

THE MARKET BEHAVIOR OF CONSUMER CASH  
INSTALMENT CREDIT GRANTORS:  
THEORY AND CASE STUDY

THESIS FOR THE DEGREE OF PH. D.

MICHIGAN STATE UNIVERSITY  
HUGH ALAN CHAIRNOFF

1966



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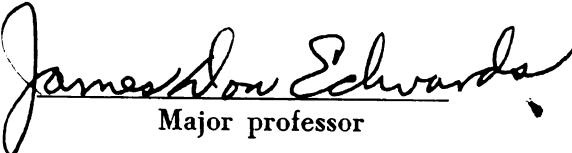
THE MARKET BEHAVIOR OR CONSUMER  
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THEORY AND CASE STUDY

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Hugh Alan Chairnoff

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of the requirements for

Ph.D. degree in Bus. Ad.

  
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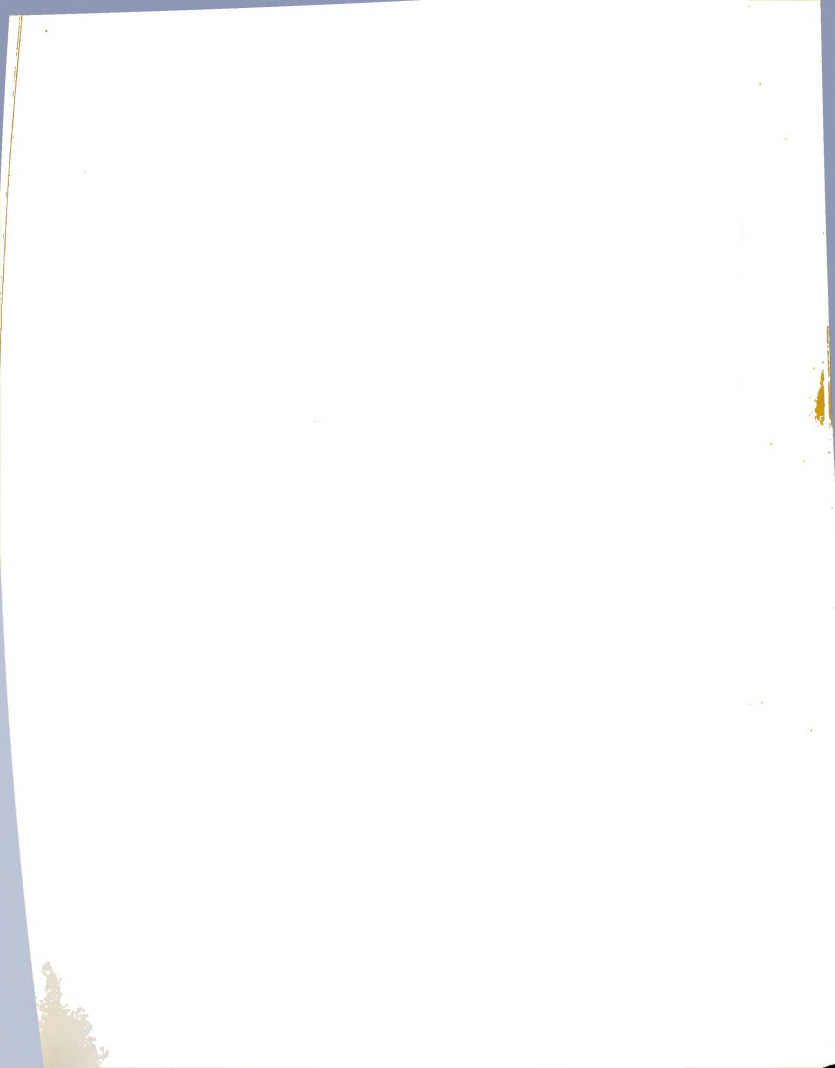
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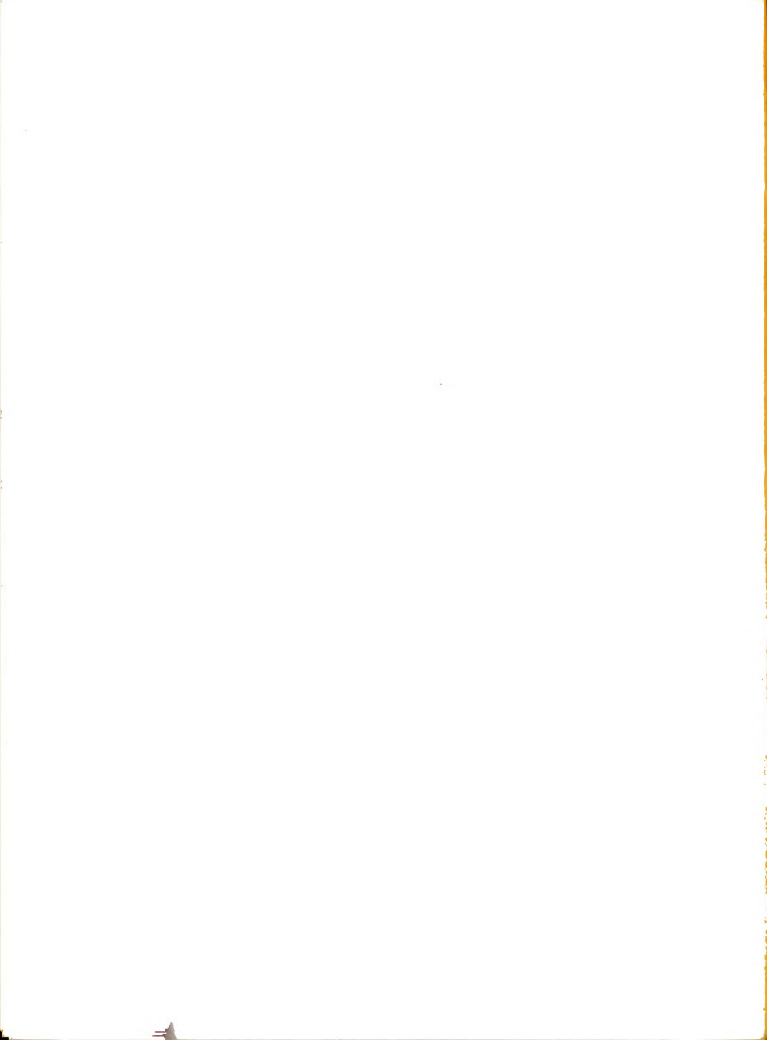
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## ABSTRACT

### THE MARKET BEHAVIOR OF CONSUMER CASH INSTALMENT CREDIT GRANTORS: THEORY AND CASE STUDY

by Hugh Alan Chairnoff

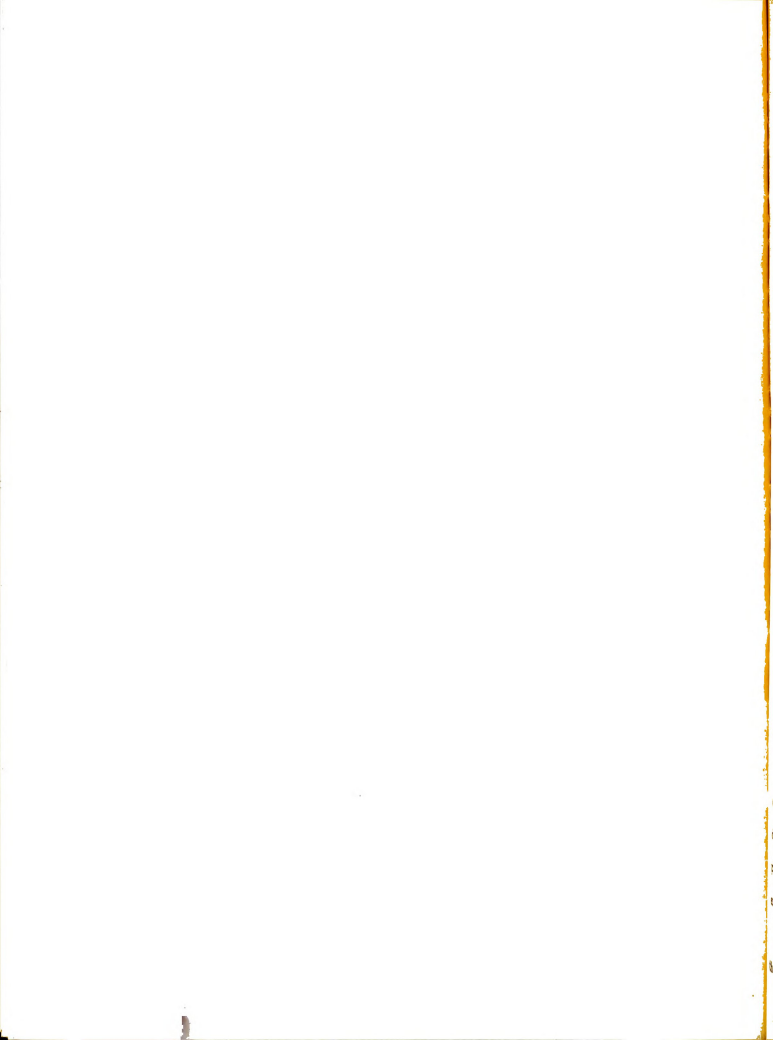
The objective of this thesis is to theoretically describe the market behavior of credit grantors in a consumer cash instalment credit market and to examine the appropriateness of the analysis via a case study in Lansing, Michigan.

The market is structured according to credit functions. Primary lenders chiefly rely on a wealth constraint to reduce the level of risk and uncertainty. These lenders require access to a consumer's wealth in the event of default. The wealth constraint is an adequate basis for rate discrimination. Contract maturity is related to the durability and resaleability of the collateralized wealth.

The secondary lender relies on the income constraint. This lender serves consumers without wealth acceptable to primary lenders and consumers whose acceptable wealth already has been collateralized. The secondary lender charges the highest rates in the market. The high level of uncertainty is not conducive to rate discrimination.

It is hypothesized that credit grantors, though distinguishable by form of organization, cannot be distinguished by analyzing borrower characteristics. The primary lender relies on the wealth constraint and other loan characteristics. The secondary lender expresses no preference because there are a large number of sets of characteristics pointing to a probability of acceptable repayment record. An examination





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of a limited number of loan application at one commercial bank, two credit unions, and six consumer finance companies indicated that credit grantors did not differentiate with respect to borrowers' income. Also, there was no strong preference for other borrower characteristics by size of income at the three types of credit grantors.

The limited examination of loans granted revealed that credit grantors are distinguishable with respect to loan characteristics. The one commercial bank and three credit unions had a much higher proportion of loans to purchase durable goods and real property than the consumer finance companies. About one-half of the loans at the consumer finance companies were for debt consolidation and current expenses; behavior consistent with the theory of the secondary lender. These results are consistent with more elaborate loan samples analyzed elsewhere.

The proportion of credit union loans secured by financial assets or automobiles (71 percent of the total) exceed the proportion of loans to purchase durable goods and real property by about 28 percentage points. The difference was considerably smaller at the commercial bank. Only about 9 percent of all loans sampled at the consumer finance companies were secured by financial assets or automobiles (mostly used).

Contract length only was slightly longer for consumer finance companies than for credit union or commercial bank loans. The minor difference is partially attributable to an above-average level of employment and residential stability in the Lansing area which permits extension of maturities in order to increase gross revenues.

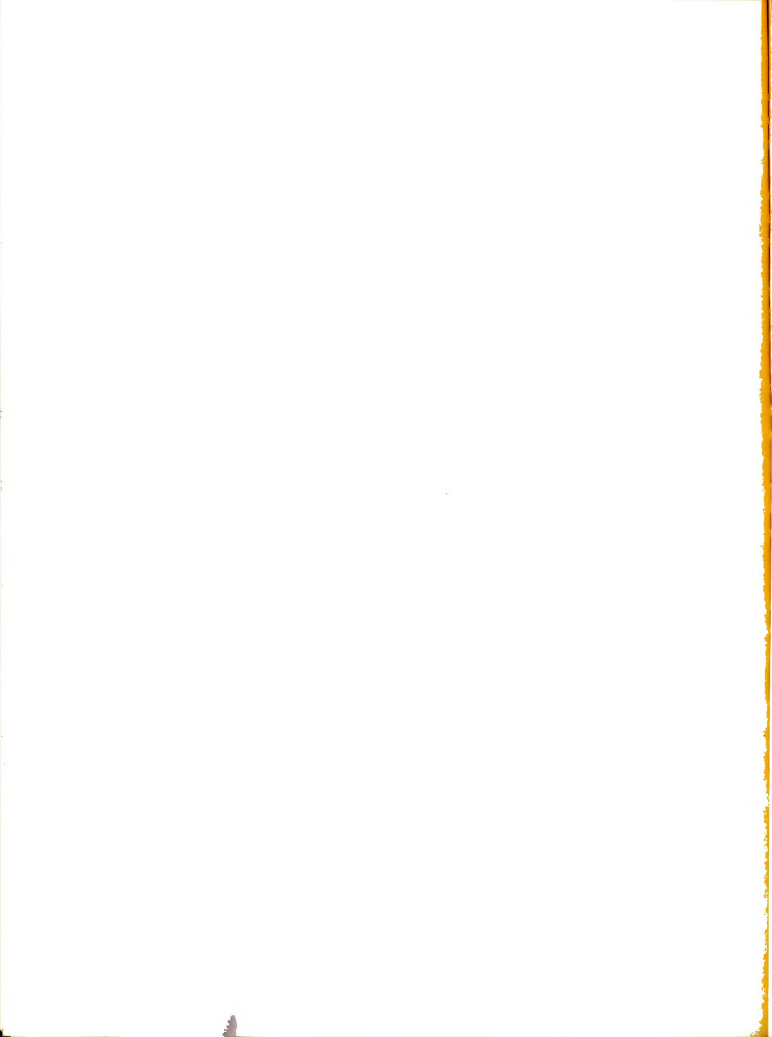
Other loan characteristics reflect the differential influence of the regulatory structures facing each of the credit grantors.



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The theory and case study has shown that credit unions and a consumer-oriented commercial bank offer services in both segments of the market. This duplication of services among institutional credit grantors supports the efforts to develop a Uniform Consumer Credit Code. Moreover, the inability of consumer finance companies to compete in the primary lending segment because of a more restrictive regulatory structure supports the effort to eliminate legal discrimination among suppliers in the same market.

Most financial institutions have evolved into multi-service institutions. The economic impetus to diversification is the more efficient and profitable use of a typically large pool of nonallocative resources. Diversification of market functions is consistent with the maximization of the public welfare.



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A THESIS

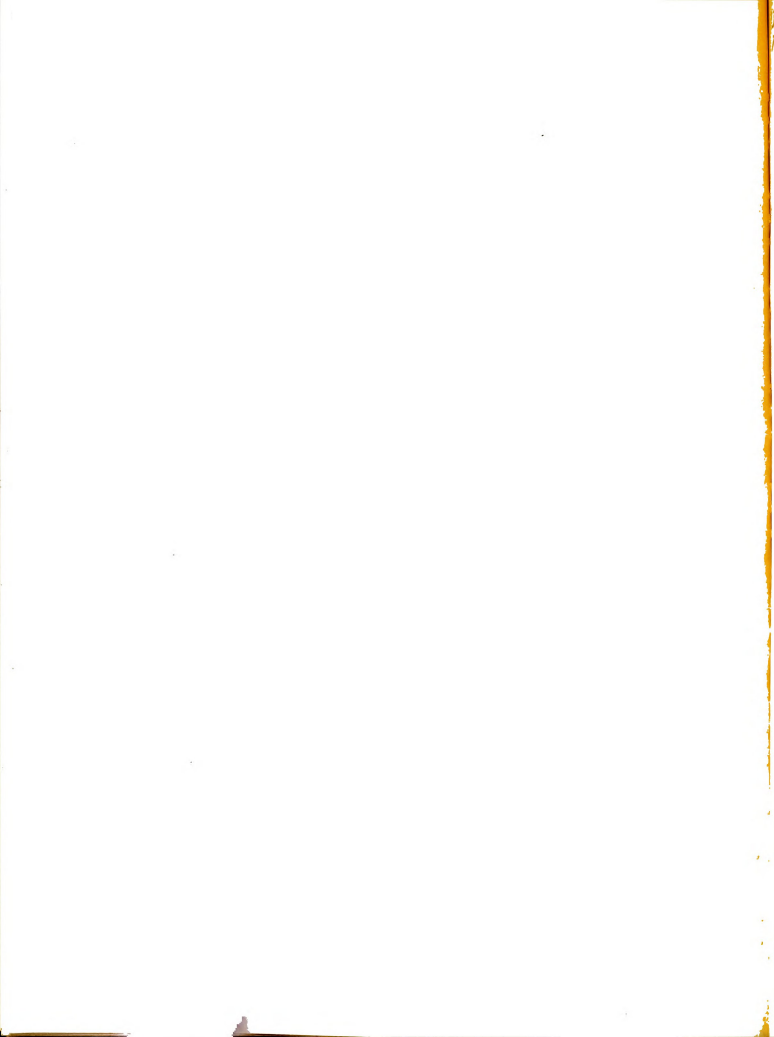
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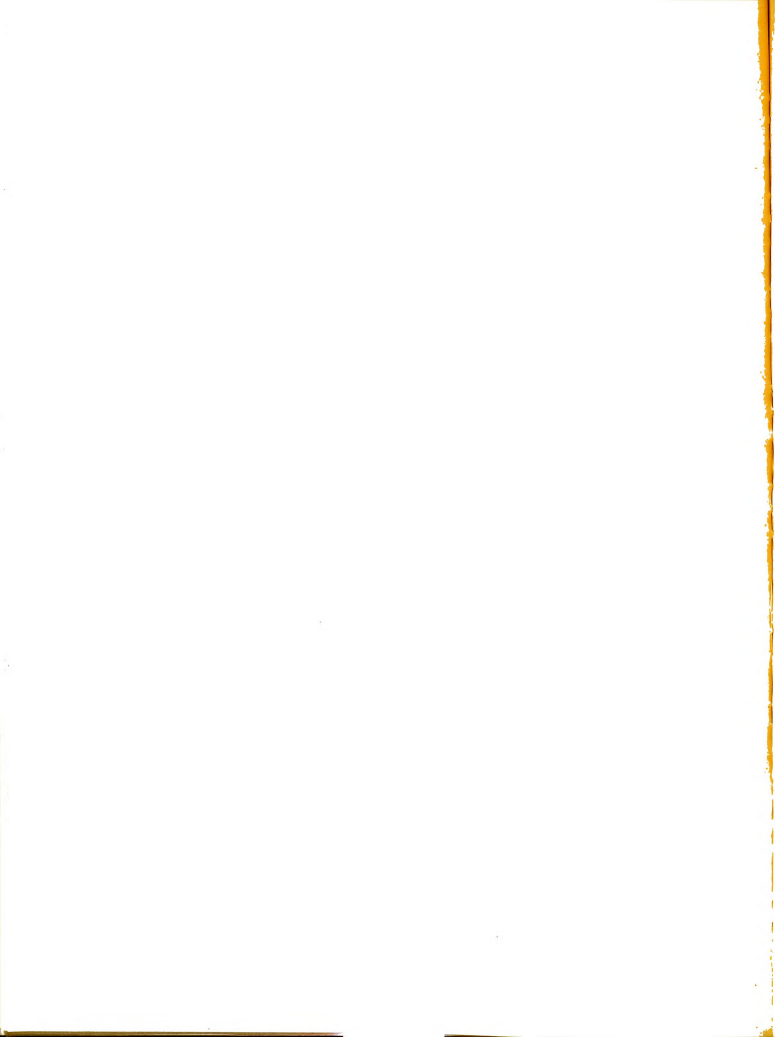
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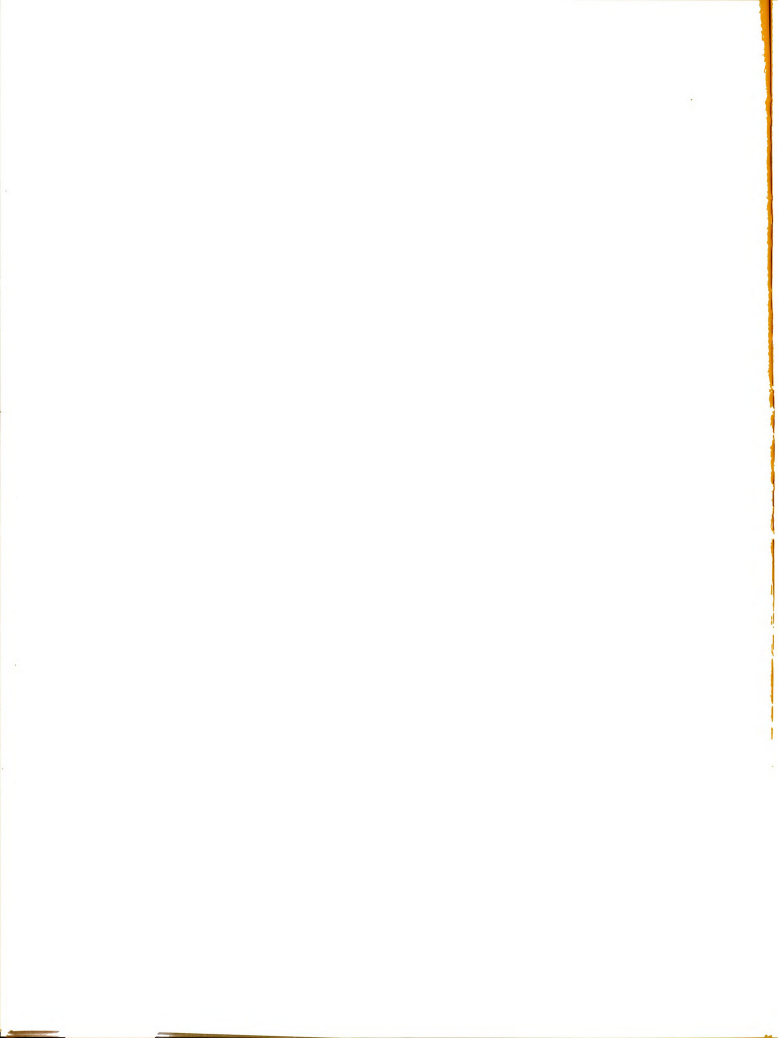
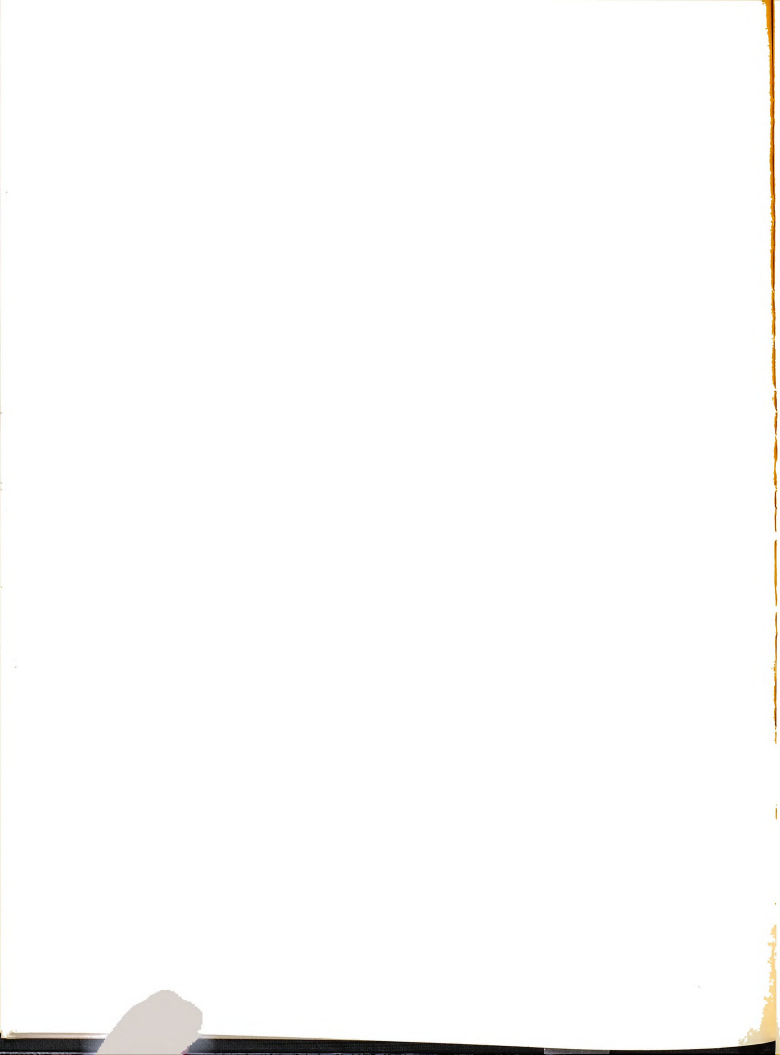


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## CHAPTER I

### PURPOSE AND BACKGROUND OF THE STUDY

#### Purpose of the Study

Economic theory suggests that the structure of a market has an influence on the competitive conduct and performance of firms within the market.

. . .that a relationship exists between market structure and performance is also a fundamental hypothesis of economic theory.<sup>1</sup>

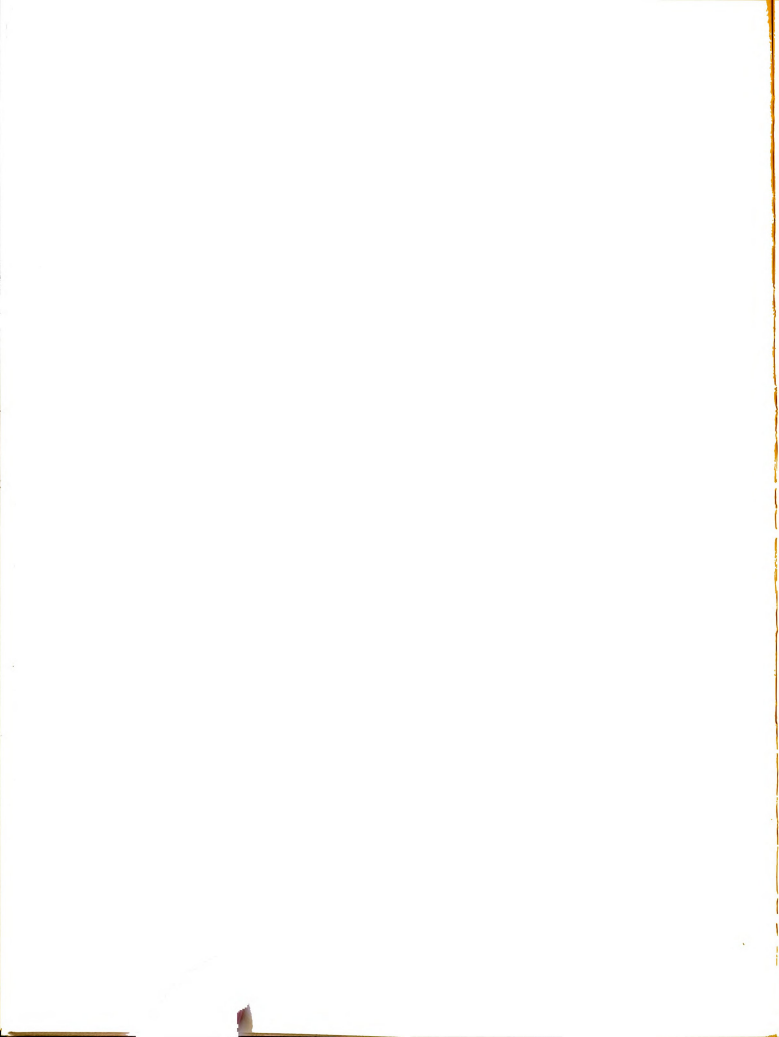
The principal elements of market structure are the number of rivals, the size distribution of the firms, the extent of product differentiation, and the conditions of entry.

It is the purpose of this study to examine the market structure and competitive characteristics of the Lansing, Michigan market for consumer cash instalment credit.<sup>2</sup> And inasmuch as a study of market structure requires a definition of the relevant market and its seg-

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<sup>1</sup>Bernard Shull and Paul M. Horvitz, "Branch Banking and the Structure of Competition," National Banking Review, Volume 1, Number 3 (March, 1964), p. 301.

<sup>2</sup>With respect to competition and commercial banking, a subject which is not completely outside of the interests of this study, one author has maintained that market performance is insensitive to market structure. But this does not deny that market structure influences competitive behavior. On the contrary, the author goes on to discuss the forms competitive behavior takes under such circumstances. Almarin Phillips, "Competition, Confusion, and Commercial Banking," Journal of Finance, Volume XIX, Number 1 (March, 1964), pp. 32-46.



ments,<sup>1</sup> this study also will examine the boundaries of the consumer cash instalment credit market and its segments and their relation to other local Lansing markets for consumer credit.

Finally, this study will examine the implications of the resulting market structure and competitive characteristics of the relevant local market for consumer cash instalment credit and its segments for public policy toward and management policy of the participating institutions.

