and Wisconsin ratios for the same years, standard ratios for the United States were selected to follow the mean of the Massachusetts and Wisconsin ratios.

The selection of the level of receivable ratios is, however, essentially arbitrary. Both the Massachusetts and Wisconsin samples contain an inadequate representation of multiple-unit stores, which may have a substantial influence upon the level of receivables; and since both samples represent less than 6 per cent of the total number of stores and less than 12 per cent of the total volume of sales in these states, other biases may arise from the selection of our samples. The bias resulting from the Dun and Bradstreet sample cannot be accurately appraised, but since the Dun and Bradstreet sample tended to produce relatively low receivable ratios for other types of merchants, the drug store ratios presumably err in the direction of understatement. It should be noted, however, that

TABLE 17.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF COUNTRY GENERAL STORES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	1,432	9.0	129
1924	1,420	9.1	129
1925	1,410	9.3	131
1926	1,400	9.5	133
1927	1,380	10.0	138
1928	1,350	10.5	142
1929	1,323	11.2	148
1930	1,149	13.2	152
1931	1,037	15.0	156
1932	888	16.5	147
1933	883	15.0	132
1934	1,027	13.0	134
1935	1,110	12.5	139
1936	1,205	12.0	145
1937	1,263	12.0	152

even the relatively low receivable ratios selected are irreconcilable with the census figures for credit sales.[1]

Table 18 presents estimates of sales, receivable ratios, and year-end receivables of drug stores in the United States for the period from 1923 to 1937.

TABLE 18.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF DRUG STORES IN THE UNITED STATES, 1923 TO 1937
(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	1,268	2.4	30
1924	1,293	2.4	31
1925	1,379	2.4	33
1926	1,408	2.5	35
1927	1,491	2.7	40
1928	1.609	2.8	45
1929	1,690	2.9	49
1930	1,554	3.3	51
1931	1,438	3.6	52
1932	1,182	4.5	53
1933	1,066	4.9	52
1934	1,156	4.4	51
1935	1,233	4.0	49
1936	1,344	3.5	47
1937	1,411	3.5	49

Receivables of Food Stores

Apart from the difficulties of obtaining accurate sales estimates, the principal problem in estimating receivables of food stores was the determination of the level of receivable ratios. As with drug stores, the various series of receivable ratios for food stores tended to follow a common pattern, but the level at which these movements took place differed enormously. Because large stores, which are overrepresented in our sample, tend to have lower receivable ratios than small stores, the trend-line ratios were higher than the aggregate ratios in both states; and the Wisconsin ratios were almost double the Massachusetts ratios. The Dun and Bradstreet ratios were still lower than those for the Massachusetts sample.

[1] Our experience indicates that the United States retail censuses understate the relation of credit sales to total sales for most types of merchants. It seems probable that many stores which sold predominantly for cash reported all sales as cash sales.

Although the income tax samples included some multiple-unit stores, interstate chains were almost entirely neglected. The effect of the inadequate representation of the latter stores certainly tends to exaggerate the level of receivable ratios, although the extent of the exaggeration is problematical. The units of chain stores would generally fall in size-classes for which receivable ratios were already very low. The published reports of the large chain grocery companies indicate still lower receivable ratios, but some of the credit granted by local managers of chain stores does not appear in the official balance sheets, and some sectional and intrastate chains do a very large part of their business on a charge-account basis. Estimated receivable ratios for all food stores fall below the ratios for the Massachusetts and Wisconsin samples.

TABLE 19.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF FOOD STORES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	9,741	4.3	419
1924	10,188	4.5	458
1925	10,744	4.6	494
1926	11,130	4.7	523
1927	11,203	4.9	549
1928	11,650	5.1	594
1929	12,085	5.4	653
1930	11,029	6.1	673
1931	9,260	7.5	695
1932	7,036	8.5	598
1933	6,991	8.3	580
1934	7,802	7.3	570
1935	8,362	6.9	577
1936	9,004	6.6	594
1937	9,349	6.6	617

Table 19 gives estimates of sales, receivable ratios, and receivables of all food stores in the United States for the period from 1923 to 1937.

Receivables of Fuel and Ice Dealers

The various series of receivables for our Massachusetts and Wisconsin samples of fuel and ice dealers were almost identical with respect to their pattern and very similar with respect to their level. The Dun and Bradstreet ratios were only moderately lower than those for the income tax samples. Estimated receivable ratios for all fuel and ice dealers approximate the midpoints between the Massachusetts and Wisconsin series.

TABLE 20.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF FUEL AND ICE DEALERS IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	1,253	10.0	125
1924	1,115	11.0	123
1925	941	12.0	113
1926	1,137	13.0	148
1927	1,079	14.0	151
1928	1,074	16.0	172
1929	1,013	18.0	182
1930	930	20.0	186
1931	742	22.0	163
1932	640	23.5	150
1933	623	22.5	140
1934	836[a]	18.4	154
1935	859	18.2	156
1936	996	17.0	169
1937	1,066	17.5	187

[a] The increase in sales between 1933 and 1934 results in part from a shift of certain fuel-oil dealers from "filling stations" to "fuel and ice dealers" in the 1935 Retail Census. Lack of information as to the extent of this shift has prevented adjustment in our sales estimates for these classes of merchants.

Estimates of the receivables of fuel and ice dealers in the United States are given in Table 20. Subject to the accuracy of the estimates of sales, which were affected by a shift of "a few" fuel-oil dealers from filling stations to fuel and ice dealers in the 1935 census, it seems probable that these estimates of receivables represent close approximations.

Receivables of Furniture and Household Equipment Stores

For purposes of estimating their receivables, we have distinguished three classes of furniture and household equipment stores: (1) general furniture stores, (2) household appliance stores operated by public utilities, and (3) other household equipment stores. The first and third classes were covered by the income tax samples and estimates of receivables of these stores were developed by the methods described earlier in this chapter. But income tax reports of public utilities failed generally to segregate household appliance sales and receivables from other sales and receivables. Consequently, estimates of receivables arising from the sale of household appliances by public utility companies were based upon data obtained from other sources.

Requests for figures for appliance sales and receivables for the period from 1923 to 1936 were sent to a representative list of public utility operating companies[1] and holding companies. Replies were received from 24 companies which accounted for 43 per cent of the total volume of public utility appliance sales in 1935. Ratios of aggregate receivables at the close of each year to aggregate sales during the year were computed for this sample and were applied to the estimated volume of appliance sales by public utility companies in each year in order to obtain estimates of receivables arising out of such sales.

The Department of Commerce estimated sales for furniture and household equipment stores as a whole, and it was necessary for our purpose to develop separate sales estimates for furniture stores, for utility-operated retail stores, and for other household equipment stores. The Retail Censuses of 1929, 1933, and 1935 gave sales figures for furniture stores, for utility-operated stores, and for other household equipment stores. The income tax samples for furniture stores and other household equipment stores and the samples obtained by questionnaire from public utilities have been used to interpolate sales figures for these three classes of stores between census years, and we have used Mr. Lough's estimates in High-Level Consumption and the Census of Manufactures as well as our samples to extrapolate sales figures for the years before 1929 and after 1935.

Both for furniture stores and for other household equipment stores, our income tax samples indicate significant differences in the pattern of the series of receivable ratios in Massachusetts and Wis-

[1] The number of operating companies represented in our sample was substantially larger since several holding companies sent us consolidated figures for all affiliates.

consin. The aggregate and trend-line ratios for furniture stores in Wisconsin rose more rapidly between 1925 and 1932 and declined more rapidly between 1933 and 1935 than the Massachusetts series. The Wisconsin ratios were lower than those for Massachusetts, and the standard receivable ratios for all furniture stores were selected to approximate the midpoints between the Massachusetts and Wisconsin trend-line series. The Dun and Bradstreet ratios, however, were still lower than the Wisconsin ratios.

For other household equipment stores the various series of ratios resulting from the income tax samples were erratic because of the lack of homogeneity among the types of merchandising included in this class. There were not only substantial differences between the level and pattern of the ratios for Massachusetts and Wisconsin, but the series of trend-line and aggregate ratios differed markedly for the same state. Scatter diagrams indicated no significant relationship between the volume of sales and the level of receivable ratios, and differences in the distribution of our samples with respect to types of merchandising had a more important influence upon the level of receivable ratios than the geographic area from which samples were drawn. Standard receivable ratios for other household equipment stores were therefore based upon the ratios of aggregate receivables to aggregate sales for the combined samples.[1]

Estimates of receivables arising out of the sale of household appliances by public utility companies are probably close because the sample includes a substantial part of the total volume of sales and because credit policies of companies covered by our sample are likely to be typical of those of public utilities as a whole. For furniture stores estimates of receivables cover a homogeneous group of merchants with respect both to type of merchandising and to credit practices, and these estimates are likely to be fairly reliable. For other household equipment stores, however, samples were far from adequate and the estimates are crude.

Table 21 presents estimates of receivables for each of these classes

[1] Our classification "other household equipment stores" includes stores selling radios and pianos. Since radio and piano stores had much higher receivable ratios, particularly in the 1920's, than other component types of stores, samples were adjusted to give these stores the weight indicated by their relative sales in the retail censuses.

TABLE 21.—REPORTED OR ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF GENERAL FURNITURE STORES, UTILITY-OPERATED RETAIL STORES, AND OTHER HOUSEHOLD EQUIPMENT STORES; AND ESTIMATED RECEIVABLES OF ALL FURNITURE AND HOUSEHOLD EQUIPMENT STORES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	General furniture stores			Utility-operated retail stores			Other household equipment stores			All furniture and household equipment stores—receivables at close of year
	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	
1923	1,380	38	524	87	43	37	673	29	195	757
1924	1,395	40	558	100	45	45	675	30	203	806
1925	1,465	43	630	110	47	52	785	31	243	925
1926	1,510	47	710	126	48	60	844	30	253	1,023
1927	1,480	49	725	129	50	65	896	31	278	1,068
1928	1,505	52	783	133	51	68	987	31	306	1,156
1929	1,510	54	815	163	52	85	1,082	32	346	1,246
1930	1,221	58	708	154	60	92	825	33	272	1,073
1931	906	64	580	124	65	81	588	35	206	866
1932	510	82	418	75	81	61	310	37	115	594
1933	554	68	377	76	77	59	329	36	118	554
1934	613	62	380	103	73	75	376	34	128	583
1935	695	58	403	123	78	96	472	30	142	641
1936	820	55	451	164	77	126	629	27	170	747
1937	868	56	486	185	80	148	665	26	173	807

of stores and for all furniture and household equipment stores in the United States.

Receivables of General Merchandise Stores

To facilitate the development of estimates of receivables of general merchandise stores, we have segregated sales and receivables of four prominent mail-order houses which account for the overwhelming part of the total volume of mail-order sales of general merchandise stores.[1] Published reports were available for these companies and, since the income tax records failed to provide sample data for mail-order sales and receivables, it seemed desirable to exclude these companies from the area to which income tax samples were to be applied.

Reports of these mail-order houses were not, however, fully satisfactory for our purpose. In the first place it was necessary to adjust the receivables figures reported by two companies in certain years in order to exclude loans to employes and other extraneous items. Sears, Roebuck and Company included a substantial investment in real estate mortgage loans among its receivables during the early 1920's and, since this company was unable to make the segregation, we were obliged to make arbitrary adjustments in the reported figures. With this exception, the modifications of reported items were slight. In the second place, several of the mail-order houses operated department stores and it was impossible to segregate mail-order sales and receivables from the local sales and receivables of affiliated department stores. For this reason, we have excluded from the income tax samples department stores operated by these enterprises.

As the basis for estimates of receivables of all other general merchandise stores, we have relied upon the income tax samples and upon a national sample of department stores obtained from published balance sheets or voluntary reports. The latter sample, while strongly biased with respect to size of stores, covers a large part of the total volume of business of department stores; and the

[1] The mail-order houses for which figures were obtained were: Montgomery Ward and Company; New Process Company; Sears, Roebuck and Company; and Spiegel, Inc. Efforts to obtain figures for other prominent mail-order houses proved impracticable either because reports were not available for the entire period, or because the reported items were unsatisfactory for our purpose.

income tax samples account for half the sales of general merchandise stores in the two states from which these samples were drawn. The various series of ratios for these samples were similar with respect both to level and to pattern of movement, except during the depression of 1930–1933 when the ratios derived from the income tax samples increased while the ratios for large department

TABLE 22.—REPORTED OR ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF FOUR MAIL-ORDER HOUSES; ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF OTHER GENERAL MERCHANDISE STORES; AND ESTIMATED RECEIVABLES OF ALL GENERAL MERCHANDISE STORES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Four mail-order houses			Other general merchandise stores			All general merchandise stores—receivables at close of year
	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year	
1923	328	5.4	17.7	4,524	9.6	434.3	452
1924	364	5.3	19.3	4,552	10.0	455.2	474
1925	419	4.8	20.1	4,722	10.5	495.8	516
1926	454	6.0	27.2	4,815	11.2	539.3	567
1927	480	7.1	34.1	4,854	11.4	553.4	587
1928	557	8.2	45.7	4,809	12.0	577.1	623
1929	698	8.8	61.4	4,842	12.8	619.8	681
1930	608	9.8	59.6	4,426	12.9	571.0	631
1931	526	10.0	52.6	3,909	13.1	512.1	565
1932	446	8.8	39.2	2,963	13.6	403.0	442
1933	473	9.4	44.5	2,740	14.1	386.3	431
1934	592	10.4	61.6	2,988	13.4	400.4	462
1935	716	12.8	91.6	3,123	13.2	412.2	504
1936	912	14.7	134.1	3,422	12.9	441.4	576
1937	1,012	15.3	154.8	3,585	12.9	462.5	617

stores declined. This difference in trend appears to be accounted for by the freezing of receivables of very small stores in the income tax samples. The income tax samples have been followed in estimating receivable ratios for all stores.

Reported or estimated receivables of the four mail-order houses and estimated receivables of all other general merchandise stores are given in Table 22.

Receivables of Hardware Stores

Year-to-year movements of various series of receivable ratios for hardware stores followed very closely the same general pattern, but the levels at which these movements occurred differed materially. The trend-line ratios were higher for Wisconsin and lower for Massachusetts than the aggregate ratios, which probably indicates the greater importance of sales of household appliances among small hardware stores in rural communities. Both the aggregate and trend-line series for Wisconsin were far above the comparable ratios

TABLE 23.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF HARDWARE STORES IN THE UNITED STATES, 1923 TO 1937
(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	650	12.0	78
1924	639	12.2	78
1925	671	12.6	85
1926	685	13.0	89
1927	667	14.2	95
1928	699	15.0	105
1929	706	15.3	108
1930	598	15.7	94
1931	458	18.0	82
1932	327	22.5	74
1933	311	23.0	72
1934	425[a]	18.3	78
1935	467	17.0	79
1936	547	15.0	82
1937	590	14.7	87

[a] The increase in sales between 1933 and 1934 probably results in part from a shift of stores previously classified as wholesale to the retail classification in the Retail Census of 1935.

for Massachusetts, and the Dun and Bradstreet ratios were only moderately higher than the trend-line series for Massachusetts.

The receivable ratios selected for all hardware stores have been placed between the Massachusetts and Wisconsin trend-line series, slightly above the Dun and Bradstreet ratios. The resulting estimates of receivables are given in Table 23.

Receivables of Jewelry Stores

Although jewelry stores represent a homogeneous type of merchandising with respect to commodity sales, credit practices of individual stores vary enormously. Some stores sell almost entirely for cash; some sell extensively on open-book account; and others almost exclusively on instalment contracts. Hence the accuracy of our estimates depends upon the extent to which these diverse policies are adequately represented in the samples.

The aggregate and trend-line series for stable corporations in Massachusetts and Wisconsin were similar with respect both to the level and to the general pattern of their movements. The Massachusetts ratios were slightly higher than the Wisconsin ratios. But,

TABLE 24.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF JEWELRY STORES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	485	18.0	87
1924	481	18.6	89
1925	500	19.5	98
1926	510	21.0	107
1927	507	21.6	110
1928	515	22.5	116
1929	536	23.0	123
1930	381	24.0	91
1931	301	25.0	75
1932	188	27.0	51
1933	175	28.0	49
1934	203	25.5	52
1935	235	23.2	55
1936	282	23.0	65
1937	312	23.0	72

when the unstable corporations were added, the ratios for five Wisconsin counties exceeded slightly those for stable corporations in Massachusetts. It seems probable that the stable corporation samples tend to underrepresent instalment stores because mortality was high among such stores and because such stores were frequently operated as units of interstate chains. We have, nevertheless, followed the midpoint of the trend-line series for Massachusetts and Wisconsin in estimating receivable ratios for all jewelry stores.

Estimates of receivables of jewelry stores are given in Table 24.

Receivables of Miscellaneous Stores

The development of sales estimates for other types of merchants proved to be exceedingly hazardous, and the samples for these types were too small to be adequately representative. Consequently, we have been compelled to group a number of heterogeneous types of merchants in a miscellaneous classification. It includes book stores and gift and toy shops which extend relatively little credit; florists' shops, luggage stores, optical stores, and sporting goods stores in which credit granting is more frequent; and it includes music stores, which account for part of the piano sales, and retail monument dealers. Receivable ratios for the latter two types of businesses are usually very high.

TABLE 25.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF MISCELLANEOUS STORES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Sales during year	Ratio receivables to sales (per cent)	Receivables at close of year
1923	540	9.0	49
1924	545	9.3	51
1925	595	9.4	56
1926	616	9.9	61
1927	602	10.4	63
1928	631	10.8	68
1929	654	11.4	75
1930	573	12.1	69
1931	477	12.8	61
1932	343	13.9	48
1933	340	13.8	47
1934	394	12.4	49
1935	441	11.9	52
1936	502	11.6	58
1937	528	11.8	62

An attempt was made at first to use the income tax samples as the basis for estimates, but it was quite clear that the results would be highly inaccurate unless the samples were adequately weighted for various types of merchandising. Lacking confidence in the representative character of the samples for each of these types of stores, however, this effort was abandoned. Instead, movements of sales for all other types of merchants were used as the means of interpolating and extrapolating sales figures for miscellaneous stores given in the retail censuses; and the combined receivable ratios for all other stores were used as the means of estimating receivable ratios. The method, of course, is arbitrary and a large potential error is inherent in our receivable estimates. It should be noted, however, that the amounts involved are relatively small as compared with most other types of merchants. These estimates are given in Table 25.

CHAPTER XI

RECEIVABLES OF SERVICE CREDITORS

THE development of year-end estimates of the amount of credit extended by agencies rendering services to consumers takes us into a field that has been even less adequately explored than the field of retail merchandising. For all types of service creditors there was an almost complete lack of summary data upon which estimates of receivables could be based. For some such agencies it has been possible to establish an objective statistical basis for estimates, but for others the impracticability of obtaining satisfactory samples has compelled reliance upon *a priori* reasoning. In all instances, estimates of receivables of service creditors are necessarily crude, and a large potential error is inherent in them; and in some instances, they have only a suggestive value.

We have identified six types of service creditors: private practitioners engaged in the curative services; hospitals; funeral directors and embalmers; laundries and cleaning and pressing establishments; public utilities; and correspondence schools. There are, of course, many other types of agencies which extend credit to consumers in connection with the sale of services. Some services are rendered by retail merchants, and our estimates of merchants' receivables include substantial amounts of consumer credit arising from storage and repair of automobiles and furs; from the maintenance and repair of watches, musical instruments, furniture, household appliances, and so forth. On the other hand, still other types of service creditors were excluded from our calculations for specific reasons.

No attempt has been made to estimate the receivables of landlords, partly because rents for houses, apartments, and rooms are usually paid in advance and partly because delinquent rental accounts are seldom treated as assets in calculating earnings. Delinquent real estate taxes, which might be considered to represent a form of consumer credit extended by local governments have been excluded. Since government expenditures in excess of tax receipts were treated as a public stimulating outlay, the treatment of an increase in tax delinquency as an expansion of consumer credit would result in duplication. Many types of service creditors —for instance, barber shops, beauty shops, hotels, and so forth—have been omitted because the amount of consumer credit created by them is negligible.

Credits extended to home-owners by those engaged in the skilled trades—plumbers, carpenters, painters, and electricians—have also been excluded from our calculations. The amount of credit extended by them is substantial and fluctuates violently with the business cycle; but we have been unable to obtain figures for sales and receivables for an adequate sample or to measure the consumer credit content of receivables when such figures were available. Because of this omission our estimates probably err in the direction of understating both the outstanding amounts and the extent of cyclical movements of the receivables of service creditors as a whole.

Receivables of Private Practitioners in the Curative Services

For our purpose physicians, dentists, nurses, and other persons engaged in private practice of the curative services represent by far the most important type of service creditors. But the development of receivable estimates for these professional groups has presented problems for which we were unable to find satisfactory solutions, and of all the consumer credit agencies for which estimates of receivables have been developed in this volume our series for the curative services is backed by the least satisfactory objective evidence and is undoubtedly the least reliable.

During the last two decades professional associations and firms which supply record forms have done much to educate physicians and dentists in the maintenance of adequate records, and it is now possible for many physicians and dentists to supply accurate figures for their income and expenses. But we have been unable to discover periodic balance sheets which would show from time to time the amount of patient receivables. Most physicians and dentists maintain ledger accounts from which total current receivables could be computed. It was also found to be possible, where old account cards had not been destroyed, to reconstruct with a fair degree of accuracy the total amount of receivables for earlier periods. But this procedure proved to be so tedious that it was discarded as impracticable.

Even if figures for patient receivables could have been obtained from the books of physicians and dentists, many adjustments would have been necessary before these figures would be useful. Some practitioners never charge off any accounts; hence their receivables continue to pyramid throughout their professional careers. Some go through their patients' accounts every few years to clean out uncollectible items, and a graph of the movement of their receivables would show gradual accumulations followed by precipitate declines at irregular intervals. Consequently, an adequate empirical study of the receivables of these professional groups would require the segregation of collectible and uncollectible accounts.

For all other types of creditors dealt with in this volume, the calculation of earnings is linked inseparably to changes in asset and liability accounts. It would be an extraordinary coincidence if the earnings of merchants during a given period corresponded precisely with the increase in cash. Instead, profits may be reflected in an increase in one or more of many asset accounts or in a decrease in liabilities in relation to assets. For agencies engaged primarily in furnishing credit service, the item "accounts receivable" is the only earning asset. Consequently, an increase in this item, unless compensated by changes in other balance sheet items, not only reflects an increase in net worth, but also represents an increase in earning capacity.

If the absence of balance sheets in the bookkeeping of the curative professions meant that the practitioner measured his current earnings solely by current collections and that changes in the amount of his receivables had no bearing upon his appraisal of his own financial worth, this type of credit could be excluded from our measurements. Both the practitioner and his patient are consumers. If the practitioner's estimate of his earnings were increased at the same time and by the same amount as the patient's cash balance was reduced by paying his bill, the expansion and contraction of credit for professional services would have no effect on consumers' purchasing power.

But in general this is distinctly not the case. Professional bookkeeping systems provide a record of current charges as well as current collections. When the physician or dentist says, "I have had a good month," he usually means that he has entered on his books a satisfactory amount of charges which he believes to be collectible. He may indicate that he has a weather eye on the second item by adding that "collections are slow." But for most professional people it is the amount of collectible charges rather than the amount of actual collections that influence decisions to expand or to contract the family budget.

Under normal conditions almost all private practitioners extend some credit to patients, and most of them expect to collect the greater part of the sums due them for these services. They know that some patients will pay their accounts promptly upon the receipt of a bill, that others will defer payment for long periods, and that still others will be unwilling or unable to pay at all. If the amount of "good" receivables is increasing, the practitioner is fully aware that his earnings exceed his cash collections, and he does not object to having part of his savings take the form of an investment in such receivables. A sizable investment in receivables is not only necessary to most private practices, but it also is very useful as a means of tiding professional families over periods of vacation and illness. Hence, to the extent that practitioners believe they will collect the accounts put on their books, the economic effect of fluctuations of this type of credit is similar to that of fluctuations of other types of consumer credit.

Each practitioner's appraisal of the collectibility of his receivables depends upon the nature of his practice, his past collection experience, his willingness to press patients for payment, and his view of the "quality" of individual accounts. Because there are differences between professional men and professional practices, there are wide differences in these appraisals. For some practitioners, no fees enter into calculations of current earnings until they have been collected; and for others, current earnings are measured almost entirely by the value of services rendered. Between these extremes lie the great majority of practitioners who appraise their current earnings on a basis of current charges after making allowances for uncollectible items.

These considerations indicate the impossibility under present conditions of developing empirically a series of "good" receivables for the creditors with which this section deals. Consequently, we have reluctantly relied upon *a priori* reasoning in the construction of estimates. Wherever possible, however, our figures have been related to available statistical data and our own observations have been supplemented by interviews with physicians and dentists and with persons engaged in research in the field of medical economics.

The first step was to develop estimates of receipts of physicians, dentists, nurses, and other private practitioners in the curative services. The figures for 1929 published by the Committee on the Costs of Medical Care formed the keystone of these estimates.[1] Figures for the period from 1930 to 1937 were extrapolated by means of the United States Department of Commerce's estimates of professional net incomes, with some modifications to exclude payments by institutions. For estimates of professional incomes during the period from 1923 to 1928 it was necessary to rely upon occasional fragmentary data for medical incomes, upon the number of private practitioners, and upon the trend of the national income for our estimates. The results are exceedingly crude.

The second step was to develop estimates of the relationship of receivables to charges at a given date. For this purpose use was made of data provided by a study of charges and receivables of 159 physicians and dentists in 1933 conducted by the United States Department of Commerce and the Department of Consumer Credit Studies of the Russell Sage Foundation.[2]

This sample was far from satisfactory. It was not only very small, but it was biased by the underrepresentation of practitioners in rural areas and in small towns and by the predominance of practitioners with substantial incomes. In order to minimize expense, it was necessary to limit field work to areas in which the

[1] Falk, Rorem, and Ring, The Costs of Medical Care: A Summary, University of Chicago Press, Chicago, Illinois, January, 1933. For incomes of physicians, dentists, and nurses, see p. 9; for incomes of other practitioners, see p. 14.

[2] Material from this study was published originally in 1935 by the Department of Commerce in Consumer Debt Study, by H. T. LaCrosse. Figures for other practitioners have been added to the original sample.

Department of Commerce maintained district offices and to several cities in which members of the staff of the Department of Consumer Credit Studies were engaged on other projects. The study in the New York area was conducted as a part of a Works Progress Administration Project. The income bias arose from the frequent impossibility of obtaining data from physicians and dentists who did not employ assistants to keep their records.

Analysis of the sample suggested, however, that these biases had comparatively little influence upon the level of receivable ratios. In general, practitioners in large cities and rural areas had lower receivable ratios than those in small cities. And practitioners with large incomes and with small incomes had lower receivable ratios than those with moderate incomes. But the differences were not great. Table 26 indicates the relationship between receivables and charges among reporting physicians and dentists by size-classes of practice.

Interviews with physicians and dentists indicated clearly that a considerable part of the receivables reported were uncollectible or at least would not be collected. In determining the level of valid receivables a device similar to that used by bank examiners in appraising slow loans of banks has been adopted. Accounts delinquent less than six months were valued at 90 per cent of their face value; accounts delinquent more than six months but less than eighteen months at 50 per cent of their face value; and accounts delinquent more than eighteen months at 10 per cent of their face value. This gave us ratios of valid receivables to gross charges of about 28 per cent for physicians and of about 24 per cent for dentists. Since these practitioners must have known when charges were entered on their books that certain accounts would probably not be paid, ratios of valid receivables to charges believed to be collectible were assumed to be 10 per cent greater.

These ratios are roughly confirmed by data presented by Paul A. Dodd and E. F. Penrose of the University of California in their recently published study, Economic Aspects of Medical Services.[1] Medical charges during the period from September 1, 1933, to August 31, 1934, and amounts owing for such charges as of Septem-

[1] Graphic Arts Press, Washington, 1939, Table 51, p. 137. See also Table 48, p. 125.

TABLE 26.—CHARGES AND RECEIVABLES OF REPORTING PHYSICIANS AND DENTISTS IN 1933, BY SIZE OF PRACTICE

Profession	Size of practice	Number reporting	Charges for services rendered during year	Per cent of charges:		Receivables at close of year	Receivables as per cent of charges	Per cent of receivables delinquent:		
				Collected in cash	Entered on books			Less than 6 months	6–18 months	More than 18 months
Physicians	More than $20,000	11	$386,003	6.6	93.4	$187,058	48.5	32	34	34
	10,000 to 19,999	24	357,843	16.7	83.3	208,602	58.3	34	27	39
	5,000 to 9,999	19	145,321	23.9	76.1	105,941	72.9	32	30	38
	Less than 5,000	18	53,870	24.2	75.8	31,296	58.1	35	29	36
	Total	72	$943,037	14.1	85.9	$532,897	56.5	33	30	37
Dentists	More than $20,000	4[a]	$127,265[a]	41.4	58.6	$31,117	24.5	35	39	26
	10,000 to 19,999	27	354,921	17.7	82.3	155,802	43.9	46	25	29
	5,000 to 9,999	32	238,475	17.1	82.9	138,015	57.9	38	30	32
	Less than 5,000	24	88,128	21.4	78.6	38,400	43.6	41	18	41
	Total	87	$808,789	21.6	78.4	$363,334	44.9	42	27	31

[a] These figures include as a single report one partnership composed of two dentists.

ber 1, 1934, reported by 18,316 white families in California indicated a ratio of receivables to charges of about 23 per cent. Similar figures for a somewhat smaller sample of white and non-white families and for a much smaller sample of families that maintained household budgets indicated ratios approximating 20 per cent. Dr. Dodd and Dr. Penrose defined medical charges to include not only charges of physicians and dentists but also charges for drugs, eyeglasses, sickness insurance, and hospital, clinical and nursing service. Since receivable ratios for these latter types of charges are characteristically low, since receivable ratios for physicians and dentists declined between the close of 1933 and September 1, 1934, and since medical debts reported by sample families were limited to those arising from medical charges for the preceding year, these data suggest that our estimates of receivable ratios for physicians and dentists at the close of 1933 are conservative.