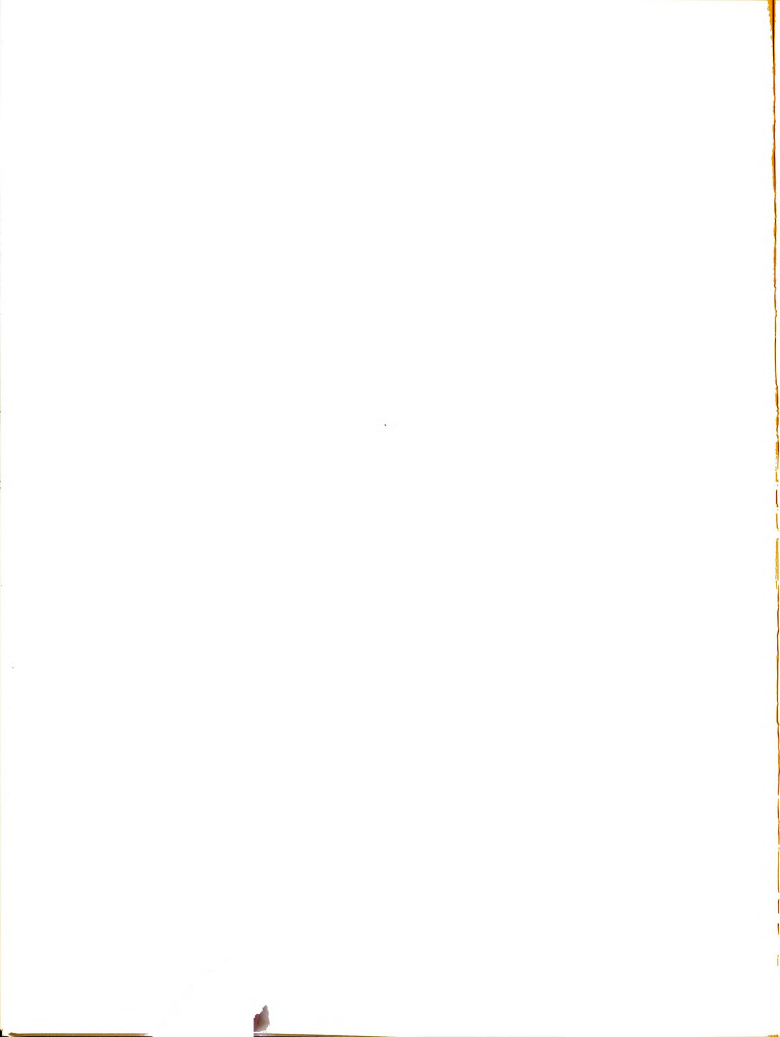
### Background of the Study

Normally, studies of consumer credit, regardless of their origin, begin with a description and analysis of the volume of consumer credit relative to that of other kinds of credit, relative to consumption expenditures in general, and relative to expenditures on consumer durable goods in particular. Because the volume of consumer credit is quite considerable with respect to these measures the study of various facets of consumer credit is justified.

But this study shall not burden the reader with such information at this point. Primarily, its avoidance is based on the already strong recognition of the importance of consumer credit apparent in the academic literature. Secondly, perhaps most importantly, the study of economic behavior need not be based on strictly practical need. The study of the economic behavior of man and the institutions which man has created are worthy of any scholar's intellectual curiosity in

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<sup>1</sup>Market definitions. . . "must be integrated with the other analytical elements of the specific proceeding. A mechanical two-step operation--first defining the market and then examining competition in it--is not appropriate." Mark S. Massel, Competition and Monopoly (Washington, D.C.: The Brookings Institution, 1962), pp. 275-76.



their own right.

Consequently, this introductory chapter will be devoted to a brief discussion of the development of practical and theoretical interest in the study of consumer credit, a discussion of the relevance of using a local market as the framework for a study of market structure and competition, and the relevance of concentrating on a segment of the consumer credit market.

### Evolution of Interest in Consumer Credit

Academic and public interest in consumer credit has proceeded through a number of stages during this century with each stage focused upon a different aspect of consumer credit. During the earlier part of the 20th century, emphasis was on the public regulation and control of the institutions specializing in the provision of small loans to consumers (particularly the small loan companies). The motivation for regulation of credit grantors was the disadvantageous position of the consumer.

The borrowers are often ignorant and always in immediate need. They are therefore likely to be willing to accept whatever terms the lenders may ask.<sup>1</sup>

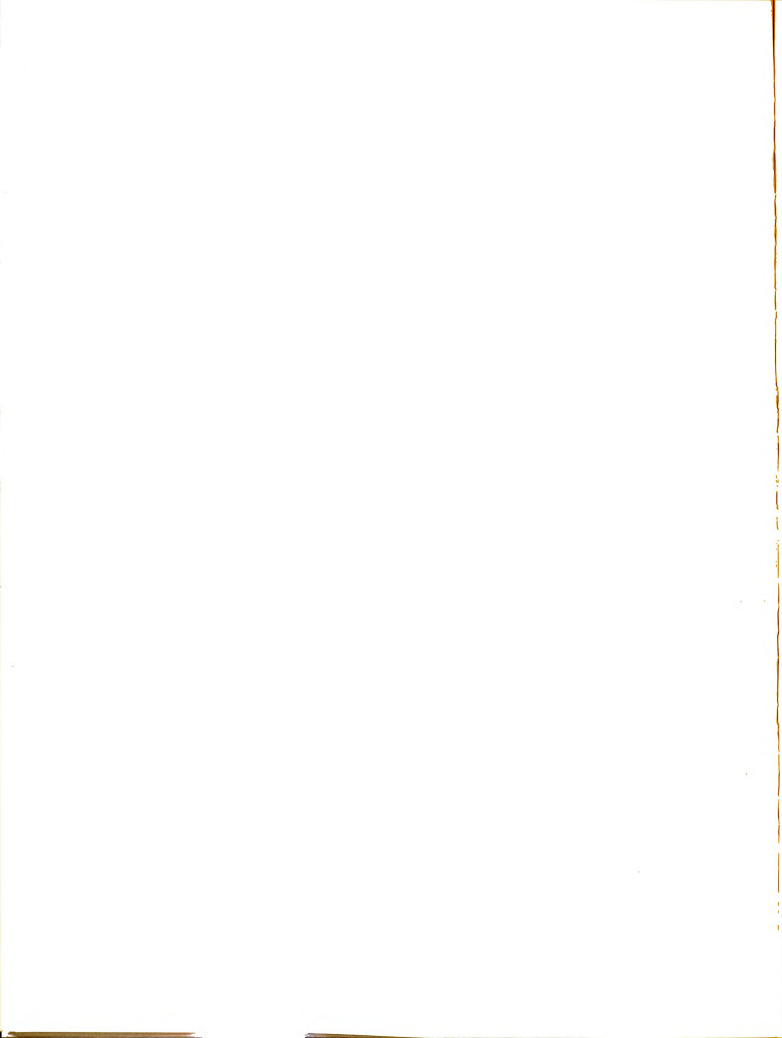
Protection of the consumer from exploitation by credit grantors was thus the primary source of concern in the area of consumer credit in

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<sup>1</sup>Gilbert, Hilborn, and May, Small Loan Legislation (New York: Russell Sage Foundation, 1925), p. 11.

"Since most of the borrowers who approach loan companies or money-lenders are in financial difficulties and in no position to bargain strongly because no other major lending institutions will normally accommodate them, it is considered necessary to 'even out the bargaining power' by prescribing maximum lending rates." Report of the Royal Commission on Banking and Finance (Ottawa, Canada: The Queen's Printer, 1964), p. 202.





the earliest stages of the development of academic and public interest. This source of concern has continued to the present although concern is more frequently directed at strengthening the system of privately operated, publicly regulated institutions in order to further reduce and eventually eliminate the operations of extralegal lenders.

#### Pre-war Stage

The second stage of development of interest in the study of consumer credit arose out of the depression of the 1930's and the expansion of consumer credit which took place during that period. In recommending extensive study of the area of consumer credit, the Exploratory Committee on Financial Research of the National Bureau of Economic Research stated their case as follows:

Instalment financing of consumer purchases withstood the strain of the depression so well and showed such relatively small losses throughout the crisis as compared with many other types of credit instruments that banks and other financial agencies, pushed to find outlets for surplus funds, are now expanding rapidly in this field. This expansion, moreover, is assuming a competitive form, with respect not only to interest rates and other financial charges, but also to the down payment, the term of loan, the security, and the amount extended in relation to the income of the borrower. As a result, pressure is being brought to bear to relax the strictness of the procedures that tended to safeguard instalment financing during the depression. The Committee feels that, in view of its potentialities, this situation deserves careful analysis. At present, it is impossible to decide with any confidence whether these modifications of procedure are justified or whether they constitute introduction of credit standards which are far too lax and which may have serious repercussions. In the present state of knowledge, such judgements cannot be based on data drawn from broad experience; they must be largely expressions of opinion. It is essential, the Committee holds, that an effort



be made to gather all the available data on this type of financing for the purpose of identifying those credit standards which are sound and have stood the test of experience.<sup>1</sup>

As a result, the National Bureau of Economic Research published ten studies in Consumer Instalment Financing during the late 1930's and early 1940's (see bibliography). Rather than concern with the disadvantageous position of the consumer-borrower, the focus of these studies was the nature and quality of consumer instalment credit.

#### Postwar Stage

The third stage of development is exemplified by the wide-ranging study by the Board of Governors of the Federal Reserve System published in 1957. The preface to this four-part study states the direction of the study as follows:

The aim of this investigation has been to bring together information on the significance in the American economy of consumer instalment credit, with the hope of contributing to a wider understanding of its role in the retail distribution of durable goods and its bearing on the problems of economic stability and progress. The investigation necessarily ranges over a broad field, taking account of both existing and newly developed attitudes. It endeavors to present the many facets of the subject that need to be considered in forming judgements on questions of public policy towards this credit area.<sup>2</sup>

Thus the third phase in the study of consumer credit was directed at its effect on economic stability and progress and the question of

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<sup>1</sup>Exploratory Committee on Financial Research, A Program of Financial Research, Volume 1 (New York: National Bureau of Economic Research, 1937, p. 29.

<sup>2</sup>Board of Governors of the Federal Reserve System, Consumer Instalment Credit: Part I, Volume I, Growth and Import (Washington, D. C.: United States Government Printing Office, 1957), preface.



public policy in controlling the use of this form of credit.

#### Current Stage

At present, interest in the study of consumer credit has taken two directions. First, the National Bureau of Economic Research has renewed its studies of consumer instalment credit. Present projects are concerned with the analysis of the rate structure in automobile financing, investigation of the economic aspects of the regulatory policies of states toward consumer credit, the effects of credit use upon the management of consumer finances, an investigation of the flow of funds from their sources through financial markets to their ultimate use by consumers, and the impact of consumer indebtedness upon unemployed families.<sup>1</sup> An already published study of the costs of providing consumer credit was based on the following rationale:

The striking growth of consumer credit has stimulated widespread interest in the costs of providing consumer credit among institutional sources. The difficulties of cost allocations and the lack of uniform cost accounting procedures have long delayed the acquisition of cost data for consumer credit operations among the major types of credit institutions.<sup>2</sup>

This work is part of a broad study of consumer credit which is designed to assess its role in the functioning of the economy of the United States.<sup>3</sup>

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<sup>1</sup>Foreword by Robert P. Shay in Paul F. Smith, Consumer Credit Costs, 1949-1959 (New York: National Bureau of Economic Research, 1964), p. xix.

<sup>2</sup>Ibid., p. xvii.

<sup>3</sup>Ibid., p. xvii.

Another aspect of the present concern with respect to consumer credit has to do with renewed interest in the regulation of the commercial lenders that provide credit services to consumers. The origin and basis for the regulation of consumer credit enterprises is being restudied in the light of developments which have occurred since the concept of regulated and supervised commercial lenders was accepted as the general solution to the problems of preventing evils in this area.<sup>1</sup> The release of the subcommittee of the National Conference of Commissioners on Uniform State Laws' Special Committee on Retail Instalment Sales, Consumer Credit, and Small Loans and Usury states the impetus behind their investigation of the applicability of a uniform consumer credit code as follows:

The Commissioners on Uniform State Laws have undertaken their consumer credit project at the request of the Council of State Governments. Substantial impetus to the project has been given by the decisions of the Supreme Court of Nebraska holding that State's retail installment sales legislation to be unconstitutional. Further impetus has been provided by the bills entitled "Truth in Lending," introduced in the Congress by Senator Douglas and others. They deal with one aspect of consumer credit problems: the disclosure of the cost of credit at the inception of each transaction.<sup>2</sup>

In attaining their objective, however, the subcommittee plans to study substantially all aspects of consumer credit trade practices.

Furthermore, the need for further study of the regulatory concepts in the consumer credit field has been well-expressed as follows:

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<sup>1</sup>Gilbert, Hilborn, and May, op.cit., p. 11.

<sup>2</sup>Release of the National Conference of Commissioners on Uniform State Laws, 1964.

We are not suggesting that credit institutions, arrangements offered, customers serviced or problems arising in the consumer credit market have become such that a homogeneity within the market exists which requires casting aside all regulatory treatment of differential participants and of different consumer credit arrangements. Our studies to date do not provide us with the information or experience to make any such judgments now. What we are suggesting, however, is that the time has come in the development of consumer credit as an institution which requires us to undertake an integrated study of the whole body of legal prescriptions which are applied to consumer credit activities and services. We need an across-the-board review of existing legislation to determine its nature and scope, to identify areas where similarity of regulation exists and where it does not. We should then reexamine the aims and concepts embodied in such legislation originally and determine, on the basis of a definitive study of the consumer credit market as it exists today, if and in what respects any of these original ideas have become obsolete and in what ways our concepts or objectives need to be revised.<sup>1</sup>

The recommendation of the Royal Commission on Banking and Finance in Canada reflects a regulatory concept different from that characterized by present-day legislation. Their recommendation was as follows:

As noted in the previous chapter, we believe that all cash lenders--including the banking institutions--should be subject to uniform regulation, and we think it appropriate that supervision of the amended legislation be transferred to the Inspector General of Banks.<sup>2</sup>

Thus, academic and public interest in consumer credit has developed in a number of ways, each of which is of individual importance.

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<sup>1</sup>Confidential source.

<sup>2</sup>Report of the Royal Commission on Banking and Finance, op.cit., p. 382.



### Further Interest

But interest in the study of consumer credit does not end with public consideration of the specific problem areas. Rather, interest also has developed as the result of a more general interest in the functioning of the nation's financial markets with the objective of gaining further insight into their importance and their patterns of behavior.

In 1937, the National Bureau of Economic Research surveyed the state of knowledge of the nation's capital markets. Their report noted:

A comprehensive survey of the financial structure as a whole is urgently needed to provide background for the analysis of financial problems and to give perspective to proposals for changes in the financial structure. . . This survey must not be limited to central banks and commercial banks where our information is now relatively most complete. It must include the activities of savings banks, investment banks, insurance companies, finance companies and underwriting houses. It must be sufficiently comprehensive, furthermore, to show not only the structure and functions of these various types of financial organizations taken individually, but also their relative importance and interdependence. Without the basic financial survey. . . it is impossible to come to any well-considered opinion concerning many of the most pressing problems of today.<sup>1</sup>

This report of the National Bureau was followed by other such reports in 1946, 1954, and 1964. Although the 1964 report of the National Bureau referred to the capital markets in general and made specific recommendations for research in particular sectors of the capital

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<sup>1</sup>Exploratory Committee on Financial Research, op. cit., pp. 23-24.

market,<sup>1</sup> the applicability of the report to consumer credit is equally valid. The National Bureau's report, for example, called for a critical examination of the impact of legal and regulatory influences on the market structure and competitive characteristics of particular sectors of the capital market.<sup>2</sup>

The Report also pointed out the need to know more about "the facility of borrowers in seeking alternative sources of funds, about the degree of market segmentation due to legal factors or customary practices, about differential risk attitudes and preferences."<sup>3</sup> More specifically, the report of the National Bureau stated:

Particular issues which should be examined are the criteria that might be used in assessing the optimum degree of specialization among financial institutions, the extent to which our institutional structure falls short of the optimum, and whether that structure has on balance tended to improve or deteriorate in the period under review.<sup>4</sup>

Finally, the National Bureau's report pointed out that the rather extensive literature concerning the market structure and competitive characteristics of the commercial banking industry is not duplicated in other areas of the capital market.<sup>5</sup>

Thus, the recommendations for research in the general area of the financial markets have developed from one of comprehensive surveys

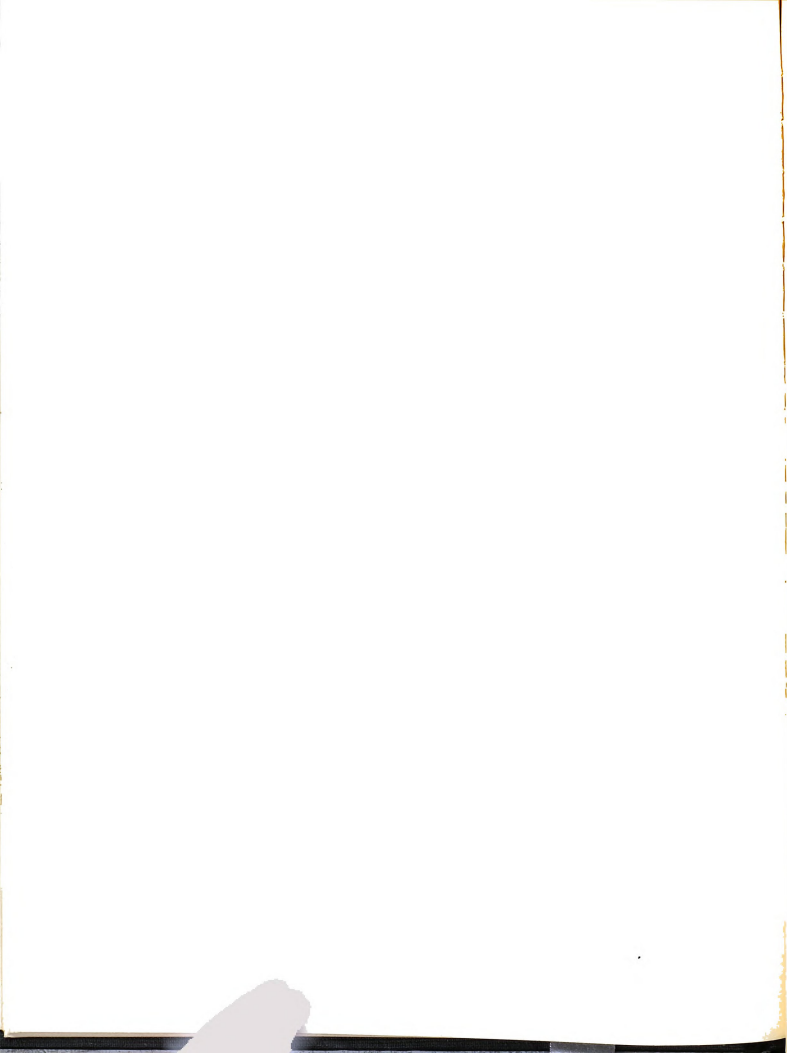
<sup>1</sup>National Bureau of Economic Research, "Research in the Capital Markets," Journal of Finance, XIX Supplement (May, 1964).

<sup>2</sup>Ibid., p. 5.

<sup>3</sup>Ibid., p. 6.

<sup>4</sup>Ibid., p. 8.

<sup>5</sup>Ibid., p. 8.



of the financial structure to one of intensive analysis of the patterns of behavior and interrelationships. The current objective is to judge the effectiveness of the existing structure and offer recommendations for change to improve its effectiveness.

#### Supplementary Statement of the Purpose of the Study

The preceding discussion ably illustrates the many facets with which a study of competition and market structure in a consumer credit market can concern itself. These facets can be summarized as follows:

- 1) institutional behavior in relation to its environment,
- 2) intra- and inter-institutional relationships,
- 3) influence of the legal and regulatory structure on institutional behavior,
- 4) nature of alternative sources of funds and their degree of availability,
- 5) degree of financial specialization of institutions and market performance,
- 6) relevant definitions of consumer credit markets and submarkets.

The purpose of this study, in order to refine further the earlier statement of purpose, is to describe and analyze these facets of consumer credit in a specific geographical environment. The goal of the analysis is to formulate conclusions and recommendations dealing with the criteria of evaluation of market performance, the extent of economic and non-economic differences in institutional behavior, and the degree to which economic and non-economic factors aid or disturb efficient market functioning.

### Validity of the Scope of This Study

The discussion to this point has focused on the various facets of the study of consumer credit. The discussion concluded with a summary of those facets which are relevant to this study. But two questions remain unresolved:

- 1) Is it conceptually valid to limit the study to a specific geographical location, and
- 2) Is it conceptually valid to limit the study to one segment of the consumer credit market?

The remainder of this chapter is devoted to demonstrating that these two limitations of the study are valid in that they permit the examination of market behavior under a unique set of conditions which are known and relevant to all credit grantors operating within these limits.

### Spatial Dimensions of a Consumer Credit Market

#### Markets in General

When we speak of markets we are speaking of a set of common circumstances that permit us to analyze behavior and events in a meaningful fashion: Alfred Marshall expresses it thusly:

When demand and supply are spoken of in relation to one another, it is of course necessary that the markets to which they refer should be the same.<sup>1</sup>

If markets do have a spatial dimension, then we are implicitly recognizing that demand and supply conditions for any given product do vary over space. In the extreme case, the spatial dimension may be so overwhelming that demand and supply conditions in a specific geographical

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<sup>1</sup> Alfred Marshall, Elements of Industry, Volume I of the Elements of Economics (London: Macmillan and Co., Ltd., 1920), p. 184.

location are, to a large extent, independent of the demand and supply conditions for the identical product in any other geographical location. Edward Chamberlain provides this example of the substantial importance of spatial dimension:

Thus the cement industry in the United States with 162 mills operated by 75 companies (1938), the five largest of which produced under 40 per cent of the total, would appear by this measure to be almost purely competitive, whereas the element of spatial monopoly is actually so great as to make it one of <sup>1</sup> the most striking cases of monopolistic competition.

In general, the greater the suitability of the product for grading and portability, the greater is the breadth of the market for that product.<sup>2</sup> Marshall illustrates this point with a brief discussion of the narrowness of the markets for bricks and the broadness of the market for well-known securities, both corporate and governmental.<sup>3</sup>

The condition of suitability for grading will not be discussed at this point inasmuch as it involves the question of product differentiation, a question which will be dealt with at some length in demonstrating the validity of focusing upon a segment of the consumer credit market and at greater length in analyzing institutional differences in the cash instalment loan segment of the consumer credit market. The question of portability, however, is worthy of inquiry at this point because it does provide an excellent vehicle for discussing the nature of spatial dimensions of markets.

<sup>1</sup>Edward H. Chamberlain, Towards a More General Theory of Value (New York: Oxford University Press, 1957), p. 78.

<sup>2</sup>Marshall, op.cit., p. 186.

<sup>3</sup>Ibid., pp. 187-188.

The portability of the product can be such that, *ceteris paribus*, the effective cost of purchase is a function of distance. As Marshall recognized:

Thus the more nearly perfect a market is, the stronger is the tendency for the same price to be paid for the same thing at the same time in all parts of the market: but of course if the market is large, allowance must be made for the expense of delivering the goods to different purchasers; each of whom must be supposed to pay in addition to the market price a special charge on account of delivery.<sup>1</sup>

A readily apparent implication of the existence of transportation charges is that the closer the supplier to the purchaser, the higher the price he may charge so long as he does not exceed the effective cost to the purchaser of acquiring the product from a more distant lender. It then follows that a group of suppliers in proximity to a group of purchasers face a finite demand curve. The ability of the suppliers to exert influence on price, however, is tempered by the proximity of other groups of suppliers. Thus there is an upper limit to the discretion of a group of local suppliers in establishing price policy. In short, each supplier and each local group of suppliers are monopolistic competitors.<sup>2</sup> The upper limit, it is to be noted, is determined by the amount of transportation expense a purchaser must incur in order to acquire the product from the next closest group of suppliers, given the market price under purely competitive conditions. In a discrete world, suppliers of a product at one given point posses

<sup>1</sup>Ibid., p. 185.

<sup>2</sup>Chamberlain, op.cit., p. 47.

a monopoly so long as the price to purchasers does not exceed the total cost of importing the identical product from another given point, given the amount of tariffs or other costs of importation.

This simple model of the influence of spatial dimensions caused by the degree of unportability make it clear that "market" behavior must be carefully defined in many cases in order to reach appropriate conclusions regarding the extent and types of competition which exist among suppliers. The existence of a finite demand curve rather than an infinite demand curve requires a different concept of what is meant by the "market." Although the degree of isolation of a group of suppliers may vary with the area of space over which they extend,<sup>1</sup> the principle is apparent: in a discrete world, the possibility that spatial differentiation of markets for the identical product can influence the behavior of suppliers is a situation that must be dealt with carefully.

In a non-discrete world, the role of spatial differentiation is not quite so apparent. The continuity of the population does not permit any kind of precise definition of the spatial barriers of any market.

In Marshall's words:

In applying economic reasonings in practice, it is often difficult to ascertain how far movements of supply and demand in any one place are influenced by those in another.<sup>2</sup>

Chamberlain attempts to describe the problem as follows:

In trying to get this type of problem clearly in mind a good first approximation is to think of an abstract "model" in which a population of buyers

<sup>1</sup>Marshall, op.cit., p. 188.

<sup>2</sup>Ibid., p. 185.





is distributed fairly uniformly over a spatial area, and the sellers of a product--homogeneous, except for the spatial aspects to be considered, and offered initially by all at the same price--distribute themselves about the area in an attempt to make sales by appealing solely to the convenience of as many buyers as possible. The result would evidently be a fairly uniform distribution of sellers over the same spatial area, each one with a "market" consisting of those buyers located nearest to his place of business.<sup>1</sup>

In the non-discrete case, the outer limits of the "market" of each supplier quite probably overlaps, to some degree, the outer limits of another supplier's "market." Expanding this concept to the analysis of geographical markets in densely populated areas, the conclusion holds. One can clearly visualize a Lansing, Michigan market for consumer credit vis-a-vis the Detroit, Michigan market for consumer credit some 75 miles away. But can one readily conceive of a Lansing market for consumer credit vis-a-vis a Kason, Charlotte, Grand Ledge, or Holt market for consumer credit knowing that these political subdivisions are within a 25 mile radius of Lansing? Certainly, the outer limits of these markets intersect to a considerable extent. In other words, certain suppliers within a political subdivision are in a position to supply the product to buyers of another political subdivision that is nearby.<sup>2</sup> Whether the contiguity of markets in the non-discrete case affects the behavior of suppliers in both markets is also worthy of inquiry. It would be a first step to increasing our understanding of

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<sup>1</sup>Chamberlain, op.cit., pp. 46-47.

<sup>2</sup>In reality, political subdivisions have no necessary relation to market relevancy.

market behavior and the diffusion of innovations, attitudes, habits, and customs. And if this analysis can link the entire consumer credit market, then we have substantiated and existing belief (already partly documentable) that investigating and analyzing national trends and relationships can be valid for certain types of policy formulation.

Within limits, then, the analysis of the Lansing, Michigan market for consumer instalment credit is valid. Conceptually, at least, there can be barriers which spatially differentiate markets for the identical product. The next section will examine the factors which create these barriers in a financial market, keeping in mind that more direct forms of product differentiation have not been discussed as yet.

#### Theory of Commercial Loan Markets<sup>1</sup>

Commercial loan markets do differ from the general conception of markets which were the focus of the preceding section. The major difference is that financial products are perfectly differentiable to the extent that each borrower possesses a set of characteristics which are unique to him. Operationally, however, individuals are grouped into classes in order that credit grantors can efficiently function in this market.<sup>2</sup> It is also to be noted that each loan arrangement may be unique with regard to the various provisions which it usually contains.

<sup>1</sup>See Franklin R. Edwards, Concentration and Competition in Commercial Banking: A Statistical Study (Research Report No. 26: Boston; Federal Reserve Bank of Boston, 1964), pp. 8-11.

<sup>2</sup>Lawrence L. Werboff and Marvin E. Rozen, Market Shares and Competition Among Financial Institutions (Research Study Four, Private Financial Institutions: Englewood Cliffs, New Jersey; Prentice-Hall, 1963), p. 267.



However, for the purpose of this discussion, it is convenient to assume that loan arrangements are initially homogeneous. The analysis will then be able to indicate that spatial dimensions of a market may require credit grantors to alter loan arrangements as well as alter the credit grantors' examination of borrower characteristics.

In a perfectly competitive commercial loan market, if we assume that costs are not a function of distance between lender and borrower, it is clear that any businessman would be able to obtain a loan from any bank without regard to spatial considerations and assuming that the businessman does qualify for credit. Too, commercial loan portfolios of commercial banks, the primary institution in this market, would not be especially weighted with loans made in any specific geographical area.

However, it would not be difficult to demonstrate that commercial loan portfolios are not evenly distributed with respect to geographical area. On the contrary, an overwhelming proportion of commercial loans, if not the entire portfolio, consist of borrowers from the local community and surrounding areas. Stating it in another way, "transportation" costs are not zero, but are significantly different from zero. Part of a recent study by the House Committee on Banking and Currency is applicable here. The data are summarized in Table 1-1, The Percentage Distribution of Commercial and Industrial Loans by Size of Bank and by Distance from the Bank. The data supports the contention that commercial loan portfolios are not distributed evenly with respect to geographical area. The greater the distance from the bank, the smaller the proportion of the commercial loan portfolio devoted to loans at

Table I-1. Percentage distribution of commercial and industrial loans by size of bank and by distance from bank<sup>a</sup>

Deposit Size (in millions)	Within Hometown or City	Outside Home Base but With- in 50 Miles	Within 50 to 100 Miles of Home Base	Over 100 Miles from Home Base
Over \$100	77	12.5	3	8.5
\$50 to \$100	71	22	4	3
\$25 to \$50	81	16.5	1.5	1.6
\$10 to \$25	76	21	2	1.4
Under \$10	70.5	28	1	0.9

<sup>a</sup>Unweighted average over the following four types of banking systems:

1. city unit
2. city branch
3. other unit
4. other branch

Source: Subcommittee on Domestic Finance, Committee on Banking and Currency, House of Representatives, A Study of Selected Banking Services by Bank Size, Structure, and Location (Washington, D.C.: Government Printing Office, 1964), pp. 38-39.

that distance. This conclusion is not only true of the smaller-sized banks but generally is true for the larger-sized banks as well.

The transportation costs of a commercial loan can be classified as to those incurred by the lender and those incurred by the borrower. The case of spatial differentiation of financial markets differs somewhat from the case of commodity markets in that suppliers in the commodity markets need not necessarily bear the costs of transportation. But in the financial markets this is not so. A commercial lender does incur costs which are the result of negotiating and lending to distant applicants. Firstly, the credit grantor probably experiences an increased cost in investigating the applicant in order to determine his creditworthiness: the degree of uncertainty and the class of risk. Although the cost of investigation will vary with the size of the applicant, investigation costs will vary also with distance insofar as the credit grantor must seek information from sources outside the range of his normal investigatory channels. Thus, all other things equal, the loan to a distant applicant will be less profitable than an identical loan to a local applicant of the same risk class and with a similar degree of uncertainty.

The difficulty in obtaining information and the limits to the credit grantor's entrepreneurial capacity tend to increase the degree of uncertainty and risk of a distant applicant. That is, there are limits to the credit grantor's ability to determine the proper class of risk of the applicant inasmuch as he is unacquainted with the firm, its managers, the spatial dimensions of its markets, and the economic environment of its market. Most probably, the lender would prefer to

overstate the degree of risk and uncertainty. Thus, all other things equal, the cost of lending to a distant applicant would be greater than that of lending to a local applicant of the same size and operating in an environment which is more familiar to the lender.

If the credit grantor is a commercial bank, a third kind of "transportation" cost may arise. In determining its investment policy a commercial bank takes into consideration the stability of its deposits and reserves. The stability of these items is related to offsetting drains of reserves and deposits among banks. The more localized are the bank's borrowers and depositors and the more localized are the other banks' borrowers and depositors, the greater is the tendency for reserve and deposit drains for any one bank to be offset by similar drains at other banks. Hence, the greater the stability of reserve and deposit accounts. In dealing with a distant borrower, however, the greater is the probability that the commercial bank will not experience an offsetting drain of reserve and deposit balances. Thus, investment policy will be affected in terms of its maximum profitability to the extent that the bank must maintain a higher proportion of primary and secondary reserves because the bank is doing business with distant firms. It would not be consistent with profit maximization for the bank not to charge a higher rate for funds extended to distant borrowers under these circumstances.

The distant borrower also incurs costs which serve to limit the distance he is willing to travel in order to negotiate a loan. To the borrower, however, these costs may be largely reflected in the loan arrangements and the degree of financial flexibility of its financial operations. For example, because of the expected loss of reserves and



deposits, a commercial bank may insist upon a higher average or minimum deposit balance. Or, the bank may reduce the line of credit or the amount of the loan in an attempt to compensate for the imprecise measurement of the borrower's risk class. Finally, the distance between borrower and lender may limit access to the other financial services of the lender such as advice and counsel and other forms of financing. The inconvenience in availing himself of these other services tends to restrict his solicitation of these services.

Thus, the borrower from a distant lender tends to have a higher effective cost of borrowed funds than a borrower from a local lender at the same explicit rate of interest. Under otherwise purely competitive conditions, the existence of these costs implies that loans from distant lenders may be inconsistent with the business firm's assumed profit maximizing behavior.

#### Convenience

When the consumer rather than the business firm is the borrower, the convenience of the borrower plays a more important role. Even under perfectly competitive conditions, obtaining funds requires an expenditure of time. Furthermore, the expenditure of time implies a cost to the borrower which raises the effective cost of the loan. To be consistent with the maximization of utility, the borrower should seek to minimize the time spent in obtaining a loan, all other things equal.

The cost of the expenditure of time is an opportunity cost. Expending time in obtaining a loan requires the consumer to reduce either

his working time or his leisure time. The cost of time (labor time or leisure time) is the amount of income which may have been earned by the borrower had he worked during that time. Consequently, the more time spent in obtaining a loan, the higher the effective cost of the loan.

To the extent that distance does involve an expenditure of time, a consumer-borrower would do well to minimize this time consistent with minimizing the effective cost of the borrowed funds. Under conditions of pure competition, a loan from a local credit grantor would have an effective cost which is less than that of obtaining the loan from a distant credit grantor. But, local credit grantors now possess a monopoly which permits some degree of price influence. But because they are surrounded by potential competitors, there is an upper limit to the ability of these local credit grantors to control the price of their services. The closer credit grantors are to each other, the smaller is the ability of any one credit grantor to exercise price control. A group of credit grantors, however, can exercise price control limited only by the proximity of another group of credit grantors whose solicitation by consumers would require more time and hence a greater cost.

#### Summary

The preceding discussion has established an a priori basis for supposing that markets are spatially differentiated. These are costs which are a function of distance. It then follows that focusing on a specific spatial market will be useful for the study of market structure and competition. This conceptual approach to studying markets permits us to examine the nature of the cross-elasticities among spatial markets

for the same product and to analyze its nature and implications for the patterns of behavior of financial institutions.

#### Authoritative Opinion

General recognition of the geographical limits to financial markets, particularly those markets involving consumers and small businesses, has been recognized by students of intra- and inter-institutional competition. This section will present but a sample of the statements of these recognized experts.

In a recent study of mortgage and savings markets in California, the authors indicated the nature of part of their analysis as follows:

. . .the analysis proceeds to local market structure within the state, which in most respects are more relevant than California totals and which vary widely from area to area.<sup>1</sup>

A monograph on the consumer credit industry prepared for the Commission on Money and Credit stated:

Each individual market, however, has more or less distinct geographic limits since the area served by any one office is restricted to the immediately adjacent territory, which can be conveniently reached by available transportation. Convenience is recognized as an important competitive factor in providing consumer credit service.<sup>2</sup>

Recent studies of small mortgage markets (areas with population of less than 100,000) stated the hypothesis as follows:

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<sup>1</sup>Leo Grebler and Eugene Brigham, Savings and Mortgage Markets in California (Pasadena: California Savings and Loan League, 1964), p. 10.

<sup>2</sup>National Consumer Finance Association, The Consumer Finance Industry (A Monograph Prepared for the Commission on Money and Credit: Englewood Cliffs, N.J.; Prentice-Hall, Inc., 1962), p. 24.

Since lending institutions operate with significantly different sets of attitudes toward F.H.A. and V.A. lending, knowledge of the relative importance of the major institutions in a market can be used to predict the amount of F.H.A. and V.A. lending that will be done in the market.<sup>1</sup>

A recent paper on the factors involved in analyzing local competition has this to say:

Only the smallest business borrowers, in company with other small borrowers--consumer instalment borrowers, most farm borrowers, and many, if not most, residential real estate mortgage borrowers --are limited in their choice of banks, largely to local banks. Whether this limitation is or is not significant in a given local situation however, can only be revealed by a study of relevant qualitative and quantitative aspects of that situation, such as: asset-allocation preferences, of the bankers operating in the local market; the presence or absence, and the intensity, if present, of non-bank competition in the various credit-granting product lines; and the number and size distribution of the locally competing banks.<sup>2</sup>

In discussing the relevant market for banking products, the authors of a case study of banking competition make the following point:

However, if it is one's purpose to describe and analyze structural change, it is useful to note that for a sizable share of its total banking output, a particular banking office faces most of its competition from those other offices which are "accessible" to a "significant portion" of its actual or potential customers. This would seem especially true in an area in which banking operations are primarily retail in nature, as in Nassau.<sup>3</sup>

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<sup>1</sup>Gillies and Curtis, "A Note on the Small Mortgage Market," Journal of Finance, Volume (September, 1959), p. 411.

<sup>2</sup>Clifton H. Kreps, Jr., "Characteristics of Local Banking Competition," Banking and Monetary Studies, ed. Deane Carson (Homewood, Illinois: Richard D. Irwin, Inc., 1963), p. 324.

<sup>3</sup>David C. Motter and Deane Carson, "Bank Entry and The Public Interest: A Case Study," National Banking Review, Volume 1 (June, 1964), pp. 483-485.

In discussing the degree of competition which exists between various consumer cash lending institutions, a noted consumer credit analyst stated:

The degree to which competition exists between the various types of cash lending institutions differs from place to place and from time to time.<sup>1</sup>

Commenting on the Supreme Court's decision in the Philadelphia National Bank merger case, one economist said:

Particularly questionable is the Court's use of aggregate data for the banking industry as a whole, as evidence of the degree of concentration which prevails. Such data throw no light on the concentration which exists in individual markets, and these are the only relevant figures for assessing the competitive effects of concentration.<sup>2</sup>

#### Submarkets of the Consumer Credit Market

The previous section considered the role of space in differentiating among markets for the same product or family of products. This section considers the role of product and supplier characteristics in differentiating among submarkets within a spatially defined market. The objective of this section is to present a basis for studying a single submarket in order to gain further insight into the functioning of that submarket, the functioning of the entire market, and the relation of the submarket under study to other submarkets in the spatially defined system of submarkets.

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<sup>1</sup>Ernst A. Dauer, "The Nature of Competition in Consumer Credit," Tenth Annual National Consumer Credit Conference (Columbus: April 21, 1958), reprint.

<sup>2</sup>Victor Abramson, "Private Competition and Public Regulation," National Banking Review, Volume I (September, 1963), p. 104.

### Assumptions and Implications of Arbitrary Market Classification

It is implicit in any discussion of market differentiation that the cross-elasticities of demand among submarkets is quite low. A low price-volume sensitivity among submarkets indicates a high degree of unrelatedness among the factors determining the conditions of supply and demand in each submarket. The analysis of competition and market structure, then, is more relevant with respect to any submarket to the extent that the cross-elasticity of demand does indicate that some economic variables can be segregated from factors pertinent to the market in general. That is, the recognition of submarkets implies that each submarket has characteristics which are unique to it.

The analysis of market structure and competition within a submarket also will be more relevant to the extent that common characteristics among submarkets are accounted for. Further, the analysis of competition within a submarket is significant only to the extent that the characteristics which are unique to that submarket are significant.

It should be realized that the attempt to classify a market into segments may not be theoretically precise and hence not practically precise.

There must be some arbitrary element in drawing the boundary, and all products must be regarded as a continuous series in more or less close rivalry with each other.<sup>1</sup>

In fact, the attempt to classify markets is a complex task.

Another complication must be recognized. Differences in consumers' income and in geographical

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<sup>1</sup> Joan Robinson, Economics of Imperfect Competition (London: Macmillan and Co., Ltd., 1934), p. 114.

location divide an industry or market, as defined above, into overlapping markets. These differences complicate the analysis of market structure by adding other factors which need to be examined, and which may further narrow the actual market area. Yet they do not invalidate the basic distinction between products which can, and those which cannot serve a defined purpose.<sup>1</sup>

We have dealt conceptually with the problem of spatial differentiation. The problem of consumers' income and preferences (demand) will be deferred until a later chapter. For the present, our purpose is to deal conceptually with the segmentation of the consumer credit market within its spatially defined limits.

#### Product and Supplier Characteristics in General

The measurement of cross-elasticities of demand has not developed to the point where it provides meaningful results.<sup>2</sup> Consequently, although the assumption of a low cross-elasticity of demand is at the heart of market segmentation, less technical means must be used to construct submarkets.

The most frequent method used is to list all the general characteristics of the product or products and the characteristics of suppliers in order to determine which of these general characteristics provides a basis for differentiating among products and markets. The following list is representative of the general characteristics of the product or products and their suppliers:

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<sup>1</sup>Lawrence Abbott, Quality and Competition (New York: Columbia University Press, 1955), p. 34.

<sup>2</sup>Mark S. Massel, Competition and Monopoly (Washington, D.C.: The Brookings Institution, 1962), p. 245.

- 1) physical characteristics of products,
- 2) end uses of the product or products,
- 3) attractiveness of the product or products to buyers,
- 4) influence of sellers' costs,
- 5) relative prices of the products,
- 6) unit of measurement of the product or products,
- 7) the stages of marketing,<sup>1</sup>

Which of these characteristics provides a basis for partitioning a market depends on the particular situation, including the objectives of the researcher. No doubt examples of market segmentation based on each of these characteristics come readily to the reader's mind. The objective of partitioning a market may be the analysis of the implications of one or more of the following factors:

- 1) measurement of concentration,
- 2) price control,
- 3) taxation,
- 4) subsidies,
- 5) antitrust,
- 6) evaluation of market performance,
- 7) other policies affecting business behavior.<sup>2</sup>

The criteria which are employed in partitioning the consumer credit market can best be based on the purpose of the analysis of market structure and competition. The criteria that are employed will be

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<sup>1</sup> Ibid., pp. 241-257.

<sup>2</sup> Ibid., p. 254.



best developed within the context of the consumer credit market rather than a more or less a priori discussion of the criteria.

#### Consumer Credit Submarkets - Maturities

Firstly, the consumer credit market may be subdivided according to maturity: short-term, intermediate-term, and long-term. Long-term consumer credit consists almost entirely of real estate mortgage credit.<sup>1</sup> In statistics of the national income, investment in residential housing is reported as gross private domestic investment. As a result, rental income from owner-occupied housing must be imputed. In addition, the large size of mortgage credit contracts and a market organization substantially different from that of other forms of consumer credit dictate their exclusion from the generally accepted concept of a consumer credit market.

It should be pointed out that the use of mortgage credit (senior and junior) for consumption purposes has risen sharply in recent years and poses a significant alternative to the more accepted forms of financing consumption expenditures. However, for the present purpose, long-term or real estate mortgage credit will be considered outside the definition of the consumer credit market.<sup>2</sup>

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<sup>1</sup>"As the term has come to be generally used, consumer credit covers credit extended to consumers through regular business channels, exclusive of real estate mortgage credit which is almost entirely long-term." "Revision of Consumer Credit Statistics," Federal Reserve Bulletin, Volume 39 (April, 1953), p. 336.

<sup>2</sup>"Although the consumer credit concept logically includes real estate mortgage credit on owner-occupied houses, this type of credit traditionally has been omitted." Ibid., p. 339.

### Consumer Credit Submarkets - Instalment vs. Noninstalment Credit

Secondly, the consumer credit market can be subdivided into instalment credit and noninstalment credit. Instalment credit includes all consumer credit held by financial institutions and retail dealers which is scheduled to be repaid in two or more instalments.<sup>1</sup> Noninstalment credit, on the other hand, consists of single-payment loans, charge accounts,<sup>2</sup> and service credit.

With the exception of single-payment loans, charge accounts and service credit are convenient forms of credit that permit households to economize on their cash balances. Too, the average size of this form of credit is quite small and mostly arises out of the purchase of non-major consumer goods. As a result, charge accounts and service credit are not repaid out of future earnings which is the case with consumer instalment credit, but they are repaid from the liquid asset holdings of the household. That is, convenience consumer credit is very similar to the working capital loans of business firms.

Furthermore, charge accounts and service credit are held by retail stores and service enterprises rather than financial institutions. Although financial institutions may be the ultimate source of financing, we can clearly distinguish between these forms of credit and those which are more clearly initiated by the financial institutions themselves. Charge account and convenience credit are used as a competitive device in the merchandising of goods and services. Conse-

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<sup>1</sup> Ibid., p. 341.

<sup>2</sup> Ibid.

quently, its nature, expansion, and use is very closely allied to the promotion of retail sales rather than to the independent promotion of consumer financing.

Single-payment loans for consumption purposes are granted by financial institutions as well as pawn brokers. These loans may be unsecured but probably are more often secured by share accounts, time or savings accounts or marketable securities such as stocks and bonds. This study will arbitrarily include single-payment loans in the cash lending segment of the consumer credit market although this type of loan is not always integrated into an institution's major consumer credit policies. In addition, the inclusion of this type of loan will permit us to consider its implications with respect to the larger volume of cash instalment credit.

#### Consumer Credit Submarkets - Instalment Credit<sup>1</sup>

Consumer instalment credit may be subdivided into instalment sales credit and cash credit. Financial institutions are the ultimate source of instalment sales credit. But the credit transaction itself is only a part of the total transaction which also includes the sale of merchandise. Too, instalment sales transactions are regulated independently of the regulation of cash loans. Although institutions may participate in both submarkets, their policies are affected by the existence of these separate regulations.

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<sup>1</sup>For a somewhat similar discussion see National Consumer Finance Association, The Consumer Finance Industry (A Monograph Prepared for the Commission on Money and Credit: Englewood Cliffs, N.J.; Prentice-Hall, Inc., 1962), pp. 23027.

Retail merchants are an integral part of the market for instalment sales credit. Competitive practices of financial institutions revolve around these merchants. Contact between the consumer and the financial institution does not occur until the contract between the financial institution and the dealer has been completed. Consequently, policies with respect to instalment sales credit and cash credit must be different to some degree.

Another difference arises from the use to which the instalment credit is put. Instalment sales credit is limited, by definition, to the purchase of consumer durable goods. Cash credit, on the other hand, has no limits to its uses. In this sense, the market for cash credit is much broader than that of instalment sales credit.<sup>1</sup> The broadness of the market for cash credit requires a different policy inasmuch as security, maturity, and the rate of charge are oftentimes unrelated to the purchase of durable goods that possess a satisfactory degree of collateral value. Consequently, distinguishing between instalment sales credit and cash credit is valid from the point of view of the uses of the credit and the nature of the credit decision.

Lastly, the institutions which participate in the markets for instalment sales credit and cash credit may differ as much as they

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<sup>1</sup>The author recognizes that this concept can be quite arbitrary. The difficulty of determining the true purpose of the borrowed funds has been expressed as follows: "Applicants lacking reserve resources may require cash for one of several needs, so that if funds were not borrowed for one use they would probably be borrowed for another." Ralph A. Young, Personal Finance Companies and Their Credit Practices (Studies in Consumer Instalment Financing: New York; National Bureau of Economic Research, 1940), p. 61.

overlap. Credit unions and consumer finance companies, for example, are not permitted to offer inducements to dealers in order to acquire instalment sales paper. In fact, these institutions must deal directly with the consumer. Retail merchants typically do not retain ownership of the instalment sales paper they originate. Commercial banks do advertise direct auto loans as well as purchase instalment sales paper through dealers. In short, the institutions involved in each segment of the consumer instalment credit market are not identical. Furthermore, institutions which do participate in both segments of the instalment credit market do not necessarily pursue identical policies with respect to these segments. Consequently, there is a basis for considering cash lending and instalment sales credit as submarkets of the consumer instalment credit market.

#### Outline of Consumer Credit Submarkets

The segments of the consumer credit market can be outlined as follows:

#### Consumer Credit Market (Short- and Intermediate-Term)

##### I. Submarkets for Noninstalment Credit

- A. Charge Account Credit
- B. Single Payment Loans

##### II. Submarkets for Instalment Credit

- A. Submarket for Instalment Sales Credit
- B. Submarket for Cash Instalment Loans

Table I-2 presents the dollar amount of consumer credit outstanding in each of the submarkets outlined above for the entire nation. The

Table I-2. Estimate of size of consumer credit  
submarkets for the United States  
consumer credit market

	End of <u>1963</u>	End of <u>June, 1964</u>
<u>Cash Instalment Loans</u>		
Commercial banks - automobile	\$ 4,003	\$ 4,323
- personal loans	4,877	5,170
Sales finance companies - personal	1,754	1,830
*Other financial institutions - total	<u>11,859</u>	<u>12,408</u>
Total	<u>\$ 22,493</u>	<u>\$ 23,731</u>
<u>Instalment Sales Credit</u>		
Commercial banks - automobile	\$ 7,246	\$ 7,854
- other goods	3,123	3,205
Sales finance companies - automobile	8,228	8,633
- other goods	3,383	3,615
Retail outlets	<u>6,753</u>	<u>6,371</u>
Total	<u>\$ 28,733</u>	<u>\$ 29,678</u>
<u>**Repair and Modernization Loans</u>		
Commercial banks	\$ 2,361	\$ 2,355
Sales finance companies	<u>158</u>	<u>150</u>
Total	<u>\$ 2,519</u>	<u>\$ 2,505</u>
<u>Single-Payment Loans</u>		
Commercial banks	\$ 5,047	\$ 5,313
Other financial institutions	<u>912</u>	<u>920</u>
Total	<u>\$ 5,959</u>	<u>\$ 6,233</u>

Source: Federal Reserve Bulletin (January, 1965), pp. 160-161.

\* Includes repair and modernization loans of \$870 million at the end of 1963 and \$890 million at the end of June, 1964.

\*\* Shown separately because of the difficulty in determining the proportion of purchased paper and the proportion of direct loans.

table differs from the Federal Reserve presentation inasmuch as that presentation is based on the use of the funds rather than the type of transaction.

Table I-2 makes it abundantly clear that the segmentation of the consumer credit market is not theoretically precise. But it also indicates the relative importance of each of the submarkets given the geographical dimensions of the market (in this case the United States). As a result, the study of the cash lending segment of the instalment credit submarket does furnish a valid market for the analysis of competition and market structure. In addition, the relation of the cash lending segment to the instalment sales credit segment can be meaningfully considered and evaluated.

Although the largest proportion of consumer instalment credit is in the form of instalment sales credit, the difference between the proportion of instalment sales credit and the proportion of cash instalment credit is narrow; instalment sales credit constitutes approximately 56.1% of the total, cash instalment credit constitutes approximately 43.9% of the total. When single-payment loans are added to cash instalment loans, direct loans are almost equal to instalment sales credit.

Repair and modernization loans are classified separately because of the difficulty in determining the proportion of these loans which are indirectly acquired and those which are directly acquired. Whatever the true proportions, however, the size of the market for home repair and modernization loans is small enough not to materially affect the proportions of cash instalment and instalment sales credit.

### Summary

The classification of the consumer credit market into submarkets and, more particularly, the classification of the consumer instalment credit market into submarkets is admittedly tenuous inasmuch as the classification was based almost exclusively on noneconomic considerations; that is, legal, structural, and regulatory differences. It is a major objective of this study, however, to consider the relationships among these submarkets on the basis of economic considerations. The purpose of this section was to present to the reader some basis for arbitrarily classifying the consumer instalment credit market so that the boundaries of the succeeding analysis are clearly understood. The consideration of the entire consumer credit market will be more meaningful if we explicitly change our assumptions as to the nature of the market. Although this approach may appear to be unrealistic at first it does have the virtue of simplicity and lucidity. In addition, economic differences and similarities may be more clearly emphasized and their nature more fully understood.

### Applicability of a Case Study of Competitive Behavior

In the preceding two sections it was argued on theoretical grounds that the study of competitive behavior must be conducted, in effect, on a case-by-case basis.<sup>1</sup> It is then pertinent to inquire as to the meaningfulness of a case study with respect to the more practical considerations with which such a study is often surrounded. It would not be

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<sup>1</sup>This is equivalent to the comments of the experts on pages 24-26. Footnote 3 on page 25 is a case study of bank competition in Nassau County, New York.



inappropriate at this point to consider this question; for this study is based on the implicit assumption that there are concepts and relationships to be recognized that have general applicability when correctly qualified.

The theoretical appropriateness of the case study implicitly rests on the idea that aggregative analysis (macroeconomic analysis) must abstract from variations among the individual components of the analysis. That is, aggregative analysis develops average relationships among variables which may be sufficient for the purposes in mind but do not hold universally in any fixed manner. But more importantly, the justification for the case-method of study must admit that aggregative analysis must conceal microeconomic effects that may severely limit the applicability of the conclusions of such an analysis. In any event, it is the burden of the case-method approach to indicate the degree to which more aggregative forms of analysis must be qualified in order to produce operational implications. Perhaps the burden of demonstrating the applicability of aggregative analysis should lie with the aggregative analysis. In fact, the costs of the case-study approach are not benefited by the economies of mass analysis with the result that the case-method must explain the degree to which aggregative analysis can be justifiably employed if the case-study approach's overall contribution is to be acceptable.

Of course, the case-study approach to economic research can be appropriate on grounds other than its potential value as a check on the validity of aggregative analysis. In an economy in which decisions are made by a rather large number of independent units, a microscopic

examination of a small group of independent units (such as those within a particular geographical submarket) possesses an inherent consistency and meaning that aggregative analysis cannot approach; for a microscopic examination permits attention to be directed to a greater number of parameters and details which aggregative analysis cannot reasonably take into consideration.<sup>1</sup> And inasmuch as decision-making based on macroeconomic relationships can only be considered by the largest of economic organizations, the utility of a more microeconomic approach yet remains. The proper framework for decision-making by a unit bank in Lansing, Michigan with respect to its investment in automobile paper, for example, very reasonably cannot consist of the analysis of consumer buying intentions based on data collected without regard to geographical locality. The uncertainties which would attach to the analysis and the consequent decision-making process by the bank would almost certainly undermine the efficacy of this type of decision-making process. In short, the case-method approach is a valid research methodology that explicitly recognizes that the decision-making processes of perhaps all but the largest economic organizations is conditioned by the parameters of their immediate sphere of activity; and it is precisely within this immediate sphere of activity that knowledge of variations from macroeconomic relationships could be more important than the relationships themselves.

There is another facet to the practical aspects of the usefulness of the case-method approach in analyzing competitive behavior. Regu-

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<sup>1</sup>The advent of the computer age and its vast potentialities does limit the appropriateness of this remark.

lation of financial institutions has traditionally been the responsibility of state governments and the federal government. Will the analysis of behavior within a specific locality produce anything of value for the purposes of improving regulation? Although the problem of regional differences within the state still exists, the case method of research should be expected to uncover basic concepts and relationships that are of value in appraising the effectiveness of state as well as federal regulation of financial institutions. The case-method approach can be employed to analyze the extent of variations from presumed behavioral patterns, subsequently contributing to minimizing the variations in behavior that are attributable to regulation. Thus, from the more practical point of view, the case-method approach to research into competitive behavior has value in evaluating the impact of regulation.

In summary, the case-method approach to studying competitive behavior is valid for a number of reasons. These reasons are sufficiently important from a number of viewpoints to proceed with the case study with the further expectation that some fundamental concepts and relationships can be extrapolated from the case analysis that will be applicable to geographically-defined markets in general.

## CHAPTER II

### ELEMENTS OF THE DEMAND FOR INSTALMENT CREDIT

This chapter will discuss the theoretical aspects of the demand for consumer instalment credit. Our objective is to point out aspects of this demand, to which credit grantors may react. More specifically, the discussion of the elements of the demand for instalment credit will permit us to examine the concept of the demand implied from the observable behavior of institutional lenders.

#### Investment Theory

The analysis of the demand for instalment credit can take two paths. One path is concerned with the analysis of the purchase of consumer durable goods which provide monetary rewards in the form of costs avoided.<sup>1</sup> Traditional investment theory is quite applicable to this form of consumer investment for it places great reliance upon the rate of interest as a regulator of the demand for "productive" assets. The rational consumer, in this case, would compare the yield (rate of return) on the proposed asset with the market rate of interest in order to determine the efficacy of the prospective purchase.

The market rate of interest is the relevant marginal cost of capital only under conditions of a perfect capital market; that is, when the borrowing rate and the lending rate are the same. Under

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<sup>1</sup>For a more technical discussion than that which follows, the reader is referred to F. Thomas Juster and Robert P. Shay, Consumer Sensitivity to Finance Rates: An Empirical and Analytical Investigation (New York: National Bureau of Economic Research, 1964), pp. 76-89.

imperfect capital market conditions, the borrowing rate is higher than the lending rate. Consequently, the relevant marginal cost of capital is the borrowing rate.<sup>1</sup>

#### Application to Other Consumer Goods

The traditional theory of investment has been applied infrequently to the analysis of consumer expenditures in general.<sup>2</sup> The problem in applying the theory lies with the presence of nonmonetary factors which are an integral part of the decision-making process. These nonmonetary factors are the utilities or satisfactions which the consumer receives from an object of consumption. The inability to quantify utility prohibits the comparison of the rate of return with the marginal cost of capital in order to determine whether such a purchase would contribute to the optimal use of the consumer's income, present and future.

It has been noted already that certain types of consumer durable goods may be analyzed with the traditional apparatus. These consumer goods are mainly cost-saving devices in that they allow the consumer to avoid the expenditure of funds on alternative means of acquiring the services which are desired. The purchase of a home laundromat, for example, produces revenue for the consumer by eliminating the need

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The nature of an imperfect consumer capital market will be more fully discussed at the end of this chapter.

<sup>2</sup>In the following articles two authors have worked at expanding the number of consumer goods which can be analyzed in terms of traditional investment theory: J.V. Poapst and W.R. Waters, "Individual Investment: Canadian Experience," Journal of Finance, Volume XVIII (December, 1963), pp. 647-666, and "Rates of Return on Consumer Durables," Journal of Finance, Volume XIX (December, 1964), pp. 673-678.

to have his clothes cleaned at a laundry service. The cash outflow in the present time is the present value of the future instalment payments to be made to the lender. This outflow is then compared to the time series of cost savings which are expected to occur over the useful life of the durable good.

But even in the case of cost-saving consumer goods there are non-monetary factors which have importance to consumers to varying degrees. To return to the laundromat example, its purchase not only involves the avoidance of expenditures on laundry service, it also involves the factor of convenience. The disutility of traveling to and from the laundry service is avoided; the disutility of having to perform the mechanical processes connected with the home laundromat is also involved. In short, a cost-saving durable good is a time-saving and time-consuming device as well.

#### The Time Rate of Preference

The problem of the analysis of consumer expenditures is complicated also by another factor. Consumers are assumed to express a preference for present consumption over future consumption. A consumer, for example, may be willing to give up \$1.00 worth of present consumption for \$1.25 worth of future consumption or vice versa. Unless we are aware of the consumer's rate of time preference, it is impossible to determine the optimum distribution of consumption between present and future, given the consumer's present income and his expected future income.<sup>1</sup> This fact is one of the keys to understanding the theoretical and actual behavior of consumers toward the use of instalment credit.