The third step was to attempt to determine changes in credit policies of physicians and dentists during the period under consideration. In the absence of empirical data we relied upon observations from medico-economic studies, upon discussions in professional journals, and upon interviews with practitioners and with students of medical economics. These inquiries revealed several tendencies which have a bearing upon the movement of receivables of private practitioners.

First, there appears to have been an increasing tendency throughout the whole period from 1923 to 1937 to press for payment of bills for professional services. This tendency is reflected in the introduction of instalment payment plans by many dentists, obstetricians, and surgeons, in the establishment of collection and financing agencies by local medical and dental societies, in the increasing attention given to collection problems in the meetings and publications of professional societies, and in the increasing demand for loans from cash-lending agencies to meet medical expenses. There continue to be many physicians and dentists who look upon any collection effort as unprofessional. But these practitioners are being supplanted gradually by younger men who are willing to insist upon payment.

This tendency is to some extent the cause and to some extent the result of what appears to be a gradual increase in "valid" receivables in relation to charges throughout the period under investigation. On one hand, greater pressure for collection has tended to validate receivables which in years past would have been considered to be uncollectible. On the other hand, the extension of expensive types of professional service to lower-income classes has required longer terms of repayment and greater attention to collections. The public school system and the educational programs of medical and dental professions have created among all classes realization of the importance of medical care, while methods of acquiring these services without dangerous stresses upon most family budgets are still to be found.

With respect to cyclical movements there appear to be conflicting tendencies among various types of practice. Some practitioners appear to have gone completely on a cash basis for the duration of the depression. Many dentists whose practice was among working classes began in 1931 or 1932 to insist upon payment as their work for each patient progressed. The clinics, they said, now provided for emergency service. Similar information was given by many physicians in industrial communities. In good times they had given their patients credit; but during the depression they had insisted upon payment in cash. Several had accepted part-time employment in clinics and in this capacity continued to deal with many of their former private patients. A second group of practitioners continued to extend credit, reduced their charges to conform with the individual patient's capacity to pay, and became increasingly insistent that accounts be paid rather promptly. And a third group permitted patients' accounts to accumulate, believing that they would generally be paid in better times.

For the first two groups there was undoubtedly a marked decline in valid receivables between 1929 and 1933. And even for the third group, the freezing of some accounts was probably offset by liquidation of others. It was the general testimony that most patients whose incomes were reduced avoided so far as possible engaging professional services. Physicians were called only in emergencies; minor ailments were neglected; and many necessary services were postponed. Although dental and certain types of surgical practice were most seriously affected by postponements, all practitioners feel the effect of postponements when the economic pressure upon their patients becomes severe. Since the more expensive types of professional service are frequently the more readily postponable, there is a tendency when incomes decline for payments on accounts previously rendered to exceed the amount of current valid book entries.

With respect to the recovery period the physicians and dentists interviewed gave relatively similar testimony. The low point for charges occurred in 1933, but for receivables it came in 1934, when payments on accounts appear generally to have exceeded the amount of new credit charges. Thereafter, current charges increased more rapidly than collections, and receivables increased as a consequence.

Estimates of receivables of physicians and dentists were based upon the foregoing data and observations. Tentative figures for charges believed to be collectible were calculated from estimated receipts by assuming a two-months' lag between charges and receipts. Next, the receivable ratios obtained from the samples were applied to the 1933 figures for charges, which gave us estimates of valid receivables at the close of 1933. Receivable figures for other years were then extrapolated, using as controls the differences between estimated receipts and the tentative estimates of collectible charges, observed changes in credit policies, and the pattern exhibited by receivable ratios of creditors whose policies were relatively similar. For the purpose of these extrapolations it was assumed that the judgment of practitioners at the time of rendering services concerning the collectibility of accounts was entirely confirmed by subsequent collection experience. Consequently, increments and decrements in receivables were limited to those which could be reasonably justified in terms of lags between billings and receipts.

For private practitioners other than physicians and dentists no sample data were available by which ratios of valid receivables to charges believed to be collectible could be approximated. For nurses the receivable ratio at the close of 1933 was estimated at half the ratio for dentists; and for "other practitioners" the mean of the ratios for physicians, dentists, and nurses was used. Receivables for these groups of practitioners were then estimated by the methods used in developing estimates for physicians and dentists.

The following figures indicate the range of fluctuations in the receivable ratios that were applied to estimated collectible charges for each group of practitioners in estimating receivables:

	Physicians	Dentists	Nurses	Other practitioners
1923	18	17	7	14
1929	23	21	9	18
1933	31	27	13	24
1936	24	21	9	18

Table 27 gives our estimates of receivables of physicians, dentists, nurses, and other private practitioners in the curative services at the close of each year from 1923 to 1937. Needless to say, these estimates represent exceedingly crude approximations. Although the range of choice was limited by the calculations described, the process of estimating was essentially subjective. As the result of the assumption that practitioners' judgments of the collectibility of accounts was confirmed by collection experience, these figures appear to err, however, in the direction of understating cyclical movements of receivables. Such judgments are undoubtedly influenced by the business cycle. When the national income is increasing, favorable collection experience leads naturally to opti-

TABLE 27.—ESTIMATED VALID RECEIVABLES OF PHYSICIANS, DENTISTS, NURSES, AND OTHER PRIVATE PRACTITIONERS IN THE CURATIVE SERVICES IN THE UNITED STATES, 1923 TO 1937

(Millions of dollars)

Year	Physicians	Dentists	Nurses	Other practitioners	All practitioners
1923	140	68	7	17	232
1924	150	73	8	19	250
1925	175	80	10	22	287
1926	190	88	11	26	315
1927	200	94	13	29	336
1928	220	102	14	32	368
1929	250	114	16	36	416
1930	240	108	16	35	399
1931	225	98	15	32	370
1932	215	88	14	29	346
1933	205	83	13	27	328
1934	195	80	12	26	313
1935	200	84	13	27	324
1936	220	93	15	30	358
1937	235	100	16	32	383

mistic appraisals, which are revised downward when incomes begin to decline and defaults become more frequent.[1]

Receivables of Hospitals

While there are many points of similarity between credits extended to patients by hospitals and those extended by private practitioners in the curative services, the development of estimates of hospital receivables escapes some of the difficulties met in estimating receivables of private practitioners. A hospital has a corporate existence that is unaffected by the professional life cycles of those associated with it. Consequently, to the extent that their credit policies are typical of hospitals in general, the movements of receivables of a group of hospitals may be accepted as a significant guide to the movements of hospital receivables as a whole.

In an effort to obtain data on receivables for a well-distributed sample of hospitals, we obtained access to the files of the American Hospital Association and to the files of several state departments which exercise some degree of supervision over hospitals receiving state aid. But the quality of the available data was disappointing. For the most part the available reports had been prepared with a view to soliciting funds rather than to giving an intelligible report of fiscal operations and current financial status. Mimeographed reports of the early 1920's were frequently expanded into elaborately illustrated volumes in 1929; and during the next few years reports were either omitted or reduced to primitive mimeographed statements.

These reports contained fairly satisfactory data concerning incomes and expenses. But balance sheets were frequently missing and when available they were seldom useful for our purpose. Some hospitals included among their receivables sums due from local and state governments as compensation for services rendered to indigent patients. Others included amounts pledged by contributors. Even where patient receivables were identified, it was usually impossible to rely upon the reported figure. Some hospitals adjusted their bills to patients' incomes before bills were rendered; others made adjustments after bills were rendered when the patient indicated

[1] The writer is indebted to R. G. Leland, M.D., Director, Bureau of Medical Economics of the American Medical Association, and to Lon W. Morrey, D.D.S., of the American Dental Association, for helpful suggestions in the preparation of the manuscript of this section.

his inability to pay; and still others submitted bills at standard rates and collected as large a part of the bill as possible. Obviously, the level and trend of receivables resulting from the latter two methods of bookkeeping are not significant for our purpose.

The data obtained from the Massachusetts income tax records included figures for 19 hospitals, but our experience with the published reports of hospitals in other areas led us to doubt the validity of the income tax figures as a basis for estimating patient receivables.

We were able to find reliable data for hospital receivables only in New York City where, under the aegis of the United Hospital Fund, many private hospitals have made periodic reports on a standardized basis for a number of years. It is the practice of these hospitals to discuss charges for hospital service with the patient or his family and with the attending physician or surgeon before bills are rendered. If the patient is unable to pay standard rates, an allowance is subtracted from these rates in preparing his bill. The net billing represents a sum which the patient has agreed to pay and which the hospital expects to collect. It is significant that the ratio of bad debts to net billings was small for these hospitals. Throughout the period for which data were obtained the lowest loss ratio was 1.1 per cent in 1927 and the highest 1.8 per cent in 1933. The net billings and patient receivables of these hospitals, therefore, have characteristics that correspond closely with those of other types of creditors included in this study.

Through the courtesy of William A. Dawson, consulting accountant of the Fund, we obtained transcripts of balance sheets and income statements for 25 private hospitals in New York City for the period from 1925 to 1937. We have used this sample as the principal basis for our estimates of hospital receivables.

Table 28 illustrates the procedure by which our estimates of receivables for all hospitals were developed. First, indices of billings and receivables and ratios of receivables to billings were calculated for the New York sample. Next, we developed an estimated index of billings for all hospitals based upon the index of billings for the New York sample, upon the trend of gross income reported by hospitals in the Massachusetts income tax sample, and upon estimates of the number of hospital beds in certain years. This index

TABLE 28.—REPORTED NET BILLINGS AND RECEIVABLES OF 25 PRIVATE HOSPITALS IN NEW YORK CITY, 1925 TO 1937, AND ESTIMATED NET BILLINGS AND RECEIVABLES OF ALL HOSPITALS IN THE UNITED STATES, 1923 TO 1937

Year	Twenty-five private hospitals in New York City			All hospitals in the United States (private patients only)				
	Index of net billings (1933 = 100)	Receivables as per cent of net billings	Index of receivables (1933 = 100)	Estimated index of net billings (1933 = 100)	Estimated net billings (millions of dollars)	Estimated ratio receivables to net billings (per cent)	Estimated receivables (millions of dollars)	Index of estimated receivables (1933 = 100)
1923	..	..	..	68	158	6.7	10.6	51
1924	..	..	..	74	172	6.8	11.7	56
1925	89.4	5.0	53	85	197	7.0	13.8	66
1926	101.9	5.3	63	95	220	7.2	15.8	76
1927	105.2	5.3	65	102	237	7.4	17.5	84
1928	113.8	6.0	80	112	260	7.7	20.0	96
1929	123.8	6.2	91	125	290	8.0	23.2	111
1930	119.2	5.6	78	120	278	7.9	22.0	105
1931	113.1	6.1	81	113	262	8.0	21.0	100
1932	103.4	6.9	84	103	239	8.5	20.3	97
1933	100.0	8.5	100	100	232	9.0	20.9	100
1934	100.5	9.4	111	106	246	8.6	21.2	101
1935	122.2	8.0	114	120	278	8.5	23.6	113
1936	129.5	8.5	129	133	309	8.6	26.6	127
1937	136.2	8.8	141	140	325	8.8	28.6	137

was then applied to the figure for the amount of hospital charges in 1930 estimated by the Committee on the Costs of Medical Care in order to obtain estimates of net billings of all hospitals.[1] Finally, a series of estimated receivable ratios for all hospitals, based upon the ratios for the New York sample with modifications to reflect what we believe to be characteristic differences between the credit policies of hospitals in New York City and those of hospitals in other areas, was developed. These ratios were applied to the estimates of net billings for all hospitals in order to obtain our series of estimated receivables.

The series of receivable ratios for New York hospitals suggests that credit policies were restricted in 1930 and gradually liberalized thereafter, except in 1935 when financial difficulties appear to have compelled hospitals to restrict their credits. The movements of these ratios indicate comparatively little freezing of accounts during the depression years. From what we have been able to learn of the credit policies of hospitals in other areas, it appears that credit for hospital services was granted more liberally elsewhere during the 1920's and partly for this reason delinquencies in those areas were greater than in New York City during the depression years. Differences between the receivable ratios of the New York sample and the estimated series of receivable ratios for all hospitals reflect these differences in credit policies.

Our estimates of hospital receivables are obviously exceedingly crude, but we believe that they indicate with some degree of reliability the general pattern of the movement which actually occurred.

Receivables of Funeral Directors and Embalmers

Data for our estimates of the receivables of funeral directors have been drawn from three sources, each of which provides only fragmentary information. First, the United States Census of Business for 1935 gives the total number and total receipts of funeral directors, embalmers, and crematories in the United States and the 1933 Census of Business gives similar figures except that crematories are excluded. No useful data were given in the 1929 Census of Distribution. Second, we had figures for annual billings and for

[1] Falk, Rorem, and Ring, The Costs of Medical Care: A Summary, p. 331.

year-end receivables from 1926 to 1935 for 20 funeral directors in Massachusetts, obtained from the state income tax records.[1] Third, we had the figures for billings and receivables of 61 funeral directors for the year 1933. The latter sample, which was well distributed geographically, indicated that the credit policies of the Massachusetts sample, at least for the year 1933, were similar to those of funeral directors in other areas.[2]

TABLE 29.—ESTIMATED BILLINGS AND RECEIVABLES OF FUNERAL DIRECTORS AND EMBALMERS IN THE UNITED STATES, 1923 TO 1937
(Amounts in millions of dollars)

Year	Estimated total billings of all funeral directors and embalmers	Ratio receivables to billings (per cent)		Estimated total receivables	Estimated claims on consumer income
		Reported by 20 funeral directors in Massachusetts	Estimated for all funeral directors and embalmers		
1923	186	..	29	54	27
1924	185	..	30	56	28
1925	194	..	31	60	30
1926	207	32	32	66	33
1927	212	34	33	70	35
1928	241	33	34	82	41
1929	247	34	35	86	43
1930	229	36	36	82	41
1931	207	35	35	72	36
1932	185	34	34	63	31
1933	172	32	33	57	28
1934	181	31	31	56	28
1935	194	32	32	62	31
1936	212	..	33	70	35
1937	225	..	34	77	38

Table 29 gives our calculations of the receivables of funeral directors, embalmers, and crematories. The first column presents

[1] The original sample included 24 establishments. But we excluded four large establishments in Boston which reported erratic movements of receivables.

[2] These data were summarized in Consumer Debt Study by Herman T. LaCrosse. The ratio of total receivables to total billings for the 61 funeral directors was approximately 29 per cent, but the sample was strongly biased by the inclusion of many large establishments. The mean of the ratios for individual establishments was 46 per cent and the median 35 per cent. It is clear, therefore, that the bias toward large establishments tended to minimize the aggregate receivable ratio. This sample was predominantly an urban one, but specialized funeral directors are essentially an urban phenomenon. In rural areas these services are frequently rendered by furniture dealers.

estimates of total billings. This series was based upon the 1933 census figures and extrapolated in accordance with the trend indicated by the Massachusetts sample with some adjustments for characteristic differences in consumption trends between Massachusetts and the United States as a whole. The second column gives the ratios of receivables to billings reported by the Massachusetts sample; the third gives estimated ratios of total receivables to total billings based upon the Massachusetts sample; and the fourth estimated total receivables, computed by applying these receivable ratios to estimated billings. Since some of these receivables represent claims against estates and against the proceeds of life insurance policies rather than claims upon consumer incomes, the estimated claims on consumer incomes given in the final column represent half the total estimated receivables of funeral directors. The latter figures have been used in our summary estimates of the outstanding amounts of consumer credit.

Receivables of Laundries and Cleaning and Pressing Establishments

In estimating the receivables of laundries and of cleaning and pressing establishments, our procedure has been to estimate the annual volume of consumer sales of these businesses and to apply to such sales figures ratios of receivables to sales obtained from sample enterprises engaged in each type of business. Data for these calculations have been pieced together from many sources.

For laundries estimates of sales to consumers were based upon figures from the Census of Manufactures and from the 1933 and 1935 Censuses of Business. The Census of Manufactures provided biennial figures for the receipts of power laundries for the period from 1925 to 1935. It also gave an analysis of the kind of work done by power laundries whose receipts exceeded $100,000, which indicated, when adjustments had been made for changes in classification, that approximately 25 per cent of the receipts came from services to commercial customers. The Censuses of Business for 1933 and 1935 provide figures for the receipts of hand laundries. The services of these latter agencies are rendered almost entirely to ultimate consumers.

Receipts are so closely related to sales that we have used the census figures for receipts as the equivalent of sales. Our sales estimates for 1933 and 1935 include the receipts of hand laundries reported in the Census of Business and 75 per cent of the receipts of power laundries reported in the Census of Manufactures. Figures for other census years were extrapolated on the basis of the trend of power-laundry receipts; and figures for inter-census years were interpolated in accordance with the trend of sales reported by sample enterprises. The relative movements of our sales estimates between 1929 and 1935 correspond very closely with those of an index of laundry sales published by the American Institute of Laundering, and for 1936 and 1937 our estimates are based upon this index.[1]

Our series of receivable ratios for laundries was based upon sales and receivable figures for 75 laundries covering the period from 1925 to 1935 obtained from the Massachusetts income tax records, and upon sales and receivable figures covering part or all of the period from 1925 to 1937 taken from the published reports of 16 large-scale laundry companies. We have relied most heavily upon the Massachusetts sample because it is more representative of the laundry business as a whole than the large enterprises for which published reports were available. We have used aggregate ratios to determine the pattern of the movement and the medians of individual ratios to determine the general level of the estimated ratios.

For sales figures for cleaning and pressing establishments, it has also been necessary to go to the censuses of manufactures and of business. The Census of Manufactures provides biennial figures for wholesale and retail receipts of cleaning and dyeing plants for the period from 1925 to 1935; and the Census of Business gives the receipts of cleaning, pressing, and altering shops not covered by the Census of Manufactures, for the years 1933 and 1935. Our sales estimates for the year 1935 represent the sum of the retail receipts of the cleaning and dyeing plants covered by the Census of Manufactures and the receipts of cleaning, pressing, and altering shops covered by the Census of Business. Our sales estimates for other years were extrapolated in the same manner as those for laundries.

Data obtained from the Massachusetts income tax records fur-

[1] American Institute of Laundering, Service Bulletin 54, March, 1938.

nished the basis for our estimated receivable ratios for cleaning and pressing establishments. But the Massachusetts sample included only 19 enterprises, and we were obliged to rely upon aggregate ratios of aggregate receivables to aggregate sales and to smooth the resulting series of ratios. We were unable to find published reports for a satisfactory sample of companies engaged in the cleaning and pressing business in other areas.

Table 30 gives our estimates of sales, receivable ratios, and receivables for laundries and for cleaning and pressing establishments. These figures are exceedingly crude.

TABLE 30.—ESTIMATED SALES, RECEIVABLE RATIOS, AND RECEIVABLES OF LAUNDRIES AND CLEANING AND PRESSING ESTABLISHMENTS IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Laundries			Cleaning and pressing establishments			Total estimated receivables at close of year
	Total sales during year	Estimated ratio receivables to sales (per cent)	Receivables at close of year	Total sales during year	Estimated ratio receivables to sales (per cent)	Receivables at close of year	
1923	285	5.4	15.4	132	7.7	10.2	26
1924	297	5.5	16.3	148	7.8	11.5	28
1925	316	5.5	17.4	179	7.7	13.8	31
1926	355	5.5	19.5	214	7.7	16.5	36
1927	395	5.6	22.1	246	7.8	19.2	41
1928	438	5.6	24.5	293	8.0	23.4	48
1929	471	5.8	27.3	349	8.2	28.6	56
1930	463	5.9	27.3	307	8.4	25.8	53
1931	405	6.2	25.1	254	8.9	22.6	48
1932	319	7.0	22.3	186	10.2	19.0	41
1933	260	7.8	20.3	174	10.3	17.9	38
1934	276	7.1	19.6	205	9.1	18.7	38
1935	321	6.4	20.5	238	8.3	19.8	40
1936	365	6.2	22.6	270	8.1	21.9	44
1937	394	6.1	24.0	293	8.0	23.4	47

Receivables of Public Utility Companies

Comprehensive reports of operations were more generally and more readily available for public utility companies than for any other type of consumer credit agency. Nevertheless, the task of estimating the receivables arising from sales of these companies to consumers has proved extraordinarily difficult, and our series of estimates for these creditors is among the least satisfactory. The shortcomings of our estimates arise primarily from three circumstances: (1) the general impossibility of segregating household accounts from industrial, commercial, and government accounts; (2) the practice of requiring deposits or advance payments; (3) the practice of rotation billing.

Public utility companies generally report the amount of sales by type of customer. Hence actual figures or close estimates are available for household sales of manufactured and natural gas, electricity, and telephone service. But neither reports to stockholders nor reports to public service commissions identify receivables arising out of sales to households and we have discovered few companies which were able even to make a rough estimate of the amount of such receivables. This would not present a serious problem if credit policies were identical for household, industrial, commercial, and government accounts. However, the contrary is true. Industrial and government accounts are usually much larger in relation to sales than household accounts, and fluctuations of large industrial accounts frequently dominate the movements of aggregate receivables.

Even if receivables arising out of household sales could be satisfactorily isolated, it would be necessary to make adjustments for deposits or advance payments. The practice of requiring deposits, particularly for household accounts, is common though certainly not universal and we have been unable to find satisfactory summary data concerning the extent of the practice or the amount of such deposits. Moreover, the mere subtraction of the total amount of advance payments from the total amount of consumers' receivables would not give us an accurate figure for the amount of consumer credit extended by public utility companies. Some household accounts consistently have a net credit balance while other accounts recurrently have a net debit balance and it would be necessary to sum the net debit balances of individual accounts in order to obtain an accurate figure for net consumer receivables.

The practice of rotation billing, which is frequent among public utilities, adds further complications to our problem. When bills issued at the close of each month covered services rendered during the month, the amount of year-end receivables is an accurate measure of the services rendered in advance of payment. But when billings are staggered throughout the month, the amount of year-end receivables is reduced without any real change in the amount of credit advanced. The reduction in receivables is compensated by an increase in services rendered but as yet unbilled.

These circumstances made published balance sheets of public utilities useless as the means of estimating consumer receivables and compelled us to solicit the assistance of individual companies in the development of our estimates. But here again problems arose. Although the public utility industry has produced an amazing array of useful and accurate statistical data, the analysis of accounts receivable has been neglected and the few studies of receivables which we have been able to discover had a limited usefulness for our purpose. Our estimates are based on fragmentary data supplied by a few companies and upon the observations of a few officials of operating companies and trade associations.

On the basis of the information obtained, it seems possible to make two generalizations concerning consumer receivables of public utility companies. First, the ratios of receivables to sales for household accounts appear to have been consistently low. If all accounts were paid during the month in which bills were rendered, the ratio of gross receivables at the close of the year to sales during the year would approximate 8.3 per cent. For most companies delinquencies would raise this figure to 11 or 12 per cent. But the net figure is substantially lower because, for most accounts, the deposit exceeds the amount of the monthly bill. Second, receivable ratios for household accounts appear to have been more stable than those for any other type of credit agency throughout the period covered by our study. There was no significant liberalization of credit policies during the prosperity and recovery periods, and the rise of receivable ratios during the depression appears to have been very moderate. Unlike most other creditors, public utility companies have an effective collection weapon in the suspension of their almost indispensable services. Hence the movement of consumer receivables tends to approximate very closely the movement of sales of household services.

Receivable estimates for telephone companies were based upon information obtained from representatives of the American Telephone and Telegraph Company. The records of the Bell System did not permit an accurate computation of net consumer receivables, but an estimate of 18.5 million dollars for the close of 1933 was supplied to us. We were advised that, so far as it was possible to determine, the relationship between receivables and sales had remained relatively constant throughout the period between 1923 and 1937. Although the tendency toward delinquency was greater during depression years, the rise of receivable ratios was minimized by more prompt and more vigorous collection pressures and by stricter charge-off policies than during years of prosperity. Estimates of receivables due for household telephone service have been calculated by applying the ratios of receivables to sales indicated for the close of the year 1933 to sales of household service for each year.

Among electric power and light companies, the practice of requiring deposits is quite general and the amount of the deposit usually exceeds the amount of the monthly bill. Representatives of these companies expressed the opinion that power and light companies were, on balance, debtors to their household customers. It does not follow, of course, that no consumer credit is created by them. The amount of the deposit is usually standardized, while the amount of the monthly bill varies substantially. Some accounts by virtue of the current bill and others by virtue of delinquency exceed the amount of the deposit. But the amount of such credit appears to be small and relatively stable. Consequently, we have excluded the receivables of electric power and light companies from consideration.

Among manufactured and natural gas companies the practice of requiring deposits is also common although there are important exceptions. But even when deposits are required, the use of gas for house-heating purposes brings the monthly bills of many customers well beyond the amount of their deposit. Consequently, the amount of credit extended to consumers by gas companies, particularly at the year end, is more substantial than that extended by electric power and light companies and it has tended to increase with the growth in the use of gas for house-heating purposes.

We have been compelled to rely for our estimates of the receivables of gas companies upon data for sales and receivables, exclusive of industrial and institutional accounts, covering the period from 1925 to 1934 for two operating companies and upon somewhat similar data covering brief periods for several other companies. Crude adjustments were made for customer deposits. The estimated series of receivable ratios based on these data reflects not only the growth of the use of gas for house-heating purposes, but also the greater delinquency of gas company accounts as compared with those of other types of public utility companies during the depression years. Both the larger sums involved in house-heating accounts and the social objectionableness of the discontinuance of service under certain circumstances account for the rise of receivable ratios and receivables during the depression years.

Table 31 gives estimates of the net consumer receivables of tele-

TABLE 31.—ESTIMATED CONSUMER RECEIVABLES OF PUBLIC UTILITY COMPANIES IN THE UNITED STATES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Manufactured and natural gas companies			Telephone companies			Total estimated consumer receivables
	Estimated sales of household services[a]	Estimated ratio receivables to sales (per cent)	Estimated consumer receivables	Estimated revenues from nonbusiness service[b]	Estimated ratio receivables to revenues (per cent)	Estimated consumer receivables	
1923	411	2.5	10.3	326	4.4	14.3	25
1924	427	2.5	10.7	355	4.4	15.6	26
1925	434	2.6	11.3	400	4.4	17.6	29
1926	464	2.6	12.1	436	4.4	19.2	31
1927	481	2.8	13.5	469	4.4	20.6	34
1928	509	3.0	15.3	502	4.4	22.1	37
1929	549	3.3	18.1	542	4.4	23.8	42
1930	568	3.4	19.3	550	4.4	24.2	44
1931	563	3.5	19.7	529	4.4	23.3	43
1932	545	4.2	22.9	464	4.4	20.4	43
1933	505	5.0	25.3	417	4.4	18.5	44
1934	505	4.7	23.7	417	4.4	18.5	42
1935	512	4.6	23.6	435	4.4	19.1	43
1936	521	4.6	24.0	468	4.4	20.6	45
1937	532	4.7	25.0	496	4.4	21.8	47

[a] Figures for the period from 1929 to 1937 were obtained from the statistical bulletins of the American Gas Association; figures for the period from 1923 to 1928 were extrapolated on the basis of an index of total sales of manufactured and natural gas published by the Association.

[b] Figures for the years 1925, 1930, and 1935 are estimates obtained from the American Telephone and Telegraph Company; figures for other years were interpolated or extrapolated in accordance with the movement of total telephone revenues.

phone companies and gas companies. These estimates are exceedingly crude. The estimate for telephone companies for 1933 probably has an error of no more than 15 per cent, but the potential error is substantially greater as the end years are approached. Our estimates of the receivables of gas companies for any one year have a potential error of at least 40 per cent, but the general pattern of the year-to-year movement appears to be much more reliable.

Receivables of Correspondence Schools

Correspondence schools offer courses to students on the instalment plan. The student generally makes a down-payment and contracts to make subsequent instalment payments as services are rendered. Since these instalment contracts are usually paid over a relatively long period, the receivables of correspondence schools are generally high in relation to their sales.

Credits granted by correspondence schools differ in one important respect from credit granted by other types of consumer credit agencies. When automobiles are sold on the instalment plan or when dresses or groceries are sold on open-book credit, these goods are delivered immediately to the purchaser. In the case of credits granted by correspondence schools, however, the services purchased are delivered piecemeal, and the schedule of instalment payments generally bears some relationship to the schedule of performance of services. These credits, therefore, resemble a lease on an apartment by which the lessee agrees to make periodic payments for a given term and the lessor agrees to provide certain services over the same period. Since we would not include in our estimates of consumer credit the unpaid balances on apartment leases, the propriety of including the receivables of correspondence schools might well be questioned.

Two considerations, however, have led us to include part of these receivables in our estimates. First, the major portion of the expense of supplying a correspondence course is incurred in advance of the receipt of the student's instalment payments. Courses must be planned and advertised; salesmen must be paid; and texts and instructions must be printed. The number of courses sold tends to determine the amount of many of these outlays. Second, it has been a common accounting practice to treat a substantial part of the credit sales of correspondence courses as earned income. Reserves are established for cancellations, uncollectible accounts, and expenses of collection and of providing instruction service. But these reserves have usually ranged from 35 to 50 per cent of the total amount of accounts receivable.

For the three major units in the correspondence school field, the Alexander Hamilton Institute, the International Textbook Company, and the LaSalle Extension University, figures for sales, gross receivables, and net receivables were obtained from their published annual reports. So far as possible figures covered the period from 1923 to 1937. But when reports were missing, estimated figures were interpolated. In some instances reserves were not identified; and we have preferred generally to use gross receivable figures and to make our own adjustments for reserves.

From information supplied by the National Home Study Council, we learned that the three companies for which data were obtained accounted for about 40 per cent of the total volume of correspondence school sales throughout the country during recent years. Their credit policies, however, appear to have been more liberal than those of most other enterprises in the field, and they probably accounted for at least half of the correspondence school receivables. Since a 50 per cent reserve appears to be adequate, the gross receivable figures of the three major companies have been used as a measure of the net receivables of all correspondence schools. Estimated receivable figures are given in Table 32.