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<sup>1</sup>Cost-saving devices are, of course, an exception.

### Impact of Instalment Credit

To properly focus the discussion of the impact of instalment credit with respect to consumer behavior, a number of assumptions will be helpful. Firstly, let us assume that the consumer's present and future income is known with perfect certainty. Secondly, the consumer always prefers more consumption to less consumption. As a corollary, the consumer would prefer a given amount of consumption now to that same amount of consumption in the future (this really follows from the concept of the time rate of preference).

The consumer borrows today in order to increase his present consumption. In return, he "mortgages" a part of his future income in order to repay the principal amount of the loan plus interest. Given his future income, the consumer must reduce future consumption in order to repay the loan plus interest.<sup>1</sup> Note that the absolute amount of consumption which must be given up in the future, assuming a constant level of prices, is greater than the absolute amount of consumption which is obtained through borrowing in the present; the interest paid on the loan accounting for this difference. The relevant question to ask is: How can we theoretically justify an absolute increase in consumption today at the cost of a greater absolute decrease in consumption in the future? Conceptually, the analysis can be made within the framework of traditional investment theory with the exception that

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<sup>1</sup>This discussion assumes that savings are a form of consumption that constitutes a fixed proportion of the consumer's income, present and future. Further, accumulated savings are assumed not to be substitutable for income with respect to loan repayments.

the yield on the object of consumption will be substituted by the consumer's time rate of preference.

The consumer's goal is to maximize the present value of his consumption, given that he incurs a cost in postponing consumption.<sup>1</sup> If we discount the amount of future consumption which is foregone in order to repay the loan plus interest we can compare this with the value of the increase in present consumption permitted through borrowing. If the net difference is positive, the consumer is behaving in a theoretically correct manner in borrowing to finance the purchase, for he has increased the present value of his consumption over the period the funds are to be repaid.

But in order to achieve a better understanding of the relationship between the cost of instalment credit and the rate which is used to discount future consumption foregone, a different approach must be used. The quantity of future consumption foregone is presumably discounted by the consumer's rate of time preference; the rate which establishes the relationship between a given absolute amount of present consumption and a certain greater absolute amount of future consumption toward which the consumer is indifferent. This rate of time preference is determined by the shape of the consumer's indifference curve between present and future consumption and it is assumed to decrease with successive increments of present consumption over future consumption. If the rate of time preference is greater than the cost of the instalment loan, the consumer will be increasing the present value

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<sup>1</sup>It is assumed for the purposes of this analysis that the amount to be borrowed is equal to the purchase price of the consumer good or service to be financed.



of his total consumption over the period of the loan by borrowing the funds necessary to increase present consumption. In terms of the process outlined above, a rate of time preference greater than the cost of the instalment credit results in a net increase in the present value of consumption.

To give an example, suppose a consumer is indifferent between \$1.00 worth of consumption today and \$1.25 worth of consumption one year from now. For the consumer to borrow \$1.00 to increase his current consumption, he should not be willing to pay more than \$1.25 at the end of one year (principal plus interest). The effective annual rate of charge on the borrowed funds cannot exceed 25% per annum if the consumer's behavior is to be considered rational. The rate of time preference is the maximum rate of sacrifice of future consumption which the consumer can incur in order to increase the present value of his total consumption for the entire period.<sup>1</sup>

Under perfect capital market conditions, a consumer could borrow any amount of funds he desires. He will do so as long as the marginal borrowing rate (the market rate of interest) does not exceed the marginal rate of time preference. Under imperfect capital market conditions, the consumer faces an upward sloping supply curve of consumer credit. Successive borrowings only can be obtained at successively higher rates of interest. The consumer will continue to borrow until the marginal borrowing rate exceeds the marginal rate of time preference. Note that in either case the consumer's marginal rate of time preference is the ultimate regulator of his demand for instalment credit. It is a

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<sup>1</sup>It is also the minimum yield.



substitute for the rate of return or yield concept which is employed in traditional investment theory and to the analysis of consumer demand for goods which permit the avoidance of other costs. Note, too, that in either case the analysis is consistent with traditional investment theory; the appropriate cost of capital is the market rate of interest in the case of the perfect capital market and the marginal cost of capital is the marginal borrowing rate in the case of the imperfect capital market.

#### Institutional Borrowing Constraints

The concept of the imperfect capital is not limited to the fact of a rising supply of credit which each demander must face. Suppliers of credit may limit the maximum amount of debt any borrower may carry at any one point in time. Such a constraint has the effect of making the supply of credit available to a borrower perfectly inelastic at some total amount of credit. For some consumers, for example, this perfectly inelastic portion of the supply of credit may intersect the demand for credit at a point below that which would occur if a rising supply curve of credit were the only characteristic of an imperfect capital market.

A number of constraints employed by the credit grantor readily come to mind. Perhaps of greatest significance is the lender's concept of the maximum relationship of loan repayments to the borrower's expected future income. The objective of such a constraint is to avoid placing the consumer-borrower in a position in which the repayment of the loan can be made only with undue strain. The margin of safety implied in such a constraint is perhaps of more importance to the



lender with respect to the consumer-borrower than with respect to the businessman-borrower, for the problem of consumer bankruptcy has reached major proportions in recent years.<sup>1</sup>

The wealth position of the consumer is another constraint upon the consumer's capacity to accept credit. The greater the wealth position of the borrower, given his income, the greater will be the amount of debt institutional lenders will grant. The definition of consumer wealth, however, is not always similar to the traditional meaning of wealth. Credit grantors view the consumer's wealth position with respect to the protection such wealth will provide for their loans. This protection takes the form of claims against the wealth in case of default. Not all forms of wealth will be acceptable as collateral for a loan. Moreover, various kinds of wealth have varying degrees of acceptability to credit grantors as collateral for their loans. Liquid assets, for example, will be acceptable to all credit grantors for the simple reason that this type of asset can be readily converted to cash at a very small cost in case of default. An automobile, on the other hand, may be of limited collateral value depending on the age and condition of the vehicle. As a result, loans secured by automobiles will bear some relation to the estimated market value of the vehicle less cost of disposal.<sup>2</sup> In general, consumers will be

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<sup>1</sup>This statement is qualified by factors which are to be discussed on the following pages.

<sup>2</sup>This relationship between the value of the collateral and the loan can be thought of as ranging from zero to one depending on the nature and condition of the asset and the extent of the secondary market through which the asset must be disposed in case of default.

permitted to accept more debt the greater is their wealth which would be acceptable as collateral to credit grantors, *ceteris paribus*.

### Rationed and Unrationed Consumers

The constraints placed upon consumers in acquiring debt which result in a rising supply schedule of instalment credit are the heart of a recently published theory concerning the reaction of consumers to changes in the finance rate. The authors concluded:

Consumers are not, as frequently though, wholly unresponsive to the finance rates charged on instalment credit contracts. Rather, they are unresponsive to rates when subject to credit rationing, as that term is used here. Since the majority of consumers probably fall into the rationed category, there will be little rate response observable in the population as a whole under existing conditions.<sup>1</sup>

Consumers whose marginal borrowing cost is in excess of going rates of primary lenders are here called rationed. Defined in another way, rationed consumers are those whose average outstanding debt to primary lenders is less than the amount they would prefer, given the rates charged, and unrationed consumers are those whose actual and preferred debt levels are the same.<sup>2</sup>

Unrationed consumers, then, possess the income and particularly the wealth necessary to obtain their credit needs such that the market need not ration them.<sup>3</sup> Their need for credit is limited by their demand for high-cost durable goods. As Juster and Shay postulate, consumers' sensitivity to changes in the finance charge is a function of the need for instalment credit, the demand for durable goods, and the

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<sup>1</sup> Juster and Shay, op.cit., p.2.

<sup>2</sup> Ibid., p. 14.

<sup>3</sup> Rationing in the sense of the slope of the supply of credit and in the sense of an absolute limit to the amount of debt they are permitted to assume.

store of acceptable collateral.<sup>1</sup>

Rationed consumers, on the other hand, are faced with institutional constraints upon their borrowing capacity. They must seek increments to their liabilities, after a point, from secondary lenders (credit grantors who do not require as much or no collateral) at higher rates of charge; and their search is not always successful. Although the decision to borrow from secondary lenders may be consistent with the maximization of the present value of the rationed consumer's consumption, their desire for credit beyond that which will be granted by primary lenders leads them to a position in which they cannot afford to be sensitive with respect to the rate of charge on borrowed funds.

#### Other Elements of the Demand for Instalment Credit

The following pages discuss a number of aspects of the demand for instalment credit which are believed to have a significant influence on this demand. More to the point, these other elements are generally thought to be responsible for the fact that the demand for instalment credit is relatively inelastic with respect to the finance charge. The previous discussion has offered an explanation for the fact that the demand for instalment credit is relatively inelastic for a certain class of consumer. The extension of this discussion is essential to a better understanding of the market behavior of institutional lenders in the market for consumer cash instalment credit.

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<sup>1</sup>Juster and Shay, op.cit., p. 1. It may be pointed out that this also implies a relatively lower marginal rate of time preference than that of rationed consumers.

### Substitutes for Instalment Credit

Current consumption can be increased by means other than the use of instalment credit: namely, the use of past or current savings.<sup>1</sup> Until very recently, opinion of academic economists and consumer credit officers of financial institutions was that savings are not an effective substitute for instalment credit.

There is a plausible reason for believing, however, that these assets would not be used to any great extent for the purchase of goods otherwise obtainable on credit. Those who incur instalment debt in spite of the fact that they possess liquid assets must have strong reasons for not using these assets for the purchase of goods. Instalment credit is expensive. The annual rate which the consumer has to pay on his average unpaid balance is never much below 12 percent and in most cases is substantially higher than the yield of saving deposits, bonds and most other salable assets. Hence, it would be very irrational for a man to incur a debt on which he has to pay perhaps 15 percent or even more instead of selling a bond on which he earns perhaps 5 percent or even less, and it would be still more irrational to incur such a debt in order to protect saving deposits or cash reserves on which the yield is next to nothing--unless he is considering other factors than immediate cost.<sup>2</sup>

These factors other than immediate cost which the consumer is likely to consider can be summarized in the Keynesian terms speculative motive and precautionary motive.<sup>3</sup> The speculative motive leads consumers to

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<sup>1</sup>This discussion will assume that other sources of debt capital are not available. That is, loans from friends, relatives, etc. and single-payment loans from financial institutions do not represent effective substitutes for instalment credit.

<sup>2</sup>Gottfried Haberler, Consumer Instalment Credit and Economic Fluctuations (New York: National Bureau of Economic Research, 1942), p. 44.

<sup>3</sup>The transaction motive is omitted here inasmuch as transactions balances are more directly affected by the use of convenience credit rather than the use of short- or intermediate-term consumer instalment credit.



maintain a store of liquid assets with which to take advantage of future opportunities for profit. Consequently, any reduction in the store of liquid assets maintained for speculative purposes involves a cost in terms of future profit foregone. Liquid balances maintained for precautionary purposes do not have an explicit cost. Rather the cost of reducing precautionary balances must be expressed in terms of the utility or satisfaction foregone by reducing the precautionary balances. Thus, although interest charges on instalment credit may be high, the use of instalment credit may be a rational decision if the marginal loss of utility and future profit through a reduction of liquid balances is greater than the marginal cost of the instalment credit.

A recent National Bureau study revealed that liquid assets (past savings) are a more effective substitute for the use of instalment credit for certain classes of consumers. Consumers whose store of liquid assets are high in relation to their credit needs and consumers whose credit needs are limited because their demand for durable goods is limited (unrationed consumers).<sup>1</sup> In these cases, the utility and opportunity for profit which is foregone by reducing the store of liquid assets to finance the purchase of a consumer good are negligible, on the margin, with respect to the total store of liquid assets. Consequently, liquid assets are a more significant alternative to the use of instalment credit for these classes of consumers.

At the other extreme, consumers who are unable to build a store of liquid assets have no alternative to the use of instalment credit.

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<sup>1</sup>Juster and Shay, op.cit., p. 10.

It is to be concluded that the store of liquid assets can be a substitute for instalment credit only to an imperfect degree. The degree of substitutability of liquid assets for instalment credit is to be thought of as a range primarily determined by the credit needs of the consumer, his demand for durable goods, and the ability of the consumer to build a store of liquid assets.

The demand for instalment credit is generally believed to be relatively more inelastic with respect to the finance charge the greater the proportion of the consumer population that are rationed by institutional lenders because this proportion of the population, for one thing, lacks a sufficient store of liquid assets.

#### Relative Cost of Instalment Credit

Alfred Marshall's theory of derived demand is partially appropriate for the analysis of the demand for instalment credit.<sup>1</sup> Let us assume that instalment credit is a factor of production in the sense that it is one of the inputs necessary to provide the consumer with the ability to purchase the goods and services he desires. Given this assumption, two of Marshall's principles of derived demand can be used to demonstrate that the demand for instalment credit is relatively inelastic with respect to the finance charge.

Marshall's third principle of derived demand is: the derived demand for any factor will be more inelastic the smaller the fraction of total cost that goes to the factor in question.<sup>2</sup> Table II-I

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<sup>1</sup>For a full discussion of the theory of derived demand see Milton Friedman, Price Theory (Chicago: Aldine Publishing Company, 1962), Chapter 7.

<sup>2</sup>Ibid., p. 153.

Table II-1. Influence of finance charge on total cost

	Loan Number-						
	1	2	3	4	5	6	7
Price of Durable Good	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Finance Charge	<u>\$ 30</u>	<u>\$ 60</u>	<u>\$ 90</u>	<u>\$ 120</u>	<u>\$ 150</u>	<u>\$ 180</u>	<u>\$ 210</u>
Total Cost	\$1,030	\$1,060	\$1,090	\$1,120	\$1,150	\$1,180	\$1,210
Ratio of Finance Charge to Total Cost <sup>1</sup>	.0291	.0566	.0826	.1071	.1300	.1525	.1735
Percentage Change in Finance Charge		100.00%	50.00%	33.33%	25.00%	20.00%	16.67%
Percentage Change in Ratio of Finance Charge to Total Cost		94.50%	46.00%	30.00%	21.40%	17.30%	13.80%
Percentage Change in Total Cost		2.91%	2.83%	2.75%	2.68%	2.61%	2.54%

<sup>1</sup>This figure is also the elasticity of total cost with respect to changes in the finance charge.

demonstrates the effect of a constant dollar increase in the finance charge on the total cost of purchasing a \$1,000 consumer durable good with instalment credit. The data in the table assumes no downpayment is necessary and that the term of the loan is identical for each case (one year). For all loans, the percentage increase in the finance charge produced a less than proportional increase in the ratio of the finance charge to total cost. Moreover, for a given percentage increase in the ratio of the finance charge to total cost, there was a less than proportional percentage increase in total cost. In short, the total cost of purchasing a consumer good with instalment credit is inelastic with respect to the finance charge, given the price of the durable good. Even though the finance charge was increased by 100%, for example, total cost increased by less than 3%. If the relationship between changes in the finance charge and changes in total cost were plotted on a graph, the result would be a rectangular hyperbola, a curvilinear relationship that implies inelasticity throughout.

#### Essentiality of Instalment Credit

Another of Marshall's principles is concerned with the essentiality of an input to the demand for that input. Marshall demonstrated that the demand for a factor of production is more inelastic the greater is the essentiality of the factor. Thus, if we continue to assume instalment credit to be an input, the greater its essentiality to the consumer, the more inelastic is the demand for instalment credit with respect to the finance charge.

We have already noted that many consumers do not possess a store of liquid assets which is sufficient to be an effective substitute for consumer instalment credit. Juster and Shay pointed out in their study that liquid assets are still an imperfect substitute for instalment credit for consumers who do possess a sufficient store of liquid assets.<sup>1</sup>

Taken together, these two cases of the degree of essentiality of instalment credit lead to the conclusion that liquid assets and instalment credit are but imperfect substitutes. Consequently, consumer insensitivity to changes in the finance charge are to be expected; the degree of sensitivity being greater for the unrationed consumer than for the rationed consumer.<sup>2</sup>

#### Lack of Knowledge

Whenever and wherever the subject of the costs of instalment credit is discussed, the inability of the consumer to make sense out of the section of the contract dealing with the finance charge is often raised. There have been monographs,<sup>3</sup> legislative proposals,<sup>4</sup> and large-scale studies and considerations of this problem and its effects on consumer behavior.<sup>5</sup> This study will not attempt to review or add to the sub-

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<sup>1</sup>The authors' computed finance charge elasticity ranged from a low of  $-.005$  to a high of  $-.299$ . Juster and Shay, op.cit., p. 29.

<sup>2</sup>It should be pointed out that the essentiality argument is very similar to the substitution argument. The concepts which were employed in both sections, however, warranted this differentiation.

<sup>3</sup>Robert W. Johnson, Methods of Stating Consumer Finance Charges (New York: Columbia University Press, 1957).

<sup>4</sup>Senator Douglas' series of Truth-in-Lending bills.

<sup>5</sup>Juster and Shay, op.cit.

stantial literature on the subject. But the existence of difficulties and confusion for the consumer in determining the true rate of charge on an instalment loan contract is mentioned frequently as another reason why the demand for consumer instalment credit is relatively inelastic with respect to the finance charge.<sup>1</sup>

#### Effect of Monthly Payments

It is frequently argued that consumers are insensitive to changes in the rate of finance charge because such changes do not materially affect the monthly payment, given the length of the contract. Of course, Juster and Shay assert that only rationed consumers would be insensitive to the finance rate and sensitive to the monthly payment. This kind of behavior is necessary because these consumers are not permitted the desired level of debt from primary lenders. Lowering the monthly payments permits them to acquire more debt inasmuch as the institutional constraint on a borrower's capacity to borrow bears some relation to the ratio of the monthly payment to expected future income.

Table II-2 describes the relationship between changes in the monthly payment and changes in the finance charge for a twelve month, twenty-four month, and thirty-six month loan. Note that the percentage change in the annual finance charge is greater than the percentage change in the monthly payment regardless of contract length. Further,

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<sup>1</sup>The Juster and Shay study discovered that "the majority of respondents had little awareness of the finance rates they had actually paid on their past instalment credit transactions: about 7 percent of the sample gave reasonably accurate estimates of the effective annual finance rates paid; 11 percent estimated the approximate add-on or discount rate equivalent paid; the remaining 82 percent were unable to give rate estimates of reasonable accuracy." Juster and Shay, op.cit., p. 3.



Table II-2. Relationship between the monthly payment and the finance charge

Loan Number-							
	1	2	3	4	5	6	7
Price of Durable Good	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Annual Finance Charge	\$ 30	\$ 60	\$ 90	\$ 120	\$ 150	\$ 180	\$ 210
Monthly Payment - 12 month contract	\$85.83	\$88.33	\$90.83	\$93.33	\$95.83	\$98.33	\$100.83
- 24 month contract	\$44.17	\$46.67	\$49.17	\$51.67	\$54.17	\$56.67	\$59.17
- 36 month contract	\$30.28	\$32.78	\$35.28	\$37.78	\$40.28	\$42.78	\$45.28
Percentage Change in Monthly Payment:							
- 12 month contract		2.91%	2.83%	2.75%	2.68%	2.61%	2.54%
- 24 month contract		5.66%	5.36%	5.08%	4.84%	4.62%	4.41%
- 36 month contract		8.26%	7.63%	7.09%	6.62%	6.27%	5.84%



the percentage changes in the monthly payment are positively related to changes in the length of the contract. Thus, although the monthly payment is relatively insensitive to changes in the annual finance charge, the longer the contract length the more sensitive is the monthly payment to changes in the annual finance charge. Inasmuch as academic and business opinion believe that the monthly payment is an important variable with respect to the demand for instalment credit, the insensitivity of the monthly payment to changes in the annual finance charge is another reason for thinking that the demand for instalment credit is relatively inelastic with respect to the finance charge.<sup>1</sup>

#### Length of the Contract

Table II-2 also permits us to examine the relationship between the monthly payment and the length of the instalment credit contract. For example, an increase in the finance charge of 100% would increase the monthly payment of a twelve month contract by \$2.50. Yet if the length of the contract was extended to twenty-four months at the same time the finance charge was increased, the monthly payment would decrease by almost \$40. Notice, too, that given the finance charge, the percentage change in the monthly payment is less than proportional to the percentage change in the length of the instalment credit contract.

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<sup>1</sup>"Third, the analysis suggests that the size of the monthly instalment payment plays a considerable role in the determination of instalment sales credit demand, which confirms prevailing opinion." Avram Kisselgoff, Factors Affecting the Demand For Consumer Instalment Sales Credit (New York: National Bureau of Economic Research, 1952), p. 56.

Juster and Shay computed demand elasticities using a "payments" model. The elasticities range from .000 to -.034. Juster and Shay, op.cit., p. 29.

It has been concluded that consumers, more specifically rationed consumers, are more sensitive to changes in the length of the contract because the changes in the length of the contract more materially affect the monthly payment than do changes in the finance charge.

It should be noted also that changes in the finance charge combined with changes in the length of the contract tend to make the effect of changes in the finance charge rather immaterial when compared to the effect caused by the change in the length of the contract.

#### Effect of Down Payment

The down payment on the purchase of a durable good is believed to be a major determinant of the demand for instalment credit. The reason is obvious: the down payment requirement has the effect of requiring the consumer to use his current income or store of liquid assets to acquire the durable good. Thus, Federal Reserve regulation of instalment credit terms included regulation of the required down payment in order to reduce the demand for instalment credit.

The down payment requirement forces the consumer to incur an additional cost of using credit. The cost is in terms of future profit opportunities foregone and/or the disutility of giving up a portion of his precautionary balances. Note, too, that a down payment requirement eliminates those consumers from the demand for instalment credit who do not possess liquid assets with which to make the down payment.

Requiring a down payment increases the marginal cost of borrowing.<sup>1</sup>

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<sup>1</sup>"If loan size is smaller than purchase price or if contract maturity is less than the service life of the asset, the market finance charge does not cover the total cost of time and risk associated with ownership of the asset." Juster and Shay, op.cit., p. 10.



Table II-3 shows the effects of a change in the rate of down payment.

The data assume the following:

- 1) purchase price - \$1,000
- 2) borrowing rate - 8% add-on
- 3) opportunity cost of liquid assets - 6% per annum
- 4) length of contract - twelve months

Table II-3. Effect of downpayment on  
marginal cost of borrowing

Down Payment	Marginal Cost of Borrowing
None	14.8%
10%	16.0%
20%	17.5%
30%	19.5%

Finally, the effective annual marginal borrowing cost is computed from the constant ratio formula.<sup>1</sup>

The implications of these results are worth pursuing. As was demonstrated by Regulation W, increases in the required down payment reduced the demand for instalment credit and thus the demand for consumer

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<sup>1</sup>The formula for the constant ratio method of computing the effective annual interest cost is  $\frac{2 \times M \times D}{P(n+1)}$ .

This formula will not produce the true annual interest cost inasmuch as the opportunity cost occurs at the end of the year rather than regularly throughout the year. However, the formula does produce a reasonable picture of the effect of the down payment requirement.

durable goods at the margin. In terms of Juster and Shay's rationed and unrationed consumers, liquid assets are not an effective substitute for instalment credit. But Table II-3 also demonstrates that, with respect to downpayment provisions, liquid assets and instalment credit are complements. The effect of downpayment provisions is to increase the marginal cost of capital. This is true for rationed as well as unrationed consumers. Thus, increases in the required downpayment not only reduce the demand for instalment credit at the margin, it causes a downward shift in the demand for instalment credit.<sup>1</sup>

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<sup>1</sup>The economics of complementary factors tells us that an increase in the demand for one of the complements (an increase in the required downpayment can be considered to be an upward shift in demand) causes a downward shift in the demand for the other complementary factor (in this case, the demand for instalment credit).



### CHAPTER III

#### A THEORY OF THE STRUCTURE OF A CASH INSTALMENT LOAN MARKET

Much of the literature of consumer credit has been devoted to the description of the operating behavior of institutional lenders.<sup>1</sup> What these discussions have lacked, however, is a model of market structure which can be employed to explain the behavior of the institutions who are being observed. It is the objective of this chapter to offer a theory of the market structure which attempts to explain the behavior of institutional lenders.

##### A Perfect Consumer Credit Market

If the market for short- and intermediate-term consumer credit were perfect, any consumer could acquire as much debt capital as he desired at the market rate of interest with but one limitation. The limitation that would be placed upon any consumer's capacity to acquire debt would be the expected value of the consumer's future income available for debt

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<sup>1</sup>The following references offer a detailed description of the operating practices of institutional credit grantors: The American Bankers Association, The Commercial Banking Industry (A Monograph Prepared for the Commission on Money and Credit: Englewood Cliffs, N.J.; Prentice-Hall, Inc., 1961), Chapter V. The National Consumer Finance Association, The Consumer Finance Industry (A Monograph Prepared for the Commission on Money and Credit: Englewood Cliffs; Prentice-Hall, Inc., 1962). Theodore A. Anderson, "Market Practices in the Consumer Lending Industry," Consumer Instalment Credit, Volume 1, Part 2 (Washington, D.C.: Board of Governors of the Federal Reserve System, 1957). John M. Chapman, Commercial Banks and Consumer Instalment Credit (New York: National Bureau of Economic Research, 1940). Ralph A. Young, Personal Finance Companies and Their Credit Practices (New York: National Bureau of Economic Research, 1940).





repayment capitalized at a rate which would reflect the risk category in which credit grantors have placed him.<sup>1</sup> On this basis, consumers would face a perfectly elastic supply curve of short- and intermediate-term consumer credit up to the maximum permitted by the suppliers of credit. At the maximum amount of debt, the supply curve would become perfectly inelastic.<sup>2</sup> In short, the structure of the consumer credit market would be one of atomistic competition: each borrower and lender would take the price of the loan as given; institutional constraints are limited and applied uniformly by all institutional lenders.

#### Characteristics of an Imperfect Market

Abstractly, each loan to a consumer is perfectly differentiable from any other loan to any other consumer or to the same consumer at two different points in time.

Every loan represents the result of analysis, of the needs and capabilities of the borrower, and a program designed personally for him. Thus, technically every consumer credit transaction is unique since there are not two borrowers or purchasers whose needs and capabilities are identical.<sup>3</sup>

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<sup>1</sup>Future income available for debt repayment is a synonymn for cash flow. In practice, the credit grantor uses the consumer's cash flow as the basis for determining the maximum amount of funds he will lend (the income constraint). The income constraint under discussion here is to be considered identical to the cash flow of the consumer.

<sup>2</sup>This is not to argue, however, that the consumer's cost of capital is constant. Chapter II pointed out that a down payment requirement, for example, increases the marginal cost of capital. The opportunity cost of unpledged financial assets also affects the consumer's cost of capital.

<sup>3</sup>The Consumer Finance Industry, op.cit., p. 27.

From a practical point of view, perfect differentiation of consumers is not possible. To function efficiently credit grantors must classify consumers into a number of risk groupings, each of which reflects the practical similarities of the members of the group.<sup>1</sup> The sophistication which is applied to classifying consumers into a relatively small number of risk groupings is, of course, a function of the savings which are derived versus the costs which are incurred in the process of abstraction. Thus, with respect to the risk-bearing function of institutional credit grantors, differentiation of borrowers will occur to the degree which each credit grantor considers consistent with profit- or wealth-maximizing behavior.

Another form of differentiation of financial services is concerned with the various aspects of the loan itself. The many elements of a loan transaction serve as a ready means whereby institutional lenders can differentiate the basic product, "money." Omitting any legal considerations, the primary elements of an instalment credit transaction are as follows:

- 1) the amount of the loan,
- 2) the finance charge,
- 3) the length of the contract,
- 4) the collateral,
- 5) delinquency, default, and prepayment provisions,
- 6) ancillary financial services including collection policy.

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<sup>1</sup>"Is every financial transaction unique because risk evaluation, an essential point, is bound to be subjective? The contention that financial transactions cannot be grouped into common categories must be rejected because it is belied by everyday practice." Werboff and Rozen, op.cit., p. 267.

Within each element there are a number of alternatives from which the credit grantor and/or the borrower may choose. Consequently, there are a rather large number of combinations of loan terms from which the actual financial product may be chosen. In the absence of unequal bargaining power, the loan negotiation is basically a process of trading-off one feature for another by both parties to the contract in order to arrive at a mutually satisfactory loan agreement.<sup>1</sup>

Lastly, institutional credit grantors attempt to differentiate their product by offering facilities and other nonmonetary factors which augment the benefits the consumer derives from the loan agreement itself. Thus, convenient location, telephone interviews, and payroll deductions are forms of nonmonetary services by which institutional lenders attempt to differentiate their services from those offered by other credit grantors.

The existence of these basic forms of financial differentiation led two prominent consumer credit economists to conclude that the consumer instalment credit market is an imperfect market; imperfection, of course, denoting the presence of obstacles to the mobility of consumers within the market.<sup>2</sup>

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<sup>1</sup>Of course, in practice, loan terms tend to be standardized or, at least, the variations in loan terms tend to be reduced. Legal restrictions as well as operating policy contribute to this standardization. But it should be pointed out also that competition has much to do with the bargaining which takes place between applicant and credit grantor. Institutional practices have been known to change to meet the competition of other institutional lenders.

<sup>2</sup>Theodore O. Yntema, "The Market for Consumer Credit: A Case in Imperfect Competition," Annals of the American Academy of Political and Social Science, Volume 196 (March, 1938), pp. 79-85.

Clyde W. Phelps, "Monopolistic and Imperfect Competition in Consumer Loans," Journal of Marketing, Volume VIII (April, 1944), pp. 382-393.