TABLE 32.—ESTIMATED NET RECEIVABLES OF CORRESPONDENCE SCHOOLS IN THE UNITED STATES, 1923 TO 1937

(Millions of dollars)

Year	Amount of receivables	Year	Amount of receivables	Year	Amount of receivables
1923	16.4	1928	15.6	1933	8.0
1924	17.1	1929	15.5	1934	9.4
1925	17.8	1930	14.2	1935	9.6
1926	18.5	1931	13.1	1936	11.4
1927	16.5	1932	9.7	1937	12.6

CHAPTER XII

RECEIVABLES OF INTERMEDIARY FINANCING AGENCIES

IN A PURELY technical sense intermediary financing agencies do not create consumer credit. They acquire receivables that have already come into existence as the result of credit sales by other agencies. Yet it would be a mistake to conceive of the intermediary financing agencies as playing a purely passive role in movements of consumer credit. In many fields of retailing, credit is generally extended by merchants with full expectation that receivables arising out of their sales will be sold promptly to an intermediary financing agency; and in many instances credit sales are consummated subject to the willingness of some such agency to "finance the deal." Consequently, the growth of facilities for intermediary financing and the standards applied by intermediary financing agencies in purchasing retail receivables have been reflected in the credit policies of merchants who depend upon them.

In the past intermediary financing agencies generally confined their purchases of receivables to instalment contracts arising out of the sale of goods that could be readily repossessed, such as automobiles, kitchen ranges, pianos, radios, refrigerators, suction cleaners, and washing machines. But throughout the period covered by our estimates purchases have been gradually extended to paper arising from heating, plumbing, and roofing installations, where repossession was more difficult, and even to paper arising from professional services.

Obviously, if we are to measure the outstanding amount of consumer credit, it is necessary to include not only receivables that appear on the balance sheets of agencies which initiate credit sales, but also receivables that appear on the balance sheets of agencies which purchase receivables from those who originate credit sales. Our estimates of receivables of automotive dealers, for instance, include only a small part of the consumer credit arising from instalment sales of passenger cars. Among household equipment, radio, and piano stores, a substantial portion of the receivables arising from sales is transferred to instalment finance companies or to manufacturers. This is true in lesser degree of many other types of merchants and even of certain services. Since the proportion of receivables transferred to intermediary financing agencies has tended to increase, the year-to-year movement of estimated receivables for some types of merchants has been affected by a shifting of receivables from the books of the original creditors.

Some intermediary financing agencies purchase receivables unconditionally, and others purchase them subject to endorsement of the dealer who made the credit sale. Occasionally, receivables purchased subject to endorsement of the dealer remain in the latter's possession for collection. Under these circumstances, the transaction is almost identical with a loan secured by a chattel mortgage on the dealer's receivables. But ownership of title rather than physical possession is the controlling criterion in our measurement of the receivables of the intermediary financing agencies. When title lies with the dealer, the receivables appear on his balance sheet and are reflected in our estimates of receivables of retail merchants. But when title passes to an intermediary financing agency, the receivables are to be found on the balance sheet of the latter enterprise.

Types of Intermediary Financing Agencies

This chapter will deal with three types of intermediary financing agencies: instalment finance companies, banks, and manufacturers. Throughout the period from 1923 to 1937 instalment finance companies have accounted for the preponderant part of the total amount of intermediary financing. Banks, which were relatively unimportant at the beginning of the period, have rapidly increased their share of this business in recent years; while the portion handled by manufacturers has gradually declined.

Distinctions between instalment finance companies, banks, and manufacturers, as these terms will be used here, are highly artificial. Included among instalment finance companies are the instalment financing departments or affiliates of a number of banks that purchase instalment contracts on a large scale over extensive geographic areas. This has seemed desirable both for the purpose of making our data comparable with those assembled by the United States Census Bureau, which are understood to include figures for some large-scale instalment financing by banks, and for the purpose of differentiating the business of these latter institutions from the small-scale, community-wide instalment financing service rendered by many other banks. Instalment financing subsidiaries of manufacturers have also been included among instalment finance companies, even though the receivables of these affiliates were carried in the consolidated balance sheet of the parent company.

For many years some companies engaged primarily in financing instalment sales have also made small loans either directly, as licensees under regulatory small loan laws, or through licensed subsidiaries; and in recent years many companies formerly engaged primarily in the regulated small loan business have entered the field of instalment financing. Difficulties of distinguishing between regulated small loan companies engaged in the instalment finance business as a side line and instalment finance companies engaged in the small loan business as a side line have led to the inclusion of all retail instalment paper held by such enterprises among the receivables of instalment finance companies.

These three types of agencies are not the only ones engaged in intermediary financing. In recent years industrial banking companies and unregulated lenders have purchased considerable quantities of retail instalment paper. But the total investment of the latter agencies in such paper is small as compared with that of instalment finance companies, banks, and manufacturers; and, since its segregation was frequently impossible, the retail instalment paper held by industrial banking companies and unregulated lenders has been included in the estimates of loan balances of these agencies given in Chapter 13. Difficulties of segregation have also led to the inclusion of small amounts of retail instalment paper in the figures for loan balances of personal loan departments.

The types of intermediary financing agencies mentioned thus far confine their purchases of retail receivables almost exclusively to instalment contracts. Throughout the period covered by our estimates, however, there have been occasional purchases of retail open-book accounts and such purchases have increased in very recent years. Since the total amount of open-book accounts held by agencies other than the original credit grantors was still very small at the close of 1937 and since it was impossible to develop reliable measurements of such paper, no effort has been made to include it in our estimates. But the possibility that purchases of retail open-book accounts may become more important in the future warrants inclusion of a comment upon this business.

Long before the development of agencies that purchased retail instalment contracts, enterprises known generally as "factors" were engaged in advancing funds against accounts receivables. These advances frequently took the form of purchases of inter-business open-book accounts, such as receivables due to manufacturers from wholesalers and jobbers, receivables due to wholesalers and jobbers from retailers, and receivables due to raw-material producers or brokers from those engaged in processing these materials. Some factors appear to have purchased open-book accounts on a small scale during the 1920's, particularly in 1928 and 1929 when many merchants were hard pressed for capital to finance expanding receivables. But it was not until 1936 and 1937, when several prominent factors made experimental purchases of department store accounts on a substantial scale, that this business acquired noteworthy proportions.

Retail Instalment Sales Contracts Held by Instalment Finance Companies

There are two principal sources of quantitative data concerning the business of instalment finance companies—the United States Census Bureau and the National Association of Sales Finance Companies. Since the beginning of 1928 the Bureau of the Census has published monthly figures on wholesale and retail automobile financing reported voluntarily by some 400 finance companies; and it has recently initiated a monthly series of outstanding amounts of retail automobile paper held by 224 instalment finance companies that goes back to January, 1936. The National Association of Sales Finance Companies has from time to time assembled and analyzed data from many sources and published them in its periodical, Time Sales Financing.

Unfortunately the data available from these sources were inadequate for our purpose. It was possible to compute fairly reliable estimates of receivables from the Census Bureau's monthly figures for automobile financing from 1928 to the date when its receivable series was initiated, and such computations were made by Milan V. Ayres of the National Association of Sales Finance Companies.[1] But this series had several important shortcomings. First, it could not be carried back beyond 1928. Second, it was limited to automobile financing and only the crudest guesses were available concerning the outstanding amounts of other retail paper on the books of instalment finance companies. Third, the Census Bureau's figures were admittedly incomplete; and, because the Census Bureau considers the names of reporting companies as well as their figures to be confidential, it was impossible to form a reliable opinion concerning the proportion of the total amount of automobile financing covered by these figures.

It was hoped when the present study was first planned that the National Association of Sales Finance Companies might be encouraged to develop year-end estimates of the total amount of retail paper held by instalment finance companies for the period since 1923. But dissensions within the instalment financing business, arising from the NRA code hearings and culminating in the organization of a second trade association known as the American Finance Conference, made this impracticable. Consequently, the development of estimates was reluctantly undertaken by us. Although independent estimates have been built up from original source material, the data already available have been used to check the accuracy of our results. In order that our series might be compared with that computed by Mr. Ayres and the figures reported by the Bureau of the Census, retail automobile receivables have been segregated from other retail receivables in our estimates.

The first problem in the development of our estimates was to identify the companies engaged in financing instalment sales. The National Association of Sales Finance Companies supplied the names of some 800 companies which were understood to be engaged in the instalment finance business. This list was checked to elimi-

[1] Mr. Ayres' series, which was calculated on the assumption that contracts were paid over a twelve-month period, was discontinued late in 1935 when the progressive increase in the term of retail automobile contracts made further calculations highly speculative.

nate those engaged solely in factoring or other business financing, in rediscounting the retail contracts of other instalment finance companies, and in financing commercial vehicles, or professional, business, and industrial equipment. Additional names were obtained from the classified telephone directories and from many other sources.

The available compilations of corporate reports were then searched for information concerning these companies. Poor's, Moody's, Fitch's, and Polk's manuals and Standard Corporation Records yielded accounts-receivable data for many companies. Some companies were incorporated under the investment company article of the New York Banking Law and their balance sheets have been published in the annual reports of the State Banking Department.[1] While these sources provided useful material, they generally failed to yield the precise figures which we sought. Balance sheet items were usually summarized and it was frequently impossible to distinguish between wholesale and retail paper or between retail automobile paper and other retail paper.

The best source of data proved to be the published annual reports of individual instalment finance companies. Some of these companies gave us access to files of their own annual reports and several permitted us to use their files of competitors' reports. Through the courtesy of Laurence H. Sloan of the Standard Statistics Company permission to use the files of corporate reports of that company was obtained. The material culled from these files was invaluable.

The published annual reports of instalment finance companies generally segregated retail and wholesale paper, at least for the period since 1929, but all classes of retail paper were frequently lumped together or inadequately identified. Since many companies were engaged in financing either automobiles or other commodities, their retail receivables could be readily identified with these types of paper. Reports of companies that offered a general financing service presented the greatest difficulties.

In recent years the balance sheets of most instalment finance

[1] This source must be used, however, with a great deal of care. Many of the balance sheets are for subsidiaries of prominent instalment finance companies and, because of the similarity between the names of subsidiaries and parent companies, the subsidiary may readily be confused with the parent company.

companies have segregated wholesale and retail receivables. Retail paper was usually reported under two items: "motor-lien retail time sales notes" and "industrial-lien retail time sales notes." The latter item was usually more inclusive than our classification "other retail paper" since it covered paper secured by store fixtures, physicians' and dentists' equipment, and industrial machinery. But the bulk of the receivables reported by most finance companies under this item was secured by refrigerators, washing machines, pianos, heating equipment, and other consumers' goods. Some reports gave the percentage distribution of this receivable item or of the volume of paper purchased by types of commodities financed; and these figures were used, when available, to estimate the amount of "other retail paper." When segregations were impossible, the whole sum reported as industrial-lien retail time sales notes was included for companies known to be engaged primarily in financing consumers' goods and excluded for companies known to be engaged principally in financing producers' goods.

The items "open accounts," "sundry receivables," and "rediscounts" also appeared in many balance sheets. The item "open accounts" generally identifies receivables arising from business transactions, and it was therefore excluded for our purpose. The item "sundry receivables," which appears to have been used to report loans to employes and petty credits of various sorts, was also excluded. The item "rediscounts" generally identifies advances made to other finance companies against hypothecated notes without a transfer of title. Except for the few instances in which rediscounts were known to represent advances to subsidiaries for which reported figures were not available, this item was excluded.

When these sources of published balance sheet data were exhausted, work sheets for each company containing information which had been collected were prepared. No sheet contained precise figures for the whole period covered by our series. But many provided figures from which close estimates for the whole period could be made. Wherever fairly reliable estimates could be developed from the existing data, the series was completed and the figures entered on summary sheets.

For all other companies further information was sought by correspondence.[1] In many instances it was necessary only to request information to fill gaps in the data previously obtained. For several large companies figures were requested for earlier years for companies which had later been absorbed by them. The companies for which data were generally inadequate were divided into two groups: those whose receivables were believed to exceed a million dollars at the close of 1936, and those believed to have smaller receivable balances. Anticipating that the larger companies would have better records and would be more willing to supply detailed figures, the first group was asked to supply year-end figures for retail automobile receivables and other retail receivables from 1923 to 1937.[2] The smaller companies were asked to give figures for the close of the years 1929, 1932, and 1936.

Replies were received from all but a few of the larger companies. Where information was refused, data were solicited and generally obtained from banks in the same locality or from commercial paper brokers dealing in the short-term notes of the companies for which data were sought. Less than half of the smaller companies, however, responded to repeated requests for figures for the years 1929, 1932, and 1936. For the remainder reports were ordered from credit information services.

Many of the reports obtained from credit information services contained balance sheets for the years 1935 and 1936 or 1936 and 1937, but some gave figures for earlier years. Wherever possible, estimates were developed for the years 1929, 1932, and 1936 even if only crude approximations could be obtained. Some of the balance sheets furnished by credit information services distinguished retail automobile receivables from other retail receivables. Where segregations were not made, we frequently divided total receivables between automobile and other retail paper on the basis of the

[1] It was our general policy to avoid soliciting figures for the period before 1928 if we had any reasonable basis for the development of estimates. The policy was adopted for two reasons: First, our summaries for these early years would be crude even if based on precise figures because an allowance would have to be made for mergers and liquidations. Second, we believed that the response to our inquiries would be improved by limiting so far as possible the time-period for which figures were requested.

[2] Since figures were solicited during the year 1937, the original series generally covered the period from 1923 to 1936. For all but a few of these companies, 1937 figures were later obtained from annual reports or by correspondence and for the remainder 1937 figures were extrapolated.

description of the business given in the report. Some of the credit reports described the business but gave no balance sheets and, in some instances, crude estimates were based upon other information supplied by these reports. If the number of employes was reported, retail receivables at the close of 1936 were estimated at $40,000 per employe. If the net worth was reported, we estimated retail receivables at twice the net worth for companies with a net worth of less than $100,000 and at two and one-half times the net worth for larger companies unless other information led us to modify it.

This procedure provided figures for retail automobile paper and other retail paper for three groups of instalment finance companies. For one group of companies, we had year-end figures for the period from 1923 to 1937 or for that part of this period during which each company had been engaged in instalment financing; for another group of companies, we had figures for the close of the years 1929, 1932, and 1936; and for still another group, we had figures only for the close of 1936. Among the companies engaged in automobile financing, we had full-series figures for 241 companies, three-year figures for 321 companies, and 1936 figures for 138 companies. Among those engaged in financing other consumers' goods, we had full-series figures for 161 companies, three-year figures for 167 companies, and 1936 figures for 42 companies.

The series of year-end figures for retail automobile paper and for other retail paper covering the period from 1923 to 1937 were used as the means of interpolating and extrapolating the three-year and single-year figures. First, the leading enterprises in both fields of financing were excluded from the full-series figures. This minimized the size-disparity among the enterprises represented in these groups of companies and gave a closer fit for the relative movements of the full-series and three-year series figures between 1929, 1932, and 1936. Second, the remaining full-series companies, all the three-year series companies, and all the single-year companies were divided into classes determined by the date of organization. Third, we extrapolated or interpolated figures for each class among three-year and single-year companies in accordance with the movement of the receivables of the full-series companies of the same class. The results of these calculations for retail automobile paper and other retail paper are given in Tables 33 and 34.

TABLE 33.—ESTIMATED AMOUNTS OF RETAIL AUTOMOBILE PAPER HELD BY CERTAIN INSTALMENT FINANCE COMPANIES AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Millions of dollars)

Year	Full series (241 companies)	Three-year series (321 companies)	1936 Figures only (138 companies)	Total (700 companies)
1923	176.8	6.8	2.8	186.4
1924	226.1	12.1	5.3	243.5
1925	420.8	24.0	11.0	455.8
1926	529.7	26.5	12.5	568.7
1927	469.8	23.9	11.4	505.1
1928	596.6	34.9	16.3	647.8
1929	767.2	46.2	21.7	835.1
1930	589.3	37.8	17.3	644.4
1931	445.8	30.3	13.7	489.8
1932	261.4	22.1	10.0	293.5
1933	344.8	25.0	11.2	381.0
1934	495.4	31.4	13.7	540.5
1935	688.8	43.7	17.8	750.3
1936	1,089.0	63.8	24.4	1,177.2
1937	1,197.7	78.2	29.3	1,305.2

TABLE 34.—ESTIMATED AMOUNT OF OTHER RETAIL PAPER HELD BY CERTAIN INSTALMENT FINANCE COMPANIES AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Millions of dollars)

Year	Full series (161 companies)	Three-year series (167 companies)	1936 Figures only (42 companies)	Total (370 companies)
1923	32.5	2.0	0.5	35.0
1924	45.8	2.5	0.7	49.0
1925	70.7	3.9	1.1	75.7
1926	101.4	4.2	1.2	106.8
1927	127.0	5.0	1.4	133.4
1928	178.0	6.7	1.8	186.5
1929	252.5	8.5	2.3	263.3
1930	245.7	8.5	2.3	256.5
1931	199.7	8.2	2.2	210.1
1932	123.4	7.6	2.1	133.1
1933	99.7	7.7	2.1	109.5
1934	111.9	8.4	2.3	122.6
1935	178.1	13.6	3.7	195.4
1936	263.8	16.3	4.5	284.6
1937	..	..	..	385.1

The figures given in these tables understate the total amount of retail automobile paper and of other retail paper held by instalment finance companies. Our researches were unable to discover all the enterprises engaged in purchasing retail instalment paper, and for many that were identified we failed to obtain figures. The true number of instalment finance companies is probably almost double the number for which data have been obtained. The missing companies were probably small in most instances, but in total their receivables were not negligible. Two comparisons permit a very crude judgment concerning the comprehensiveness of our figures.

First, it was possible to make a rough appraisal of our coverage for the state of Indiana. By an act of 1935[1] all enterprises engaged in instalment financing in that state have been brought under state regulation and are required to submit an annual report to the Department of Financial Institutions. Only 40 per cent of the companies licensed to finance instalment sales in Indiana in 1936 (exclusive of banks, industrial banking companies, public utility companies, and companies specializing in commercial vehicle or agricultural implement financing) were represented in our figures. The Indiana Department of Financial Institutions courteously supplied us with figures for the total amount of Indiana receivables reported at the close of 1936 by interstate companies represented in our series. By adding to this figure the receivables of intrastate companies in Indiana for which we had data, it was possible to compare our Indiana totals with the totals reported by the Department of Financial Institutions. This comparison indicated that our figures omitted at least 5.5 per cent of the Indiana receivables.[2]

Second, it was possible to use the Census Bureau's figures for automobile financing as a means of checking the adequacy of coverage of our automobile paper series during the early 1920's. Table 35 compares the outstanding amounts and number of companies represented in each year in our automobile paper series with the num-

[1] An act to license and regulate and to promote competition in the business of purchasing contracts arising out of retail instalment sales, and so forth, Chap. 231, Laws of 1935.

[2] For purposes of this comparison, we excluded commercial motor vehicle financing from the Indiana totals since we had excluded companies specializing in the financing of commercial vehicles from our series. But since our series includes some commercial vehicle financing, this comparison minimizes the disparity between our totals and the Indiana totals for 1936.

ber of companies represented in the Census Bureau's figures for automobile financing and with the outstanding amounts of automobile paper estimated by Mr. Ayres from census data or reported to the Census.

TABLE 35.—NUMBER OF COMPANIES REPRESENTED, AND REPORTED OR ESTIMATED AMOUNTS OF RETAIL AUTOMOBILE PAPER HELD BY SUCH COMPANIES AT THE CLOSE OF EACH YEAR, IN OUR SERIES AND IN THE UNITED STATES CENSUS BUREAU'S SERIES FOR INSTALMENT FINANCE COMPANIES, 1923 TO 1937

(Amounts in millions of dollars)

Year	Our series		Census Bureau's series	
	Number of companies represented[a]	Reported or estimated amount of paper held	Number of companies represented[b]	Reported or estimated amount of paper held
1923	195	186.4	..	..
1924	250	243.5	..	..
1925	299	455.8	..	..
1926	328	568.7	..	..
1927	354	505.1	..	..
1928	390	647.8	456	665.3[c]
1929	417	835.1	456	865.0[c]
1930	444	644.4	455	612.8[c]
1931	457	489.8	428	481.1[c]
1932	469	293.5	330	264.2[c]
1933	485	381.0	383	355.7[c]
1934	535	540.5	419	486.0[c]
1935	601	750.3	419	643.0[c]
1936	633	1,177.2	224	1,036.0[d]
1937	633	1,305.2	224	1,120.2[d]

[a] These figures include the 700 companies for which full-series, three-year-series, or 1936 figures were obtained. Since many of these companies began business after 1923 or discontinued business before 1937, the number represented in each year was much smaller than the total number covered. The date of organization was known in almost all instances. The few companies for which the date of organization was unknown were allocated in accordance with the distribution of organization dates of other companies.

[b] Since the number of reporting enterprises varied substantially during some years, we have given so far as possible the number reporting as of June 30. Because most of the enterprises which dropped out of the series at certain times were very small, the substantial variation in the number of reporting companies has comparatively little influence upon the movement of estimates based upon the Census Bureau's series.

[c] Calculated by Milan V. Ayres from the Census Bureau's figures for retail automobile financing on the assumption of a twelve-month term of repayment.

[d] Figures reported to the Census Bureau.

Both the census figures for automobile financing and Mr. Ayres' estimates of the outstanding amounts of automobile paper are most reliable for the years 1928 and 1929. When the Census Bureau's series was initiated, it certainly covered the overwhelming part of the total volume of retail automobile financing. Since then, however, the Bureau has attempted to maintain what approximates a continuous series for identical companies, including new companies only to replace those dropping out. Because the number of instalment finance companies has increased throughout the period covered by these figures, the Census Bureau's series has become, for later years, increasingly less reliable as a measure of the total amount of automobile financing. It seems probable, also, that Mr. Ayres' estimates of outstandings, based on the assumption of a twelve-month term of repayment, were most reliable for 1928 and 1929 and that they were distorted during the depression years by their neglect of the influence of delinquency and during the recovery period by the gradual lengthening of the term of repayment. For 1928 and 1929 both the number of companies represented in the census series and the oustandings computed by Mr. Ayres from these data substantially exceed those for our series.

It was to be expected from the nature of its development that our series would tend to understate the number of instalment finance companies and the amount of paper held by them in progressively greater degree as one moves backward in time. Although figures were obtained for many companies which had been liquidated or merged before our study was initiated, it was impossible either to identify all such companies or to obtain figures for many that were identified. We believe our series is most comprehensive, with respect both to the number of instalment finance companies and to the amount of paper held by them, for 1933 and 1934. Our figures also appear to understate progressively the number of companies and their outstandings for the years after 1934. During these years many small loan companies and individual investors entered the field of instalment financing on a small scale and, although some such enterprises are included in our series, it was impossible to obtain figures for all. The comprehensiveness of our figures for 1937 is also affected by the fact that no effort was made to identify or to obtain figures for companies which began to finance instalment sales during this year.

These observations are reflected in the percentage allowances for omissions which have been applied to our series in order to obtain estimates of the total outstanding amounts of retail paper held by instalment finance companies. These allowances and estimates of the total amount of retail paper held by all instalment finance companies in the United States are given in Table 36.

TABLE 36.—ESTIMATED RETAIL RECEIVABLES OF ALL INSTALMENT FINANCE COMPANIES IN THE UNITED STATES AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Amounts in millions of dollars)

Year	Reported or estimated amount of automobile paper held by 700 companies	Reported or estimated amount of other retail paper held by 370 companies	Reported or estimated amount of all retail paper held by 837 companies	Allowance for omissions		Estimated total amount of retail paper
				Per cent	Amount	
1923	186.4	35.0	221.4	12.0	26.6	248
1924	243.5	49.0	292.5	12.0	35.1	328
1925	455.8	75.7	531.5	11.5	61.1	593
1926	568.7	106.8	675.5	11.0	74.3	750
1927	505.1	133.4	638.5	10.0	63.9	702
1928	647.8	186.5	834.3	9.0	75.1	909
1929	835.1	263.3	1,098.4	8.5	93.4	1,192
1930	644.4	256.5	900.9	8.0	72.1	973
1931	489.8	210.1	699.9	7.0	49.0	749
1932	293.5	133.1	426.6	6.0	25.6	452
1933	381.0	109.5	490.5	5.0	24.5	515
1934	540.5	122.6	663.1	5.0	33.2	696
1935	750.3	195.4	945.7	5.4	51.1	997
1936	1,177.2	284.6	1,461.8	6.0	87.7	1,550
1937	1,305.2	385.1	1,690.3	7.0	118.3	1,809

These estimates have a high degree of reliability, particularly for the period since 1929. The full-series figures, which account for the overwhelming part of the totals, are to a large extent reported figures or very close estimates. The three-year figures are also in very large degree reported figures, although there are some crude estimates among them. For the companies in the single-year group many figures are exceedingly crude and the process of extrapolation involves large potential errors. But the amounts of retail paper held by this group were relatively small and even substantial errors in these estimates have a negligible influence upon the totals. It seems probable that the potential error in the estimates for all instalment finance companies during the period between 1929 and 1937 is less than 5 per cent. For the years before 1929 the potential error increases substantially and for 1923 it may be as high as 15 per cent.

Receivables Acquired by Banks as Intermediary Financing Agencies

Bank credit is used for financing consumers in three ways. The first and by far the most common method is the extension of credit to agencies which in turn extend credit to consumers. But this type of bank credit is excluded from the area of the present study because it would duplicate the receivable balances of other types of consumer credit agencies. The second method is direct lending to consumers. Such loans will be dealt with when estimates of loan balances of cash-lending agencies are presented. The third method is the purchase of instalment contracts arising from retail sales. In this section an attempt will be made to measure the retail instalment paper acquired by banks as intermediary financing agencies.

Although some banks began to purchase retail instalment contracts on a small scale before the outbreak of the World War, this practice was limited to a very few banks until the late 1920's and it has become common only in the last few years. From 1934 to 1937 there was an extraordinarily rapid increase both in the number of banks that purchased instalment paper and in their total holdings of such paper. The latter development was stimulated, on one hand, by the pressure of excess reserves and, on the other hand, by the slack demand for commercial loans, by the low yield for prime investments, and by the favorable experience of many banks with home remodernization loans under the National Housing Act.

It will serve our purpose to distinguish three classes of intermediary financing among commercial banks: (1) large-scale instalment financing through special departments created for this purpose, (2) small-scale instalment financing confined to the immediate locality in which the bank is situated, and (3) home remodernization financing under Title I of the National Housing Act.

Large-Scale Instalment Financing Departments

A few large commercial banks have established special facilities for buying retail instalment paper on a large scale and have competed aggressively with instalment finance companies for this business. Instalment paper is frequently solicited from dealers over a large area. Where banking laws confine the bank's activities to a limited area, subsidiary corporations have been established or arrangements made with independent agencies to purchase instalment paper elsewhere on behalf of the bank. In some instances the bank entered the field by acquiring a previously existing instalment finance company. For the purpose of this section the term "large-scale instalment financing departments" will be used to identify those whose operations cover a large geographic area and whose retail receivables at the close of 1936 exceeded a million dollars. Six such large-scale instalment financing departments have been identified and figures secured for the retail instalment paper held by them at the close of each year. There is no assurance, of course, that similar departments may not have escaped our notice.

As previously indicated, figures for these large-scale instalment financing departments, which resemble instalment finance companies far more than they resemble the small-scale, community-wide instalment financing operations typical of other banks, have been included in the estimates for instalment finance companies. To give figures for these institutions for the whole period from 1923 to 1937 would disclose information given us in confidence. But the trend during recent years is of the greatest interest. The following figures give the amount of retail paper held by these six institutions at the close of each year from 1934 to 1937:

1934	$10,232,000
1935	18,000,000
1936	48,753,000
1937	69,915,000

Small-Scale Instalment Financing

The second form of intermediary financing is functionally identical with the first, but differences in the nature of the operation make its segregation desirable. Thousands of banks in rural and urban communities purchase small quantities of instalment paper arising from sales by dealers to consumers in their communities. In some instances, instalment contracts are purchased from dealers after sales have been consummated; and in other instances, arrangements for financing are made with the bank before sales are completed. The extent of this practice among banks was not generally realized until the enactment of laws in Indiana and Wisconsin to regulate instalment financing revealed that a substantial proportion of the banks in these states were engaged in instalment financing. The history of the practice is obscure. But it seems likely that banks which formerly extended credit to automobile dealers and to other retail merchants for carrying receivables have, in increasing numbers, preferred to buy retail receivables rather than to make loans to dealers secured by their receivables.

TABLE 37.—NUMBER OF INDIANA BANKS REPORTING RETAIL INSTALMENT RECEIVABLES AND AMOUNT OF SUCH PAPER HELD, AT THE CLOSE OF 1936, BY SIZE OF PLACE

Population of places	Total number of banks	Number reporting instalment receivables	Number reporting instalment receivables of:						Total instalment receivables
			Less than 3,000	3,000–9,999	10,000–29,999	30,000–99,999	100,000–299,999	300,000 or more	
Over 200,000	16	1	..	1	..	..	..	..	$5,000
100,000–199,999	22	12	1	2	1	3	3	2	1,900,000
50,000– 99,999	7	2	1	..	..	1	..	..	48,000
20,000– 49,999	27	14	3	4	3	3	1	..	356,000
5,000– 19,999	84	27	3	7	13	4	..	..	578,000
Less than 5,000	368	104	26	42	26	8	2	..	1,212,000
Total	524	160	34	56	43	19	6	2	$4,099,000

Through the courtesy of the Indiana Department of Financial Institutions, we have obtained the amounts of retail instalment receivables held by individual banks at the close of 1936 classified by the population of the place in which each bank was situated. This material, which is summarized in Table 37, is enlightening for our purpose. Whereas large-scale instalment financing departments were situated in major trading centers, the retail receivables held by banks in Indiana were confined principally to banks in smaller cities and country towns. Only two had balances in excess of $300,000 and none exceeded a million dollars. It seems clear, therefore, that the type of operation represented by the Indiana figures is quite different from that defined as large-scale instalment financing.

Similar data were not available for Wisconsin. But the Wisconsin Banking Department has published a list of agencies licensed to finance instalment sales of automobiles in that state,[1] among which were 125 banks. Table 38, which gives the number and resources of all banks in Wisconsin and the number and resources of banks licensed to finance instalment sales of automobiles by size-classes of places, indicates that in Wisconsin, as well as in Indiana, automobile financing is most common among banks in small towns and rural communities. It will be noted also that in the larger

TABLE 38.—NUMBER AND RESOURCES OF ALL BANKS IN WISCONSIN AND OF BANKS LICENSED TO FINANCE INSTALMENT SALES OF AUTOMOBILES IN THAT STATE, BY SIZE OF PLACE, AT THE CLOSE OF 1936[a]

Population of places	All banks		Banks licensed to finance instalment sales of automobiles			
	Number	Resources (millions of dollars)	Number	Per cent of total number	Resources (millions of dollars)	Per cent of total resources
100,000 or over	22	365	4	18.2	15	4.1
50,000 to 99,999	16	71	1	6.3	4	5.6
25,000 to 49,999	46	149	12	26.1	42	28.2
10,000 to 24,999	34	81	3	8.8	5	6.2
3,000 to 9,999	86	116	22	25.6	32	27.6
Less than 3,000	395	201	83	21.0	50	24.9
Total	599	983	125	20.87	148	15.1

[a] Data for resources of banks were taken from Polk's Bankers Encyclopedia; banks licensed to finance instalment sales of automobiles in Wisconsin are listed in List of Wisconsin Sales Finance Companies, Direct Loan Agencies, Motor Vehicle Dealers, Motor Vehicle Salesmen, prepared by Division of Consumer Credit, State Banking Department, Madison.

cities it is generally the smaller banks that finance instalment sales of automobiles. The average investment in retail automobile paper among Wisconsin banks licensed to do this business was only $19,000 at the close of 1937.[2]

Difficulties of identifying banks that purchase instalment contracts in other states have led us to rely upon figures for Indiana

[1] The Wisconsin act (Chap. 474, Laws of 1935, Section 218.01, Revised 1937) applies to instalment sales of automobiles only.

[2] The results of a survey of personal loan and instalment financing activities conducted in 1937 by the Reserve City Bankers' Association among its membership and issued in a confidential bulletin by the Association suggest that instalment financing practices among bankers in other areas are similar to those in Indiana and Wisconsin.

and Wisconsin banks as the basis for estimating the outstanding amounts of retail paper held by commercial banks engaged in small-scale instalment financing throughout the United States. Our procedure was, first, to develop an estimate of the paper held by such banks at the close of 1937 by applying to the estimated amount of retail receivables held by all instalment finance companies on that date the ratio between the amounts of retail instalment paper held by instalment finance companies and banks in Indiana and Wisconsin on the same date; and, second, to base our estimates for previous years upon the trend of instalment receivables reported to us by banks in Wisconsin and Indiana which were licensed to finance instalment sales.

At the close of 1937 Indiana banks reported retail instalment receivables of $5,419,000 as compared with $51,165,000 reported by instalment finance companies in that state. Thus, in Indiana, banks held 10.6 per cent as much retail instalment paper at the close of 1937 as instalment finance companies. Through the courtesy of the Wisconsin Banking Department we obtained similar figures, previously unpublished, for the close of 1937. The retail automobile paper held by banks was $2,355,000, as compared with $38,466,000 for instalment finance companies, after subtracting the automobile paper held by industrial banking companies. Thus, in Wisconsin, banks held 6.1 per cent as much retail automobile paper as instalment finance companies.

The actual disparity between the relative amount of instalment financing done by Wisconsin and by Indiana banks is not so great as the differences in these ratios would indicate. The Wisconsin figures, as already noted, are limited to automobile paper; while the Indiana figures cover all forms of retail instalment financing. A breakdown of the retail instalment paper held by various types of institutions given us by the Indiana Department of Financial Institutions indicates that banks in that state held a much smaller percentage of the total amount of automobile paper than of the total amount of other retail paper. It seems probable that the ratio for Wisconsin would be increased to 7 per cent or higher if all retail instalment paper were included.

A reliable judgment as to whether or not the situation in Indiana and Wisconsin with respect to small-scale instalment financing by banks is adequately representative of the situation in the United States as a whole must await exploration of this field of bank activity by official supervisory agencies. In many respects Indiana and Wisconsin are satisfactory states for sampling purposes, and, in the absence of specific information to the contrary, the relationship between the instalment paper held by banks and by instalment finance companies in these two states has been accepted as typical for the country as a whole. In the interests of conservatism we have selected a ratio of 8 per cent, which is somewhat lower than the mean of the ratios in these two states. Applying this ratio to our estimate of the retail receivables held by all instalment finance companies at the close of 1937 gives an estimate of $143,300,000 for the retail receivables held by banks on that date.

Estimates for earlier years were based upon data solicited from individual banks licensed to engage in instalment financing in Indiana and in Wisconsin. There were 364 licensed banks in these two states and, of these, 189 supplied figures for their retail instalment receivables at the close of 1927, 1929, 1932, 1934, 1936, and 1937, and indicated the year in which each began to finance instalment sales. Most banks reported absolute amounts of retail instalment paper, but a few reported in terms of relatives of 1937. For most of the latter banks we were able, by various devices, to develop close estimates of their 1937 retail instalment receivables and to compute absolute figures from these relatives. Where banks were unable to give us figures for certain years, missing figures were estimated on the basis of the trend indicated by banks which had begun to finance instalment sales in the same year. The available absolute figures were then summed and relatives of 1937 were computed.

Table 39 gives the amount of retail instalment paper reported to us by Indiana and Wisconsin banks for the close of the years 1927, 1929, 1932, 1934, and 1936, in terms of relatives of the 1937 total; a series of estimated relatives for all banks for the period from 1923 to 1937, based upon interpolations and extrapolations of the figures supplied by Indiana and Wisconsin banks; and estimates of the total amount of retail instalment paper held by all commercial banks, obtained by applying these relatives to the 1937 figure previously calculated. These estimates are, of course, extremely crude. They depend, first, upon the representativeness of Wisconsin and Indiana banks with respect to the extent of financing, and, second, upon the representativeness of the movement of receivables of reporting banks. The figures for the period between 1923 and 1927 have little validity. Figures for the period from 1934 to 1937 represent a large number of banks and they are more likely to be reliable, but a large potential error is inherent in them.

TABLE 39.—INDEX OF RETAIL INSTALMENT RECEIVABLES HELD BY REPORTING BANKS IN INDIANA AND WISCONSIN AT THE CLOSE OF CERTAIN YEARS; AND ESTIMATED INDEX AND ESTIMATED OUTSTANDING AMOUNT OF SUCH PAPER HELD BY ALL BANKS IN THE UNITED STATES ENGAGED IN SMALL-SCALE INSTALMENT FINANCING, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

Year	189 reporting banks in Indiana and Wisconsin—index of receivables (1937 = 100)	All banks in the United States engaged in small-scale financing	
		Estimated index of receivables (1937 = 100)	Estimated amount of receivables (millions of dollars)
1923	..	3.0	4.3
1924	..	4.5	6.4
1925	..	6.5	9.3
1926	..	7.5	10.7
1927	7.9	7.9	11.3
1928	..	9.5	13.6
1929	10.8	10.8	15.5
1930	..	11.5	16.5
1931	..	11.0	15.8
1932	9.3	9.3	13.3
1933	..	13.0	18.6
1934	21.1	21.1	30.2
1935	..	35.0	50.2
1936	68.3	68.3	97.9
1937	100.0	100.0	143.3

Home Modernization Financing Under Title I of the National Housing Act

Credits extended by banks for the modernization and repair of homes under Title I of the National Housing Act usually took the form of direct loans and they might, therefore, have been included in the estimates of consumer loan balances of commercial banks that will be presented in Chapter 13. But several characteristics of Title I financing have led us to treat these loans as a form of intermediary financing. In the first place, they resemble instalment financing, inasmuch as the funds were supplied to finance specific credit sales negotiated between two other parties. In the second place, these loans tended to supplant instalment financing during the period for which government insurance was available for such loans and similar transactions reverted to the form of instalment financing when this insurance was discontinued.

Satisfactory figures for the outstanding amount of Title I financing have not been published by the Federal Housing Administration. But the annual reports of this agency give figures for the volume of Title I financing handled by various types of institutions, the kinds of property involved in this financing, the amounts of individual contracts, and the duration of terms of contracts. From these data it is possible to derive fairly reliable estimates of the amount of consumer paper held on various dates by banks.

The procedure in making these estimates was as follows: First, all financing in sums of more than $2,000 was excluded on the assumption that none of this paper represented consumer credit. Second, for all contracts of less than $2,000 a standard repayment schedule was constructed on the assumption that the contracts financed during each month were distributed with respect to term of repayment in the same proportions as were all contracts financed prior to the close of 1936. Third, this repayment schedule was applied to the sums insured by the Federal Housing Administration each month, and the outstanding amounts of paper at six months' intervals beginning with December 31, 1934, were computed. Fourth, we estimated that 55 per cent of these receivables represented consumer financing by banks,[1] and this percentage was applied to the estimated total receivables to obtain estimated amounts of consumer F.H.A. paper held by banks. These calculations are given in Table 40.

As has been indicated above, many other types of institutions

[1] This estimate was arrived at from the following reasoning: 70.4 per cent of the Title I contracts financed through December, 1936, were handled by banks (other than industrial banks). Consumer paper was estimated at 75 per cent of the total amount of financing in sums of $2,000 or less by assuming that all contracts involving single family properties and farm residences and one-half of the contracts involving multiple dwellings and "other property" represented consumer paper. If the proportion of consumer paper was the same for all types of financial institutions, a percentage of 52.8 per cent would have resulted. But we believe that instalment finance companies handled a considerably larger proportion of producer financing than the banks. Hence our estimate of 55 per cent.

have made loans insured under Title I of the National Housing Act. The Title I contracts held by industrial banks and credit unions are usually not segregated in their balance sheets. Consequently, such receivables are included in our loan balance estimates for these institutions. Building and loan associations handled only 1 per cent of the total amount of these contracts and their receivable balances have therefore been excluded as negligible. Except for banks, the largest part of the financing of Title I contracts was handled by instalment finance companies. Many of these companies were subsidiaries of manufacturing enterprises established solely for the purpose of financing Title I contracts. The receivables of these companies were excluded if the manufacturer was engaged primarily in making producer goods. Otherwise, the receivables of these companies were included in our figures for "other retail paper" held by instalment finance companies.

TABLE 40.—ESTIMATED AMOUNTS OF CONSUMER PAPER INSURED UNDER TITLE I OF THE NATIONAL HOUSING ACT HELD BY COMMERCIAL BANKS, 1934 TO 1937

Date	Estimated total outstandings on contracts of $2,000 or less (millions of dollars)	Consumer paper held by banks as per cent of total	Estimated amount of consumer paper held by banks (millions of dollars)
Dec. 31, 1934	30	55	17
June 30, 1935	82	55	45
Dec. 31, 1935	205	55	113
June 30, 1936	263	55	145
Dec. 31, 1936	278	55	153
June 30, 1937	248	55	136
Dec. 31, 1937	169	55	93

Retail Receivables Held by Manufacturers

As has been indicated at several points in the previous discussion, substantial amounts of retail receivables have been held by manufacturers throughout the period from 1923 to 1937. These receivables were acquired in two ways. Some manufacturers have maintained the practice of buying from dealers instalment contracts arising out of sales of their products, and a few have even offered to buy all their dealers' instalment paper on condition that a prescribed proportion arises from sales of their own products. Some manufacturers, on the other hand, sell directly to consumers by mail or through agents and these acquire consumer receivables directly as sellers of merchandise.

Instalment paper acquired by the first of these methods properly belongs among the receivables of intermediary financing agencies. In these transactions the manufacturer performs a function identical with that of the instalment finance company. In fact, the distinction between them for purposes of our classification is purely a formal one. If the manufacturer had set up a separate corporation to handle his retail financing, the receivables of this agency would be included in the estimates for instalment finance companies even though the subsidiary corporation was wholly owned by the manufacturer and was operated for all practical purposes as a department of the manufacturing corporation. Receivables acquired by means of direct sales to consumers, however, belong properly in the category of receivables of retail merchants. But for reasons inherent in the nature of the data, it is convenient to group instalment paper arising out of direct sales by manufacturers with those purchased by manufacturers from their dealers.

For the purpose of constructing estimates of retail receivables held by manufacturers, six types of manufacturing, in which the practice of making direct sales to consumers or of purchasing dealers' retail instalment paper is common, have been identified. These are: (1) subscription book publishers, (2) manufacturers of pianos and other musical instruments, (3) manufacturers of sewing machines, (4) manufacturers of refrigerators, washing machines, vacuum cleaners, and other household appliances, (5) manufacturers of stoves, furnaces, and stokers, and (6) manufacturers of paint, lumber, and roofing and insulating equipment.

The subscription book publishers generally acquire instalment receivables by direct sales to consumers. They guard their operating figures jealously; and, except for two large enterprises, of which one has published annual reports for an extended period and the other supplied us with data by correspondence, we have been unable to obtain receivable figures for these enterprises. Consequently, it has been necessary to rely upon information concerning the volume of business and credit policies of the industry as the basis for our estimates. Much of this information has been supplied by John O'Connor of the Quarrie Corporation, Chicago, who was active in the administration of the NRA code for subscription book publishers and who has an extensive knowledge of the credit policies of the industry. His assistance is gratefully acknowledged.

Year-end receivables of subscription book publishers tend generally to approximate the volume of sales during the year, except for a lag due to the long term of repayment. Reports to the NRA Code Authority indicated that the industry's sales approximated $26,000,000 in 1933. The 1936 volume has been estimated crudely at $36,000,000, and the 1929 volume appears to have been only slightly larger. Estimates of receivables have been constructed on the basis of these crude landmarks and the trends indicated by the two companies for which we have receivable figures. In recent years there has also been a development of instalment sales of magazine subscriptions and estimates for the credits arising out of such sales have been included in our estimates for the subscription book houses.

For other types of manufacturers we have relied heavily upon the published balance sheets of individual enterprises and upon correspondence with these enterprises to supplement the information given in their reports.

Among piano manufacturers and among manufacturers of stoves and furnaces, it is general practice to segregate retail instalment receivables in published balance sheets. For some enterprises the reports for certain years were not available or failed to segregate instalment receivables. But by interpolations and extrapolations based upon movements of receivables of other companies it was possible to develop fairly reliable figures during the period from 1923 to 1937 for the retail instalment receivables of companies which accounted for a major part of the total volume of production in these two industries during the period covered. The figures for manufacturers of pianos and other musical instruments covered 13 leading enterprises, and the figures for stove and furnace manufacturers covered 16 leading enterprises.

Figures for these enterprises, of course, understate the total outstanding amounts of instalment receivables held by all enterprises engaged in these types of manufacturing. Conservative allowances for omissions have therefore been added. We were unable to obtain figures for many piano factories which went out of business during the period between 1923 and 1934. Consequently, we have increased our figures for these enterprises by 22 per cent for the period between 1923 and 1925, by 10 per cent for the period between 1935 and 1937, and by percentages declining from 19 per cent to 10.5 per cent between 1926 and 1934. For stove and furnace manufacturers we have increased our figures by 20 per cent in each year.

For sewing-machine manufacturers and for manufacturers of radios, refrigerators, washing machines, suction cleaners, and other household appliances, the problem of identifying retail instalment receivables was more difficult. Published reports were less generally available because many enterprises that had published reports were reorganized, merged with other companies, or liquidated during the period covered by our study. Some enterprises for which reports were available segregated instalment receivables consistently; others did so occasionally; and some consistently reported both retail instalment paper and dealers' accounts in the same item. In a few instances, we were able to improve upon the data available in published reports by correspondence with individual enterprises, but in other instances, we were compelled to rely upon very crude estimates or to jettison entirely the reported figures.

Our series for sewing-machine companies includes figures for four companies which accounted for the overwhelming part of the production of household sewing machines during the period covered by estimates. But we were unable to obtain adequate figures for the Singer Sewing Machine Company, the largest enterprise in this field. After diligent search we finally obtained from the New Hampshire Secretary of State balance sheets for this company that segregated accounts receivable. Because this item includes receivables arising from sales of sewing machines for industrial use and probably includes receivables arising from foreign sales, only half of the receivables of this company have been included in our series. Although movements of estimated consumer receivables for the Singer Sewing Machine Company corresponded closely with movements of the combined receivables of the three other enterprises, the reliability of our series is dependent entirely upon the validity of our assumptions with respect to the retail receivables of the Singer Sewing Machine Company.

For manufacturers of paint, lumber, and roofing and insulating materials, published annual reports seldom provided the data necessary for our purpose. Dealers' receivables and retail instalment contracts were generally consolidated in a single item and we were obliged in most instances to solicit supplementary information by correspondence. Figures for retail receivables were obtained from 13 companies which account for a very small part of the total volume of production in these industries. In many instances our figures represent crude estimates made either by us or by the reporting enterprise. Partly for this reason and partly because of the wide differences in the credit practices among various enterprises, no allowance has been made for omissions and our figures tend substantially to understate the volume of retail receivables on the books of these enterprises.

Estimates of retail receivables held by each of these five types of manufacturers at the close of each year from 1929 to 1937 are given in Table 41. It will be noted that the receivables held by manufacturers of musical instruments have declined substantially as the result of the decline in piano sales. The erratic movements of receivables of manufacturers of refrigerators, vacuum cleaners, radios, and other household appliances, particularly for the years 1935 and 1937, reflect the shifting of receivables to instalment finance companies. Among manufacturers of stoves and furnaces and of paint, lumber, and roofing and insulating materials, there was also some shifting of receivables to instalment finance companies after 1933.

The possibility exists that these estimates of manufacturers' receivables may duplicate in some degree the estimates of receivables of retail merchants. To the extent that manufacturers acquire receivables from dealers, no duplication can occur. But the situation differs when manufacturers' receivables arise from direct sales to consumers. Such sales may be covered by the retail censuses, and may therefore form part of the base to which ratios of sample stores have been applied in estimating merchants' receivables.

Such duplication, if it occurs at all, seems likely, however, to be of minor proportions. The 1929 Census of Distribution excluded manufacturers' retail sales of 622 million dollars and, although reduced somewhat in subsequent censuses, the volume of manufacturers' sales excluded was still large in the 1935 Retail Census. In a few instances, it was possible to identify manufacturing corporations whose retail sales were included in the retail censuses and receivables of these companies have been excluded from our figures. But in the final analysis there is no means of segregating precisely manufacturers whose direct sales are covered by or excluded from the retail censuses.

TABLE 41.—ESTIMATED RETAIL RECEIVABLES HELD BY MANUFACTURERS, SELLING DIRECTLY TO CONSUMERS OR PURCHASING INSTALMENT PAPER FROM DEALERS, IN THE UNITED STATES, 1923 TO 1937

(Millions of dollars)

Year	Subscription book publishers	Manufacturers of pianos and other musical instruments	Manufacturers of sewing machines	Manufacturers of refrigerators, vacuum cleaners, radios, and other household appliances	Manufacturers of stoves and furnaces	Manufacturers of paint, lumber, and roofing and insulating materials	Total
1923	22	39.3	17.7	9.5	11.4	3.8	103.7
1924	24	41.3	23.2	11.4	15.3	4.1	119.3
1925	27	43.0	25.6	15.3	19.4	5.0	135.3
1926	28	43.5	28.4	20.1	24.0	4.8	148.8
1927	28	42.0	30.5	19.1	24.4	4.7	148.7
1928	30	39.0	33.4	22.7	27.5	4.7	157.3
1929	33	33.8	36.0	27.3	29.9	5.4	165.4
1930	32	24.8	33.4	23.7	28.8	4.9	147.6
1931	28	17.7	23.5	15.9	23.8	4.2	113.1
1932	24	12.3	14.8	10.6	17.9	2.9	82.5
1933	25	10.1	13.9	13.3	16.0	1.9	80.2
1934	27	9.1	15.2	19.1	16.0	1.9	88.3
1935	30	10.6	16.1	20.8	21.9	2.2	101.6
1936	34	14.7	17.5	27.0	29.5	3.3	126.0
1937	38	17.7	18.8	20.5	29.5	3.8	128.3

Receivables of manufacturers selling suits, dresses, shoes, stockings, brushes, packaged foods, and other household supplies direct to consumers were excluded in order to avoid the possibility of duplicating sums included in our estimates of merchants' receivables. Receivables of manufacturers of pleasure boats, automobile tires, and other automobile accessories who purchase instalment receivables arising from dealers' sales were excluded because it was impossible generally to obtain accurate segregations of instalment paper purchased from dealers and because the sums involved were relatively unimportant, though certainly not negligible.

CHAPTER XIII

LOAN BALANCES OF CASH-LENDING AGENCIES

THIS concluding chapter will describe the development of estimates of loan balances of agencies which lend money to consumers. Receivables of the consumer credit agencies with which the three preceding chapters have dealt arise directly from credit sales of goods and services. The receivables of retail merchants and service creditors originate in their own credit sales; and the receivables of intermediary financing agencies, though acquired from others, have their beginnings no less directly in sales of goods and services. Consumer loans made by cash-lending agencies, on the other hand, cannot in most instances be identified with specific credit sales. But in the final analysis these loans are inextricably related to credit merchandising.

Since few consumers would be willing to borrow money to increase their cash balances, the consumer loans of cash-lending agencies are used almost universally either for the purchase of goods or services or for the payment of debts incurred through previous credit purchases. To the extent that loans are used to purchase goods and services, the loan balances of cash-lending agencies represent a substitute for receivables on the books of credit-granting merchants or service agencies. To the extent that loans are used to liquidate debts incurred through previous credit sales, there is merely a shift of receivables from the books of merchants, service creditors, or intermediary financing agencies to the books of cash-lending agencies; and an expansion of the loan balances of the latter must be reflected in a compensating contraction of the receivables of other types of consumer credit agencies.

A further difference between the loan balances of cash-lending agencies and the receivables of other consumer credit institutions lies in the fact that loans generally bear interest while the receivables of other agencies do not. But this distinction is more apparent than real. So long as there are costs associated with the extension of credit, consumer credit agencies will attempt to make charges to cover these costs. Charges for loans can be readily identified because money, at any given time, is standardized with respect to quality and to price. Charges for other types of credit service, however, are usually included in the prices asked for goods or services; and only when both cash and credit prices for identical merchandise or services are quoted, as they generally are in fields where the services of intermediary financing agencies are used, can charges for credit be clearly identified.

For our purpose differences in the method of assessing charges for credit services are more important than the distinction between interest charges and "mark-ups" for credit sales. When the credit charges of retail merchants, service creditors, or intermediary financing agencies are included in the purchase price of goods or services, the receivables arising out of such sales include a sum to cover the cost of credit service which is yet to be rendered. Similarly, when cash-lending agencies discount interest in advance, their loan balances include a charge for credit service which will not be earned until the term of each loan has expired. Thus, the receivables of these agencies tend to overstate the amount of cash or its equivalent which has been advanced to consumers. On the other hand, if a borrower's note represents cash actually advanced and interest is collected on unpaid principal balances, or if a merchant sells goods at the cash price and levies a periodic carrying charge for credit service, the loan balances of such lenders and the receivables of such merchants will not reflect their outlays attributable to the costs of extending credit service and they will, therefore, tend to understate the amount of credit advanced to the consumer.

These distinctions are controlling for purposes of interpreting the influence of consumer credit fluctuations upon movements of the national income. On one hand, no additional income is created by an expansion of receivables which is compensated by an increase in reserves for unearned credit charges; and, on the other hand, income is created by an expansion of lenders' outlays which are frequently not reflected in their loan balances. But for the sake of simplicity no attempt has been made to correct our figures in this respect. The amount of unearned credit charges included in our receivable figures is relatively small, and whatever exaggeration in the movement of receivables results from failure to exclude these sums is largely offset by the exclusion of interest accruals.

For purposes of our statistical measurements seven types of cash-lending agencies have been identified: commercial banks, credit unions, industrial banking companies, pawnbrokers, regulated small loan companies, unregulated lenders, and miscellaneous lending agencies. Commercial banks, of course, lend primarily to producers and some of the institutions included in the miscellaneous category also lend a substantial part of their funds to business borrowers. For these agencies it has been necessary to develop crude estimates of the consumer credit content of their loan balances. The other types of agencies lend primarily for consumptive purposes, and their entire loan balances are included in our estimates. Since there are some loans for business purposes on the books of many of these agencies, our figures tend to exaggerate somewhat the amount of consumer credit. But since there are some consumer loans on the books of lending agencies which we have excluded entirely from consideration here; and since, as noted in the first chapter of this volume, the consuming and producing functions of many families engaged in agriculture and small businesses are hopelessly intermixed, the inclusion of some business loans in these estimates does not appear to be a serious shortcoming.

Consumer Loan Balances of Commercial Banks

Loans made by banks to consumers fall generally into two categories: First, there are the loans made by commercial banks on terms similar to those of industrial banking companies, which we shall call instalment loans. These loans are usually payable over the period of a year. Interest, and frequently investigation fees, are discounted in advance; fines are charged for delinquency; and instalment payments are credited either to the principal of the loan or to an hypothecated savings account. Second, there are the loans made for thirty, sixty, or ninety days at the prevailing discount rates for small commercial loans, usually with the understanding that the loan will be reduced periodically on renewal dates. The term "accommodation" will be used to describe these loans, although it is no longer fully appropriate because the decline in demand for commercial loans has compelled many small banks to welcome such loans as an important outlet for funds.

In spite of the elaborate statistics which are reported periodically by various supervisory agencies, no official figures have been published which shed any light upon the extent or trend of consumer lending by banks. Nor is it possible generally to obtain satisfactory data from these institutions themselves. For banks that maintain specialized personal loan departments, loan balance data can usually be obtained. But for the hundreds of others which do not segregate instalment loans from their commercial loan portfolios, and for the thousands which make accommodation loans, the reconstruction of a historical series of consumer loan balances is either impossible or so laborious that no bank could be expected to undertake it.

Loan Balances of Personal Loan Departments

Because loan balance figures could be obtained from most of the banks which maintained specialized personal loan departments, it seemed desirable to develop separate estimates for these agencies. Our data were assembled in the following manner. First, a list of banks operating personal loan departments was developed over a period of years by collecting news items referring to personal loan departments through newspaper clipping services. Additional names were obtained from the American Bankers Association and from classified telephone directories. Second, a letter was sent to each bank on the list requesting the date of organization of the personal loan department and the net loan balance,[1] exclusive of paper insured under the National Housing Act, at the close of each year back to 1928. For the few banks which had organized such departments before 1928, supplementary requests were later made for figures back to 1923 or to the date of organization. Third, reported loan balance figures were tabulated; and loan balance summaries and lists of personal loan departments in each state were sent to each contributing bank, to state banking departments, and to state bankers' associations with a request for the names of

[1] That is, after subtracting payments to hypothecated accounts.

other banks which were operating personal loan departments. The names of many other banks were submitted and the loan balances of their personal loan departments were solicited in the same manner.

Most banks supplied the data requested, at least for recent years. A few declared that it was contrary to their policy to release figures. For many that refused to supply figures estimates were obtained from officials of competing institutions; and for a few, whose personal loan balances were known to be small, crude estimates were made on the basis of the amount and trend of loan balances of personal loan departments, operating under similar conditions, which had furnished data. The greatest problem was met in obtaining figures for banks that had been liquidated. In making estimates for these latter institutions we frequently had the generous assistance of bank examiners, conservators, and officials of competing institutions, but our estimates in most instances were necessarily crude.

Except for the possibility of overestimates for non-reporting banks, which in the aggregate are likely to be negligible, our series tends to understate the total loan balance of personal loan departments. It includes figures for 685 departments that were operating at the close of 1936. But we were unable by these methods to identify all banks which operated personal loan departments during the period covered by this study. Comparison of our data with the results of more intensive studies in certain areas in 1936 indicated that our series omitted a large number of personal loan departments —perhaps as much as 30 per cent of the total. The omitted departments, however, generally had relatively small loan balances and our series appears to be more adequately representative of the total loan balance. Because we were unable to obtain data for many personal loan departments which had disappeared with the closing of banks between 1930 and 1933 and because our lists of personal loan departments, developed primarily during 1935 and 1936, failed to include many substantial departments organized toward the close of 1936, reported or estimated loan balances appeared to be especially low for the years before 1929 and for 1936.

These observations are reflected in the allowances for omissions in Table 42, which gives a summary of the reported and estimated figures for personal loan departments covered by this study[1] and estimates of loan balances for all personal loan departments in the United States. The table also indicates the degree of reliability of the data for various years. "Close estimates" include those made by the reporting bank, by supervising officials or officers in charge of liquidations, or by local competitors; those based upon figures for

TABLE 42.—ESTIMATED NET LOAN BALANCES OF PERSONAL LOAN DEPARTMENTS OF BANKS IN THE UNITED STATES, AT THE CLOSE OF EACH YEAR, 1923 TO 1937

Year	Personal loan departments represented in our series					Allowance for omissions (per cent)	Estimated loan balance of all personal loan departments (millions of dollars)
	Number	Total reported or estimated loan balance (millions of dollars)	Per cent of total loan balances based on				
			Reported figures	Close estimates	Crude estimates		
1923	6	0.7	5	..	95	10	0.8
1924	8	1.0	10	..	90	10	1.1
1925	13	1.6	8	15	77	10	1.8
1926	26	2.9	8	33	59	10	3.2
1927	44	5.1	7	41	52	10	5.6
1928	95	16.7	65	26	9	10	18.4
1929	208	38.7	70	18	12	10	42.6
1930	253	41.0	70	15	15	10	45.1
1931	251	35.9	75	9	16	8	38.8
1932	234	29.3	81	7	12	6	31.1
1933	238	27.4	84	6	10	5	28.8
1934	314	36.8	80	13	7	5	38.6
1935	488	67.8	78	18	4	6	71.9
1936	685	119.0	85	12	3	10	130.9
1937	..	..	..	..	..	..	216.0

gross loan balances or for the volume of loans made; and interpolations and extrapolations for not more than two years from reported figures where the direction of the movement was known. "Crude estimates" include figures developed by any other method. It will

[1] The differences between the loan balances given in this table and those previously given by the writer in The Growth of Personal Lending in the December, 1937, issue of Banking, are due to the inclusion of figures for several additional personal loan departments and the exclusion of retail instalment receivables of two banks which maintained both instalment financing and personal loan departments. The latter figures have been included among the receivables of instalment finance companies.

be noted that figures for the period from 1923 to 1926 are very crude. Thereafter, their reliability increases progressively until the close of 1936.