The theory of the structure of a cash instalment credit market to be presented here does not imply that the word "imperfection" should be associated with the connotations which often accompany the word in the economics literature. Instead, the theory establishes that the structure of the market is the result of historical development founded on a sound economic foundation. Given the forms in which differentiation may be manifested, this theory of the market structure permits consumers to be highly mobile within the structure, resulting in competition which is intense and innovative and which leads to a smoothly functioning market.

#### Foundations of the Imperfect Market

Under imperfect capital market conditions, the income constraint present in the perfect capital market is simply not applied uniformly by all types of institutional lenders. For reasons to be discussed shortly, the nature of the income constraint imposed by a particular type of consumer financing institution is unique; it is unique with respect to the determination of the borrower's expected future income available for debt repayment, and it is unique with respect to the risk category in which the consumer is placed. As a result, consumers face a discontinuous supply curve with respect to the institutional sources of credit. To put it curtly, given the same rate of finance charge, the maximum amount of debt permitted the consumer by any one particular financial institution will not be the same as the maximum permitted by other financial institutions.

But variations in the application of the income constraint is not

the only characteristic of the market structure we are proposing. Some institutional credit grantors impose a constraint which relates the amount of debt to the consumer's wealth position. A consumer's wealth from the point of view of the credit grantor consists of assets which are acceptable to the credit grantor as collateral for a loan. Similar to the income constraint, credit grantors do not apply the same standards to the wealth constraint.

The wealth constraint and the income constraint are related. The wealth position of the consumer affects the rate at which the expected value of the consumer's future income available for debt repayment is capitalized. Hence, the lower the wealth position of the consumer, the smaller will be the maximum amount of debt the consumer can purchase, all other things equal. It follows that the consumer will be faced with the wealth constraint before he will be faced with the income constraint.

There is a third form of constraint that is imposed by all institutional lenders: the moral character of the consumer. Credit grantors consider the consumer's willingness to repay the loan a very important part of the credit analysis. But the degree to which an evaluation of the consumer's moral character is relied upon by credit grantors is related to the nature of the institutional lender. A financial institution which imposes a wealth constraint upon its borrowers will tend to rely less upon an evaluation of moral character than an institutional lender which relies upon the wealth constraint.

The basis for the structure of the consumer credit now takes shape. An imperfect capital market is a market in which particular credit grantors

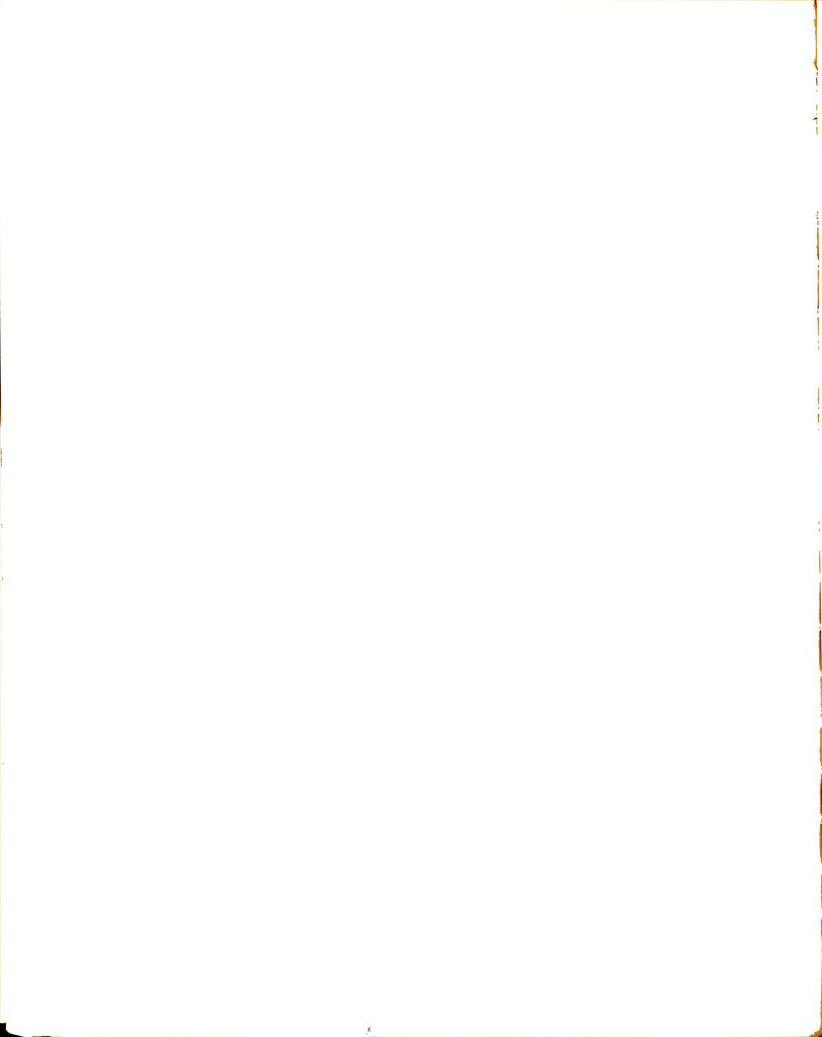


impose norms of behavior (constraints) upon consumers which vary from institution to institution. These institutional norms can be categorized as income constraints and wealth constraints. Imperfect capital market conditions arise because the wealth and income constraints are not applied consistently and because they are not internally consistent. The consumer who has acquired the maximum debt permitted by a credit grantor's wealth constraint must seek out lenders who impose only an income constraint in order to increase their debt outstanding. The capitalization rate will not be any lower than that which is indicated by consideration of income and moral character. For the income constraint and the wealth constraint to yield the same result, the institutional lender expects the consumer to possess a certain level of wealth. The greater is the difference between the actual and the minimum wealth required, the higher will be the capitalization rate.

#### Reasons for the Imperfection of the Market

Differences in institutional norms of behavior arise from two sources which may not be very unrelated as the reader will readily see. The unrelatedness of the two sources will be assumed, however, in order to introduce a number of factors which bear heavily upon the differences in institutional constraints.

The behavior of institutional lenders in the cash instalment loan market has evolved from their respective beginnings as specialized financial institutions. Contrasted with other forms of economic activity, financial institutions have long maintained a higher degree of specialization. When the concept of a multi-service financial





institution was introduced, financial institutions, as to be expected, tended to rely upon its experience and operating policies which had developed over the years of intensive specialization. The evolution of multiple financial services offered by a particular type of institution did not proceed at the same rate and did not originate from the same base of intensive specialization as that of other types of financial institutions. The result: institutional norms that are not identical.

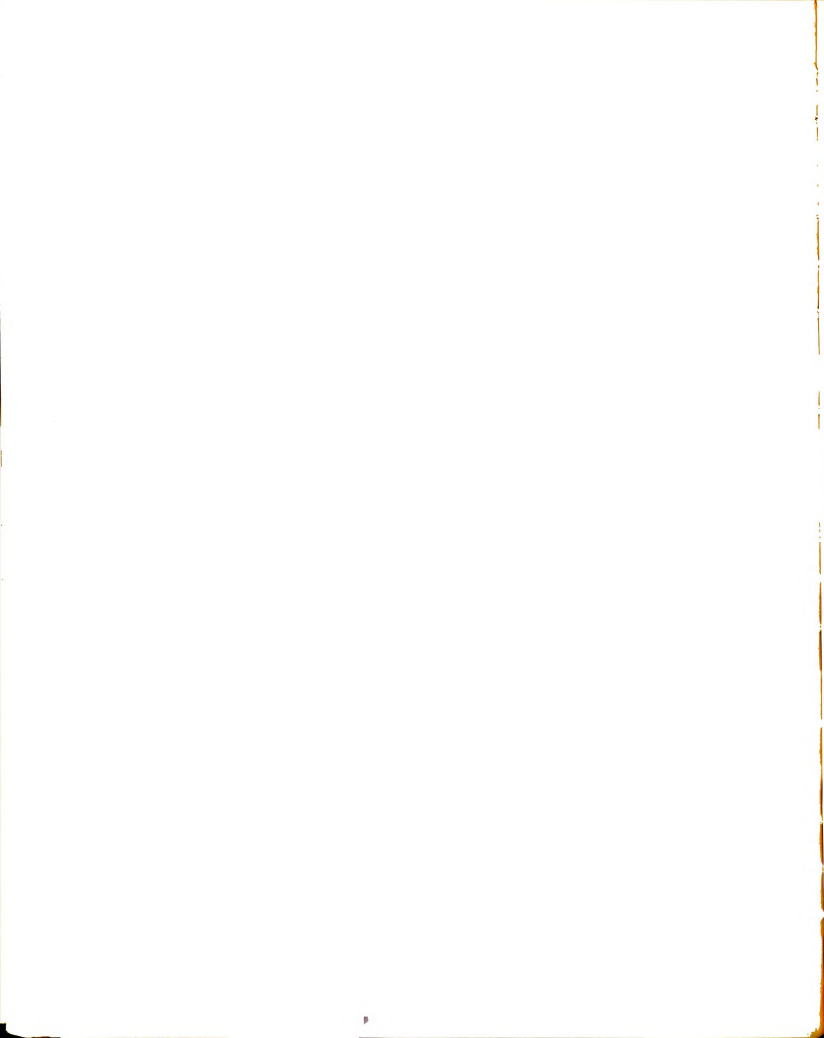
We can perceive of two basic steps in the evolution of the multi-service financial institutions. The first step for some types of institutions was the dramatic introduction of an unfamiliar financial service.

Although the profitability of such financing was attested in the records of consumer credit companies, which had long been accessible to banks, the latter were for years content to stand aside, allowing the business to be conducted almost entirely by specialized credit agencies whom they in turn partly or largely financed. One reason for their lack of interest in direct lending to consumers was that bankers were uncertain as to the amount of risk entailed in this sort of financing; another was the social stigma attached to it, which led banks to consider questions of community standing and public relations. More fundamental, perhaps, were other factors. The business of consumer instalment lending differs significantly from that traditionally engaged in by commercial banks: unit transactions are small, unit loan costs high, and the specialized lending and collection techniques required have been the subject of criticism when employed by other agencies. Finally, the state banking laws did not, in most states, specifically give banks the right to finance consumers on an instalment basis at charges in excess of statutory interest rates, so that doubt as to the legal status of bank activities in the field served as an additional restraining influence.<sup>1</sup>

It would have been certainly unusual were the commercial banks not to have applied the principles gained from long years of experience in the

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<sup>1</sup> John Chapman, op.cit., pp. 22-23.

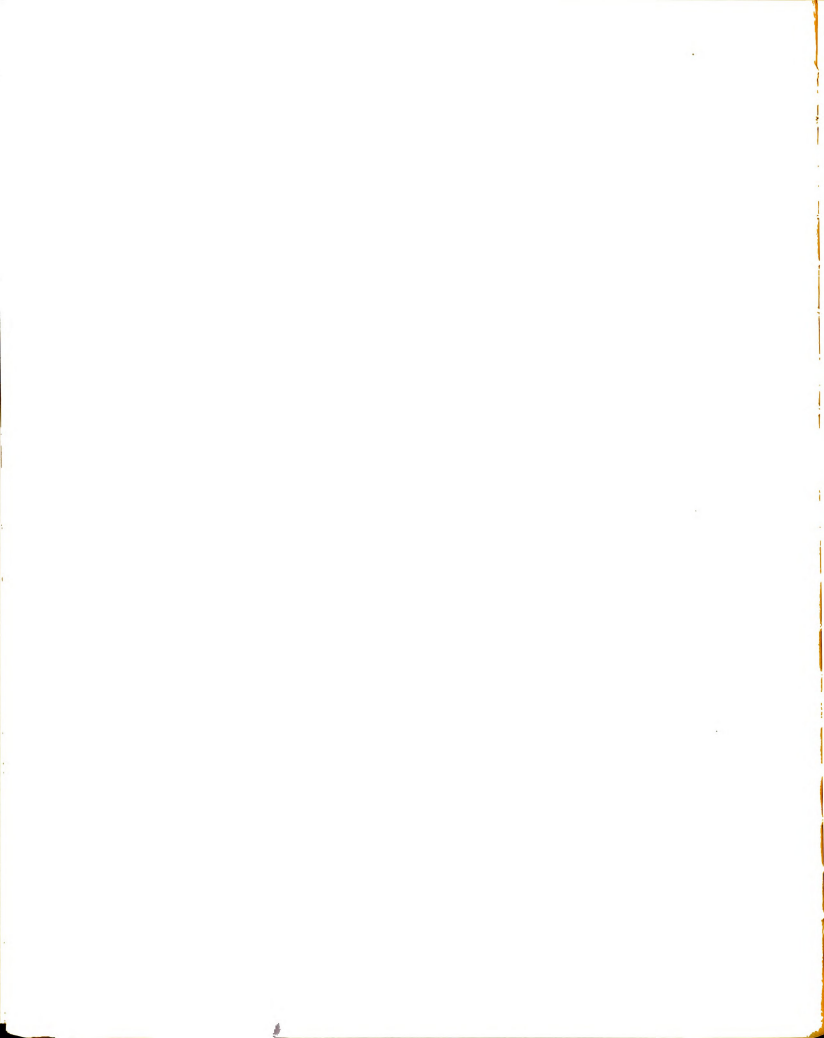


short- and intermediate-term market for business loans to their operations in the consumer instalment credit field.

The second step was less dramatic. It involved the almost natural expansion of services to related products. Thus, commercial banks introduced indirect consumer financing into their inventory of financial services following their entry into the market for direct loans to consumers. With respect to finance companies, some companies are adding direct loan services to their already extensive participation in the direct consumer loan market while others are doing just the reverse. Credit unions, too, have begun offering more varied loan services than previously. Inasmuch as the introduction of additional services of a related nature are not independent of the institution's existing services, operating principles tend to be transferred from one service to another until such time as the dynamics of the situation require the introduction of innovations which are radical departures from the operating principles which are a carryover from the concept of the financial institution as an intensive specialist in only one type of financial service.

#### Influence of Regulatory Policy

For a number of institutions, consumer finance companies and credit unions in particular, regulation in the consumer credit field was the creator of the institution. For other types, such as sales finance companies, regulation occurred after the institution had already entered the market. As a consequence, regulation was likely to resemble the socially acceptable modes of behavior already exhibited by the institution. Rate, loan size, term, and collateral considerations tended to



be formalized by the legislative process. But in either case, financial institutions now take as given the regulatory limits to their behavior. Their policies are formulated in accordance with those limitations.

The existence of a regulatory structure which varies from institution to institution is another reason for the existence of the market imperfections to which we have referred. The implications of the regulatory structure on market imperfections are manifested in two ways, particularly as the result of the regulation of the finance charge.

A rational credit grantor explicitly relates risk to the finance charge; for profit or wealth maximization is not independent of the degree of risk which is assumed. Consequently, a given rate of finance charge implies the credit grantor has assumed a conceptually precise degree of risk. But for the loan officer, concepts of risk must be given a more practical meaning. This is especially so for the institution which is faced with a rather low ceiling on the finance charge it is permitted. Consequently, the lower the ceiling on the finance charge, the more accurately must the credit grantor be able to determine the degree of risk which he is accepting. Subjective risk determination is not compatible with a rate structure which allows little room for error, even on a random basis. Conversely, the higher the ceiling, the less is the urgency of the credit grantor to determine risk precisely. A very high ceiling on finance rates encompasses a large number of risk classes. A low rate ceiling provides for only a few risk classes. The credit grantor is then required to carefully determine risk for a larger proportion of his borrowers than that which is necessary for the credit grantor operating under a higher ceiling.

Greater precision in determining risk is acquired through the use of a monetary concept of risk. That is, the amount of the potential loss must be estimated and controlled. For a given size of loan, an analysis of the borrower's credit-worthiness on the basis of his moral character is not sufficient. The potential loss of principal must be reduced to the point where the potential loss is consistent with the rate structure.

The employment of the wealth constraint is a useful method of reducing risk to manageable proportions; not only in terms of the psychological effect upon the borrower, but primarily because the exercise of a claim against wealth will reduce the absolute amount of loss the credit grantor can experience. The wealth constraint thus provides the credit grantor with the means to more accurately measure the risk he is contemplating accepting. Its use overcomes the inexactness of determining risk on the basis of the evaluation of the borrower's credit-worthiness.

The wealth constraint provides another benefit to the credit grantor who must operate with a low ceiling on the finance charge. The problem of uncertainty enters every credit decision. There is the uncertainty of making an error of judgement; the need to categorize borrowers into a relatively small number of risk classes is a source of a great deal of uncertainty. Time provides another source of uncertainty. The less "control" over the borrower the more uncertain the credit grantor is likely to be with respect to the borrower's willingness to repay the loan, given the risk class in which the borrower has been placed. The existence of uncertainty leads to the introduction of a subjective



probability system that tends to overstate the degree of risk that is accepted. Such behavior justifies a higher rate of charge by the credit grantor. By providing the credit grantor with more tangible control of the borrower, the accompanying degree of uncertainty will tend to be reduced sufficiently to permit the credit grantor to operate within the ceiling imposed by the public authorities.

The lower risk which accompanies a lower rate ceiling is manifested in another fashion: the level of costs of the credit grantor. The wealth constraint is used to limit the potential dollar loss from lending. That the use of this constraint results in the acceptance of better-risk consumers is reflected in the costs of lending; for collection costs and investigation costs are very likely to be lower the better the class of risk which the credit grantor accepts. The evaluation of risk solely on the basis of moral character is a costly procedure. The wealth constraint clearly limits the investment necessary to reach more accurate evaluations of risk. One would expect, therefore, that credit grantors who use the wealth constraint would display a cost structure which is below that of credit grantors relying mainly on borrower evaluation.<sup>1</sup>

#### Specification of the Market Structure

The preceding pages have outlined the foundation for the imperfections which obtain in the consumer credit market. It is to be

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<sup>1</sup>Paul Smith's study for the National Bureau indicates that credit costs are not identical among the various institutional lenders in the market for consumer instalment credit. For credit grantors using a wealth constraint, the level of costs appear to be significantly lower than that of other types of credit grantors. Paul Smith, op.cit.





recalled that these imperfections are not to be considered as obstacles to the efficient functioning of the market. On the contrary, these imperfections arise from sound economic bases and they do not prevent the market from functioning efficiently.

The remainder of this chapter is devoted to specifying the institutions in the market for consumer instalment credit and describing the manner in which this market functions. The emphasis, however, will be directed toward the consumer cash instalment credit market, for in this way, the functioning of the market can be clearly perceived.

### The Structure of Supply

The supply of consumer credit consists of two conceptually distinct groups of lenders: the primary lenders and the secondary lenders. The basis for the distinction arises from the differential behavior of credit grantors with respect to the use of the wealth constraint.

#### The Primary Lender

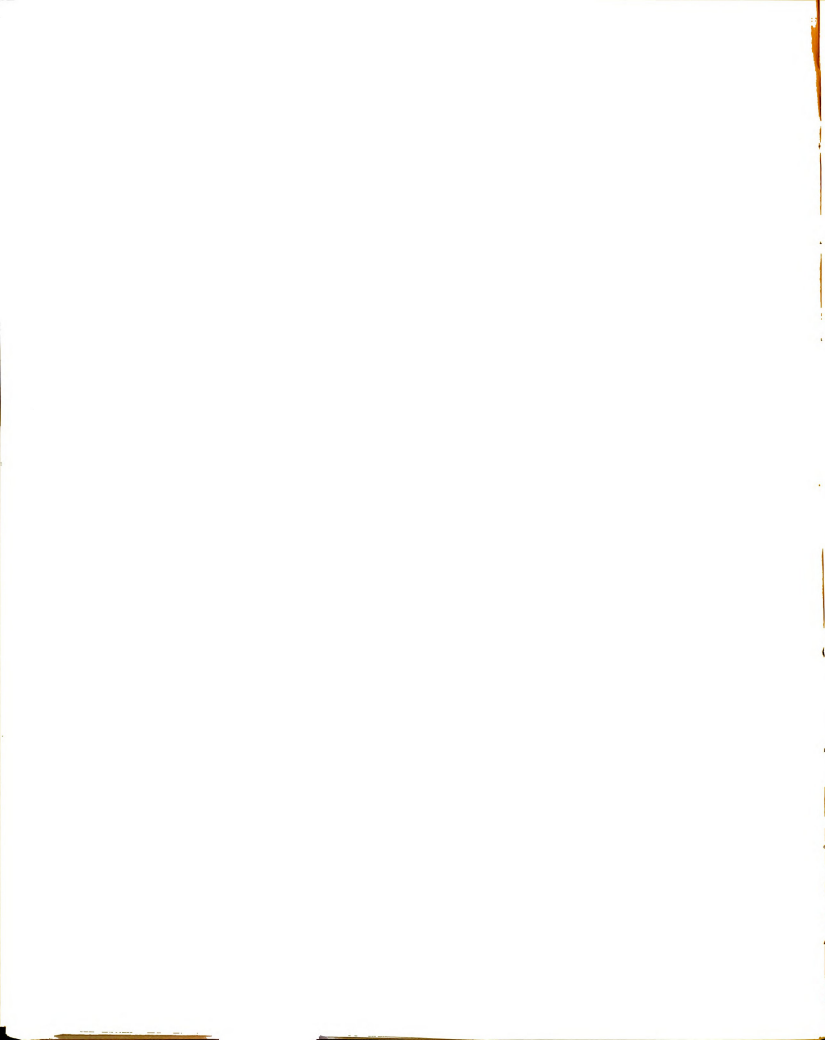
The primary lender is faced with a legal maximum rate of charge which requires the more precise measurement of risk associated with the monetary concept of risk. The wealth constraint is employed by the primary lender to meet this requirement.

The fact that most consumer instalment credit is used to purchase durable goods provides the lender with an additional means of reducing the risk of loss by default, a lien on the goods purchased.<sup>1</sup>

In addition, consumers with a store of liquid or marketable assets can obtain credit from a primary lender by pledging those assets as collateral.

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<sup>1</sup> Juster and Shay, op.cit., p. 11.

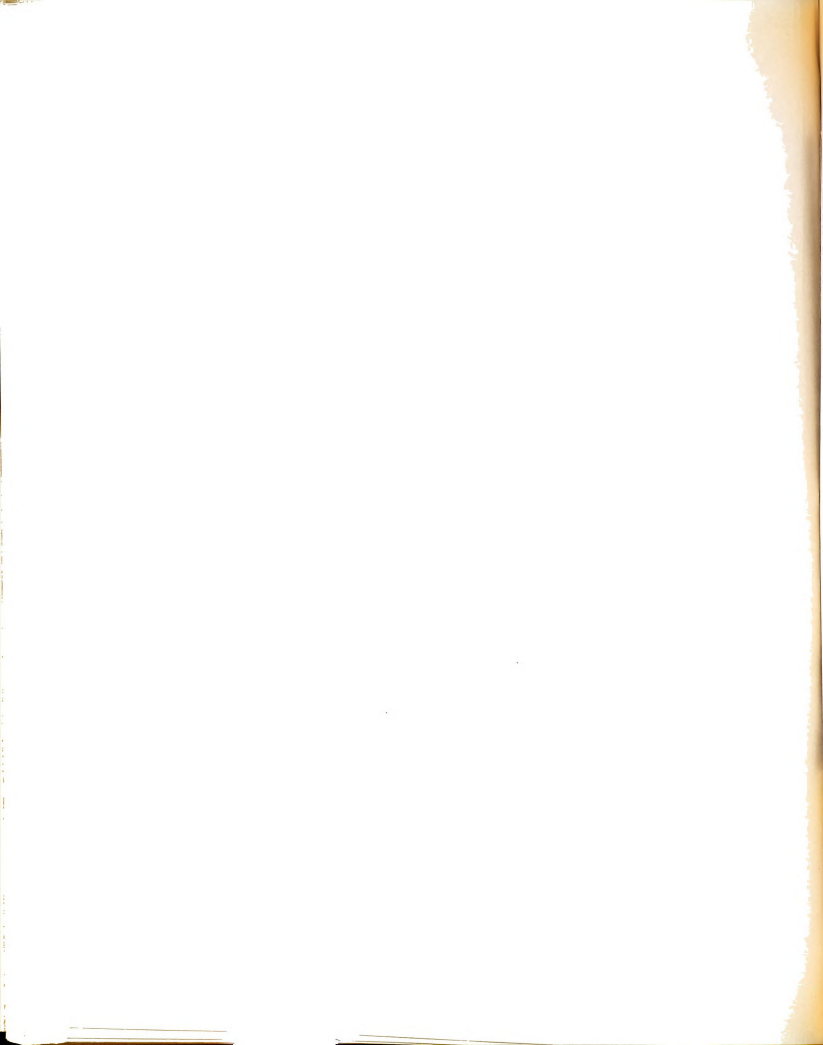


The fact that the primary lender requires access to the consumer's wealth in addition to being satisfied as to the consumer's willingness and ability to repay the loan distinguishes this type of lender from the other type of lender of which we shall speak shortly. And because primary lenders rely on being accessible to the consumer's wealth, their rates of charge will be lower than those imposed by the secondary lenders.

Juster and Shay seem to argue that the concept of a primary lender is limited to the single-payment consumer loan market.<sup>1</sup> Apparently, Juster and Shay felt that this narrow definition of a primary lender was necessary in order to fit the behavior of credit grantors to the behavior of consumers toward the finance charge, the nature of which they were studying. One source of difficulty is that the self-liquidating nature of instalment loans is itself a control of risk. But it does not go far enough in providing the credit grantor with a monetary concept of risk. The use of a wealth constraint in instalment loan transactions is equally necessary. The wealth constraint must affect all the terms of the loan arrangement. The length of the contract is affected by the expected disposal value of the collateral. The finance rate and loan size are also affected by the nature of the collateral. In short, all the terms of the loan agreement are not absolutely standardized by the credit grantor unless he expects the nature of the collateral he is accepting to be practically identical.

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<sup>1</sup> Ibid., p. 10. I use the phrase "seem to argue" because the authors, on page 1 of their monograph, refer to banks and sales finance companies as primary lenders. But their discussion of the wealth constraint on pages 10 and 11 differentiate between single-payment loans and instalment loans.



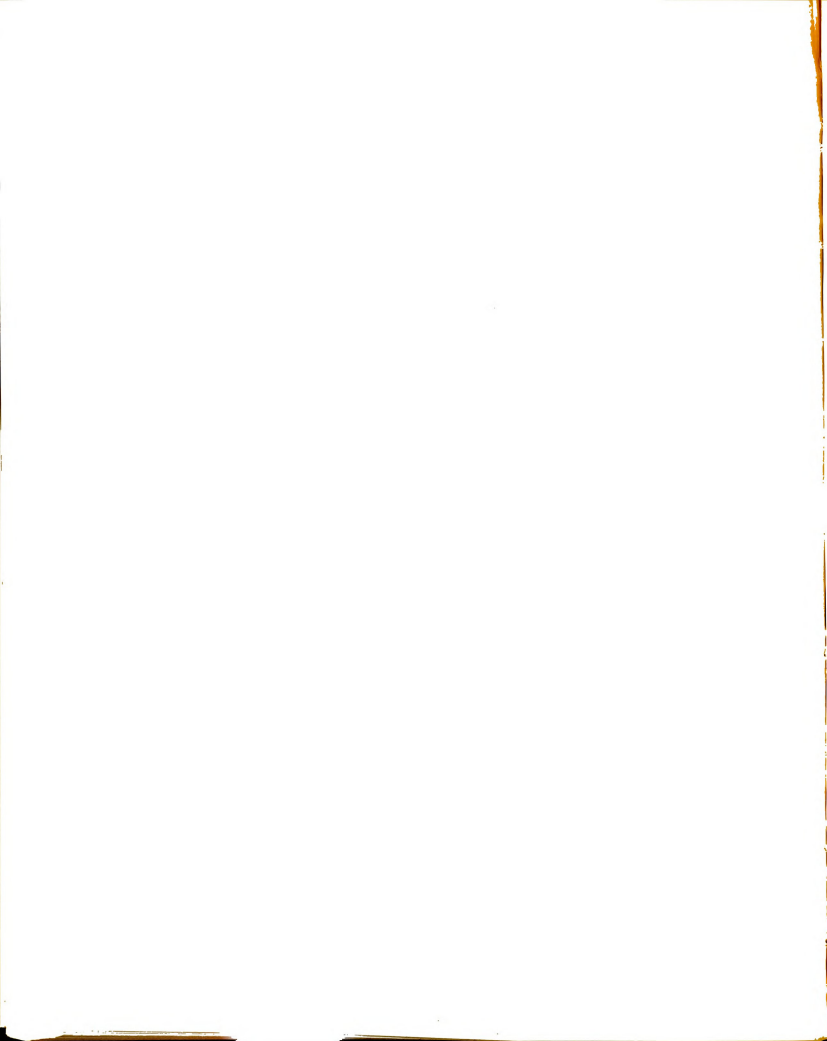
Commercial banks and credit unions are primary cash instalment lending institutions. Commercial banks and sales finance companies are primary indirect instalment lending agencies. This is the result of the fact that all three of these institutions depend upon collateral for the majority of their consumer lending business. With some variation, these institutions are faced with the lowest ceiling on rates of charge in the market.<sup>1</sup> To successfully operate within the legal ceiling on rates, these financial institutions must accurately define the risk they are accepting. As a result, they must be in a position to adjust the terms of the loan agreement such that risk remains consistent with the finance charge.

There are two important implications of the economic foundation from which these primary lenders operate. In the first place, cyclical changes in money costs are likely to have a strong influence on total costs of lending. The primary lender must be in a position to transmit these changes, especially upward changes, to his customers. The sensitivity of primary lenders to changes in money costs cannot be implemented unless the lenders can accurately correlate rate and money costs. The use of the wealth constraint is the foundation which permits the primary lender to effectively transmit changes in money costs to the demand-side of the market.

The ability to determine risk accurately is the basis for sound price discrimination in the market. That the confidence of the primary

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<sup>1</sup> This is exclusive of single-payment loans made by other financial institutions such as mutual savings banks and savings and loan associations.

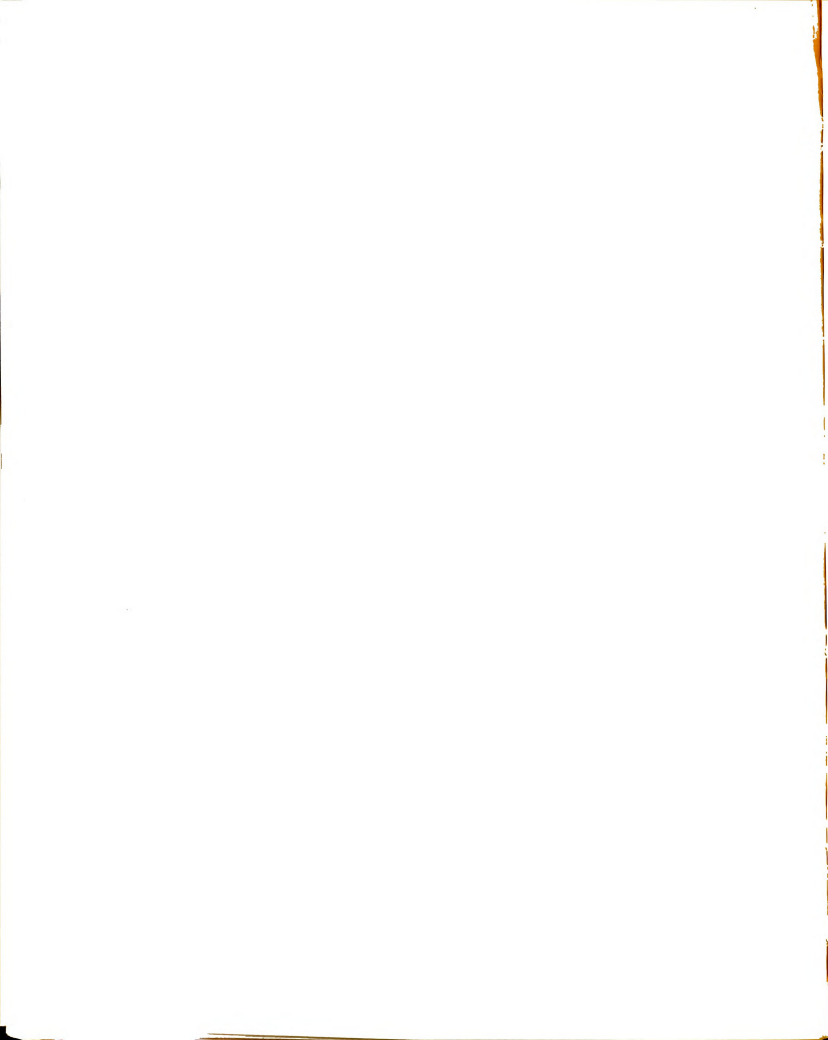


lenders to determine risk will vary from credit grantor to credit grantor is hardly a debatable point. If one lender in the market can charge a lower finance rate or offer more attractive terms to a borrower with a given conceptual risk, other primary lenders have a strong impetus to improve the manner in which they determine risk in order to maintain their share of the market of that given class of risk. In other words, the ability to discriminate is the foundation for competition among primary lenders. Given any degree of consumer sensitivity to the terms of the loan agreement including the finance charge, the primary lending element of the market structure of the consumer cash instalment credit market will be a highly competitive market. The legal ceilings which exist provide the impetus for such competition as long as market rates need not exceed the legal ceiling in order to ensure participation in the market by the lending institution.

#### The Secondary Lender

The secondary lender does not rely upon being accessible to the wealth of the consumer in making most of his credit decisions. Risk is measured by the pattern of the borrower's characteristics. For example, three credit-scoring systems in use by national consumer finance companies give no weight to the elements of the loan agreement: amount, maturity, and collateral. The much higher ceiling on the finance charge is the reason secondary lenders have no urgency to determine risk with the accuracy present in the case of the primary lender. Relying almost completely on the income constraint and the evaluation of the moral character of the applicant, secondary lenders



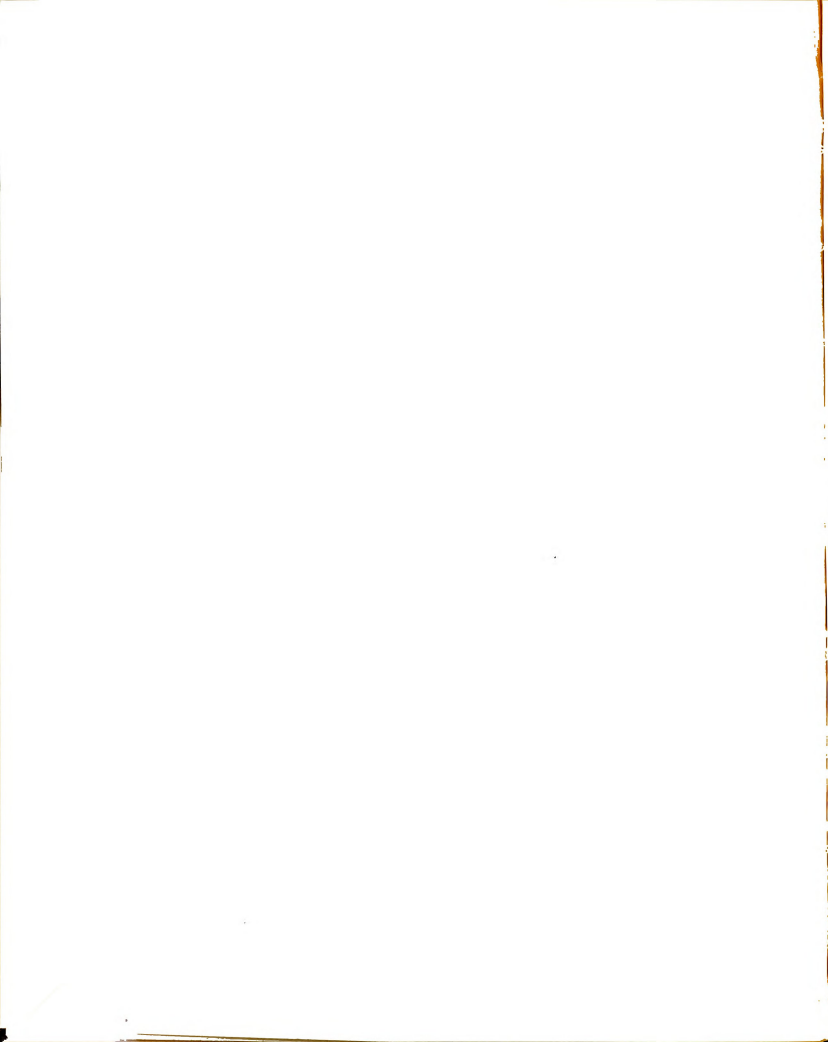


view collateral simply as a psychological weapon; there is little or no expectation that exercising claims against wealth will produce significant reductions of potential loss.

Because the income constraint is the only constraint employed by the secondary lender, the terms of the loan agreement are frequently more standardized than that which might be expected of primary lenders. The objective of the secondary lender is to arrange the terms of the loan such that the consumer's needs are met and the loan terms place no undue strain upon the consumer. The higher ceiling on finance charge and the less precise means of determining risk provide the secondary lender with the ability to make the loan arrangement as liberal as the borrower may require, the influence of the income constraint notwithstanding. Consequently, contract length and loan size will tend to approach the maximum permitted by the law.

The nature of consumer evaluation employed by the secondary lender does not provide a practical basis for rate discrimination. As a result, the finance charge of secondary lenders also will tend to approach the maximum permitted by the law. The tendency for the other elements of the loan agreement to approach their legal maximums also leads to the tendency of the finance charge to approach its maximum.

The nature of competition among credit grantors in the secondary segment of the market structure is unlike the competition which was described for the primary segment of the market. We have noted that rate competition is not very likely among secondary lenders. We have also noted that contract length tends to approach the maximum permitted. Thus, competition among secondary lenders, if it does exist, must take



a more subtle form. Geographical obstacles to competition notwithstanding, competition among secondary lenders will revolve partly around the income constraint employed by the secondary lenders. Similar to primary lenders, all secondary lenders will not determine the income constraint uniformly. Consumers concerned with their capacity to borrow can shop among the secondary lenders for the one who will offer the most satisfactory terms and/or the largest size of loan. Competition can occur in another subtle sense. Difference in evaluation may lead to adjustments in the loan terms. Consumers in relatively high risk classes may be able to find loan terms less restrictive with one secondary lender if they seek such a situation. Belief systems are bound to vary among secondary lenders. Thus, risky consumers may be able to stretch out the loan maturity with some secondary lenders. Or, when loan size is somewhat restricted because of high risk, the consumer may be able to find differences in the behavior of secondary lenders toward the maximum loan they are willing to grant him. The nature of the borrower and the nature of the secondary lenders leads to a more subtle form of competition than that which would tend to occur within the primary segment of the market structure.

#### The Structure of Demand

We noted in Chapter II that consumers may be categorized into two classes: rationed and unrationed. We noted further that the unrationed consumer, in effect, can acquire all of his debt capital from primary lenders because he has not exceeded the wealth constraint imposed by primary lenders. A number of reasons were cited for the situation of the unrationed consumer.

The rationed consumer, on the other hand, has been rationed by the primary lenders through the employment of the wealth constraint. To acquire further debt capital, these consumers must seek out secondary lenders. As Juster and Shay explained, these consumers tend to be insensitive to the finance charge since they recognize they must pay a higher price. This chapter has provided a rationalization for the higher finance charges in effect at secondary lenders from the supply side.

In order to understand the nature of this market structure fully the behavior of rationed consumers will be analyzed. There are two basic reasons for following this course. Firstly, rationed consumers must operate in both segments of the structure. Consequently, the study of their behavior will provide a more complete picture of the mechanism of the market. Secondly, perhaps most importantly, viewing the behavior of the rationed consumer will allow us to examine the structure of what we have called an imperfect market; for it is not the purpose of this theory of market structure to suggest that such a market structure produces obstacles to acquiring consumer debt capital which lead to exploitation of the consumer or an underallocation of resources to consumers. On the contrary, the market structure hypothesized here can be very fluid; consumers can be very mobile within the geographical limitations of the market. The structure that is hypothesized is based on the historical development of the participation of financial institutions in the consumer credit market and their concomitant regulation by government. It is a market structure based on sound economic principles exemplified by the income and wealth constraints.

### The Mechanism of the Market

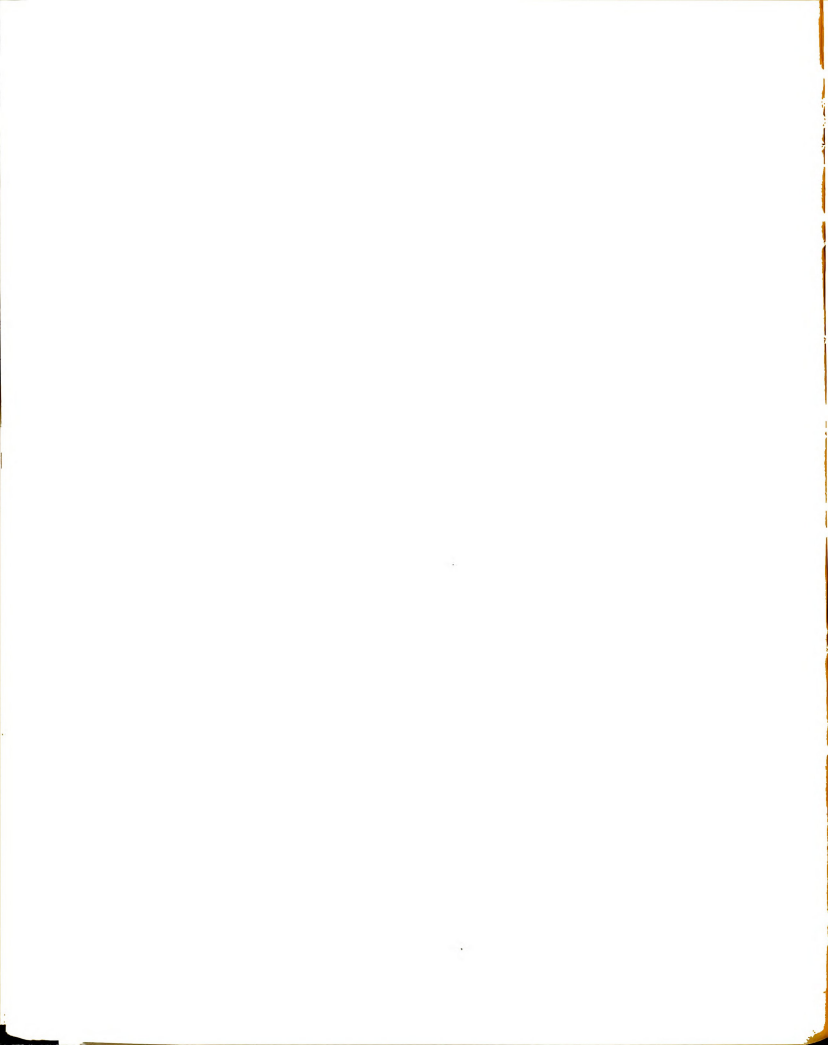
A consumer is never permanently rationed, although many consumers, no doubt, can be considered permanently unrationed. If the reason for borrowing is to purchase a specific durable good, the object of purchase may have collateral value acceptable to a primary lender.<sup>1</sup> As long as the consumer has not exceeded the income constraint, a primary lender decides on the basis of the present situation. If the loan is for the purpose of purchasing a durable good which possesses collateral value, the consumer, though previously rationed, may acquire the debt from a primary lender by permitting a claim against the durable good. In other words, any consumer can move between the two elements of the market structure, depending on his situation with respect to wealth at the time of borrowing.

For the consumer with little accumulated wealth, mobility between the elements of the market structure is quite important. For the most part, his ability to borrow from a primary lender depends almost exclusively on the object of purchase; that is, whether the object of purchase has collateral value or not. In addition, the primary lender will insist, in most cases, that the length of the contract be tied to the nature of the collateral in order to partially ensure that the amortization of the loan proceeds at a rate faster than the rate of depreciation of the durable good.<sup>2</sup> As a consequence, the consumer with

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<sup>1</sup>The nature of the secondary market for the durable good is the key to its acceptability by the primary lender. The degree of acceptability can vary from time to time for a particular durable good and it can vary from durable good to durable good.

<sup>2</sup>Deviations from the relationship between loan amortization and asset depreciation imply more risk. The primary lender will adjust the finance rate to account for such deviations.



little accumulated wealth will rapidly approach the maximum debt which would be permitted by the wealth constraint. Credit needs for non-durable purchases must be financed with the secondary lenders segment of the market structure. In order to avoid the undue strain of a very high monthly payment to monthly income ratio, the consumer will seek loan terms which tend to stretch out to the maximum permitted the secondary lender by the law. Inasmuch as the finance charge of secondary lenders tend toward the maximum permitted by the law, any increase in risk which accompanies the extension of contract maturity is compensated by the high rate ceiling for most cases.

Consumers with existing wealth can be provided with their credit needs almost exclusively by primary lenders. When borrowing is for the purpose of purchasing non-durable goods and services, permitting the primary lender a claim against existing wealth will result in accommodation by the primary lender. Of course, the nature of the existing wealth will determine the degree to which the primary lenders will extend credit to this type of consumer. Although existing wealth may permit the consumer to acquire all of his needed debt capital from a primary lender, there is some limitations imposed on his freedom because the terms of the loan are tied to the nature of the collateral. As a result, a consumer with existing wealth may need to seek a longer contract or a higher loan to collateral value ratio than the primary lender would ordinarily be willing to grant. Offering to pay a higher rate will usually permit the consumer to attain his objectives. Thus, for some proportion of the consumer population, the primary lender will need to behave as a quasi-secondary lender if he wishes to acquire a





share of this market. And in this case, the existence of secondary lenders serves as an upper limit to the conditions a primary lender can impose upon a consumer of this type. Thus, mobility within the structure of the market is evident although it is not employed by the consumer.

Finally, there is another group of consumers whose store of existing wealth is large and highly liquid or marketable. These consumers can acquire debt from primary lenders at the lowest rates in the market and on a single-payment basis. These consumers are truly unrationed. The combination of a limited need for debt capital and a large store of liquid or marketable assets marks these consumers as the lowest risk group of the consumer population.

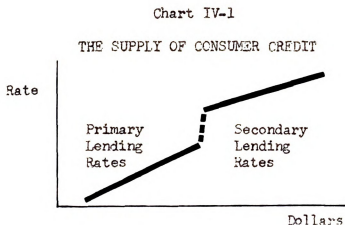
Most consumers have access to primary lenders at one time or another with few exceptions; for the need for a secondary lender does not arise until the existing wealth of the consumer is not sufficient to be acceptable to the primary lender. In addition, access to a primary lender will diminish as the needs of credit are directed toward the purchase of non-durable consumer goods. The secondary lender's share of the market rests upon the nature of the accumulated wealth of the consumer population and the relationship between demand for consumer credit and the demand for consumer durable goods.

#### Summary

This chapter has established a basis for distinguishing between two types of lenders. The basis for the distinction is the preference of the primary lender to be accessible to the wealth of the borrower

in order to accurately relate risk to yield. In short, the nature of the collateral is an integral part of the credit decision of the primary lender. The secondary lender, on the other hand, has no such preference for accessibility to the consumer's wealth. He almost completely relies on the characteristics of the borrower in making credit decisions.

As a result of this distinction, the supply of consumer credit may be depicted as in Chart IV-1.



Conceptually, there is a significant difference between the highest rate charged by the primary lender and the lowest rate charged by the secondary lender. This is the result of distinctly different bases for determining risk by each of the two types of lenders. The source of the difference in the respective levels of the finance rate is the different methods of risk determination and the differing levels of uncertainty which accompany them.

#### Cash Credit vs. Instalment Sales Credit

In Chapter I we established a basis for distinguishing between the cash instalment loan segment and the instalment sales credit segment of the consumer credit market. The basis for the distinction was twofold:

the differences in the form of the contract, and the differences arising from the participants to the contract. We can now establish that these differences are, for the most part, superficial.

Instalment sales contracts generally take two forms: the chattel mortgage and the conditional sales contract. In either case, the borrower is not free to dispose of the durable good as he chooses until the loan balance has been paid off. The primary lender, whether he participates in the indirect or direct segment of the consumer credit market operates on the same principles. Legal differences in form are superficial.

Many primary lenders participate in both the direct and indirect segments of the market. As we have previously discussed, operating principles tend to be transferred from one related function to another. The use of the wealth constraint need not be altered to be suitable for application to the indirect segment of the market. The role of the commercial bank in both the direct and indirect segments of the market best illustrates the interrelatedness of these two segments with respect to the use of the wealth constraint. The existence of these two methods of consumer financing are the result of historical relationships which are an integral part of the evolution of financial institutions in the consumer credit market.



## CHAPTER IV

### THE MARKET THEORY AND INSTITUTIONAL FUNCTIONS

This is a transitional chapter whose purpose is to lay the foundation for the analysis of the approved loan applications at three consumer cash instalment credit grantors: the credit union, the commercial bank, and the consumer finance company. To do this, the chapter will be divided into three sections. The first section discusses the relationship between risk-bearing and market functions, for the test of the theory involves the analysis of loan and borrower characteristics as the means of describing the behavior of institutional credit grantors. The second section discusses the behavior of indirect credit grantors in order to establish a basis for focusing upon the activities of cash instalment credit grantors as a means for examining the validity of the market theory. The last section of the chapter is devoted to developing the hypotheses that will be tested in Chapters V and VI.

#### Risk-Bearing vs. Market Functions

The nature of the market structure developed in Chapter III was based on the differential behavior of institutional lenders with respect to the concept of risk determination. But the segmentation of the market for consumer credit is not manifested, in the real world, in terms of risk considerations. The concept of risk is too indefinite for successful operating behavior in the market. The institutional credit grantor seeks some other basis with which to attract desirable applicants. The need to seek some other basis to attract customers is largely due to the fact



that consumers are sufficiently unaware of risk concepts to shop intelligently for credit on the basis of the risk-bearing function of the institutional lenders. In addition, the uniqueness of each consumer is such that credit grantors would find it very costly to pattern market behavior directly on the basis of risk considerations.

In general, the consumer does not conceive of himself as being associated with a given degree of risk. The search for a credit grantor is related to the financing functions which the consumer believes the various types of credit grantors perform. Juster and Shay detected the existence of institutional knowledge on the part of the consumer population in general:

Despite the lack of rate knowledge, consumers seemed to know that certain types of credit are more costly than others. For example, consumers' estimates of the rates, as well as actual rates, tended to be higher than average for credit transactions for purchasing furniture, lower than average for transactions involving automobiles, and higher than average for small amounts of credit. This degree of knowledge is termed "institutional."<sup>1</sup>

It appears reasonable to suppose also that consumers are aware of the types of institutions to which they may apply for credit for specific purposes and the circumstances under which they may receive favorable treatment. The consumer, to reiterate, conceives of a financial institution, not as selective with respect to risk, but selective with respect to the goods it will finance or the other circumstances which surround the application such as the characteristics of the borrower and the attitude of the credit grantor toward the various aspects of the loan terms. The view of the consumer toward the institutional<sup>1</sup>

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<sup>1</sup>Juster and Shay, op.cit., p. 3.



supply of credit is functional in nature rather than abstract.

The functional point of view also prevails on the supply side of the market. Although fundamental segmentation of the market may be based upon differing concepts of risk, operating behavior translates risk considerations into more functional lines. The various lending activities which a credit grantor may pursue are made known to the public by means of identification with the goods and services the credit grantor is willing to finance or the circumstances under which he is willing to accommodate a consumer. Regardless of the manner in which the particular credit grantor may conceive of risk, his operating behavior will be divulged in terms of the lending functions he is willing to perform. A consumer will not be rejected because he is an unacceptable risk, but because the use to which the funds will be put or the circumstances surrounding his application do not coincide with the lending functions of the institutional credit grantor. In fact, the credit grantor often will offer a loan arrangement to the consumer that would be consistent with the credit grantor's lending functions but unacceptable to the consumer. Thus, the consumer often will turn down the arrangement offered by the credit grantor.

Because market behavior is manifested along functional lines rather than risk concepts, the observation of the loan borrower characteristics at various types of credit grantors should prove to be an accurate means of determining credit grantor behavior. Moreover, examining the functional aspects of institutional lender behavior also provides the means whereby the source of credit grantor behavior can be determined. Thus, the credit grantor whose loans are always secured by high-quality collateral



does employ the concept of risk consistent with that of a purely primary lender. It is because of the relationship between risk-bearing and market function that this study will analyze the loan and borrower characteristics of approved loans in order to determine the nature of the credit grantor with respect to his role in the consumer instalment credit market structure.

#### Nature of Indirect Lending Activities

The nature of the consumer instalment financing performed by sales finance companies and the indirect sales financing performed by commercial banks would provide no insight into the functioning of the market as postulated in this study. Because collateral is involved in every financing transaction, these types of lenders would be identified as primary lenders. Actually, the situation is not that lucid that observation of loan and borrower characteristics would yield no results. On the contrary, these lenders often face the decision that is faced by cash instalment credit grantors with respect to the relationship between borrower characteristics and loan characteristics. Consequently, it will be worthwhile to examine the nature of indirect instalment lending to demonstrate that, although this type of lender often faces decisions analogous to those of direct cash credit grantors, including them in a sample of credit grantors will not produce useful results.

#### Typical Indirect Finance Behavior

Because of the nature of the lender-debtor relationship in indirect finance, the sales finance company must function as a primary lender in

in the typical transaction:<sup>1</sup>

In the typical sales finance transaction the commodity is the collateral or physical security for the loan, and upon default of payment the seller-lender has the right to seize and resell the commodity.<sup>2</sup>

The durability and resale value of the commodity itself are unquestionably important factors, since it is an accepted principle of instalment financing that the commodity purchased shall be the security for the loan.<sup>3</sup>

The primary lender usually is assumed to consider solely the nature of the collateral and its relationship to the other aspects of the loan: finance rate, down payment, and length of contract. There is little tendency to evaluate the borrower's characteristics. But the durability and resaleability of the commodity to be financed are the keys to the extent to which the indirect credit grantor will rely on the collateral in determining his risk. He will tend to give greater weight to the borrower's characteristics the more unstable the resaleability of the commodity, and also, the less durable is the commodity. Inasmuch as resaleability and durability vary among the commodities credit grantors will finance, the behavior of indirect credit grantors will vary with respect to the weight given the characteristics of the borrower in evaluating the opportunity to lend.

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<sup>1</sup>Actually, the sales finance company and the sales finance operation of commercial banks are indicative of the purely primary lender only when consumer goods are financed in conjunction with a repurchase or recourse agreement with the dealer. Otherwise, another element enters the transaction: the lender-dealer relationship.

<sup>2</sup>Wilbur C. Plummer and Ralph A. Young, Sales Finance Companies and Their Credit Practices (New York: National Bureau of Economic Research, 1940), p. 48.

<sup>3</sup>Ibid., p. 133.

The underlying consideration is of course the possibility that repossession and resale will become necessary; in that case the avoidance of loss depends largely on the durability of the commodity. But the importance attached to durability and resale value necessarily varies from one type of commodity to another, roughly in accordance with the original cash selling price. This explains why factors relating to collateral security are given more weight in automobile than in diversified financing.<sup>1</sup>

Credit grantors, particularly indirect credit grantors, are aware of the relationship between the commodity's durability and resaleability and the need to give greater weight to other factors which are a part of the financing arrangement.

An official of an automobile sales finance company declared in an interview on this subject of credit standards that his company had formerly relied primarily on resaleability, down payment, and length of contract, but the instability of the used-car market in recent years, also the dealers' demand for smaller down payments and longer contracts made it necessary to give increasing consideration to factors concerning the purchaser himself--his income, his occupation, the ratio of monthly payment to monthly income, and the permanence of his employment.<sup>2</sup>

To sample the loan applications of indirect credit grantors would not produce measurable results. The variation of specialization in financing durable goods purchases by indirect credit grantors would create a situation that could not be interpreted with any degree of confidence unless the sample was stratified on the basis of the types of durable goods these lenders finance. Consequently, the empirical evidence to be presented as examples of the behavior of credit grantors will be taken from the cash instalment credit segment of the consumer instalment

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.

credit segment of the consumer instalment credit market. It is in this market that credit grantors can freely associate themselves with either the risk concept of the primary lender or the risk concept of the secondary lender or a combination of the two concepts that occurs in the case of the truly diversified lender.

#### Personal Loans

Because attention will be focused entirely upon the cash instalment credit segment of the market, it will be useful to clarify the concept of a personal loan and the problems it presents for the analysis to be pursued in the following two chapters.

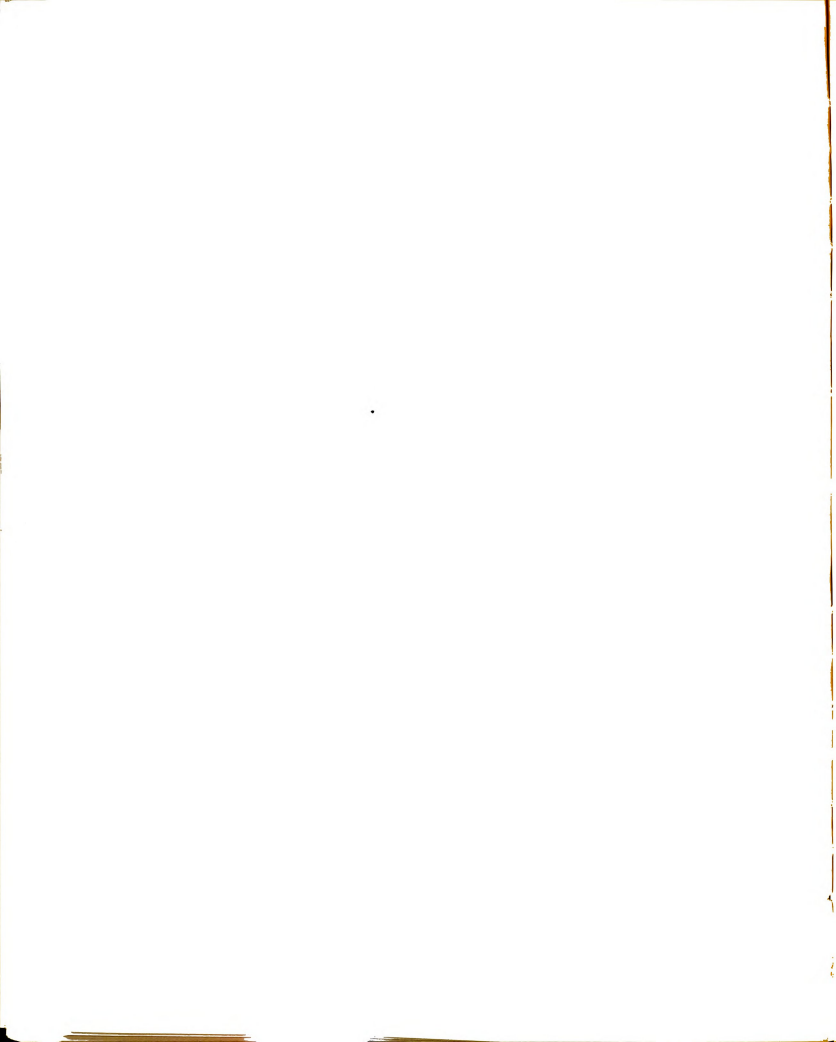
The Federal Reserve System, for purposes of statistical analysis, define personal loans as follows:

"Personal loans" include all instalment loans not covered in the previous categories made by financial institutions to individuals for consumer purposes. Most of these loans are for such purposes as consolidation of consumer debts, payment of medical, educational, or travel expenses, and payment of personal taxes or insurance premiums. Some personal loans are used for the purchase of consumer goods but they are not included under "automobile paper" or "other consumer goods paper" unless they are secured by the goods purchased.<sup>1</sup>

Part of the data to be presented in this study are, for the most part, derived from a sample of the personal loans granted by credit unions, commercial banks, and consumer finance companies in Lansing, Michigan. Loans for the purchase of consumer durable goods are included in the data of some of the institutions sampled due to the manner in which their credit applications are filed. In addition, consumer finance

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<sup>1</sup>"Revision of Consumer Credit Statistics," Federal Reserve Bulletin (April, 1953), p. 341.



companies and credit unions cannot participate in the indirect segment of the instalment credit market. Thus, it is an integral part of this analysis to reveal the extent to which these two institutions extend credit for the purchase of consumer durable goods. Finally, in many cases it was not possible to determine whether the loan was used for the purchase of the commodity which does appear as collateral for the loan.