No attempt was made to obtain loan balance figures for all banks for the close of 1937. The 1937 figure was estimated on the basis of the trend of loan balances of a group of banks which accounted for more than 60 per cent of the estimated total loan balance in 1936 and the trend of loan balances of all personal loan departments in state banks in New York and New Jersey.

Non-Departmentalized Consumer Loan Balances of Commercial Banks

Loan balances of specialized personal loan departments represent the minor part of the credit extended to consumers by banks in the form of direct loans. Many banks responded to our request for the names of additional institutions that maintained personal loan departments with the words, "Every bank in town." Solicitations addressed to other banks in the same community brought information that instalment loans were not segregated, and that figures for the outstanding amounts of such loans at various dates could not be provided.

The practice of making accommodation loans has been far more general than the practice of making instalment loans. In fact, there are few banks that make no accommodation loans, and in some communities such loans frequently constitute a substantial part of the total loan balance. There has been a tendency for instalment loans to supplant accommodation loans, but even banks that operate personal loan departments continue generally to make accommodation loans to certain customers. Experimentation indicated that an effort to obtain by questionnaire a series of accommodation loan balances even for a small sample of commercial banks would be impracticable.

Throughout the several years during which the collection of data for the present study was intensively under way, considerable effort was devoted toward inducing research committees of state bankers' associations or federal supervisory agencies to undertake studies of non-departmentalized consumer lending, but these efforts have thus far been unavailing. Lack of official data concerning consumer lending by banks and the difficulties of developing historical figures for banks that do not segregate their personal loans make it impossible to develop accurate estimates of non-departmentalized consumer loan balances. Fully reliable figures will have to await the insertion in official call-reports of items that identify balances due on consumer loans. Nevertheless, it seems possible to indicate with some degree of assurance the general pattern of the movement of these loan balances.

Data for estimates have come from several sources. First, credit officers of a number of banks in various localities were interviewed in an effort to get a general picture of the trends of personal lending during the period covered by the estimates. In some instances current figures for their consumer loan balances were obtained. Second, a large number of research projects in the commercial banking field were explored in the hope that pertinent quantitative data might be available, perhaps as a by-product of research directed toward other purposes. In the past banking research has sadly neglected the question of the purposes for which loans are made, but several current studies have attempted analysis of loans by purpose. Data obtained from two such studies have provided a crude empirical basis for estimates of non-departmentalized consumer loan balances.

Interviews with bankers indicated that, except in the principal financial centers, non-departmentalized lending to consumers by banks had increased substantially during the 1920's. A few metropolitan banks confined their loans to industrial enterprises and to large commercial and financial businesses. But the specialization of these banks in large-scale producer financing and the tendency toward centralization of financial management of business enterprise compelled others to seek additional outlets for funds. Some banks in small wage-earning communities and some situated near army posts, universities, insurance companies, municipal buildings, and state capitals became predominantly consumer loan agencies; and most banks in agricultural areas increased the consumer credit content of their loan portfolios.

During the depression of 1930–1933, and particularly after 1931, increasing unemployment apparently led banks generally to curtail their consumer loans. During the period of recovery, however, pressures that had forced banks into this field during the 1920's were renewed and increased. One banker in a middle western industrial city stated that "The demand for commercial loans in this community has declined to the extent where personal loans constitute a substantial part of the available demand and we are compelled to choose between government bonds and loans to consumers." A banker in a New England city said: "We formerly avoided personal loans, except as a favor to old customers, because we could employ our resources more profitably in larger business loans. Now an application for a loan of $500 to buy an automobile is attractive to us. We get few applications for loans of this size from business borrowers and loans to small business men are frequently more hazardous than loans to salaried persons of good reputation."

Early in the history of this study the development of an estimate of non-departmentalized consumer loan balances for at least one year by obtaining current figures for a representative sample of individual banks was contemplated. Although it is generally impracticable for banks to give figures for previous years, it is usually not difficult for the credit officer of a relatively small bank to run an adding-machine total of the outstanding balances of loans made for consumptive purposes. But it was clearly necessary to explain in some detail not only the reason for requesting these figures, but also what sort of loans should be included and excluded. In 1935, as an experiment, data were solicited by personal interview from a group of banks in several small towns in an upstate county of New York and from a group of banks in one urban and in several rural communities in Minnesota. Except for the Minnesota city and for one small town in New York, the communities covered were primarily agricultural, but in each there was some industrial activity.

These solicitations proved to be so time consuming and so expensive that they were discontinued. In all, consumer loan balances at the close of the year 1934 were obtained for 22 banks. None of these banks operated a specialized personal loan department. Two had made a considerable number of instalment loans and several had made occasional instalment loans where it suited the convenience of the customer. But all made accommodation loans. Table 43 gives the consumer loan balance of each bank as the relative of its total loans and discounts. It will be noted that there is an indirect relationship between the size of the bank and the extent of consumer lending.

TABLE 43.—CONSUMER LOAN BALANCES AS PER CENT OF TOTAL LOAN BALANCES FOR 22 BANKS IN THREE AREAS, AT THE CLOSE OF 1934

Banks having total loan balances of	Banks in six small towns and villages in New York State	Banks in four small Minnesota towns	Banks in one Minnesota city
$1,000,000 and over	1.4; 1.8	. .	0.8
200,000 to 999,999	4.2; 5.4	0.8; 1.7	5.5; 6.5
Less than 200,000	14; 20	10; 16; 23; 33; 35; 39	15; 25; 34; 43; 55

The information obtained from interviews with bankers is confirmed and supplemented by materials from two research projects which have generously been made available to us by other agencies. The United States Department of Agriculture supplied figures for personal loan balances of a group of rural banks in Wisconsin whose loans had been studied by Fred L. Garlock of the Bureau of Agricultural Economics and B. H. Hibbard of the Wisconsin Agricultural Experiment Station; and Roy J. Burroughs and the Michigan State College, under whose auspices his studies were conducted, courteously permitted the use of data on the purposes of loans made to selected borrowers from a group of Michigan banks taken from Dr. Burrough's forthcoming study entitled Credit Experience of Michigan Rural Banks.

The data from Wisconsin banks include mid-year figures for the outstanding amount of personal loans and total loans of 17 rural banks covering part or all of the period from 1929 to 1935. Four of these banks have been excluded from the analysis because figures were missing for more than one year; and five of the remaining 13 banks were closed before June, 1935. The term "personal loans" was used as the approximate equivalent of our term "consumer loans," and to avoid confusion we shall substitute the latter term in describing these data.[1] Table 44 gives estimated consumer loan balance of each of these banks as the relative of its total loan balance.

[1] It should be noted that the report forms of several state banking departments contain an item "personal" loans. So far as the writer has been able to determine, this term refers in each instance not to loans for personal use but to unsecured loans.

TABLE 44.—CONSUMER LOANS AS PER CENT OF TOTAL LOANS FOR EACH OF 13 RURAL BANKS IN WISCONSIN ON JUNE 30 OF EACH YEAR, 1929 TO 1935[a]

Date	Banks remaining open throughout the period								Banks closed during the period				
	1	2	3	4	5	6	7	8	9	10	11	12	13
1929	4.8	3.8	4.2	[b]	6.2	4.2	1.4	5.4	4.9	3.2	4.7	3.6	10.2
1930	6.1	3.9	3.7	7.1	4.3	4.0	4.7	4.5	3.7	3.6	1.6	2.5	10.3
1931	1.9	5.3	2.0	4.6	4.8	4.6	3.6	5.9	2.2	3.5	1.3	2.4	7.9
1932	1.6	3.6	3.6	5.0	3.6	4.4	4.2	3.9	2.6	3.7	1.6	2.1	7.3
1933	2.5	5.6	2.4	5.0	4.5	4.9	2.0	.7	2.2	closed	closed	2.0	5.7
1934	4.9	2.4	2.7	5.3	7.4	9.1	3.6	.7	.8	..	..	2.0	closed
1935	4.7	2.5	7.1	7.5	[b]	7.6	3.0	[b]	closed	..	..	closed	..

[a] Data supplied by the United States Department of Agriculture from a co-operative study by Fred L. Garlock of the Bureau of Agricultural Economics and B. H. Hibbard of the Wisconsin Agricultural Experiment Station.

[b] Data not available.

Consumer loan balances were partially estimated by sampling, and this undoubtedly accounts in large part for the erratic movement of the ratios for individual banks. Nevertheless, the ratios tended to follow a common pattern. They were high in 1929 and 1930, decreased to a low point in 1933, and increased thereafter. When averages were computed, variations for individual banks disappeared, and a smooth movement such as might be expected if all loans had been covered was produced. Mean ratios (the mean of individual ratios for each year) and aggregate ratios (the ratios of consumer loan balances to total loan balances for all banks in each year) for banks that remained open during the period and the mean ratios for closed banks are as follows:

	Banks remaining open		Closed banks
	Mean ratios	Aggregate ratios	Mean ratios
1929	4.3[a]	4.0[a]	5.3
1930	4.8	4.8	4.3
1931	4.1	4.2	3.5
1932	3.7	3.6	3.5
1933	3.4	3.0	..
1934	4.5	4.0	..
1935	5.4	4.4	..

[a] The low ratio for 1929 is entirely due to the influence of bank No. 7. If figures for this bank are omitted, the mean and aggregate ratios for 1929 approximate those for 1930.

The similarity of the ratios for individual banks suggests that there is no wide difference in practice among banks in agricultural areas with respect to such loans. It should be remembered, however, that these figures are not representative of banks in industrial areas. The method of classification understates the extent of consumer lending among banks covered by the Wisconsin study. Small, short-term loans for operating expenses that could not be identified with specific expenditures for consumers' goods and services were classified as producer loans.

The data for Michigan banks indicate the purposes for which loans were made during the period from 1928 to 1937 by certain farmer borrowers from seven banks in agricultural communities. One hundred farmer borrowers from each bank were selected at random. Their loan transactions were transcribed from the records of the bank and the purposes for borrowing were ascertained by questionnaires addressed to the borrowers. Since many failed to respond, the sample includes 344 borrowers.

TABLE 45.—ANNUAL VOLUME OF CONSUMER AND PRODUCER LOANS MADE TO 344 FARMER-BORROWERS BY CERTAIN MICHIGAN BANKS DURING THE PERIOD FROM 1928 TO 1937[a]

Year	Number of banks covered	Producer loans	Consumer loans	Total loans	Consumer loans as per cent of total
1928	5	$93,169	$3,793	$96,962	3.9
1929	6	39,946	2,412	42,358	5.7
1930	6	27,822	3,233	31,055	10.4
1931	7	35,414	2,528	37,942	6.7
1932	7	37,701	910	38,611	2.4
1933	7	26,013	614	26,627	2.3
1934	7	29,413	1,467	30,880	4.8
1935	7	65,726	5,909	71,635	8.2
1936	7	52,812	7,074	59,886	11.8
1937	3	19,242	3,359	22,601	14.9

[a] Data supplied by Roy J. Burroughs from his forthcoming study, Credit Experience of Michigan Rural Banks.

Table 45 gives figures for the amount of producer and consumer loans made to these borrowers in each year during the period from 1928 to 1937. The series for total producer and consumer loans is distorted by differences in the size of the sample in various years. Figures for four banks were not available for the year 1937; figures for two banks were missing in 1928; and figures for one bank were available only after 1930. This distortion is avoided to some extent by computing ratios of consumer loans to total loans. These ratios indicate that the proportion of consumer loans made for consumptive purposes increased between 1928 and 1930, declined abruptly during the depression years, and rose rapidly during the recovery period.

The Michigan ratios, computed from the annual volume of loans, are not fully comparable with the ratios for Wisconsin banks, which were computed from outstanding amounts as of June 30. But Dr. Burroughs believes that the relationships between the outstanding amounts of consumer and producer loans for the Michigan sample would be substantially similar to the relationships between the annual volumes of consumer and producer loans. The greater volatility of the year-to-year movements of the Michigan ratios, as compared with the Wisconsin ratios, is probably due in part to the limitation of the Michigan sample to farmer borrowers and in part to the greater severity of the banking crisis in Michigan. It seems probable that the limitations of the Michigan sample to farmer borrowers tends to understate the consumer loan ratios of these banks. On the other hand, the Michigan figures for total loans exclude loans on real estate which tend to exaggerate the consumer loan ratios. Ratios of consumer loans to total loans throughout the whole period covered varied between 2.4 and 21.0 per cent for individual banks.

Loan balances as of June 30 of each year for all borrowers covered by the Michigan sample were taken from the bank records. Assuming that consumer loans were repaid at the same rate as production loans, the outstanding amount of consumer loans for reported borrowers may be crudely approximated by applying the consumer loan ratios to the total loan balance as of these dates. This calculation is given in Table 46. The average loan balance per bank has been used in order to eliminate so far as possible the influence of the changing number of banks represented in the series. It should be noted that total loan balances are given for June 30 of each year while the consumer loan ratios were derived from figures for the volume of loans made during each calendar year.

In the analysis of the Michigan sample four types of consumer loans were identified: loans for living expenses, loans for medical and burial expenses, loans for household repairs and equipment,

TABLE 46.—ESTIMATED OUTSTANDING AMOUNTS OF CONSUMER LOANS OF SELECTED FARMER-BORROWERS FROM CERTAIN MICHIGAN BANKS, AS OF JUNE 30 OF EACH YEAR, 1928 TO 1937[a]

Year	Total loans of reporting borrowers (average per bank)	Consumer loans as per cent of total loans	Estimated amount of consumer loans (average per bank)
1928	$15,720	3.9	$613
1929	16,980	5.7	968
1930	19,637	10.4	2,042
1931	20,215	6.7	1,354
1932	16,921	2.4	406
1933	15,483	2.3	356
1934	14,589	4.8	700
1935	14,144	8.2	1,160
1936	19,999	11.8	2,360
1937	19,597	14.9	2,920

[a] Data supplied by Roy J. Burroughs from his forthcoming study, Credit Experience of Michigan Rural Banks.

and loans for purchasing passenger automobiles. Table 47 gives the number of consumer loans made during each year for each of these purposes. Because of the differences in the number of banks covered, changes in the number of loans of each type are significant only for the period between 1931 and 1936. It will be noted that the total number of consumer loans declined between 1931 and 1933 and rose rapidly during the recovery period. The number of loans for the purchase of passenger automobiles fluctuated most violently.

TABLE 47.—NUMBER OF CONSUMER LOANS MADE IN EACH YEAR TO SELECTED FARMER-BORROWERS BY CERTAIN MICHIGAN BANKS DURING THE PERIOD FROM 1928 TO 1937, BY PURPOSE[a]

Year	Number of banks represented	Loans for living expenses	Loans for medical and burial expenses	Loans for household repair and equipment	Loans for passenger automobiles	Total
1928	5	8	2	7	10	27
1929	6	12	4	2	5	23
1930	6	14	5	1	8	28
1931	7	12	3	3	11	29
1932	7	16	4	3	1	24
1933	7	5	2	1	..	8
1934	7	5	3	2	4	14
1935	7	23	9	6	14	52
1936	7	15	6	6	26	53
1937	3	4	1	8	13	26

[a] Data supplied by Roy J. Burroughs from his forthcoming study, Credit Experience of Michigan Rural Banks.

From these data it seems possible to draw several crude generalizations concerning the level and movement of non-departmentalized consumer loan balances. First, it seems clear that there are wide differences in the extent of consumer lending among individual banks. Large banks generally have small consumer loan balances, and small banks substantial consumer loan balances, in relation to their total loans. Consumer lending appears to be least extensive among large metropolitan banks, moderately extensive among banks dealing with agricultural borrowers, and most extensive among small banks in wage-earning communities. Second, it seems clear that there have been substantial cyclical movements in the outstanding amount of non-departmentalized consumer loans. In fact, if we may rely upon the Wisconsin and Michigan samples, consumer loan balances increased much more rapidly than total loan balances during periods of rising incomes and decreased much more rapidly than total loan balances during periods of declining incomes.

The desirability of developing estimates for non-departmentalized consumer loan balances on the basis of an analysis of the size and location of banks is indicated by these observations. Unfortunately, figures for loans are not available by size-classes of banks. Consequently, it has seemed desirable to distinguish between weekly-reporting member banks, for which figures are available throughout the period covered by our estimates, and all other member and non-member banks in the United States, exclusive of mutual savings banks. This classification, while not ideal, is useful for our purpose.

Weekly-reporting member banks include most of the large metropolitan institutions for which accommodation loans represent a negligible fraction of total loan balances and they also include banks that account for the overwhelming part of the total loan balances of personal loan departments for which separate estimates have been made. However, they also include large numbers of banks that make instalment loans without segregating them in personal loan departments and many banks for which accommodation loans to consumers of established reputation and stable income have come to represent an increasingly significant part of the market for funds. As already indicated, most banks that operate personal loan departments continue to make some accommodation loans.

In the aggregate the non-departmentalized consumer loan balances of these weekly-reporting member banks have undoubtedly been small in relation to their total loan portfolios throughout the period covered by our estimates. But it is clear that they have increased both absolutely and in relation to total loan balances in recent years. From what we have been able to learn through interviews with bankers, non-departmentalized instalment lending has followed rather closely the rapidly rising trend of departmentalized instalment lending; and accommodation lending, while relatively stable in relation to total loan balances, has moved generally in the same direction. Consequently, in the construction of total non-departmentalized consumer loan balances of reporting member banks, two factors have been used: a constant relative (one-half of 1 per cent) of total loan balances and a constant relative (50 per cent) of the loan balances of personal loan departments. The resulting estimates for weekly-reporting member banks are given in Table 48. Needless to say, these estimates are exceedingly crude.

For other member and non-member banks in the United States exclusive of mutual savings banks, estimated ratios of non-departmentalized consumer loans to total loans were developed from the ratios computed for the Wisconsin and Michigan samples. The ratios for the samples presented heretofore were for June 30 of each year and it was necessary to interpolate year-end ratios. Certain other modifications were made in an effort to compensate for the limitation of sample banks to those in agricultural areas.

With respect to the general level of consumer loan ratios, the samples appear to be adequately representative. Among member and non-member banks other than weekly-reporting and mutual savings banks, there are undoubtedly some that had consumer loan ratios resembling those of large metropolitan banks, but there are also many small urban banks whose consumer loan ratios appear generally to have exceeded the characteristic ratios of banks in agricultural areas. With respect to trend, however, the use of rural bank samples appears to exaggerate cyclical fluctuations of these ratios. It seems probable that the growth of consumer lending with respect to total loans among many urban banks continued through-

TABLE 48.—ESTIMATED NON-DEPARTMENTALIZED CONSUMER LOAN BALANCES OF WEEKLY-REPORTING MEMBER BANKS IN 101 CITIES, OF ALL OTHER MEMBER AND NON-MEMBER COMMERCIAL BANKS, AND OF ALL MEMBER AND NON-MEMBER COMMERCIAL BANKS IN THE UNITED STATES AT THE CLOSE OF EACH YEAR, 1923 TO 1937

(Amounts in millions of dollars)

Year	Weekly-reporting member banks in 101 cities			Other member and non-member banks (exclusive of mutual savings banks)			All banks exclusive of mutual savings banks—estimated non-departmentalized consumer loan balance
	Total loans outstanding	Estimated non-departmentalized consumer loan balance		Total loans outstanding	Estimated non-departmentalized consumer loan balance		
		Per cent of total loans	Amount		Per cent of total loans	Amount	
1923	11,982	0.50	60	15,258	2.4	366	426
1924	13,143	0.50	66	15,344	2.6	399	465
1925	14,375	0.51	73	16,890	2.9	490	563
1926	14,730	0.51	75	17,226	3.2	551	626
1927	15,476	0.52	80	17,676	3.4	601	681
1928	16,284	0.55	90	18,804	3.7	696	786
1929	17,649	0.62	109	18,324	4.2	770	879
1930	16,263	0.64	104	15,803	4.4	695	799
1931	13,104	0.64	84	11,984	4.0	479	563
1932	10,297	0.66	68	9,687	3.2	310	378
1933	8,934	0.66	59	7,137	3.4	243	302
1934	8,123	0.73	59	6,860	4.2	288	347
1935	8,249	0.94	78	6,870	5.0	344	422
1936	9,189	1.22	112	7,233	6.0	434	546
1937	9,387	1.64	154	7,815	6.7	524	678

out the depression years; and the incomes of persons to whom banks in urban communities made accommodation loans were generally less affected by the depression than the incomes of farmers. Consequently, the cyclical movement of the sample ratios has been smoothed somewhat.

Estimated consumer loan ratios and estimated non-departmentalized consumer loan balances of all banks in the United States other than weekly-reporting member banks and mutual savings banks are also given in Table 48. It will be noted that although consumer loan ratios increased substantially between 1929 and 1937, the loan balance for the close of 1937 was below that for the close of 1929. The failure of consumer loans to regain their 1929 level appears to be due to the lower level of agricultural incomes and to the elimination of large numbers of small banks. These estimates have a more adequate empirical basis than the estimates for weekly-reporting member banks, but they are nevertheless very crude.

Credit Union Loan Balances

Of the various types of consumer credit agencies represented in our estimates, credit unions are the most adequately covered by official reports of operations. For credit unions operating under federal charters, quarterly balance sheet summaries have been published by the Farm Credit Administration since 1934 when the Federal Credit Union Act became operative. For credit unions operating under state charters, annual and occasionally semi-annual balance sheet summaries have been published by the state banking departments of most states in which credit union operations are extensive since the enactment of enabling legislation in these states. In a few states for which credit union summaries had not been published, state banking departments have provided us with figures from call-reports or reports of examination. Table 49 gives the sources of official data concerning the loan balances of credit unions operating under state charters which have been used in the development of estimates.

In spite of the wealth of official data a considerable amount of estimating has been necessary in the development of a series of credit union loan balances. For some states, the published official

TABLE 49.—SOURCES AND NATURE OF OFFICIAL DATA CONCERNING STATE CREDIT UNION LOAN BALANCES

State	Period	Source of data	Nature of data
Alabama	1935, 1936	Superintendent of insurance	Loan balance figures as of December 31
Arkansas	1934 to 1937	Securities Division, State Bank Department	Loan balance figures as of December 31
California	1934, 1936, 1937	Department of Investment, Division of Corporations	Loan balance figures as of December 31
Colorado	1937	State bank commissioner	Credit union assets as of December 31
District of Columbia	1933 to 1935	Annual report of the comptroller of the currency	Loan balance figures as of June 30
	1936, 1937	Comptroller of the currency	Loan balance figures as of December 31
Florida	1933 to 1938	Annual report of the state comptroller	Loan balance figures as of June 30
Georgia	1930 to 1937	Superintendent of banks	Loan balance figures as of December 31 to 1936; 1937 figures as of September 30
Illinois	1930 to 1938	Biennial report of the auditor of public accounts	Loan balance figures as of December 31
Indiana	1932 to 1937	Annual report of the Department of Financial Institutions	Loan balance figures as of December 31
Iowa	1929 to 1937	Annual report of the superintendent of banks	Loan balance figures as of December 31
Kansas	1930 to 1938	Biennial report of the bank commissioner	Loan balance figures as of July 1
Kentucky	1933 to 1938	Annual report of the bank commissioner for building and loan associations and credit unions	Loan balance figures as of December 31 to 1934, thereafter figures as of June 30
Louisiana	1925 to 1937	Biennial report of the State Banking Department	Loan balance figures as of December 31
Maine	1922 to 1937	Biennial report of the bank commissioner	Credit union assets as of December 31 to 1927, thereafter figures as of June 30
Maryland	1929 to 1937	Annual report of the bank commissioner	Loan balance figures as of December 31

TABLE 49.—SOURCES AND NATURE OF OFFICIAL DATA CONCERNING STATE CREDIT UNION LOAN BALANCES—*continued*

State	Period	Source of data	Nature of data
Massachusetts	1910 to 1937	Annual report of the commissioner of banks on credit unions	Loan balance figures as of October 31 to 1925, thereafter figures as of December 31
Michigan	1933, 1934, 1936	Commissioner of banks	Loan balance figures as of December 31
	1937	Annual report of the commissioner of the Banking Department	Loan balance figure as of December 31
Minnesota	1932 to 1937	Commissioner of banks	Loan balance figures as of December 31
Nebraska	1930 to 1936	Biennial report of the Department of Banking for the period ending June 30, 1937	Loan balance figures as of December 31 from 1930 to 1936
	1937	Department of Banking on co-operative credit associations	Loan balance figure as of December 31
New Hampshire	1910 to 1937	Annual report of the bank commissioner	Loan balance figures as of various call report dates
New Jersey	1924 to 1937	Annual report of the commissioner of banking and insurance	Loan balance figures as of December 31
New York	1915 to 1937	Annual report of the superintendent of banks relative to savings and loan associations, savings and loan bank, and credit unions	Loan balance figures as of December 31
Ohio	1936, 1937	Division of Securities, Department of Commerce	Loan balance figures as of December 31
Oregon	1928, 1930 to 1937	Annual report of superintendent of banks	Loan balance figures as of December 31
Pennsylvania	1934	Chief of private banking bureau	Loan balance figures as of December 31
	1935 to 1937	Annual reports of state banking department on credit unions	Loan balance figures as of December 31
Rhode Island	1915 to 1937	Annual report of the chief of the Division of Banking and Insurance	Loan balance figures as of December 31

TABLE 49.—SOURCES AND NATURE OF OFFICIAL DATA CONCERNING STATE CREDIT UNION LOAN BALANCES—*continued*

State	Period	Source of data	Nature of data
Tennessee	1934, 1936	Superintendent of banks	Loan balance figure as of December 31, 1934 and June 30, 1936
Texas	1933 to 1937	State building and loan supervisor	Loan balance figures as of December 31
Utah	1934, 1936, 1938	Biennial report of the bank commissioner	Loan balance figures as of June 30
Virginia	1926 to 1937	Annual report of the state corporation commission	Loan balance figures as of December 31
Washington	1933 to 1937	Annual report of supervisor on credit unions, Division of Savings and Loan	Loan balance figures as of December 31
West Virginia	1926 to 1938	Annual report of the commissioner of banking	Loan balance figures as of June 30
Wisconsin	1923 to 1937	Annual report of the state banking commission	Loan balance figures as of December 31

summaries excluded the reports of many credit unions; and for other states, official summaries are not available for certain years. A few states maintain no records by which outstanding loans of credit unions might be approximated; but in these states credit union operations were not extensive.

In filling gaps between reported figures, and in building up estimates when no reports were available, use has been made of the studies of credit union operations published periodically by the Bureau of Labor Statistics.[1] For some states we have obtained estimated or reported loan balance figures from state credit union leagues, and in some instances we have obtained figures from individual credit unions.[2]

[1] Monthly Labor Review, November, 1926; February, 1930; March, 1931; September, 1932; September, 1934; October, 1935; April, 1936; December, 1936; and October, 1938.

[2] We are indebted to William Oldewage of the Arizona Credit Union League, J. L. Moore of the California Credit Union League, W. H. Davis of the Mississippi Credit Union League, B. F. Hillebrandt of the Missouri Credit Union League, Claude E. Clarke of the Ohio Credit Union League, and J. Gorman Thomas of the South Carolina Credit Union League for loan-balance figures or for assistance in the development of estimates of loan balances in their states for years in which official

While most of the official reports for credit unions give balance sheet figures as of the close of the calendar year, some give figures for fiscal years ending with other dates. Where the fiscal year ended within the second or third quarters of the calendar year, the reported figures were graphed and estimated loan balances for the close of the calendar year were interpolated. Where the fiscal year ended within the first or fourth quarter of the calendar year, the reported figures have been treated as calendar-year figures.

Table 50 gives reported or estimated loan balances of credit unions by states since 1910 when the first credit union began operation under a state enabling act. For most states loan balance figures begin with the year in which the credit union law was enacted, but for some states they begin before or after the enactment of enabling legislation. In several states no credit unions were organized for some years after the enactment of the credit union law; in others credit unions were operating before the enactment of enabling legislation, principally among postal employes. Loan balance estimates begin before the date of enactment of the credit union law only when these informal credit unions were later chartered under the credit union act. Otherwise, the loan balances of institutions which resemble credit unions, but which are not incorporated under credit union acts are covered by our estimates for axias.[1]

Although the estimates for certain states, notably Mississippi, Montana, New Mexico, and South Carolina, are exceedingly crude, these states and others for which our figures are only slightly better have negligible credit union loan balances. For most years about 80 per cent of the total loan balance is represented by reported figures and another 15 per cent is represented by very close estimates. We have attempted to measure the extent of the error in our summary estimates by calculating the probable range of error in our estimate for each state in each year. Our allowance for errors exceeded 30 per cent for certain years in some states. But these errors have little effect upon our totals and the range of error in

data were not available. The Oklahoma Banking Department has had available, but has not published year-end figures for credit union loan balances for the period from 1934 to 1937. Official figures were obtained through the courtesy of Cecil V. Leverich of the Armour Oklahoma City Employes Credit Union.

[1] See p. 403.