Given these shortcomings, however, the analysis of the personal loans made by the aforementioned institutions does provide a foundation for evaluating the nature of the cash instalment credit segment of the market for consumer instalment credit; for it is with respect to this segment of the market that consumer lending institutions are free to formulate their policy with respect to the manner in which they shall determine risk and the lending functions they will perform.

#### The Hypotheses

In order to test, by example, the theory of the market structure presented in Chapter III, two hypotheses will be offered. These hypotheses concern the emphasis lenders place upon the characteristics of the borrowers and the emphasis lenders place upon the characteristics of the loan. It will be shown, however, that the observation of credit grantor behavior cannot be tested with respect to the characteristics of the borrower. And it is to this purpose, in addition to stating the two hypotheses, that this section is devoted.

#### Behavior of the Secondary Lender

The role of the secondary lender, defined in Chapter III, is to



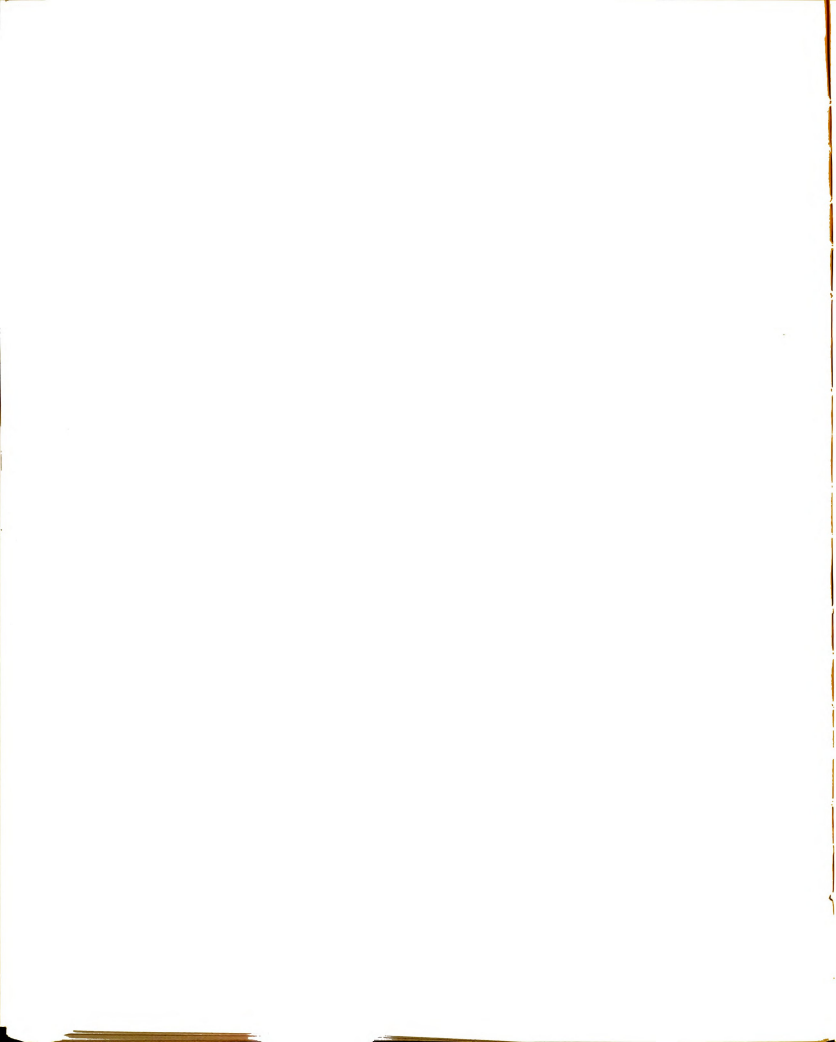


provide a source of cash instalment credit to rationed consumers; consumers who lack the wealth necessary to acquire credit from primary lenders. Because the secondary lender will not be accessible to a consumer's wealth to the degree necessary to function as a primary lender, the secondary lender must determine the consumer's creditworthiness on the basis of his personal characteristics. It is the pattern of these characteristics which determine the consumer's creditworthiness. But is this pattern invariant among consumers such that it can be observed? It will be argued here that the answer is negative, and the hypothesis to be tested in Chapter IV is based on that conclusion.

Unable to focus upon collateral considerations as the basis for risk evaluation, the secondary lender must employ a less precise (and more uncertain) means of risk evaluation. The existence of a rate structure higher than that of the primary lenders permits the secondary lending institutions to engage profitably in this segment of the consumer instalment credit market.

Specifically, the secondary lender employs an ordinal concept of risk. Consumers are ranked by a scale of risk. The secondary lender need only be watchful of consumers whose index of risk exceeds that which is consistent with the maximum rate of charge which secondary lenders are permitted and which they usually charge.

Not all loan applications received by consumer finance companies are approved. In the industry, the ratio between loans made and applications received tends to vary widely from one loan office to another, and even within the same office it will change from time to time because the composition and quality of applications is far from uniform. Managers state that credit analysis for small loan customers is more art than science; and as a result of the nebulous nature of



this analysis, judgement of the borrower's character becomes very important. However, objective financial data are required also to determine capacity or ability to pay. Usually the applicant must list such personal information as salary, name of employer, number of years on the present job and in the city, major assets owned, such as a house or car, and also all present indebtedness. The application generally is accepted if the applicant had previous dealings with the office and has established a good credit rating through prompt repayments. If the applicant is new, the loan will usually be made if he passes the "ability" and "willingness" tests to the satisfaction of the manager.<sup>1</sup>

Although the consumer finance companies are most typical of the secondary lender concept asserted in this study, the commercial banks or the credit unions are by no means excluded. On the contrary, it is one of the objectives of this study to indicate that differentiation by type of institutional organization leads to inflexibility in thinking through some of the problems connected with the consumer instalment credit market.

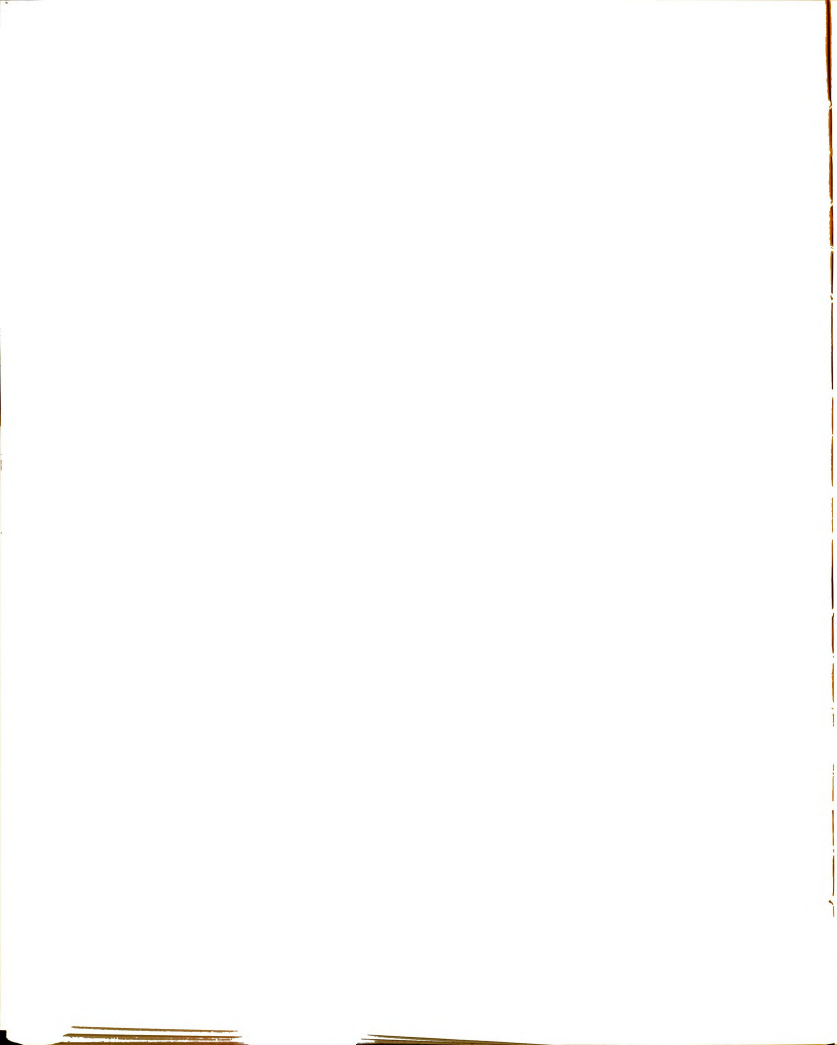
It is not true, on the other hand, that all consumer finance companies are necessarily secondary lenders. The reason has to do with the effect of maximum loan ceilings on the behavior of credit grantors.

The difference between the purpose served by credit from the consumer finance company and that from other lenders is easily explained. The legal loan ceiling for consumer finance companies (in Michigan) is too low to provide the amount of funds necessary for purchase of major durable goods such as automobiles. While multiple loans from separate licensees offer a legal possibility to the borrower, the higher rate on the first \$300 of each loan would make the total interest burden excessively heavy compared with alternative sources of credit (parentheses added)<sup>2</sup>

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<sup>1</sup> Thomas G. Gies, Cedric V. Fricke, and Martha Segar, Consumer Finance Companies in Michigan (Ann Arbor, Michigan: Bureau of Business Research; The University of Michigan, 1961), pp. 39-40.

<sup>2</sup> Ibid., p. 4.



If the consumer finance companies cannot extend credit for the purchase of durable goods that are acceptable collateral in the sense that it becomes the focal point for risk determination, then these companies have little choice but to function as secondary lenders. Thus, the wealth of the consumer to which a consumer finance company can be accessible can hardly serve as a basis for the type of risk determination which we have associated with the primary lender.

While many loans are unsecured signature notes, collateral is sometimes required. Lenders state that collateral requirements are made principally for their psychological effect upon the borrower rather than for their value as a source of loan repayment.<sup>1</sup>

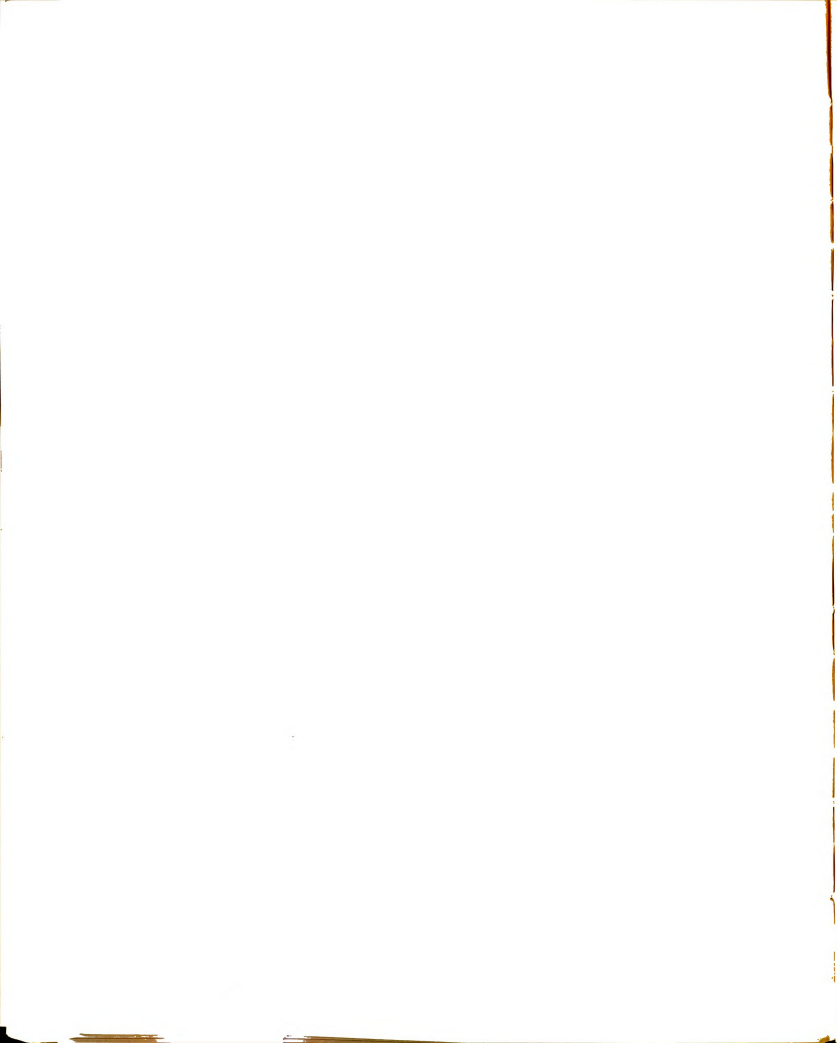
That collateral considerations are not a major part of the secondary lender's evaluation of creditworthiness is evidenced by the recovery rates resulting from the disposal of collateral security by consumer finance companies. The annual reports of two state agencies charged with the regulation of consumer finance or small loan companies furnish appropriate examples. In Illinois, for 1963, household goods surrendered voluntarily by borrowers were sold in 395 cases realizing 18.99 percent of the amount due.<sup>2</sup> However, 30.40 percent of the amount due was recovered from the sale of automobiles taken as collateral for loans by licensees in Illinois during 1963.<sup>3</sup> The maximum loan permitted to be granted by consumer finance licensees in Illinois is \$800.

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<sup>1</sup>Ibid., p. 40.

<sup>2</sup>1963 Analysis of Reports (Springfield: Division of Consumer Finance; Department of Financial Institutions, State of Illinois, 1964), p. 6.

<sup>3</sup>Ibid., p. 7.



The report of small loan licensees in the state of Indiana for 1963 states that the sale of chattels produced net proceeds of \$1,469,680 to be applied against a principal due of \$5,289,218.<sup>1</sup> This is a recovery rate of 27.8 percent on chattels which consist of household goods, motor vehicles, and other chattels. The maximum loan for small loan licensees in Indiana is \$2,000.

A number of states, however, provide for very high loan ceilings for the consumer finance companies. Missouri, for example, has no provision in its law for a maximum loan ceiling.<sup>2</sup> California sets the maximum loan at \$5,000.<sup>3</sup> For these two states, consumer finance companies can function in the primary lending segment of the market because they can finance the purchase of durable goods such as new automobiles that are sufficient for the purposes of focusing upon the collateral as the means for risk determination.

#### Borrower Characteristics

The fact that a secondary lender must rely upon the income constraint and the evaluation of the applicant's characteristics in granting credit to consumers does not imply that a specific pattern to the borrower's characteristics will manifest itself. There are two reasons why a secondary lender will not exhibit an observable preference for a certain pattern to the borrower's characteristics. Firstly, a profile of a rationed consumer cannot be constructed. Given the borrower's

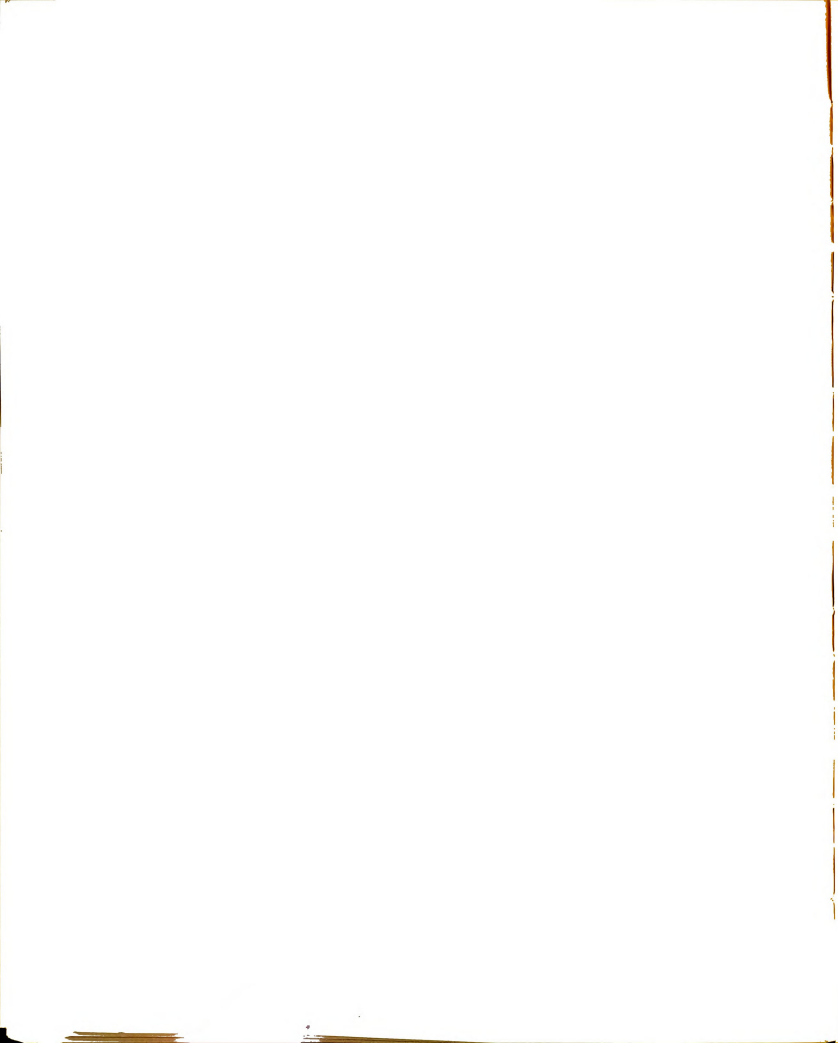
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<sup>1</sup> Annual Report and Roster of Small Loan Licensees, December 31, 1963 (Columbus: Small Loans Department; Division of Securities; Department of Commerce; State of Ohio, 1964), p. 6.

<sup>2</sup> Consumer Finance Companies in Michigan, op.cit., p. 66.

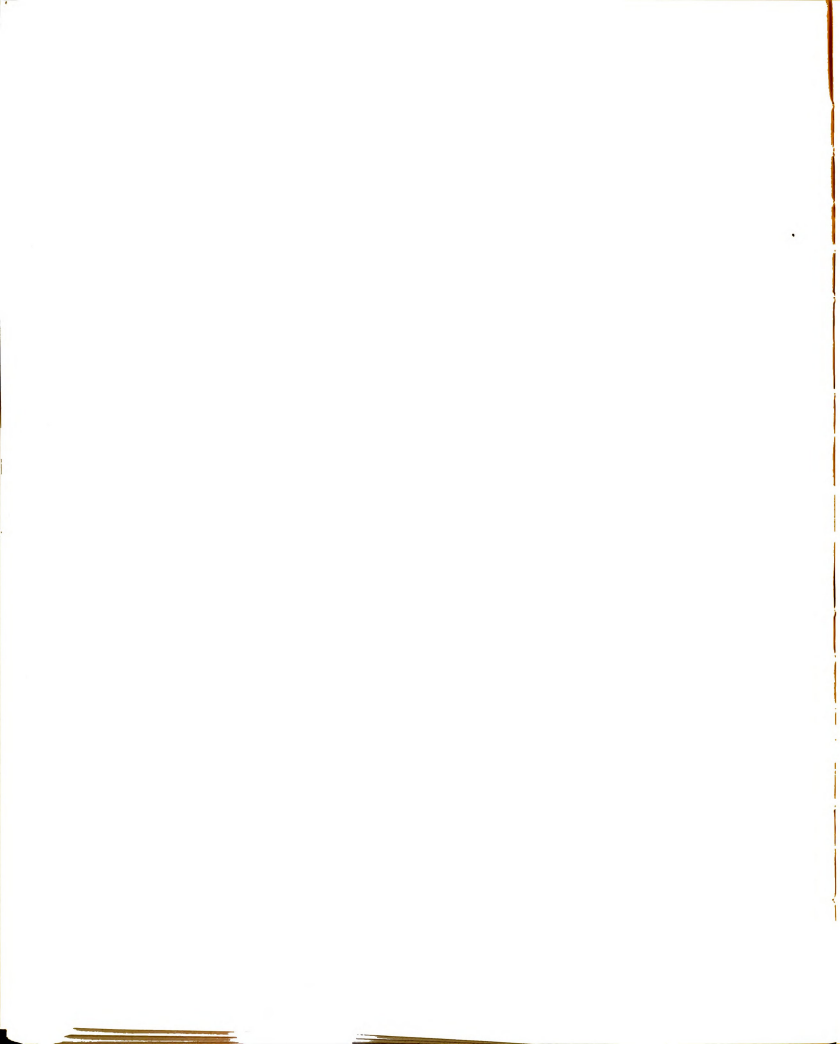
<sup>3</sup> Ibid.





income, the fact that he is a rationed consumer cannot be discerned from an examination of the other of his characteristics such as age, number in family, residential and employment stability, etc. Even with respect to a consumer's liabilities, there are difficulties of classification; for the consumer may gain access to a primary lender at almost any time by purchasing a commodity that will be acceptable to a primary lender as security for the loan.

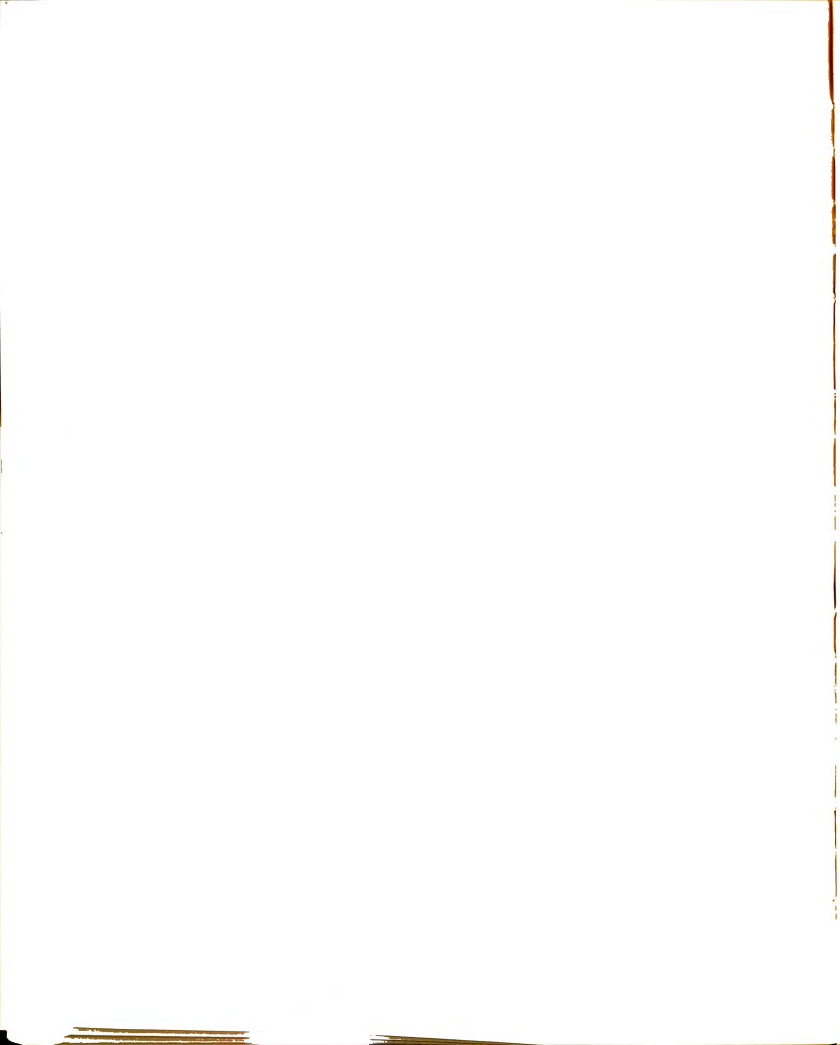
Secondly, the indefinite manner in which the secondary lender determines risk does not result in a preference for a certain pattern to the consumer's characteristics. The willingness to repay a debt is not manifested in a definite pattern to the consumer's characteristics. The credit-rating is the most important indication of the consumer's willingness to repay his debts. Supported by a higher rate structure, the secondary lender need only be watchful of applicants whose pattern of characteristics including his credit-rating does not justify the extension of credit even at the high rate of charge he is permitted. Thus, the lack of residential stability may be offset by a large degree of employment stability, undesirable occupational classification may be offset by older age, etc. since it is an index of risk which the secondary lender seeks. In short, the secondary lender need not express a preference for a certain pattern to the borrower's characteristics. Rationed consumers do not possess similar patterns of characteristics and the indefiniteness with which risk is determined does not require the expectation of a certain pattern to those characteristics.



### Factors Distinguishing Lenders' Behavior

The discussions of this chapter lead to the following hypothesis: primary and secondary lenders in the market for consumer cash instalment credit cannot be distinguished on the basis of borrower characteristics. Neither function requires the expectation of an observable preference for a certain pattern to the borrowers' characteristics. This hypothesis will be tested in the succeeding chapter.

If this hypothesis is correct, the basis for distinguishing among credit grantors in the market must lie with the characteristics of loans granted. Loan size, loan purpose, maturity, rate and collateral characteristics are the basis for the classification of credit grantors into the primary and secondary lending segments of the market structure submitted in this study. This hypothesis will be examined in Chapter VI.



## CHAPTER V

### BORROWER CHARACTERISTICS AND THE THEORY OF THE MARKET STRUCTURE

This chapter is devoted to an analysis of borrower characteristics at each of the three major institutional credit grantors in the consumer cash instalment credit market. The objective of the discussion is to determine to what extent an analysis of borrower characteristics reveals the nature and behavior of institutional credit grantors in the market. More specifically, the aim of this chapter is to present some evidence that may be pertinent to the theory of the market structure which has been set forth in earlier chapters.

#### Conclusions of Previous Studies

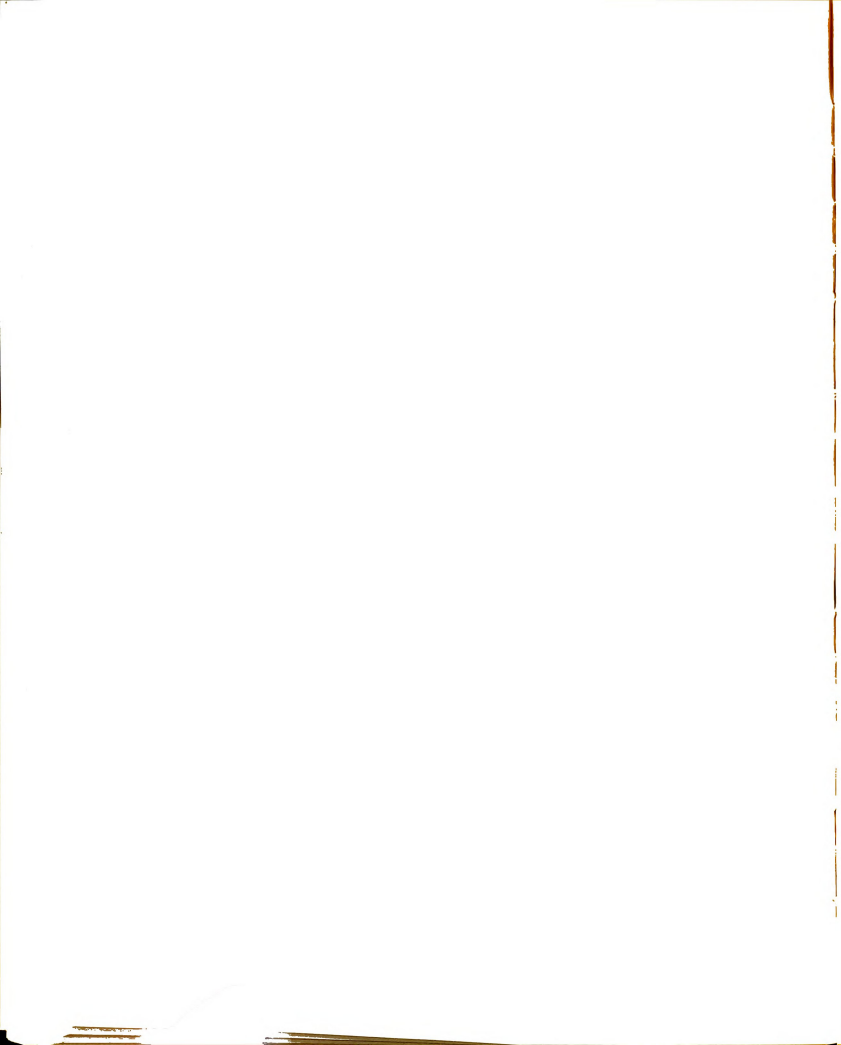
Most of the studies of the consumer instalment credit market and the cash loan segment of that market reached conclusions similar to the following:

While there is some overlapping of their respective markets it is nevertheless true that the two types of lending institution cater to substantially different classes of borrowers.<sup>1</sup>

More important than the conclusion that was reached was the manner in which it was reached. The interpretation of "classes of borrowers" was quite similar among the studies aimed at determining the extent of institutional segmentation of the market: income, occupation, and age.