TABLE 50.—REPORTED OR ESTIMATED LOAN BALANCES OF STATE AND

(Thousands

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
State Credit Unions														
Alabama	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arizona	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arkansas	..	..	..	..	..	..	..	..	..	..	..	..	..	..
California	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colorado	..	..	..	..	..	..	..	..	..	..	..	..	..	..
District of Columbia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Florida	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Illinois	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indiana	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Iowa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kansas	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kentucky	..	..	..	..	..	..	..	..	..	..	..	..	..	
Louisiana	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maine	..	..	..	..	..	..	..	..	..	..	..	8	14	2
Maryland	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Massachusetts	2	19	68	147	224	362	652	993	1,555	2,296	3,323	3,314	3,833	4,76
Michigan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Minnesota	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mississippi	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Missouri	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Montana	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nebraska	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Hampshire	12	16	27	44	70	110	140	170	260	360	450	525	640	81
New Jersey	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Mexico	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New York	..	..	..	..	20	50	151	320	424	995	1,961	3,905	6,020	7,58
North Carolina	..	..	..	..	..	..	4	10	18	39	86	84	70	6
Ohio	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oklahoma	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oregon	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pennsylvania	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rhode Island	..	..	..	..	..	18	62	134	243	298	428	438	647	91
South Carolina	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tennessee	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Texas	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Utah	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia	..	..	..	..	..	..	..	..	..	..	..	..	5	1
Washington	..	..	..	..	..	..	..	..	..	..	..	..	..	..
West Virginia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wisconsin	..	..	..	..	..	..	..	..	..	..	..	..	..	
Federal Credit Unions	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	14	35	95	191	314	540	1,009	1,627	2,500	3,988	6,248	8,274	11,229	14,17

…EDERAL CREDIT UNIONS, AT THE CLOSE OF EACH YEAR, 1910 TO 1937

…f dollars)

…924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
..	..	..	20	70	110	140	140	130	140	150	170	259	627
..	..	5	4	5	8	9	9	8	9	9	14	20	25
10	20	23	24	27	30	30	28	25	30	34	53	72	97
..	..	..	30	60	120	300	554	650	800	1,150	2,000	3,500	4,461
..	..	35	50	70	85	90	85	80	110	150	250	450	850
..	..	..	..	10	13	15	15	30	80	162	350	558	798
8	12	15	20	25	32	75	95	105	120	138	189	300	400
..	10	80	150	250	360	444	503	454	538	704	889	1,113	1,349
..	30	100	200	350	548	765	1,005	1,143	1,502	2,260	3,996	6,300	9,566
5	16	40	100	180	250	280	300	327	433	585	846	1,230	1,450
..	1	15	30	60	94	145	226	250	330	501	751	1,092	1,443
..	..	..	..	..	6	24	52	80	122	203	294	417	555
10	19	25	40	80	110	150	200	240	347	500	815	1,330	1,500
..	23	39	37	32	46	85	117	147	172	203	218	331	399
30	42	54	60	65	78	70	90	90	90	120	165	190	260
..	..	..	..	..	24	52	68	74	84	108	188	351	563
…,706	6,750	9,023	10,739	11,785	12,629	11,861	11,043	9,493	8,864	8,752	9,365	10,531	12,737
..	10	50	100	160	250	400	526	500	490	635	1,206	1,768	2,807
..	7	40	116	259	473	700	830	991	1,046	1,342	1,880	2,738	3,769
..	..	..	..	3	5	7	8	8	10	15	25	40	75
..	..	..	50	200	400	550	650	720	950	1,450	2,300	3,300	3,848
..	..	..	..	..	4	3	1	3	7	10	15	24	35
..	..	..	..	20	50	120	170	200	239	390	743	1,002	1,253
…,030	1,100	1,200	1,330	1,440	1,420	1,450	1,490	1,480	1,350	1,190	1,170	1,190	1,200
26	20	26	35	36	56	53	63	86	119	191	272	392	556
..	..	..	..	..	..	..	..	2	3	5	10	20	25
…,293	10,243	10,736	11,257	11,643	11,533	9,542	6,880	5,229	4,462	4,852	5,312	5,847	7,611
70	80	110	150	200	230	280	300	270	255	280	330	494	699
..	..	..	..	..	..	..	50	150	230	350	650	2,400	2,993
..	..	..	..	..	..	..	..	..	40	113	221	405	410
..	..	..	2	8	48	81	99	105	128	176	247	329	464
..	..	..	..	..	..	..	..	..	50	167	404	859	1,481
…,108	1,352	1,532	1,635	1,785	1,909	1,843	1,777	1,758	1,750	1,600	1,699	1,891	2,172
..	3	5	8	10	15	15	14	12	12	15	20	30	35
2	5	30	100	160	240	300	360	400	450	636	830	1,150	1,411
..	3	5	10	20	50	100	165	240	323	484	742	1,070	1,407
..	..	..	5	10	18	25	35	50	65	88	134	185	276
15	25	51	101	208	363	443	506	530	559	611	690	782	859
..	..	..	..	..	..	..	..	..	10	141	291	535	845
..	1	7	16	34	72	105	118	124	128	172	210	265	340
26	39	69	124	172	293	416	553	746	924	1,488	2,378	3,664	5,157
..	..	..	..	..	..	..	..	..	..	25	2,000	7,600	16,000
…339	19,811	23,315	26,543	29,437	31,972	30,968	29,125	26,930	27,371	32,155	44,332	66,024	92,808

our summary estimates appears to be less than 2 per cent for all years except 1910 and 1911.

Loan Balances of Industrial Banking Companies

The term "industrial banking company" will be used in this section to refer to lending agencies known by such diverse names as bank, industrial bank, Morris Plan bank or company, loan and investment company, finance and thrift company, savings and loan company, industrial loan company, and discount company. The legal status of these agencies is as varied as their names. At one extreme are institutions which operate under commercial bank charters. At the other extreme are agencies which operate without legislative or administrative sanction. Between these extremes are institutions operating under a variety of enabling acts, some of which authorize the performance of limited banking functions.

Several considerations have led us to group together these diverse institutions for the purpose of loan balance estimates. First, their techniques are similar in many respects. They lend primarily on endorsements,[1] deduct interest and an investigation fee in advance from the face value of the note signed by the borrower, credit repayments to a non-interest-bearing account, and charge fines for delinquency. Second, the distinguishing names by which these institutions are known in various states fail to conform to any logical classification. There is, for instance, little difference so far as their "banking" characteristics are concerned between institutions known as "industrial banks" in Connecticut, Michigan, and North Carolina; as "savings and loan companies" in West Virginia; as "loan and investment companies" in Arkansas, Missouri, and Rhode Island; as "industrial loan companies" in California, Indiana, and Utah; and as "discount companies" in Wisconsin. Third, there has been a tendency for individual institutions and groups of institutions to shift from one class to another and it is impossible to fix the exact date of transition. In New York, for instance, the institutions now called "industrial banks" were known recently as "industrial banking companies" and several

[1] In the past few years the business of industrial banking companies has become more and more diversified. Many are financing instalment sales, and many have lent substantial sums on unsecured promissory notes.

years earlier as "loan and investment companies." But these changes in name lagged behind the *de facto* transition to banking status that was accomplished by periodic amendment of the enabling statute.

An attempt to find terms to describe the gradations from loan company to bank that can be recognized among these institutions would merely add to the confusion already inherent in the terminology established by statute or by local usage. Consequently, we shall use the term "industrial banking company" to refer to this group of institutions as a whole. We shall reserve the term "industrial bank" to refer to institutions operating under state bank charters or under special banking acts which clearly confer banking powers and impose public supervision. To distinguish other institutions in this general category, the term "discount company" will be used.

Because of the heterogeneous legal status of the industrial banking companies, it has been necessary to establish somewhat artificial lines of demarcation to distinguish these institutions from other lending agencies. The industrial banks operating under commercial bank charters merge into the type of institutions which have been designated as "personal loan departments of commercial banks." At the other extreme the discount companies merge into the type of agency which we have treated under the heading "unregulated lenders."

In general, we have classified as industrial banks those commercial banks that have been engaged predominantly in personal loan operations, regardless of the fact that they may perform some commercial banking functions. The term "personal loan department" has been reserved to describe the personal loan business of banks that are engaged predominantly in commercial banking. Some modifications of this general rule have been introduced in the interest of maintaining continuous series of loan balances for both types of institutions. Where a shift in the importance of personal loan operations has occurred other than by merger or reorganization, we have put the whole series of loan balances into the category to which the institution belonged at the close of 1935.

In spite of this policy there has been a considerable movement of loan balances back and forth between the industrial banking company and personal loan department series. During the period from 1929 to 1933, there was a net movement of loan balances from the personal loan department series into the industrial banking company series as some commercial banks, dissatisfied with the operations of recently organized personal loan departments, sold their personal loan balances to industrial banking companies. During the period from 1934 to the present, the net movement has been in the other direction, as the result of the absorption by banks of some industrial banking companies.

The distinction between "discount companies" in several states and the agencies which we have classed as unregulated lenders is exceedingly tenuous. In the areas in which discount companies operate without legislative sanction, these companies are, in fact, unauthorized lending agencies, and their loans have frequently been held to be usurious by the courts. If, however, the lack of legislative authority for personal loan transactions were the sole criterion for the unregulated lender classification, the ranks of this class would be materially increased at the expense of several other categories. For instance, some of the industrial banks operating under commercial bank charters and many of the personal loan departments of commercial banks have no statutory authorization (although they presumably have administrative authorization) for their personal loan activities, and these agencies rely heavily upon the fact that the penalties for usury with respect to bank loans are generally so slight that it does not pay borrowers to plead usury as a defense.

So far as possible our classification of cash-lending agencies has been based upon the nature rather than upon the legal status of credit transactions, and it is in this respect that the line of demarcation between unauthorized discount companies and unregulated lenders has been drawn. For our purpose we have classified as discount companies those agencies which lend principally on the security of endorsed notes and which charge moderate rates as compared with other types of unauthorized lenders;[1] and we have classified as unregulated lenders agencies which lend on wage

[1] Agencies that charge rates as high as 35 per cent per annum have been included among discount companies. These rates, however, are not inconsistent with the rates allowed under special industrial banking company acts of several states.

assignments, chattel mortgages on household goods and automobiles, and on simple promissory notes at very high rates of charge. This distinction does not imply moral judgment on the merits of these types of lending agencies. The social repercussions of lending are not measurable purely in terms of interest rates, and it is beyond the scope of this volume to discuss the many issues which are involved in such a judgment.

Thirteen states publish official summaries or individual reports for what we believe to be all industrial banking companies operating within their boundaries. The names by which these institutions are known and the sources of balance sheet data are given in Table 51.

Two other states—Michigan and Washington—have published inclusive figures for industrial banking companies operating under special enabling acts.[1] But in each of these states there are other institutions doing a somewhat similar business without benefit of enabling legislation, and we have added estimates of the loan balances of the latter companies to the reported loan balance figures. The Michigan reports cover a predominant part of the industrial banking business, but the Washington reports cover only a small part of the business in that state.

In Arkansas, California, Iowa, Minnesota, and Oregon industrial banking companies are under state supervision and reports of these companies are submitted annually to the state. But balance sheet summaries have not been published. We have obtained what we believe to be inclusive figures for recent years from the state banking departments of Arkansas, Iowa, and Oregon. For Arkansas, where industrial banking companies are known as "loan and investment companies," we have obtained year-end figures for the period from 1929 to 1937. For Iowa, where these companies are known as "loan corporations," we have obtained official figures for the years 1934 and 1937. For Oregon, where they are known as "industrial loan companies," we have obtained official figures for the years 1933 and 1937. Figures for "industrial loan and thrift

[1] For Michigan, balance sheets of "industrial banks" have been published in the annual reports of the Department of Banking since 1917; for Washington, summary figures for "industrial loan companies" were published in the annual reports of the superintendent of banking from 1927 to 1931, after which time only one company continued to operate under this act.

corporations" in Minnesota, supplied by the State Banking Division, have been used as the basis for our estimates since 1933. The California reports for "industrial loan corporations" have not been tabulated in the past, but we have relied heavily upon estimates supplied by officials of the Division of Corporations.

TABLE 51.—SOURCES OF OFFICIAL DATA CONCERNING LOAN BALANCES OF INDUSTRIAL BANKING COMPANIES

State	Identification of institutions	Present source of balance sheet data[a]	Period for which data are available
Connecticut	Industrial banks	Annual report of the commissioner of banks	Since 1915
Indiana	Industrial loan companies	Annual report of the Department of Financial Institutions	Since 1935
Maine	Industrial bank[b]	Annual report of the bank commissioner	Since 1918
Nebraska	Instalment investment companies	Biennial report of the superintendent of banks	Since 1930
New Hampshire	Morris Plan bank[b]	Annual report of the bank commissioner	Since 1917
New York	Industrial banks	Annual report of the superintendent of banks	Since 1914
North Carolina	Industrial banks	Annual report of the condition of state banks	Since 1924
Ohio	Special plan banks[c]	Annual report of the Division of Banks	Since 1915
Rhode Island	Loan and investment companies	Annual report of the Division of Banking	Since 1916
Utah	Industrial loan corporations	Biennial report of the state bank commissioner	Since 1930
Virginia	State banks[c] Industrial loan associations	Annual report of the state corporation commission	Since 1924
West Virginia	Industrial savings and loan companies	Annual report of the State Banking Department	Since 1917
Wisconsin	Discount companies	Annual report of small loan, discount, and foreign exchange companies	Since 1930

[a] The current title of the report is given. In some instances the titles have been changed during the period for which official data are available.

[b] There is only one such institution in Maine and in New Hampshire. In Maine, the single industrial bank operates under a general enabling act; in New Hampshire, the Manchester Morris Plan Bank was incorporated by a special act of the legislature.

[c] The banks which are engaged primarily in instalment lending are not identified in the reports, but may be recognized generally by the use of the words "Morris Plan" or "industrial" in their titles.

In four states—Arizona, Massachusetts, New Jersey, and Pennsylvania[1]—lending agencies resembling industrial banking companies operate as licensed lenders under small loan laws. In Massachusetts the loan balances of Morris Plan companies have been segregated from those of other licensed lenders in the annual reports of the supervisor of loan agencies. The loan balances given for the Morris Plan companies, however, exclude loans of larger sums than $300. Estimates for the entire loan balance of the latter companies have been included in our summaries for industrial banking companies. For the other three states no attempt has been made to segregate the loan balances of industrial banking companies and their loan balances are included in the series for regulated small loan companies.

In another group of states—Alabama, Delaware, Florida, Illinois, Kentucky, Maryland, Tennessee, and Texas—some industrial banks operate under commercial bank or industrial bank charters. But in each of these states there are discount companies which are not subject to state supervision. Both in Maryland and Illinois one industrial bank operates under a state bank charter, but in each state the single institution accounts for the bulk of the industrial banking business. In Delaware an overwhelming part of the industrial banking business is done by several state banks that specialize in personal loans. In Tennessee and Texas the business has been evenly divided in recent years between industrial banks operating under state bank charters and discount companies operating without legislative authorization. In Alabama and Florida industrial banks operating under state bank charters account for the lesser part of the industrial banking business.

In Montana no industrial banking companies have been chartered under the special enabling act, but several such companies operate under business corporation charters. In Colorado there is a special enabling act for "industrial banks." But this act has provided a haven not only for companies doing a legitimate indus-

[1] In 1937 Pennsylvania enacted a law authorizing the operation of "consumer discount companies." Although consumer discount companies in Pennsylvania are identical with enterprises in other states which have been classified as industrial banking companies, their 1937 loan balances have been tabulated with those of regulated small loan companies. Most consumer discount companies operated as small loan licensees before 1937, and it seemed desirable, therefore, not to shift their classification.

trial banking business, but also for many antisocial lenders. Recent court actions by public prosecutors have indicated that some of the so-called "industrial banks" were charging interest rates as high as several hundred per cent per annum. No official reports have been published for these companies. We have included in our industrial banking series for Colorado figures for three companies which are known to be doing a business similar to that of industrial banking companies in other areas; estimates for other Colorado "industrial banks" are included in our series for unregulated lenders.

It was necessary to use a great variety of devices to develop loan balance estimates for industrial banking companies. In the interests of brevity we shall describe here only the bare outlines of the methods used.

Even for states which publish official summaries, it was frequently necessary to resort to estimates. It is characteristic of industrial banking technique that payments of borrowers are credited, not to the principal of the loan, but to a special account which is hypothecated as security. Consequently, the item "loans receivable" usually represents the sum of the original face values of notes upon which payments have not been completed, rather than the net amount owed by borrowers. In some state reports and in most reports for individual companies, the amount of hypothecated payments was clearly identified and the net debt of borrowers could be accurately computed.[1] In other instances, hypothecated payments were included in other liability items. In some states, the report form for commercial banks is used also for industrial banks. Since no item is supplied for reporting hypothecated payments, this sum is reported under one of several items designed specifically for certain liabilities of commercial banks.

In general, the amount of hypothecated payments approximates one-third of the gross loan balance. But this fraction varies with differences in renewal policies and with changes in trend of loan balances. A standard schedule of ratios of hypothecated payments to gross loan balances was developed from balance sheets which identified hypothecated payments. With some modifications this schedule was applied in estimating net loan balances of institutions for which hypothecated payments could not be identified.

[1] In recent years a few states have required the net figures to be reported.

Another problem was to identify industrial banks operating under commercial bank charters and to obtain loan balance figures for them. Most of these institutions were readily recognizable. Many have been associated at one time or another with the Morris Plan system and they generally use the words "Morris Plan" or "industrial" in their titles.[1] Moreover, their balance sheet structure differs materially from that of most commercial banks. From the literature concerning the Morris Plan institutions,[2] from reports of state banking departments, and by means of correspondence with these departments, we obtained what we believe to be a full list of industrial banks operating under commercial bank charters. Loan balance figures were then obtained from official reports, from Rand McNally's Bankers Directories and Polk's Bankers Encyclopedias, or by correspondence with the institutions themselves.

There remained the problem of estimating the loan balances of industrial banking companies which were not covered by official state summaries or which did not operate under commercial bank charters. The first task was to identify these institutions. In a few states for which loan balance figures were not available, lists of industrial banking companies could be had either from official reports or by correspondence with state banking departments. To these lists were added the names of several hundred industrial banking companies culled from the promotional literature of the enterprises which had organized and undertaken to supervise them.[3] Other names were obtained by examining newspaper files for advertisements, by noting the names of lending agencies in reported litigation involving industrial banking techniques, and, finally, by examining city directories and telephone books. Industrial bank-

[1] It should be noted, however, that the word "industrial" in the name of the bank does not necessarily imply that it is an industrial bank in the sense in which we have used this term.

[2] For a list of the Morris Plan institutions operating in 1927, see The Morris Plan of Industrial Banking, by Peter W. Herzog, A. W. Shaw Company, Chicago, 1928, pp. 78–81. Morris Plan institutions liquidated prior to this date were identified by means of the early promotional literature published by the Morris Plan Corporation of America.

[3] Besides the Morris Plan Corporation of America and its predecessor companies, the principal promotional and service companies were the National Wimsett System, the Citizens' Finance System, and the Trustees System Service, each of which operated on a national scale. Several similar "systems" were also established in limited geographical areas under such names as the Hood System, the Morgan Plan, and the Williams Plan.

ing companies could be identified with some degree of certainty by their use of the words "Morris Plan," "loan and investment," "loan and finance," "finance and thrift," "surety finance," "citizens' finance," "Wimsett," or "Trustees" in their titles. In order to determine within reasonable limits the date of organization or liquidation of these institutions, classified sections of telephone directories were checked for the years 1926, 1929, 1933, and 1936.

An effort was made to obtain a series of loan balances from all the industrial banking companies identified by these methods. First, the financial manuals were consulted, and these yielded a considerable quantity of useful data.[1] We then turned for further data to the two associations which include in their membership many of the larger industrial banking companies. The Morris Plan Bankers Association believed that it would be a breach of confidence to reveal loan balance figures even in summary form. Some data were obtained from the American Industrial Bankers Association, but its co-operation was also handicapped by the confidential nature of members' reports. Through the courtesy of the Morris Plan Corporation of America, however, figures for certain years were obtained for most Morris Plan institutions not covered by other sources. For all other companies figures were solicited by correspondence. In the case of a few large companies, a full series was requested back to the date of organization. For other companies, loan balances were requested only for the close of the years 1929, 1933, and 1936.

Although loan balance figures were returned by many companies, others failed to respond to repeated requests. For many of the latter companies, balance sheets were obtained from credit information services; for some, competing agencies supplied estimates of current loan balances; and for a few, crude guesses based upon the size of loan balances reported by companies operating under similar conditions were made by us. When reported or estimated figures were not available for the full period from 1923 to 1936, estimates for other years were obtained by extrapolation in accordance with the trend of reported loan balances.

[1] In this connection, we examined Standard Corporation Records, Polk's Bankers Encyclopedias, Moody's Manuals of Investments (financial corporations), and Poor's Fiscal Volumes.

In developing estimates of loan balances of industrial banking companies in several states, we had the assistance of specially qualified persons whose generous co-operation is gratefully acknowledged. Much of the data for the state of Washington was supplied by Bennett Baldy, president of the Baldy Finance Company, Seattle. David B. Lichtenstein, president of the Public Loan Corporation, St. Louis, supplied actual or estimated figures for many Missouri companies. For the Mississippi estimates much useful information was supplied by D. M. White, president of the Industrial Finance and Thrift Corporation, New Orleans, under whose supervision many of the Mississippi discount companies operate. Estimates for discount companies not covered by official reports in Michigan and Illinois have been based in part upon information supplied to us by F. L. Thompson, then vice-president of the Household Finance Corporation, Chicago.

Table 52 gives estimated total loan balances by states since 1910 when the first industrial banking company of which we have any record was organized. The degree of reliability of our national series is indicated by Table 53 which shows the distribution of the estimated total loan balance for each year between reported figures, close estimates, and crude estimates. "Reported figures" are those obtained from official sources, from published balance sheets, and from the companies themselves. "Close estimates" include figures based upon reported gross loan balances, annual loan volumes, or total assets; estimates made by banking department officials or by other qualified persons; interpolations to adjust for difference in fiscal year endings and extrapolations from reported figures and reliable estimates for a period not exceeding two years. All other figures have been considered to be crude estimates.

The error in the figures listed as close estimates is undoubtedly small, probably as low as 5 per cent if there are any compensating tendencies. The error in our crude estimates, however, is large and there are no means of appraising its extent. It is quite conceivable that the margin of error in the crude estimates may be, in the aggregate, as high as 30 per cent. But crude estimates comprise such a small part of the estimated total loan balance that an error of 30 per cent would produce an error of less than 3 per cent in our estimated totals for most years. It seems likely, therefore, that our

TABLE 52.—ESTIMATED LOAN BALANCES OF INDUSTRIAL BANKS, LOAN AND

(Thousands

State[a]	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Alabama	..	..	..	..	..	..	105	235	270	340	400	350	375	428
Arkansas	..	..	..	..	..	..	..	..	..	..	..	..	..	100
California	..	..	..	..	..	..	320	415	710	1,060	1,320	1,400	1,505	2,025
Colorado	..	..	..	..	70	130	233	240	263	341	390	395	419	574
Connecticut	..	..	..	..	..	233	420	667	966	1,284	1,667	1,668	1,634	2,006
Delaware	..	..	..	..	..	..	50	120	180	281	523	707	860	1,199
District of Columbia	..	..	154	316	421	533	621	642	630	635	665	943	1,015	1,125
Florida	..	..	..	..	..	..	..	95	130	190	235	250	320	730
Georgia	..	50	85	110	125	145	153	200	240	330	420	440	440	710
Idaho, Nevada, Wyoming[b]	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Illinois	..	..	..	..	..	..	..	447	740	1,016	1,174	1,469	1,785	2,356
Indiana	..	..	..	..	..	76	310	480	560	710	935	1,060	1,330	1,700
Iowa	..	..	..	..	..	..	100	280	360	500	600	620	630	850
Kansas	..	..	..	..	..	..	..	75	110	140	150	140	140	190
Kentucky	..	..	..	..	..	..	..	..	90	110	130	120	125	150
Louisiana	..	..	..	..	..	..	..	240	260	290	320	330	350	450
Maine	..	..	..	..	..	..	..	..	25	73	132	160	170	190
Maryland	..	..	151	179	190	204	260	260	250	230	250	289	283	540
Massachusetts	..	..	..	70	120	226	1,135	2,350	2,700	3,300	4,000	4,200	4,400	5,200
Michigan	..	..	..	..	..	..	..	211	651	2,058	2,343	2,169	2,865	4,458
Minnesota	..	..	..	..	..	..	..	315	450	550	600	580	630	715
Mississippi	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Missouri	..	..	..	120	300	420	830	1,075	1,200	1,590	2,180	2,350	2,530	3,555
Montana	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nebraska	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Hampshire	..	..	..	..	..	..	..	95	120	127	130	120	125	140
New Mexico	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New York	..	..	..	..	..	560	1,883	3,172	3,600	5,196	5,720	7,261	9,682	12,554
North Carolina	..	..	..	..	..	120	235	588	695	950	1,300	1,800	2,200	3,200
Ohio	..	..	..	..	..	2	364	905	1,582	2,577	3,878	4,352	4,565	5,194
Oklahoma	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oregon	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rhode Island	..	..	..	..	..	..	300	468	575	770	985	1,210	1,375	1,820
South Carolina	..	..	..	50	90	110	125	155	150	145	150	120	120	185
Tennessee	..	..	..	50	105	185	370	575	680	805	905	921	953	1,184
Texas	..	..	..	..	..	..	..	..	130	230	325	355	390	470
Utah	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia	80	130	190	365	580	762	985	1,135	1,395	1,930	2,490	2,760	2,989	4,440
Washington	..	..	..	..	..	..	..	..	..	..	..	..	108	260
West Virginia	..	..	..	..	..	..	..	248	765	1,230	1,700	2,160	2,420	2,760
Wisconsin	..	..	..	..	..	..	..	..	..	..	..	..	50	200
Total	80	180	580	1,260	2,001	3,706	8,799	15,688	20,477	28,988	36,017	40,699	46,783	61,658

[a] In Arizona, New Jersey, and Pennsylvania, institutions resembling industrial banking companies operate under small loan laws and their loan balances are included in the series for small loan companies. In North Dakota, South Dakota, and Vermont, we have been unable to identify any industrial banking companies.

[b] The loan balances of industrial banking companies in these states have been grouped in order not to reveal figures for individual companies.

NVESTMENT COMPANIES, AND DISCOUNT COMPANIES, 1910 TO 1937, BY STATES
f dollars)

1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
610	825	1,455	2,226	2,963	3,390	3,062	2,549	1,969	1,715	1,752	1,936	2,366	2,740
200	350	550	750	1,000	1,383	1,457	1,152	909	940	983	1,200	1,197	1,154
3,444	5,277	7,011	8,940	10,934	12,837	12,603	11,238	8,926	7,275	7,783	9,731	11,564	12,575
748	796	830	926	990	1,083	959	837	621	528	672	1,009	1,522	1,569
2,312	2,891	3,734	4,387	5,797	7,143	7,449	6,835	5,566	4,905	4,792	3,970	4,009	4,462
1,662	1,986	2,183	2,516	2,763	3,008	2,743	2,369	1,926	1,583	1,538	1,972	2,493	2,733
1,157	1,295	1,498	1,709	2,067	2,247	2,242	2,128	1,880	1,596	1,513	1,711	2,218	2,425
1,040	2,022	2,169	1,709	1,572	1,725	1,452	1,342	1,254	1,409	1,641	1,784	1,975	2,195
1,195	1,852	2,605	3,485	4,460	5,125	4,850	4,080	3,337	2,949	2,890	3,574	4,563	5,544
40	140	235	285	365	455	440	360	280	222	195	215	270	310
1,845	3,245	4,516	6,183	7,433	8,921	8,256	7,111	4,439	3,871	5,017	5,168	5,807	7,439
2,230	2,800	3,500	4,000	4,700	5,700	5,400	4,250	2,900	2,100	2,300	2,930	3,772	4,565
1,050	1,350	1,450	1,550	1,780	2,010	1,900	1,675	1,380	1,240	1,333	1,560	1,659	2,050
422	671	928	1,170	1,536	1,971	1,854	1,731	1,323	1,176	1,363	1,839	2,483	2,674
190	280	385	510	680	858	745	630	565	550	850	1,104	1,504	1,872
600	750	980	1,291	1,366	1,666	1,775	1,394	795	300	..	..	..	..
220	250	280	300	350	420	450	380	260	189	180	220	236	255
753	1,072	1,368	1,677	1,970	2,446	2,494	1,836	1,465	1,353	1,723	2,204	2,473	2,687
6,200	7,000	7,500	8,000	8,800	9,500	9,000	7,900	6,600	5,935	5,750	5,860	5,950	6,380
5,781	6,769	9,093	11,450	13,846	17,255	16,812	12,683	7,995	5,697	6,437	10,037	15,382	17,745
795	1,055	1,452	1,835	2,319	2,975	3,430	3,296	2,596	2,442	2,417	2,608	2,938	3,352
..	150	250	350	480	600	560	500	420	450	500	600	750	850
5,609	6,721	8,651	11,013	12,558	13,997	12,514	10,595	8,092	7,996	8,430	11,442	15,879	16,580
..	40	80	120	155	189	167	138	114	109	107	126	134	145
..	..	..	100	250	360	440	460	450	470	550	850	1,100	1,350
155	168	172	185	198	215	212	210	195	180	188	195	204	220
..	..	..	30	70	120	160	150	120	110	120	150	200	220
5,306	22,857	31,523	35,569	40,039	42,612	45,615	35,784	32,298	25,537	25,421	34,043	38,309	42,003
4,434	5,516	7,061	9,492	11,680	12,099	12,128	11,263	8,001	5,962	5,914	7,039	7,924	9,658
5,636	6,253	7,744	9,226	10,494	11,991	11,299	9,121	6,728	5,452	6,093	7,502	10,528	13,560
100	570	1,060	1,660	2,430	3,370	3,640	2,970	1,989	1,870	2,237	2,755	3,386	3,880
..	250	380	480	600	520	380	300	230	202	221	262	238	232
2,280	2,470	2,680	3,240	3,710	4,310	4,600	4,080	3,200	2,560	2,580	3,220	3,900	4,200
220	335	385	420	485	560	530	410	302	280	348	500	623	624
1,482	1,877	2,280	2,637	3,094	3,532	3,348	2,931	2,425	2,251	2,414	3,254	3,938	4,940
975	1,852	2,626	3,289	4,340	5,391	5,154	4,091	2,740	2,126	2,271	2,954	3,591	3,918
50	120	180	250	330	420	433	400	339	320	353	450	580	600
,966	7,551	9,463	11,351	13,733	14,494	15,458	13,486	9,879	9,636	9,110	11,101	13,309	16,010
418	1,091	1,641	2,130	2,629	3,189	3,091	2,355	1,464	840	470	415	345	525
,140	3,230	3,310	3,575	4,000	4,150	4,000	3,900	3,550	3,180	3,380	3,950	5,000	5,500
700	1,300	2,300	3,300	4,100	4,800	4,841	5,495	3,548	3,158	3,552	4,771	6,936	10,811
,965	105,027	135,508	163,316	193,066	219,037	217,943	184,415	143,070	120,664	125,388	156,211	191,255	220,552

figures are relatively close approximations. Reports for several companies received after our crude estimates were made indicate that the error is probably in the direction of understatement.

TABLE 53.—COMPOSITION OF ESTIMATED TOTAL LOAN BALANCES OF INDUSTRIAL BANKING COMPANIES IN THE UNITED STATES BY QUALITY OF DATA USED IN THEIR DEVELOPMENT, 1910 TO 1937

Year	Estimated total loan balance (thousands of dollars)	Per cent of estimated total loan balance based on		
		Reported figures	Close estimates	Crude estimates
1910	80	..	100	..
1911	180	..	100	..
1912	580	40	60	..
1913	1,260	24	76	..
1914	2,001	8	92	..
1915	3,706	41	59	..
1916	8,799	36	64	..
1917	15,688	35	65	..
1918	20,477	45	54	1
1919	28,988	50	41	9
1920	36,017	50	40	10
1921	40,699	52	37	11
1922	46,783	55	36	9
1923	61,658	53	38	9
1924	79,965	61	32	7
1925	105,027	55	37	8
1926	135,508	60	31	9
1927	163,316	56	35	9
1928	193,066	54	36	10
1929	219,037	57	32	11
1930	217,943	61	28	11
1931	184,415	62	31	7
1932	143,070	66	28	6
1933	120,664	79	16	5
1934	125,388	66	30	4
1935	156,211	70	26	4
1936	191,255	79	17	4
1937	220,552	75	21	4

Loan Balances of Pawnbrokers

It is impossible to develop accurate measurements of pawnbrokers' loan balances. There are few official reports on the pawnbroking business and commercial pawnbrokers are generally unwilling to supply any information concerning their business. This accounts for the wide variations in the estimates of outstanding pledge loan balances in the past which have ranged from 60 million to 400 million dollars. The best that can be done under present circumstances is to reduce the error of previous estimates.

In five states pawnbrokers are now under the supervision of state banking departments. Annual reports concerning the business have been published by the Oregon Banking Department since 1930, by the New Jersey Department of Banking and Insurance since 1931, and by the Indiana Department of Financial Institutions since 1935. The fourth state, Ohio, publishes no reports on the pawnbroking business, but through the courtesy of the Ohio Department of Commerce we have obtained summaries of examination reports for 1935, 1936, and 1937. In the fifth state, Pennsylvania, pawnbroking has been brought under state supervision by an act of 1937. Reports have not yet been published, but the State Banking Department has given us an estimate based upon incomplete returns from an official request for pawnbroking figures.

In other areas pawnbrokers are generally licensed by municipalities. But supervision, which is usually exercised by police departments, is directed solely toward the recovery of stolen goods taken as security for loans. We have not found a single municipality which publishes a report on the pawnbroking business, and efforts to get reliable estimates of loan balances from police departments have been unsuccessful. There are a few very loosely organized state pawnbrokers' associations and several sporadic attempts have been made to publish a periodical to serve the business. Efforts to obtain quantitative data concerning the pawnbroking business from both of these sources have been unsuccessful.

A substantial part of the total pawnbroking business in the United States is done by a few large companies which were originally organized, and for the most part have continued to operate, as limited dividend enterprises. These companies together with other limited dividend companies engaged in the small loan business are affiliated with the National Federation of Remedial Loan Associations which has published annual summaries of the business of members since 1911. Thus, for these "remedial" agencies, which are well distributed geographically, figures are available for a long period of years. We also obtained a long series for one large commercial pawnbroker with offices in two cities and fragmentary data for a few other smaller commercial pawnbrokers.

The executive officers of many of the "remedial" companies and of several commercial pawnbroking companies assisted us in the development of estimates of the total loan balance of pawnbrokers in the communities in which they did business. For five other cities we undertook to make estimates by calling on all licensed pawnbrokers. In Minneapolis and Detroit this was done with the assistance of police sergeants in charge of pawnbroking inspection.

Since there were no "remedial" companies in the South a special effort was made to obtain estimates for representative southern cities. Lacking any contact with pawnbrokers in this area, we examined the current files of newspapers in Atlanta, Birmingham, Chattanooga, Dallas, Houston, Jacksonville, Miami, Nashville, and Richmond to obtain the names and addresses of pawnbrokers who advertised most elaborately and consistently. Letters were then sent to several in each city asking them to provide a crude estimate of the total outstanding loan balance of pawnbrokers in that city. Only one reply was received, and this pawnbroker said he was unable to give any information.

The city estimates obtained from remedial pawnbrokers, local investigations, and other sources together with the published figures for certain New Jersey cities and figures for Ohio cities provided by the State Department of Commerce are given in Table 54.

This table indicates a very wide range of per capita loan balances by cities. Variations between cities are to be accounted for by many factors. The size of the city is an important but certainly not the controlling factor. Although the largest city has the largest per capita loan balance, some small cities, such as Albany and Atlantic City, have larger relative loan balances than Cleveland, Detroit, and Minneapolis. Of equal, if not greater, importance are the existence of low-cost pledge loan agencies, the legal status of the pawnbroking business, and certain characteristics of the population. The Jews, and to some extent the Italians, tend to keep part of their property in precious stones. Hence, where there are large Jewish and Italian populations, the demand for pledge loans is relatively large if satisfactory terms are offered by lenders. The same tendency is shown by certain occupational groups, particularly by people of the theater, for whom jewelry serves not only as a means of personal adornment, but also as security for loans to meet the financial emergencies which are characteristic of theatrical life. Resort cities not only attract people who have satisfactory collateral, but create needs for borrowing. Cities which have families of long-standing wealth are likely to have a larger demand for pledge loans than cities whose wealthy families have recently acquired their wealth.

TABLE 54.—REPORTED OR ESTIMATED LOAN BALANCES OF ALL PAWNBROKERS IN CERTAIN CITIES IN 1934 OR 1935

City	Population 1930 census	Loan balances of pawnbrokers (thousands of dollars)		Loan balance per capita
		Close of 1934	Close of 1935	
New York City	6,930,000	38,000[a]	..	5.48
San Francisco	634,000	3,400[a]	..	5.36
Boston	781,000	3,000[a]	..	3.84
Los Angeles	1,238,000	4,000[a]	..	3.23
Albany	127,000	250[a]	..	1.97
Newark	442,000	836	..	1.89
Chicago	3,376,000	6,000[a]	..	1.78
Atlantic City	66,000	98	..	1.48
Hoboken	59,000	74	..	1.25
Baltimore	805,000	..	1,000[a]	1.24
Detroit	1,569,000	1,600[a]	..	1.02
Jersey City	317,000	263	..	0.83
Utica	102,000	80[a]	..	0.78
Cincinnati	451,000	..	285	0.63
Cleveland	900,000	..	497	0.55
Columbus	291,000	..	122	0.42
Rochester	328,000	135[a]	..	0.41
Colorado Springs	33,000	10[a]	..	0.30
Minneapolis	464,000	130[a]	..	0.28
St. Paul	272,000	40[a]	..	0.15

[a] Estimated.

These are but a few of many factors that influence the per capita loan balance in various cities. They emphasize the availability of collateral rather than the need for loans. Although the will to borrow is obviously an essential ingredient of all pawnbroking loans, the availability of collateral to those who need to borrow is the most important element in determining the extent of the pawnbroking business in any area. The second most important element appears to be the rate of charge for pawnbroking loans. The rate charged by the Provident Loan Society of New York is, for instance, so far as we are aware, lower than that of any other pledge-lending agency in the world, and this accounts in very large part for the tremendous amount of pawnbroking loans in New York City. The existence of low-cost pawnbroking agencies in San Francisco and Boston also accounts in part for the high relative loan balances in those cities.

There are two distinct types of pawnbrokers. One type lends on cheap jewelry and miscellaneous personal property, such as clothing, musical instruments, guns, luggage, and household bric-a-brac. Loans usually range in size from 50 cents to $10, and average loans in various offices are frequently as low as $2.00 or $3.00 and seldom exceed $8.00. The loan balances of single offices may range from $1,000 to $50,000. These pawnbrokers usually combine pawnbroking with the sale of new and used goods. Because a large storage space is needed and because retail markets must be found for unredeemed pledges, they are usually situated in business districts where rents are cheap and where poor people trade.

The second type of pawnbroker lends mainly on precious stones and metals. Loans range in size from $1.00 to thousands of dollars, but the average in various offices is usually from $10 to $50. The loan balance per office may range from $20,000 to several millions.[1] These pawnbrokers rely primarily upon auction sales in the wholesale market for disposing of unredeemed pledges, and they are generally to be found in good retail districts.

Because of these wide differences in the size of loan balances of pawnbroking offices, the number of pawnshops is not a satisfactory guide to the development of loan balance estimates. Hence, it has been necessary to resort to per capita comparisons as the best available device for developing national estimates. Since pawnbroking is confined almost entirely to urban areas, urban population figures have been used as the basis for estimating.[2]

Calculation of the estimated total loan balance of pawnbrokers in the United States at the close of 1936 is shown in Table 55. First are given the reported or estimated loan balances for certain states. Then the sum of the available city estimates not included in the foregoing state totals is given. The urban population of the areas

[1] On December 31, 1937, the Provident Loan Society of New York had approximately $23,000,000 outstanding in 20 offices scattered throughout New York City.

[2] An examination of the classified sections of telephone directories in 18 states indicated that only a negligible number of pawnbrokers were doing business in places of less than 25,000 population, and these clearly had very small loan balances.

for which estimates were available was 29,278,000 as compared with a total urban population of 49,243,000 for the United States in 1930. The total loan balance for areas containing the remaining urban population was then estimated by assuming a per capita loan balance of 70 cents.

TABLE 55.—REPORTED OR ESTIMATED LOAN BALANCES OF PAWNBROKERS IN CERTAIN AREAS AND IN THE UNITED STATES, AT THE CLOSE OF 1936

State	Pawnbroking loan balance close of 1936 (thousands of dollars)	1930 urban population[d] (thousands)	Loan balance per capita of urban population
California	9,500[b]	3,211	2.96
Indiana	276	1,260	0.22
New Jersey	1,552	2,190	0.71
Ohio	1,105	3,399	0.33
Oregon	214	328	0.65
Pennsylvania	4,000[a]	4,104	0.97
Total for 6 states	16,647	14,492	1.15
Certain cities in other states	52,000[c]	14,786	3.52
All other places of 25,000 or more population	13,976	19,965	0.70
Total for the United States	82,623	49,243	1.68

[a] Estimate by State Banking Department.

[b] Mean of differing estimates by two authorities in 1934, adjusted for trend.

[c] Sum of estimates given in Table 54, exclusive of cities covered by state figures, adjusted for trend.

[d] Places of 25,000 or more population.

The latter estimate is, of course, extremely crude. There is a very wide difference in urban per capita loan balances among the states for which estimated or reported figures are available. It seems possible, however, to exclude the extremes as unreliable guides to the loan balance in other urban areas. The California figure is materially influenced by the large loan balances of a few exceptional pawnbrokers in San Francisco and Los Angeles and by special characteristics of the populations of these cities. The low figures for Indiana and Ohio also appear to be atypical, partly because some pledge-lending is done by small loan licensees in these states. The per capita figures for Pennsylvania, New Jersey, and Oregon appear to be more adequately representative of the extent of the pawnbroking business in the areas not covered by our estimates, and we have selected a per capita figure which approximates the mean of these figures. It seems likely that this figure is high for many of the cities in the agricultural sections of the area not covered by our estimates. But it is undoubtedly low for such cities as Atlanta, Dallas, Kansas City, Houston, Memphis, Nashville, New Orleans, Oklahoma City, Richmond, and St. Louis.

It will be noted that reported figures or reliable estimates have been obtained for areas which contain 63 per cent of the urban population. These areas also include most of the cities in which the bulk of the pawnbroking business of the country is done. If we had chosen 50 cents or 90 cents as the urban per capita loan balance for the remaining areas, our estimate of the total loan balance would be changed by less than 10 per cent. This estimate for all pawnbrokers in the United States probably errs in the direction of understatement because a considerable number of enterprises do what is in effect a pawnbroking business without taking out a license. In order to avoid the regulations and license fees imposed upon pawnbrokers, some second-hand shops buy articles of personal property with the understanding that the seller may redeem them within a certain time. While the number of such enterprises is large, the total amount of their business is small. Since this type of operation would not be reflected in our estimates, we have adopted 85 million dollars as our estimate for the outstanding amount of pledge loans in the United States at the close of the year 1936.

Information concerning the trend of loan balances of pawnbrokers is as fragmentary as that for the current loan balance. As already indicated, figures are available for a long period of years for the "remedial" companies, and aggregate loan balance figures for all pawnbrokers in four states are available for comparatively short periods. Through the courtesy of J. H. Dawes of the United States Loan Society, Philadelphia, we have also obtained a series of loan balance figures for that institution and a series of figures on the annual volume of loans made by a group of pawnbrokers in Philadelphia which do the bulk of the pawnbroking business in that city. By applying ratios of loans made during the year to outstanding loans at the close of the year computed from reports of other pawn-

TABLE 56.—INDICES OF LOAN BALANCES OF CERTAIN PAWNBROKERS AND GROUPS OF PAWNBROKERS, AND ESTIMATED TOTAL LOAN BALANCES OF PAWNBROKERS IN THE UNITED STATES, 1923 TO 1937

(Index numbers: 1936 = 100)

Year	Provident Loan Society of New York	Five other remedial companies[a]	United States Loan Society, Philadelphia	Group of Philadelphia pawnbrokers	All licensed pawnbrokers in:				All pawnbrokers in the United States	
					Oregon	New Jersey	Indiana	Ohio	Estimated index	Estimated loan balance (millions of dollars)
1923	75.8	90.5	86.0	..	..	..	..	..	94	79.9
1924	88.0	98.8	94.0	..	..	..	..	..	102	86.7
1925	95.5	105.4	102.3	126	..	..	..	..	110	93.5
1926	102.8	114.1	115.8	..	..	..	..	..	118	100.3
1927	112.4	120.7	125.4	..	..	..	..	..	126	107.1
1928	117.1	124.8	130.1	..	..	..	..	..	130	110.5
1929	134.0	131.0	142.4	..	..	..	..	..	140	119.0
1930	139.6	143.0	155.7	148	167.3	..	..	..	147	125.0
1931	133.5	142.4	144.2	..	155.1	131.3	..	..	138	117.3
1932	129.6	134.8	115.2	96	129.0	113.7	..	..	116	98.6
1933	111.9	121.7	101.7	88	100.5	95.7	115.9	..	102	86.7
1934	104.3	110.8	104.0	92	90.2	94.4	..	..	97	82.5
1935	103.1	108.4	106.7	97	95.8	100.6	89.6	97.0	100	85.0
1936	100.0	100.0	100.0	100	100.0	100.0	100.0	100.0	100	85.0
1937	112.7	105.1	109.5	..	105.5	111.5	125.5	116.0	111	94.4

[a] Includes figures for the Collateral Loan Company, Boston; First State Pawners' Society, Chicago; San Francisco Remedial Loan Association; Provident Loan Company, Seattle; and Onondaga Provident Loan Association, Syracuse.

brokers, the figures for the group of Philadelphia pawnbrokers were converted into a crude index of outstanding loans. The available indices of trend are given in Table 56. From indices for individual companies an index of loan balances for all pawnbrokers in the United States was developed. By applying this index to the estimated loan balance of all pawnbrokers at the close of 1936, a series of year-end estimates for all pawnbrokers was obtained.

The indices for "remedial" companies differ materially from those for commercial pawnbrokers. The loan balances of the former continued to decline until the fall of 1936.[1] For commercial pawnbrokers, on the other hand, liquidation appears to have been completed in 1934 and in some instances as early as 1933.[2] Although the data for commercial companies for the period between 1929 and 1931 are fragmentary, it seems clear that the loan balances of these companies declined more promptly and more rapidly than those of remedial companies. In the estimated index for all pawnbrokers in the United States allowance was made for a slower rate of growth between 1923 and 1929 than that indicated by remedial companies. During this period the remedial companies, by virtue of their lower charges, appear not only to have increased their share of business at the expense of commercial competitors, but also to have created additional demand in the areas in which they operated.

Loan Balances of Regulated Small Loan Companies

We shall use the term "regulated small loan company" to refer to agencies which operate as licensees under statutes bearing some resemblance to the Uniform Small Loan Law. Their loans are usually secured by chattel mortgages on household furniture or automobiles, by assignments of wages or salaries, by endorsed notes, or by simple promissory notes; and their charges range generally from

[1] The movement of loan balances in 1936 for both types of pawnbrokers was materially influenced by payment of the soldiers' bonus in June of that year. Our calculations indicate that the bonus payments resulted in a loss of about 10 per cent of loan balance by the remedial companies. If the bonus had not been paid, it seems possible that remedial companies would have experienced an increase in loan balance in 1936, and that commercial pawnbrokers would have experienced an acceleration in the upswing.

[2] This conclusion is supported by figures for ten commercial pawnbrokers in New York City supplied to us through the courtesy of the Wagner Audit Bureau. The loan balance of these companies increased from $829,000 at the close of 1933 to $1,024,000 at the close of 1934.

2 to 3½ per cent a month computed on unpaid principal balances. There are now more than 4,000 small loan licensees, but many of these are branches of national and sectional chain enterprises. The two largest chain enterprises, the Beneficial Industrial Loan Corporation and the Household Finance Corporation, have accounted for almost 40 per cent of the total volume of loans during recent years.

These enterprises are frequently referred to as "personal finance companies." But their principal common characteristics are derived from the restrictions imposed upon them by regulatory small loan laws. Since these laws generally limit the maximum amount of individual loans to $300, the term "regulated small loan company" seems more appropriate for purposes of our classification.[1]

Our estimates of the loan balances of regulated small loan companies represent the continuation of a series of estimates by states covering the period from 1915 to 1932, which was published several years ago in the Journal of Business of the University of Chicago.[2] The sources of the data which furnished the basis for these earlier estimates and the methods of estimating were described in some detail in that publication and they need not be repeated here. Table 57 gives the sources of official data concerning the regulated small loan business for the period between 1933 and 1937.

The figures given here for the period prior to 1933 do not correspond precisely with those previously published. In some instances more recent information has led us to make changes in our estimates. For example, it was found that the available summaries of small loan company reports for Ohio excluded an important group of companies during certain years; consequently, our estimates for that state, particularly for the period between 1928 and 1930, have been substantially increased. Still other changes were made in order to fit the series into the classification used in this volume. We

[1] Although loans of sums in excess of the maximum authorized by small loan laws are made by small loan licensees in several states, these loans are generally excluded from the loan balances covered by official reports. Except for Ohio, where loans in excess of $300 have not been segregated in the available reports for the period before 1937, our loan balance figures for regulated small loan companies will exclude these larger loans.

[2] Nugent, Rolf, Small Loan Debt in the United States, *in* Journal of Business of the University of Chicago, January, 1934, pp. 1–21. These figures were reproduced in Regulation of the Small Loan Business, by Robinson and Nugent, p. 169.

TABLE 57.—SOURCES OF OFFICIAL DATA CONCERNING LOAN BALANCES OF REGULATED SMALL LOAN COMPANIES, 1933 TO 1937

State	Period	Source of data	Nature of data[a]
Arizona	1933, 1934	Annual report of the state auditor	Amount of loans made during year ending June 30
	1936, 1937		Employed capital as of June 30
Connecticut	1933 to 1937	Annual report of the bank commissioner	Summaries of loan balances as of September 30
Florida	1933 to 1937	Annual report of the comptroller	Incomplete summaries of loan balances as of December 31
Georgia	1933, 1934	Annual report of the Department of Banking, Division of Small Loans, on small loan licensees	Incomplete summaries of loan balances as of December 31
Illinois	1933 to 1937	Annual report of Division of Small Loans of the Department of Insurance on personal finance companies	Summaries of loan balances as of December 31
Indiana	1933 to 1937	Annual report of the Department of Financial Institutions	Summaries of loan balances as of December 31
Iowa	1933 to 1937	Annual report of the superintendent of banking	Summaries of loan balances as of December 31
Kentucky	1934 to 1937	Annual report of the Department of Business Regulation, on small loan companies	Summaries of loan balances as of December 31
Louisiana	1933 to 1937	Biennial report of state bank commissioner	Summaries of loan balances as of December 31
Maine	1933 to 1936	Loan agency examiner, State Banking Department	Summaries of loan balances as of December 31
	1938[b]	Annual report of the bank commissioner	Summary of loan balance as of June 30
Maryland	1934	Haskins and Sells, accountants, Baltimore	Incomplete summary of loan balances as of December 31, based upon special reports to the state bank commissioner
	1935	26th annual report of the bank commissioner	Summary of loan balances as of December 31

[a] Partial summaries are listed as incomplete; unless so noted, the summary is either complete or is sufficiently inclusive to provide a reliable basis for estimates.

[b] The figure for June 30, 1938, was used to interpolate the loan balance for the close of 1937.

TABLE 57.—SOURCES OF OFFICIAL DATA CONCERNING LOAN BALANCES OF REGULATED SMALL LOAN COMPANIES, 1933 TO 1937—*continued*

State	Period	Source of data	Nature of data[a]
	1936, 1937	Wooden and Benson, accountants, Baltimore	Incomplete summary of loan balances as of December 31, based upon official reports to commissioner of loans
Massachusetts	1933 to 1937	Annual report of the Bureau of Loan Agencies	Summaries of loan balances as of September 30
Michigan	1933 to 1936	Annual report for small loan licensees to the state banking commissioner	Summaries of loan balances as of December 31
	1937	Annual report of the banking commissioner	Summary of loan balances as of December 31
Minnesota	1933 to 1937	Annual report of National Federation of Remedial Loan Associations	Summaries of loan balances for three associations in Minnesota as of December 31
Missouri	1933 to 1937	Annual report of commissioner of finance on personal finance companies	Summaries of loan balances as of December 31
Nebraska	1933 to 1937	Annual report of personal finance companies to State Department	Summaries of loan balances as of December 31
New Hampshire	1933 to 1936	Bank commissioner	Summaries of loan balances as of June 30
New Jersey	1933 to 1937	Annual report of the commissioner of banking and insurance	Summaries of loan balances as of December 31
New York	1933 to 1937	Annual report of the superintendent of banks (report on savings banks, etc.)	Summaries of loan balances as of December 31
Ohio	1933, 1934, 1937	Haskins and Sells, accountants, Cincinnati	Incomplete summaries of loan balances as of December 31, based upon official reports of small loan licensees to Department of Commerce, Division of Securities

[a] Partial summaries are listed as incomplete; unless so noted, the summary is either complete or is sufficiently inclusive to provide a reliable basis for estimates.

TABLE 57.—SOURCES OF OFFICIAL DATA CONCERNING LOAN BALANCES OF REGULATED SMALL LOAN COMPANIES, 1933 TO 1937—*continued*

State	Period	Source of data	Nature of data[a]
	1935	Division of Securities, of the Department of Commerce	Summary of loan balances as of December 31
Oregon	1933 to 1937	Annual report of the superintendent of banks	Summaries of loan balances as of December 31
Pennsylvania	1933 to 1937	Annual report of Department of Banking on small loan licensees	Summaries of loan balances as of December 31
Rhode Island	1933, 1934	Haskins and Sells, accountants, Providence	Incomplete summaries of loan balances as of December 31, based upon official reports to state bank commissioner
	1936, 1937	Annual report of chief of banking and insurance	Summaries of loan balances as of December 31
Utah	1933	Annual report of bank commissioner	Summary of loan balances as of November 30
	1934, 1936, 1938[b]	Biennial report of bank commissioner	Summaries of loan balances as of June 30
Vermont	1937	Annual report of licensed lenders to commissioner of banking and insurance	Summary of loan balances as of December 31
Virginia	1933 to 1937	Annual report of Banking Division, State Corporation Commission	Summaries of loan balances as of December 31
West Virginia	1934 to 1938[b]	Annual report of the commissioner of banking	Summaries of loan balances as of June 30
Wisconsin	1933 to 1937	Annual report of the banking commission for small loan, discount, and foreign exchange companies	Summaries of loan balances as of December 31

[a] Partial summaries are listed as incomplete; unless so noted, the summary is either complete or is sufficiently inclusive to provide a reliable basis for estimates.

[b] The figure for June 30, 1938, was used to interpolate the loan balance for the close of 1937.

have added the loan balances of remedial loan associations lending on chattel mortgages under special statutes in New Jersey and Minnesota and under special charters in several other areas. We have also included figures for companies operating in Nebraska under a statute which differs materially from the small loan laws of other states, but which has authorized the operation of a business resembling that conducted elsewhere under small loan laws. The loan balances of Morris Plan companies in Massachusetts, which were included in the small loan company series previously published, have been shifted to the industrial banking company series.

Some states have published comprehensive annual summaries of small loan companies since the enactment of regulatory legislation, and other states have published no data whatsoever concerning this business. For most states, however, summaries of small loan company reports prepared either by state banking departments or by accountants for state associations of small loan companies, which frequently excluded the reports of many enterprises, were available for certain years. The official data have improved progressively during the last decade, particularly since 1934. Summaries of reports prepared by private accountants, which were incomplete because they were based on voluntary reports, have generally been supplanted by comprehensive official reports. For some states, reliable quantitative data became available for the first time in 1935, 1936, or 1937; and for states which have long published official summaries, there has been a material improvement in the quality of reports.

In estimating loan balances in states for which no official data were available, it was our policy to establish as reliable estimates as possible for two or more years and to interpolate or extrapolate figures for other years in accordance with the number of licensed offices, with loan balance figures obtained from individual offices within the state, and with the trend of total loan balances in other areas. In making these estimates we frequently had the assistance of supervising officials, of officers of state associations of small loan companies, and of representatives of individual companies. We are especially indebted to M. R. Neifeld, statistician of the Beneficial Management Corporation, for assistance in the development of our estimates of loan balances in Tennessee, for which no official data

TABLE 58.—ESTIMATED LOAN BALANCES OF REGULATED SMALL LOAN

(Thousands

State	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Arizona	..	..	..	..	..	..	..	..	35	70	120	180	270
Connecticut	..	..	..	..	..	..	..	500	700	900	1,200	1,600	2,400
Florida	..	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	..	..	..	..	..	..	..	..	300	350	450	600	750
Illinois	..	..	..	..	..	3,500	3,600	3,800	4,200	4,800	5,500	6,500	7,800
Indiana	..	..	..	..	..	2,500	2,400	2,500	2,800	3,100	3,400	4,000	4,800
Iowa	..	..	..	..	..	..	..	..	..	800	950	1,200	1,500
Kentucky	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana	..	..	..	..	..	..	..	..	..	..	..	..	..
Maine	6	11	13	14	15	166	177	169	177	186	199	217	289
Maryland	..	..	..	..	..	..	850	850	920	1,000	1,150	1,400	1,800
Massachusetts	..	..	1,800	2,000	1,440	1,155	1,121	1,131	1,286	1,550	1,700	2,000	2,500
Michigan	..	..	..	500	600	680	750	900	1,200	1,450	1,800	2,400	3,400
Minnesota	82	131	165	181	210	240	289	302	335	360	403	411	421
Missouri	107	127	176	150	110	112	114	122	140	162	168	185	190
Nebraska	..	..	..	..	20	40	42	50	65	85	100	120	160
New Hampshire	..	..	..	..	..	100	90	95	100	105	115	130	180
New Jersey	..	..	..	569	704	887	904	1,302	2,080	3,147	3,951	4,831	6,082
New York	..	..	528	645	761	881	791	876	887	985	950	985	1,024
Ohio	..	..	..	3,300	3,100	2,900	3,200	3,600	4,200	4,700	5,500	6,500	8,000
Oregon	..	..	80	90	100	110	120	145	170	200	240	290	330
Pennsylvania	..	..	..	1,800	2,200	2,500	2,800	3,200	4,000	5,000	6,400	8,500	11,000
Rhode Island	..	..	..	..	..	..	..	..	..	..	..	1,200	1,500
Tennessee	..	..	..	..	..	..	..	..	..	..	..	..	..
Utah	..	..	..	..	..	..	..	..	..	..	..	..	..
Vermont	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia	..	..	..	..	..	..	500	600	750	1,050	1,420	1,460	1,540
West Virginia	..	..	..	..	..	..	..	..	..	..	..	..	..
Wisconsin	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	195	269	2,762	9,249	9,260	15,771	17,748	20,142	24,345	30,000	35,716	44,709	55,936

COMPANIES, AT THE CLOSE OF EACH YEAR, 1912 TO 1937, BY STATES
of dollars)

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
370	470	480	500	700	1,050	1,200	1,000	800	850	900	1,200	1,277
3,150	3,800	4,900	6,400	8,400	9,200	9,350	8,500	7,400	7,250	6,950	6,800	7,800
50	400	800	1,400	2,100	2,800	3,000	2,750	2,400	2,600	3,000	3,500	4,200
1,000	1,400	2,200	3,400	4,800	5,800	5,900	5,200	4,400	4,200	3,000	1,000	600
9,500	11,500	15,000	20,000	28,000	33,500	33,000	29,600	27,300	27,500	30,300	32,200	35,200
6,000	7,500	9,500	12,000	15,500	17,500	17,800	15,400	12,742	12,000	12,924	14,965	17,229
1,900	2,500	3,300	4,400	6,200	7,600	8,000	6,800	5,950	6,264	6,403	6,900	7,759
..	..	..	..	..	..	..	..	..	700	1,900	2,700	3,069
..	..	..	3,000	5,800	7,000	7,100	5,600	5,200	4,900	4,700	4,600	6,600
550	905	1,209	1,349	1,644	1,902	2,049	1,785	1,767	2,091	1,992	1,975	2,313
2,400	3,200	4,200	5,500	7,400	8,200	8,400	8,000	7,700	7,800	8,300	9,000	10,300
3,100	3,900	5,000	6,900	10,700	13,300	15,300	14,900	14,600	16,200	16,900	18,000	22,000
5,000	7,000	10,500	16,000	24,000	27,500	26,000	21,700	14,800	14,200	15,500	17,800	22,500
449	504	529	449	633	679	608	523	464	449	481	477	526
163	205	3,500	6,142	10,452	10,823	10,704	8,392	7,157	7,426	7,942	8,898	10,400
250	450	700	1,000	1,800	2,300	2,500	2,400	2,450	3,000	3,800	5,172	6,200
250	350	530	700	900	1,122	1,250	1,150	600	330	250	150	125
8,186	10,046	13,699	19,478	21,139	8,706	6,194	7,083	8,574	10,333	11,358	14,335	16,869
1,173	1,307	1,544	1,803	1,986	2,993	8,233	10,102	16,108	26,723	34,011	43,498	53,067
11,000	15,500	21,000	30,000	41,000	46,000	42,000	35,500	31,500	31,000	34,500	41,500	51,300
380	440	600	900	1,800	2,930	3,478	2,813	2,295	2,047	2,075	2,448	2,822
15,000	20,000	27,000	36,000	48,000	54,000	54,500	47,500	39,357	38,341	37,485	39,000	42,000[a]
1,850	2,300	2,800	3,300	4,300	4,800	4,850	4,200	3,700	3,800	4,100	4,400	5,000
300	600	900	1,300	2,100	2,700	2,900	2,800	2,600	2,600	3,800	3,900	2,000
..	..	..	..	..	200	500	680	990	1,900	2,000	2,200	2,650
..	..	..	..	..	..	..	..	..	..	..	..	469
1,800	2,200	2,600	3,300	4,250	4,900	5,100	4,620	4,200	4,360	4,814	5,300	6,246
1,000	1,800	2,700	3,800	3,500	2,500	1,600	1,000	1,500	2,300	3,100	3,900	4,700
..	..	2,000	4,170	6,101	7,116	7,300	6,557	5,450	4,300	4,600	5,183	5,850
74,821	98,277	137,191	193,191	263,205	287,121	288,816	256,555	232,004	245,464	267,085	301,001	351,071

[a] Includes figures for consumer discount companies operating under an act of 1937, most of which were formerly licensees under the Pennsylvania Small Loan Law.

were available, and in Florida, where the available summaries excluded the reports of many enterprises.

Table 58 presents estimates of the loan balances of regulated small loan companies by states for the period from 1912 to 1937. In spite of our reliance upon crude estimates for certain years in many states, these estimates are relatively close for the country as a whole. The figures for the period between 1912 and 1916 appear to have no more than a 10 per cent error. The least reliable figures are those for the period from 1917 to 1926, when the error may approach 15 per cent. Thereafter, the range of possible error diminishes rapidly and our estimates for the period from 1933 to 1937 appear to be within 2 or 3 per cent of the true figures.

Loan Balances of Unregulated Lenders

We shall use the term "unregulated lender" in this section to refer to a miscellaneous group of lending agencies whose principal common characteristics are their very small loans and their very high rates of charge. This category includes agencies which lend generally on chattel mortgages on automobiles or household furniture, in sums of $10 to $200, at rates of charge ranging from 5 to 20 per cent a month, depending upon the size of the loan; salary-buyers, who "purchase" wages in denominations of $6.00 to $66 at discounts representing interest rates of 10 to 40 per cent a month; and salary and "plain note" lenders, who lend in sums of $5.00 to $75 at rates of charge ranging from 10 to 50 per cent a month. Loans of salary-buyers are made from payday to payday, and they are usually renewed periodically for the same principal amount upon payment of the discount. Loans of salary, plain note, automobile, and furniture lenders, on the other hand, are usually payable in instalments over periods ranging from five weeks to twelve months.

The term "unregulated lender" is an unsatisfactory descriptive title for these lending agencies. This category neither includes all agencies whose operations lack the sanction of enabling statutes nor excludes all agencies whose operations are authorized and subjected to public supervision by law. As indicated in an earlier section,[1] many of the institutions defined as industrial banking com-

[1] See pp. 364–365.

panies are unauthorized and unregulated, but these have been included in the industrial banking category because their practices are similar to those of industrial banking companies operating under enabling statutes in other states. On the other hand, we shall define as unregulated lenders three groups of lending agencies whose operations were in varying degrees sanctioned by law and subjected to public supervision, but whose terms of lending resembled those of unregulated lenders in other areas, that is, salary loan companies operating under the Industrial Bank Act in Colorado,[1] licensees under the Colorado Moneylenders Act of 1935,[2] and personal property brokers in California.[3]

These examples, however, represent exceptions to a rule which otherwise serves our purpose. In general, the legal status of the lender is the most practical criterion for distinguishing two types of lending in small sums, which, in spite of certain similarities, differ in important respects. Regulated small loan companies and unregulated lenders generally deal with the same classes of borrowers

[1] See pp. 367–368.

[2] The Colorado Moneylenders Act of 1935 authorizes licensees to charge certain fees which result in very high rates of charge. For instance, on a loan of $50 payable at the rate of $5.00 a week, the lender may legally collect charges approximating 200 per cent a year. Even higher rates of charge are authorized for automobile loans of small amounts. Thus, while this act purports to "regulate" the small loan business, its effect has been merely to give legislative sanction to practices which prevail among unregulated salary and chattel lenders in other areas.

[3] The agencies now operating as personal property brokers in California have had a varied legal history. The small loan business was unregulated and illegal prior to 1931 when the California legislature enacted a regulatory small loan law which permitted licensees under the act to charge an interest rate of 3½ per cent a month. But in 1932 the interest rate section of this act was declared to be unconstitutional because it amended an initiative act. This decision had the effect of limiting charges of licensees to the general maximum of 12 per cent a year and of continuing the criminal penalties provided by the act for its infraction. An initiative act of 1933 exempted personal property brokers from the interest limitations, and in the same year, the legislature passed "an act to define personal property brokers and employes and regulate their charges and business." But although the Personal Property Brokers Act provided for the licensing of brokers, it failed to limit their charges. A few personal property brokers voluntarily limited their charges to rates similar to those of licensed lenders in states with adequate regulation, but most brokers charged rates similar to those of unregulated lenders in other areas. Because of the brevity of the period during which the small loan business in California was subject to regulation and because no reports of loan balances are available, it has seemed desirable to include these agencies in the category of unregulated lenders for the whole period covered by our estimates. It should be noted that the Personal Property Brokers Act applied only to those taking personal property as security for loans. Many lenders took no security and were therefore exempt from this act. A comprehensive regulatory small loan law was enacted in California in July, 1939.

and lend on the same types of security. But the operations of regulated companies are authorized by law and are subjected to restrictions and positive requirements designed for the protection of borrowers, while the operations of unregulated lenders are generally carried on illegally, or at least extra-legally, by means of evasive devices or techniques which make proof of usury difficult. These differences in legal status are reflected in the higher costs, higher profits, smaller loans, and much higher rates of charge of unregulated lenders as compared with regulated small loan companies; in the difference in caliber of the personnel of the two businesses, and in the atmosphere of chicanery which generally surrounds the unregulated small loan business.[1]

The great majority of unregulated lenders are situated in states that lack adequate small loan laws. In these areas most lenders operate openly, maintaining offices in prominent buildings and using advertisements in newspapers, classified sections of telephone directories, and other media to attract customers. Although their loans are in most instances clearly usurious, these lenders rely for the safety of their principal upon the borrower's ignorance of his legal rights, upon the impracticability of his retaining counsel to void the small claims that are characteristic of the business, and upon his continuing need for a source of credit in emergencies. Other unregulated lenders operate in states with regulatory laws that provide criminal penalties for infraction. Lenders rely in some instances upon legal loopholes or inadequate law enforcement to provide some degree of security against prosecution and, in other instances, upon the use of evasive devices, whose true character the courts of some states have been slow to recognize.

A very common device for evasion is the purchase of wages. By pretending to buy at a discount wages already earned but payable in the future, the salary-buyer undertakes to establish his transaction as a purchase of property and not a loan of money. In many states salary-buying has been expressly subjected to the regulations imposed upon lenders of small sums. But in other states, in order to subject salary-buying to the regulations of small loan laws, it is

[1] For a more extensive description of the characteristics of regulated small loan companies and unregulated lenders, see Regulation of the Small Loan Business, by Robinson and Nugent.

necessary to prove in each case that the transaction is in fact a loan. The degree of proof necessary to convince a court varies according to the familiarity of the court with the use of this device. In some states existing decisions tend to facilitate such proof and in other states a contrary condition prevails.

Another common evasive device is the hazard agreement, which has been used in recent years principally by automobile lenders. This device relies upon a legal precedent, established centuries ago in contracts of bottomry, which exempted from the restrictions of usury laws lenders who shared the risk of loss of ships' cargoes. By use of an agreement under which they forego their claims in case mortgaged automobiles are wrecked or stolen, automobile lenders attempt to establish a similar exemption. In some jurisdictions courts have declared hazard agreements to be essentially evasive; in other jurisdictions, they have required proof of the usurious nature of individual contracts, thereby providing the basis for the operation of an extensive high-rate automobile loan business in many states which otherwise have effective regulatory laws.

In some areas automobile lenders require borrowers to buy insurance at very high premiums. Many automobile loan contracts are cast in the form of instalment sales. The borrower sells his car to a dummy which resells it to him at an increased price on a partial payment contract.

In recent years there has been a rapid growth in the use of merchandise coupons to disguise interest charges for salary loans. The lender gives the borrower 90 per cent of the face value of his note in cash and 10 per cent in coupons which may be used for the purchase of merchandise to the extent of 10 per cent of the purchase price. Loans are made for short periods and are renewed periodically so that the borrower tends to accumulate coupons which he is unable to redeem. Many other evasive devices have long plagued law enforcement authorities, and the ingenuity of moneylenders is constantly developing new ones.[1]

No official data are available concerning the business of the agencies that have been defined as unregulated lenders. Obviously there

[1] For a more extensive discussion of devices for evading small loan laws and court decisions affecting them, see Annotations on Small Loan Laws, by F. B. Hubachek, Russell Sage Foundation, 1938, pp. 145–178.

would be none for lenders who operate in defiance of the law. But there is also no official information concerning the business of personal property brokers in California, or the licensed moneylenders or salary-lending industrial banks in Colorado. Because of the natural secretiveness of unregulated lenders, it seemed useless to solicit data from individual lenders. Consequently, we were compelled to rely for our estimates upon three types of material, each of which is far from satisfactory for our purpose.

First, files of the Department of Consumer Credit Studies of the Russell Sage Foundation contained a great deal of information concerning unregulated lending over a long period of years, among which were lists of offices of the principal chain systems, lists of lending agencies licensed by certain municipalities for various dates, and extensive records resulting from litigation and from investigations by county prosecutors, state and city officials, legislative commissions, and newspapers.

Second, we were in possession of data resulting from intensive local investigations of unregulated lending in Kentucky in 1929 and in 1933, in North Carolina in 1932, in Colorado in 1933 and in 1935, in Minnesota in 1934, and in Washington and California in 1937.[1] The principal purpose of these investigations was to determine the scope and character of the business in these areas. These investigations provided lists of unregulated lenders operating in the areas covered, a description of the business of each office, and in some instances estimates of the loan balances of individual offices. These data were supplemented by soliciting estimates of the loan balance of unregulated lenders in certain cities from persons who had an intimate knowledge of the business in those cities.

Third, we obtained from city directories and classified sections of telephone directories lists of unregulated small loan offices for the spring or fall of 1926, 1929, 1933, for the spring of 1936, and for the fall of 1937 or the spring of 1938. When directories for the period

[1] None of these studies has been published. The 1929 Kentucky study and the Minnesota study were made by the writer. The 1933 Kentucky study was made by Caryl Spiller of the Louisville Better Business Bureau on behalf of the Kentucky Research Council. The North Carolina study was made in connection with an anti-loan-shark campaign conducted by the Junior Chamber of Commerce of that state. The Washington, Colorado, and California studies were made by representatives of the Household Finance Corporation and were lent to us for purposes of this study.

selected could not be obtained, those for preceding or succeeding periods were substituted. This investigation covered all places of more than 10,000 population in 17 jurisdictions that lacked adequate regulatory laws during the period from 1923 to 1938.[1] In many instances, the directories indicated the nature of security required and the size of loans made by individual lenders; and in other instances, this information was obtained by examining newspaper files for lenders' advertisements.

TABLE 59.—NUMBER OF UNREGULATED SMALL LOAN OFFICES LISTED IN DIRECTORIES OF CERTAIN YEARS FOR PLACES OF MORE THAN 10,000 POPULATION IN 17 JURISDICTIONS WHICH LACKED ADEQUATE REGULATORY LAWS, BY KIND OF SECURITY TAKEN

Kind of security	1926	1929	1933	1936	1937–1938
Automobiles	22	52	118	259	366
Salaries	151	280	377	599	762
Miscellaneous and unidentified	149	236	344	475	679
Total	322	568	839	1,333	1,807

Table 59 gives the number of various types of unregulated small loan offices listed in the directories covered by our investigation. Because many types of lenders were listed in some directories under the general heading "loans," and because it was not always possible to identify accurately the business of each lender, the number of unregulated offices listed is not precise. But the error resulting from inaccurate identifications is small. Among the unregulated lenders those taking wages and automobiles as security were most readily identified by their listings and by their advertisements, but a great many salary and automobile lenders are included in the miscellaneous and unidentified group. For California it was found to be impossible to identify the security taken by more than a very few lenders. Hence all California offices were included in the latter

[1] The jurisdictions covered were Alabama, Arkansas, California, Colorado, District of Columbia, Idaho, Kansas, Mississippi, Montana, Nevada, New Mexico, North Dakota, Oklahoma, South Carolina, South Dakota, Texas, and Wyoming. Several other states that lacked adequate regulatory laws during the period, notably Minnesota, North Carolina, and Washington, were excluded from this investigation because we believed that the information obtainable from telephone directories would not improve upon the material available from other sources.

group. The classification of offices by kind of security is useful principally to show the greater rate of growth in the number of automobile lenders as compared with other types of unregulated lenders.

Comparison of lists of unregulated lenders culled from the directories with those available from other sources indicated that many unregulated lenders were omitted from the directories. For many southern and southwestern cities the number of offices revealed by local investigations was more than twice as large as the number listed in the directories for the year 1926. For 1929, 1933, and 1936, the differences were progressively smaller, but still substantial. For other cities where comparisons were possible, the directory lists were more adequate, though in no instance complete.

A considerable number of unregulated offices were also omitted from the directory lists because our investigation was limited to places of more than 15,000 population. The unregulated lender is principally an urban phenomenon. But he is generally to be found in any community in which there are a sufficient number of industrial wage-earners to support such a business. Consequently, the economic characteristic of each community rather than its size usually determines the extent of unregulated lending. In some communities of 10,000 population, there were no unregulated lenders listed in the directories; but in some, as many as five lenders were listed.

The shortcomings of the directory lists in the communities covered appear to be due to several causes. Of primary importance is the desire of many unregulated lenders to keep their business out of the lime-light, particularly in states which provide criminal penalties for usury, or in cities which impose high license fees upon moneylenders. Also, many unregulated lenders prefer to deal only with employes of certain establishments where they have access to payroll information. These lenders attract customers by personal solicitation and the distribution of circulars among the groups with which they deal, and they probably attempt to avoid directory listings which would attract other applicants. Still another cause is the fact that many unregulated lenders have no established place of business or conduct their moneylending business in conjunction with some other business. In a South Carolina city, for instance, a policeman, equipped with a motorcycle, conducts a substantial small loan business on his beat. In an Alabama city a grocery store, which is still listed as such in the directories, has long made small loans its principal business. And in many Texas cities companies engaged in lending on real estate have gone into the small loan business as a side-line.

Our procedure in estimating loan balances of unregulated lenders in states which lacked adequate regulatory laws during the period covered by our study was as follows: Wherever possible, we attempted to establish close estimates of the total loan balance in each state for one or more years. Estimated loan balances for other years were then interpolated or extrapolated in the light of all the available data indicative of the trend in that state. For states for which it was impossible to obtain close estimates of loan balances in any year, estimates were developed by applying estimates of the average loan balance per office to the number of offices lending on salaries, household furniture, and automobiles.[1] Estimated total loan balances for other years were interpolated between these points and extrapolated to 1923 in accordance with the available trend data. In developing estimates for several states we had the advice of persons familiar with unregulated lending in these states.

The resulting loan balance estimates for 19 states and the District of Columbia, which lacked adequate regulatory laws throughout the period covered by our study, are given in Table 60. The table omits figures for Delaware, which also had no effective regulation during this period. While there is ample evidence to indicate that this state has not been free from unregulated lending, the business is small and we have been unable to develop any basis for estimating its loan balances.

These estimates, of course, represent crude approximations. But

[1] The basic averages used for these estimates are as follows:

Offices lending on:	1926	1929	1933	1936	1937
Salaries	22,000	25,000	14,000	18,000	20,000
Furniture and miscellaneous	30,000	35,000	22,000	25,000	25,000
Automobile	30,000	35,000	25,000	40,000	45,000

Modifications were made in these estimates for characteristic differences in certain states. These averages are higher than those indicated by local investigations, but they reflect the assumption that the smaller offices were omitted from the directories. As an allowance for these omissions, we have increased our estimates based upon directory information by 30 per cent in 1926, 25 per cent in 1929, 20 per cent in 1933, 16 per cent in 1936, and 15 per cent in 1937.

TABLE 60.—ESTIMATED LOAN BALANCES OF UNREGULATED LENDERS IN STATES WHICH LACKED ADEQUATE REGULATORY LAWS, 1923 TO 1937

(Thousands of dollars)

State	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Alabama	660	720	800	930	1,100	1,300	1,600	1,700	1,500	1,250	1,150	1,300	1,600	2,100	2,200
Arkansas	220	260	300	340	400	470	560	600	500	380	360	480	700	1,000	1,000
California	2,200	2,500	2,900	3,500	4,300	5,300	6,500	7,200	7,500	5,500	6,000	9,000	14,000	20,000	26,000
Colorado	800	880	1,000	1,150	1,350	1,600	1,900	2,000	1,700	1,300	1,100	1,300	2,000	3,000	4,200
District of Columbia	240	260	280	310	340	380	440	460	430	360	400	500	700	900	1,050
Idaho	50	60	70	80	100	120	140	150	130	100	100	120	150	200	250
Kansas	500	560	640	740	850	1,000	1,200	1,300	1,150	900	850	1,050	1,500	2,000	2,200
Minnesota	1,100	1,250	1,450	1,700	2,000	2,350	2,700	2,800	2,500	2,100	2,000	2,300	2,800	3,400	4,000
Mississippi	100	110	120	140	160	180	200	210	180	150	140	160	200	240	300
Montana	120	140	160	180	200	240	300	330	300	250	230	300	400	550	750
Nevada	..	..	20	40	60	80	100	120	120	100	100	110	120	140	160
New Mexico	60	70	80	90	100	120	140	150	130	100	80	120	180	250	300
North Carolina	650	700	780	880	1,000	1,150	1,350	1,400	1,250	1,050	1,000	1,200	1,600	2,200	2,800
North Dakota	..	..	20	40	60	80	100	110	100	80	70	80	100	160	300
Oklahoma	550	660	800	1,000	1,300	1,800	2,500	2,800	2,600	2,200	2,000	2,500	3,300	4,500	6,000
South Carolina	260	280	300	330	360	400	440	460	400	320	300	400	600	900	1,250
South Dakota	120	140	170	200	240	280	330	360	330	260	230	260	330	450	600
Texas	2,800	3,200	3,700	4,400	5,500	7,000	9,000	9,500	8,500	7,000	6,500	8,000	11,000	15,000	19,000
Washington	700	780	880	1,000	1,150	1,350	1,650	1,800	1,650	1,400	1,300	1,600	2,200	3,000	3,600
Wyoming	30	40	50	60	70	80	100	120	120	100	100	130	180	250	350
Total	11,160	12,610	14,520	17,110	20,640	25,280	31,250	33,570	31,090	24,900	24,010	30,910	43,660	60,240	76,310

we believe that they indicate with a fair degree of reliability the relative level of loan balances and the general direction and magnitude of fluctuations. In interpreting these movements it should be remembered that except for Texas, California, and Minnesota, the states for which figures are given in this table had few large cities and they did not attract large numbers of unregulated lenders until competition or the enactment of regulatory laws in other states compelled lenders to search for new locations. During the latter part of the period covered the most rapid increases in loan balances occurred in California and Colorado, as the result of statutory changes, and in states in which automobile lending expanded rapidly.

The states which had not enacted adequate small loan laws by the close of 1937 account for the largest part of the unregulated small loan business. But it is necessary also to include figures for unregulated lenders in states which enacted small loan laws before the close of 1923 and in states which enacted similar statutes between that date and the close of 1937. For convenience we have made separate estimates for unregulated lending in these two groups of states.

Twenty states had enacted small loan laws by the close of 1923.[1] Among them are most of the states in the eastern and central industrial region, where unregulated lending had been most extensive before these enactments. By 1923 the regulated small loan business had almost completely replaced the former unregulated business except in a few areas. A notable exception was New York State, where the maximum interest rate permitted under the small loan act attracted little capital to the regulated business and a large business was conducted by unregulated lenders. But two new types of unregulated lending were developed rapidly after 1923. One was salary-buying, which was spreading rapidly in regulated areas; and the other was automobile lending on the hazard agreement, which had begun on a small scale in New York City.

The business of unregulated lenders in states with regulatory laws is highly secretive and precise measurements of its extent are

[1] Arizona, Connecticut, Georgia, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Utah, and Virginia.

impossible. Data resulting from civil litigation and from anti-loan shark campaigns have been used as the basis for the estimates given in Table 61. These figures, needless to say, are extremely crude.

The estimates of aggregate loan balances in states which enacted small loan laws before 1923 reflect the diverse trends of three types of lending. The component loan balance figures for certain years are as follows:

	1923	1926	1929	1933	1937
		(In thousands of dollars)			
Salary-buyers	2,000	5,000	2,000	1,500	4,000
Automobile lenders	400	1,800	8,500	7,500	12,500
Other lenders	2,000	2,700	3,500	1,200	1,000
Total	4,400	9,500	14,000	10,200	17,500

Salary-buying increased rapidly throughout the country until 1926, when an aggressive campaign led by Leon Henderson, then director of the Department of Remedial Loans of the Russell Sage Foundation, drove this business from most states that had adequate regulatory laws. It continued, however, on a large scale in Georgia, where unfortunate court decisions facilitated lending on this device; to a lesser extent in Utah and Nebraska; and on a small scale in several other states. The increase in the estimated loan balance for salary-buyers between 1933 and 1937 indicated by the figures just given is due principally to the emasculation of the Georgia small loan law in 1935 which led to a great increase in salary-buying in that state.

Automobile lending grew extremely rapidly until 1931, declined only slightly in 1932 and 1933, and again increased rapidly during 1934 and 1935. After 1935 the loan balance of unregulated automobile lenders in states with regulatory laws appears to have increased but little because of the competition of regulated small loan companies in this field and prosecutions by law enforcement authorities. A considerable part of the unregulated automobile lending business in 1923, 1929, and 1933 was carried on in New York State, where existing court decisions had handicapped public prosecutors in dealing with it. But in 1937 a substantial part of this business was conducted in other states, notably in Virginia and Maryland. New York State also accounted for the largest part of the loan balance of "other lenders" prior to 1932 when the small loan law was revised.

Eight states enacted regulatory small loan laws between 1923 and 1937.[1] For these states it was necessary to develop estimates not only for unregulated lenders operating before the enactment of regulatory laws, but also for those which operated by means of evasive devices after such enactments. For the former estimates, we used the methods by which our estimates for states which lacked regulatory laws were made. For the latter, we relied upon data similar to those used for our estimates for states which enacted regulatory laws before 1923.

TABLE 61.—ESTIMATED LOAN BALANCES OF UNREGULATED LENDERS IN THE UNITED STATES, 1923 TO 1937

(Thousands of dollars)

Year	States which have not enacted regulatory laws	States which enacted regulatory laws before 1923	States which enacted regulatory laws between 1923 and 1937	All states
1923	11,160	4,400	5,700	21,260
1924	12,610	5,500	6,400	24,510
1925	14,520	7,200	5,700	27,420
1926	17,110	9,500	6,600	33,210
1927	20,640	10,200	4,300	35,140
1928	25,280	11,800	3,600	40,680
1929	31,250	14,000	4,200	49,450
1930	33,570	15,200	4,500	53,270
1931	31,090	14,200	4,100	49,390
1932	24,900	11,500	3,500	39,900
1933	24,010	10,200	3,100	37,310
1934	30,910	12,000	2,400	45,310
1935	43,660	14,000	3,000	60,660
1936	60,240	16,000	4,000	80,240
1937	76,310	17,500	5,400	99,210

Estimates for unregulated lenders in these eight states are given in Table 61. The series is broken by the elimination of part or all of the unregulated small loan business in each state following the enactment of regulatory laws. In Florida, Missouri, and Tennessee salary-buying has continued on a large scale since the enactment of

[1] Florida, Tennessee, and West Virginia in 1925; Missouri and Wisconsin in 1927; Louisiana in 1928; Kentucky in 1934; and Vermont in 1937.

small loan laws and has increased rapidly since 1933.[1] In Kentucky automobile lending was exempted from the small loan act, and this business has expanded rapidly in recent years.

Loan Balances of Miscellaneous Lending Agencies

We have yet to deal with three types of cash-lending which account for relatively small amounts of credit, but nevertheless have a place in this study. These are (1) the loans of more than $300 made either by licensed small loan companies or by unlicensed business corporations in states which have regulatory small loan laws, (2) the loans of Hebrew Free Loan Societies, and (3) the loans of axias, or *achtzias.*

Loans of More Than $300 by Certain Lending Agencies

Regulatory small loan laws generally apply to loans of $300 or less and loans of larger sums are governed only by the usury laws. In some states licensees under small loan laws are restricted to loans of $300 or less, but in other states some licensees make larger loans in connection with their small loan business.[2] In most states which have regulatory small loan laws, and particularly in those where small loan licensees are restricted to loans of $300 or less, there are some unlicensed corporations which specialize in loans of more than $300. These corporations are frequently affiliated with companies operating as licensees under small loan laws.

It is impossible to obtain satisfactory data for this category of loans. Most of the states which permit small loan licensees to make loans in excess of $300 report these loans under the general heading, "other assets not used in the small loan business." Corporations specializing in loans of more than $300 are not subject to state supervision and there are no reports of their operations. From the reports of licensed lenders in the few states which identify loans of

[1] In Florida there were approximately 175 salary-buying offices at the close of 1937. For a description of salary-buying practices in Missouri, see Salary-Buying in Kansas City, Missouri, by George L. Gisler and Joe B. Birkhead, published by the Conference on Personal Finance Law, 111 Broadway, New York City, 1938. In Missouri an amendment to the small loan law bringing salary-buying under its regulations was enacted in 1939.

[2] Except for Ohio, where only total loan balances have been reported, our series for regulated small loan companies excludes loans in excess of $300.

more than $300,[1] from correspondence with the state banking departments of several other states, and from the reports of many individual corporations, we have obtained fragmentary data which were used as the basis for the estimates given in Table 62.

TABLE 62.—ESTIMATED CONSUMER LOAN BALANCES OF MISCELLANEOUS LENDING AGENCIES IN THE UNITED STATES, 1923 TO 1937
(Millions of dollars)

Date	Consumer loans of more than $300	Axias	Hebrew Free Loan Societies	Total
1923	2.0	20.0	1.9	23.9
1924	3.0	23.0	2.0	28.0
1925	4.5	27.0	2.2	33.7
1926	7.0	25.0	2.0	34.0
1927	10.0	23.0	2.1	35.1
1928	14.0	22.0	2.0	38.0
1929	20.0	24.0	2.2	46.2
1930	18.0	20.0	2.0	40.0
1931	13.0	14.0	1.7	28.7
1932	8.0	8.0	1.5	17.5
1933	6.0	5.5	1.4	12.9
1934	7.0	6.0	1.5	14.5
1935	9.0	7.0	1.7	17.7
1936	12.0	8.0	1.5	21.5
1937	15.0	9.0	1.6	25.6

These estimates are exceedingly crude. But the general pattern of the movement is clearly indicated by our material. The increase prior to 1929 was very rapid and the decline thereafter was equally precipitate. In spite of a substantial recovery since 1934, it seems certain also that the outstanding balance at the close of 1937 was below the 1929 level.

Loans by Axias

Axias are co-operative or semi-co-operative savings and loan societies organized principally among Jewish or Italian immigrants. They resemble credit unions in some respects; in fact, many credit unions in New York and Massachusetts were formerly axias. But they operate without statutory authority. No reports of their operations are available, and it is possible only to express in figures

[1] For a variety of reasons the published figures are frequently unreliable as an indication of the trend of loan balances.

our observations of the recent history of these institutions. In the early 1920's large numbers of axias were operating, particularly among the Jewish communities of Boston, Chicago, Newark, New York, Philadelphia, and St. Louis. They were frequently mismanaged and between 1923 and 1928 efforts were made by prosecutors and state banking departments in Massachusetts and New York to compel their liquidation. As a result of this pressure some were incorporated under credit union acts, and others were liquidated. The business depression which began in 1929 proved to be an effective means of eliminating many others, and during the next few years axias almost disappeared in some areas. We have been informed by those who are well acquainted with the operations of these agencies in several areas that there has been some recovery of loan balances since the low point in 1933.

A substantial part of the loans made by axias are for business purposes. Consequently, the figures given in Table 62 represent half of our estimates of the total loan balances of these agencies.

Hebrew Free Loan Societies

Estimates of loan balances of Hebrew Free Loan Societies have been based on data supplied by Michael Freund of the Bureau of Jewish Social Research. We have applied an index of the trend of loan balances of two leading societies to an estimate of the outstanding loans of all agencies in 1932. These figures represent community-wide agencies and they exclude loan funds maintained by single Jewish church congregations. A considerable part of the loans of the Hebrew Free Loan Societies are made for business purposes, but because of the small sums involved we have not undertaken to eliminate these loans from the estimates given in Table 62.

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