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<sup>1</sup>Chapman, op.cit., p. 223. The two institutions to which Dr. Chapman referred are the personal loan departments of commercial banks and the consumer finance companies.



Each of these variables were analyzed independently of each other. Thus the Chapman study described the segmentation of the market as follows:

The data available for a study of the borrowers served by commercial banks and personal loan companies are not entirely comparable, but they indicate that the customers of personal finance companies come from lower income groups than those of commercial banks. We have already noted that 55 percent of the borrowers from personal finance companies had incomes of less than \$1500 per annum while only about 24 percent of the borrowers from commercial bank personal loan departments were in this class. Wage-earners constituted about 52 percent of the customers of personal finance companies but only about 28 percent of the bank borrowers. On the other hand 44 percent of the bank borrowers were people engaged in clerical work as compared with 25 percent of the personal finance company clientele. Finally, banks made a larger proportion of their loans to business and professional borrowers than did personal finance companies.<sup>1</sup>

Little interpretation of the underlying causes of these results and similar results were provided by the authors of the study.<sup>2</sup> It has been the objective of this study to provide the framework with which to interpret these results. Too, the methodology of these previous studies was not constructed upon theoretical considerations such as has been proposed in this study. Following a review of the evidence presented in previous studies, this chapter will analyze borrower characteristics in a manner that is different than that employed in these previous studies.

### The Hypothesis

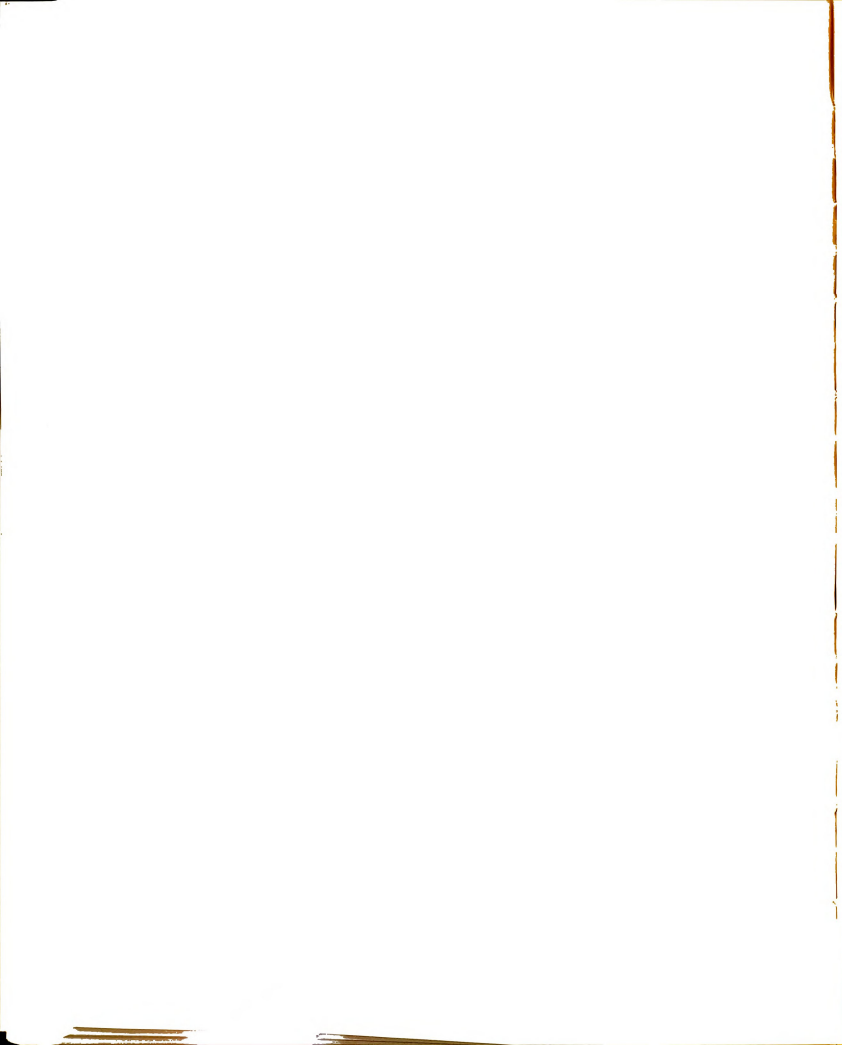
The market structure hypothesized in this study was based on differing concepts of risk. It was implicit in the argument that secondary

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<sup>1</sup> Ibid., p. 224.

<sup>2</sup> The most recent study is W. David Robbins, Consumer Instalment Loans (Columbus: Bureau of Business Research, The Ohio State University, 1955).





lenders accept more risk than the primary lenders because of the indefiniteness with which they attempt to determine risk. The lack of use of the wealth constraint by the secondary lender results in a higher level of uncertainty surrounding his credit analysis. The fact that the secondary lender perceives he is accepting more risk than the primary lender does not necessarily imply that this fact can be observed by analyzing the borrower characteristics at the various types of credit grantors. It will be argued here that secondary lenders accept more risk than primary lenders because they deal almost exclusively with rationed consumers, consumers with little or no worthwhile assets to offer as collateral to reduce the risk of lending.

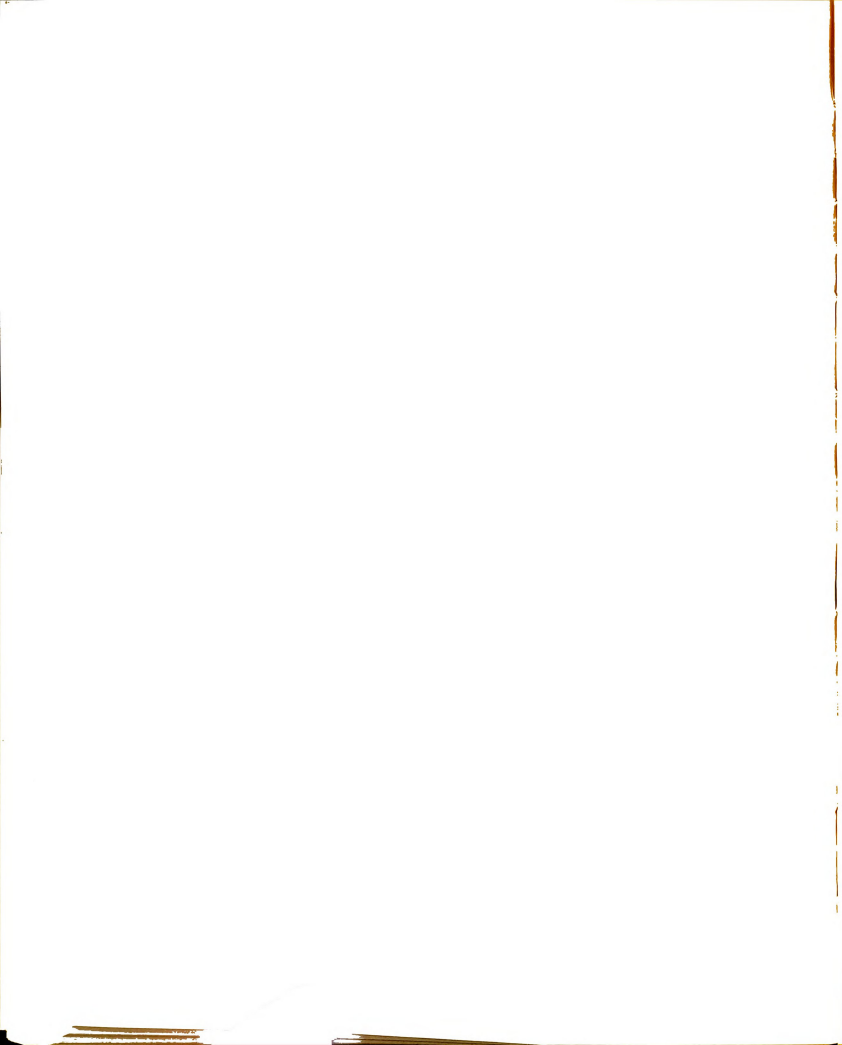
The risk of lending to consumers cannot be revealed by comparing the distribution of borrowers at various institutions for individual borrower or loan characteristics. Studies of risk factors in instalment lending do not reveal that such variables as income and occupation are significant indicators of potential risk when analyzed apart from the borrower's other characteristics.<sup>1</sup> The analysis of borrower characteristics, then, should recognize that the degree of risk accepted by a credit grantor is a function of the pattern of the borrower's characteristics. The analysis which is to follow is based on this conclusion though the evidence which accompanies the analysis is not completely

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<sup>1</sup>The reader is referred to the following studies for the analysis of risk factors in instalment lending:

David Durand, Risk Elements in Consumer Instalment Financing (New York: National Bureau of Economic Research, 1941).

Paul F. Smith, "Measuring Risk on Consumer Instalment Credit," Management Science, Volume 11 (November, 1964), pp. 327-341.



satisfactory. Our objective is to point out that rationed consumers will appear most often at secondary lenders. The breadth of the market for consumer instalment credit can be deduced from the distribution of rationed consumers at the various consumer lending institutions. Thus, the remainder of this chapter examines the hypothesis that the cash instalment loan segment of the consumer credit market is segmented in terms of the characteristics of the borrower.

#### Preliminary Data

The Federal Reserve System produced an analysis of the financial characteristics of consumers which serve to introduce the nature of the analysis to be conducted in this chapter.<sup>1</sup> Tables V-1 and V-2 are adapted from the statistical tables appearing in that analysis. The conclusion to be reached from these tables is that the wealth of the consumer population is related to income, the strength of the relationship varying from asset to asset. Moreover, the mean value of the specified assets held by consumers is positively related to the income group of the consumer. These conclusions however, are not to be construed as strong evidence of effective substitutes for consumer credit. The Federal Reserve Bulletin article concluded:

The fact that many families hold large amounts of such liquid assets suggests that these assets not only serve as an emergency reserve and provide cash for current transactions but also serve as a more permanent form of investment.<sup>2</sup>

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<sup>1</sup>"Survey of Financial Characteristics of Consumers," Federal Reserve Bulletin, Volume 50 (March, 1964), pp. 285-294.

<sup>2</sup>Ibid., p. 286. The reader is also referred to Chapter II for a more detailed discussion of effective substitutes for instalment credit.

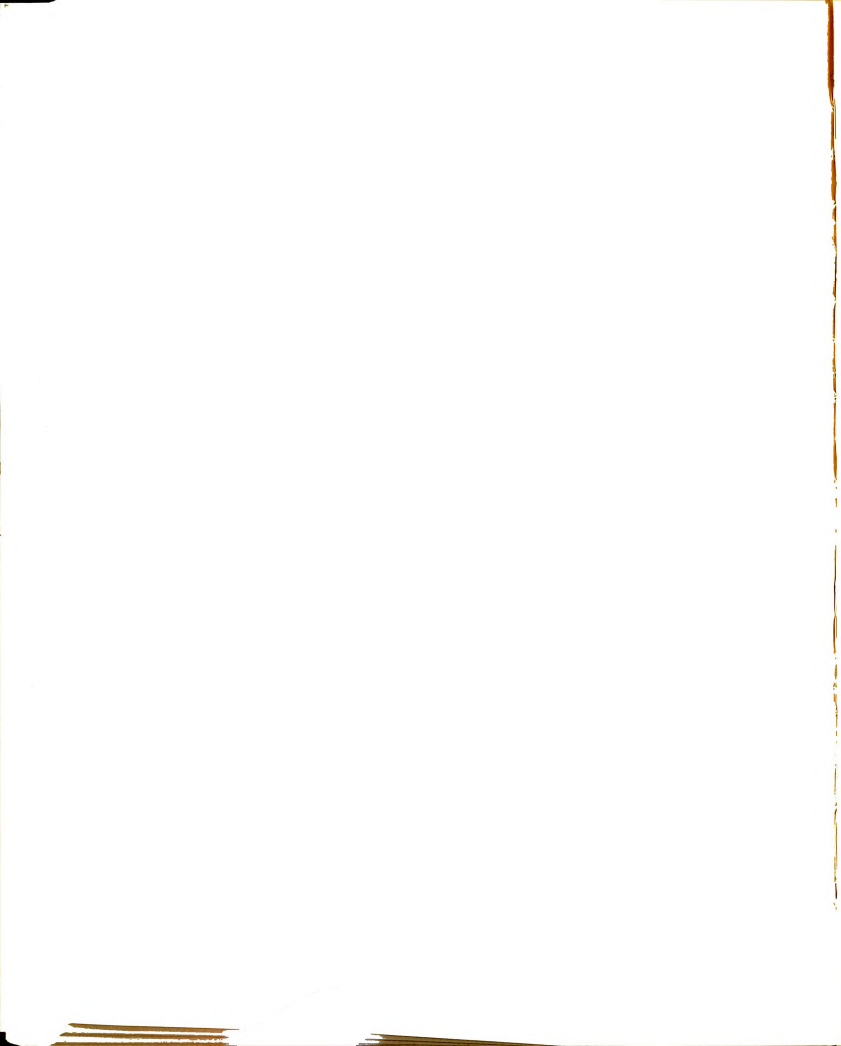


Table V-1. Percentage of income groups of consumers  
having specified assets or debt  
1962

Income	All Tangible Assets <sup>3</sup>	Own Home <sup>1</sup>	Auto- mobile <sup>2</sup>	All Liquid and Investment Assets <sup>4</sup>	Personal Debt (excludes auto)
0-\$2,999	62%	44%	39%	58%	34%
\$3,000-4,999	82	47	76	73	56
\$5,000-7,499	95	62	89	87	58
\$7,500-9,999	95	74	92	96	63
\$10,000-14,999	97	82	95	97	50
\$15,000-24,999	93	84	91	100	41
\$25,000-49,999	98	92	96	100	29
\$50,000-99,999	97	93	83	100	16
\$100,000 & Over	99	97	85	100	17

Definition of terms:

- <sup>1</sup>Own Home - respondent's estimate of market value of principal residence, less debt secured by that property.
- <sup>2</sup>Automobile - respondent's estimate of market value or value from Red Book, less debts secured by automobile.
- <sup>3</sup>All Tangible Assets - Sum of net worth in own home and net worth in automobile.
- <sup>4</sup>All Liquid and Investment Assets - sum of demand and savings accounts, U.S. bonds, stocks, marketable bonds and other investments such as mortgages, real estate, and closely held or family businesses.

Source: "Survey of Financial Characteristics of Consumers," Federal Reserve Bulletin, Volume 50 (March, 1964), pp. 285-294.

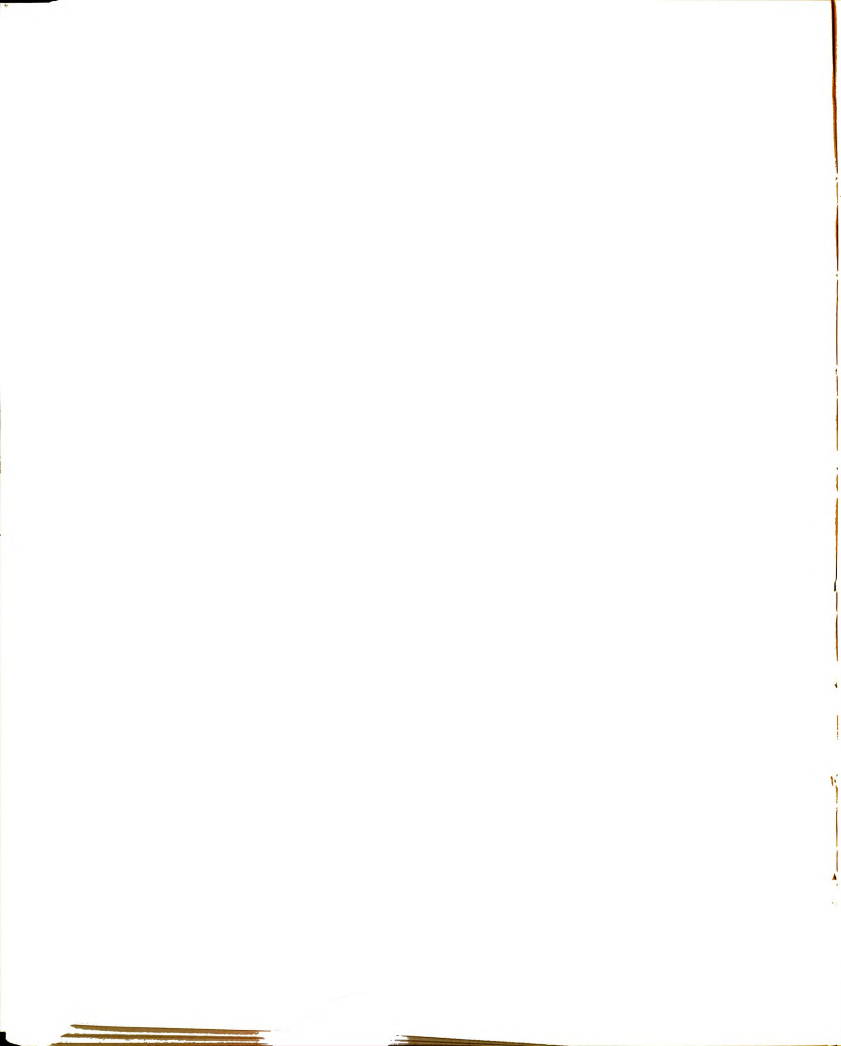


Table V-2. Mean amount of specified assets or debt held  
by all families in group, by size of 1962 income  
(In dollars)

Income	Own Home	Auto- mobile	Liquid Assets <sup>1</sup>	All Investment Assets <sup>2</sup>	Personal Debt (excludes auto)
0-\$2,999	\$ 3,752	\$ 149	\$ 1,330	\$ 2,128	\$ 205
\$3,000-4,999	3,544	412	1,738	2,925	378
\$5,000-7,499	4,973	643	1,716	3,710	453
\$7,500-9,999	7,499	868	2,722	4,779	712
\$10,000-14,999	9,527	1,346	4,233	6,969	584
\$15,000-24,999	15,188	1,816	9,241	30,638	502
\$25,000-49,999	32,215	2,875	19,098	92,663	4,553
\$50,000-99,999	45,961	2,803	41,845	345,728	4,604
\$100,000 & Over	85,634	4,011	54,426	1,004,246	12,268

Definition of terms:

<sup>1</sup>Liquid Assets - consists of checking accounts at banks; savings accounts at banks; shares in savings and loan associations and credit unions; and U.S. savings bonds at face value.

<sup>2</sup>all Investment Assets - consists of stocks, marketable bonds and other investments such as mortgages, real estate, and closely held or family businesses.

Source: "Survey of Financial Characteristics of Consumers," Federal Reserve Bulletin, Volume 50 (March, 1964), pp. 285-294.





If the asset position of consumers tends to be lower the lower the income group, then it follows from the Juster and Shay discussion of rationed and unrationed consumers that the lower the income group of the consumer the stronger is the tendency for him to become more quickly rationed. That is, an analysis of borrowers by income at secondary lenders should reveal a larger proportion of lower income borrowers than of higher income borrowers because of the tendency of lower income consumers to become more quickly rationed by primary lenders. The wealth position of the lower income borrowers is not sufficient to permit him unlimited access to primary lenders. This is especially so when credit demands arise from demands for non-durable consumer goods and services.

Juster and Shay also divided their sample of consumers into rationed and unrationed groups. The authors defined a rationed consumer as a married consumer with after-tax income of \$8,000 per year or a consumer married for fifteen years or less and an after-tax income of from \$8,000 to \$10,000. The authors noted that on the basis of this classification roughly 60 percent of the credit users in their sample would be in the rationed group, and a considerably higher fraction of the population of the United States would be in the rationed group.<sup>1</sup> On the basis of this classification, Juster and Shay reported the following results:

As predicted by the marginal borrowing cost model, rationed consumers respond much more to differences in minimum monthly payments than do unrationed ones (an estimated elasticity of  $-.231$  compared to  $-.083$ ) while unrationed consumers are somewhat more sensitive to finance rates (a mean elasticity of  $-.072$  compared to  $-.060$  for the four possible comparisons, and a mean of  $-.134$  compared to  $-.067$ ), excluding

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<sup>1</sup>

Juster and Shay, op.cit., p. 34.



the one comparison in which the sign of finance rate elasticity is positive.<sup>1</sup>

Both studies indicate that lower income consumers tend to be rationed consumers; at least they seem to behave as rationed consumers. The statistical hypothesis which follows the a priori considerations produced here would assert that secondary lenders would tend to have a higher proportion of lower income borrowers than higher income borrowers. But it should be noted that distribution of borrowers at a primary lender would not necessarily show a higher proportion of higher income borrowers. As we have noted in Chapter III, a consumer is never permanently rationed. The purchase of a commodity with durability and resaleability acceptable to a primary lender is a basis for obtaining credit at a primary lender. The greater the wealth acceptable to the primary lender, however, the weaker will be the tendency or the need of the consumer to avail himself of the services of a secondary lender.

#### Some Income Distributions

A small sample of accepted applications at the three major types of consumer lending institutions in Lansing, Michigan was made by the author. The distribution of the sampled borrowers by size of monthly income and by type of institution is presented in Table V-3. The size of the samples are very small, particularly with respect to the commercial bank and credit union samples. The distribution, however, does resemble that of the Robbins' sample to be reproduced on a later page as well as other income distributions. Though the size of the sample is not sufficient for statistical inference-making with respect to all the individual

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<sup>1</sup> Ibid.

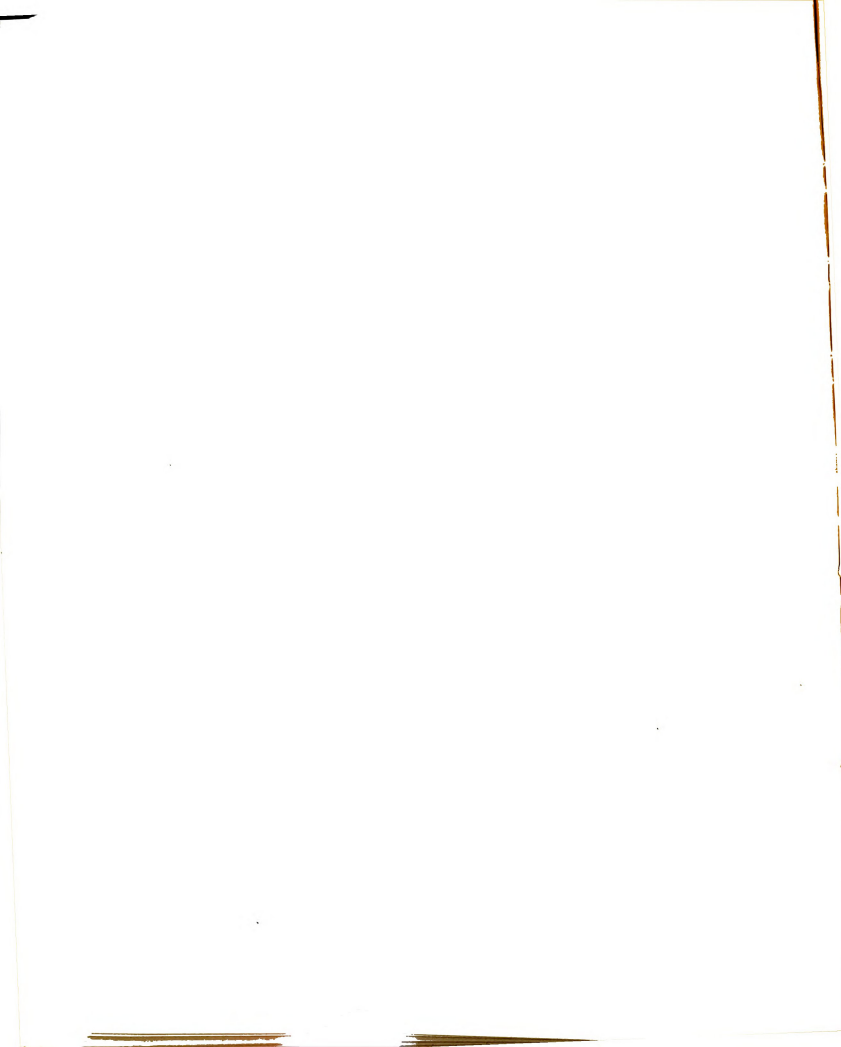


Table V-3. Distribution of borrowers by income at three  
consumer lending institutions in  
Lansing, Michigan  
1965

Monthly Income	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
\$1-300	17.0	10.3	11.40
301-400	13.5	35.3	21.8
401-500	19.2	29.1	26.4
501-600	18.4	13.8	15.4
601-800	14.2	8.5	17.7
801-999	9.9	1.8	3.9
1000 and Over	7.8	1.3	3.4
Total	100.0	100.1	100.0
No. of Borrowers	141	399	1,132

consumer lending institutions in Lansing, Michigan, circumstantial evidence as well as previously existing evidence does support the efficacy of inferring as to the behavior of institutions from which the sample was taken.<sup>1</sup>

The three consumer lending institutions can be ranked in terms of the proportion of borrowers in the lower income groups. Thus, the

<sup>1</sup>It should be pointed out here that the commercial bank sampled is the only commercial bank in the Lansing urban area which does maintain a personal loan department. Of the three largest banks in the Lansing metropolitan area, the commercial bank sampled is the only bank which actively promotes direct loans to consumers for other than home repair or automobile purposes.



sample of two credit unions reveals that approximately 46 percent of their borrowers had monthly incomes of \$400 or less. The sample of six consumer finance companies indicates that approximately 33 percent of their borrowers had monthly incomes of \$400 or less. Finally, the one commercial bank sampled had approximately 30 percent of their borrowers with monthly incomes of \$400 or less. The lack of a significant difference between the one commercial bank and the six consumer finance companies has only ambiguous significance at this point. The other characteristics of the lower income borrowers at the commercial bank as well as the conditions under which the bank extended credit are needed for a satisfactory interpretation of the observed results.

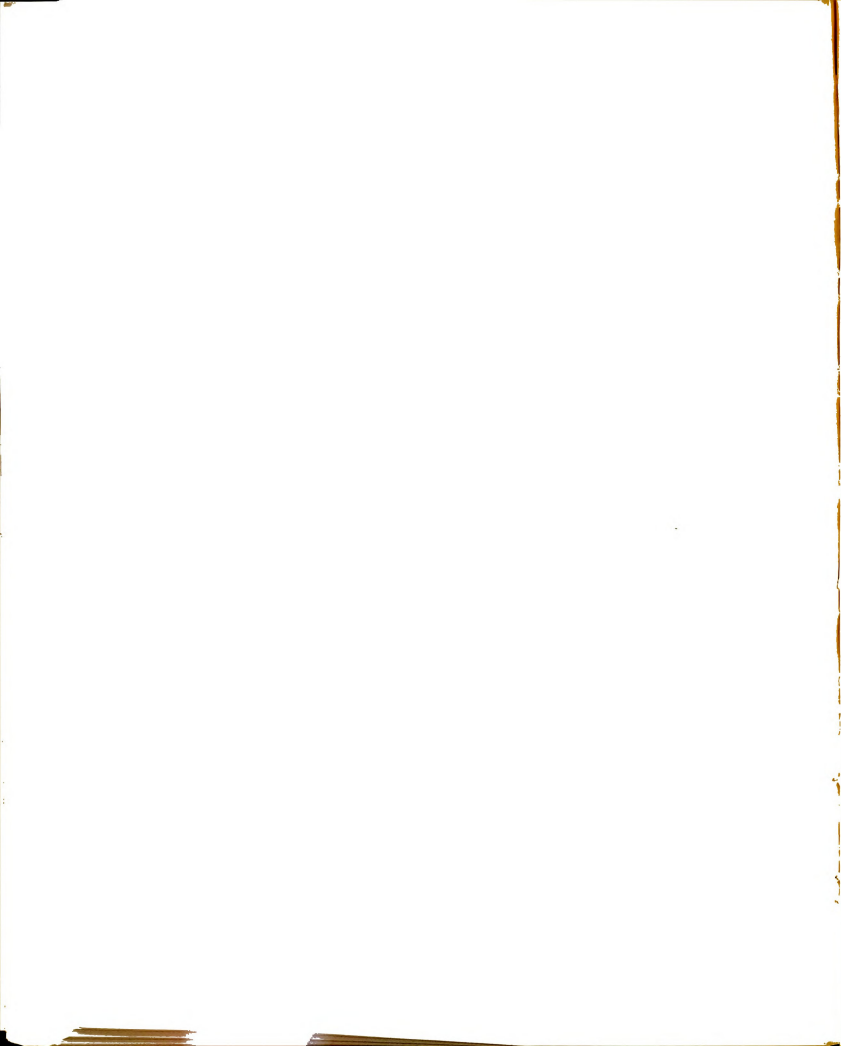
The two credit unions which were sampled were associated with government employees. Hence, the distribution of potential borrowers would tend to be lower than that of the population of Lansing, Michigan. Approximately 65 percent of the household heads in the Lansing Standard Metropolitan Statistical Area had annual incomes of \$6,000 or less whereas 75 percent of the borrowers at the two credit unions had annual incomes of \$6,000 or less.<sup>1</sup>

Though the difference between the one commercial bank and the six consumer finance companies was rather small with respect to the percentage of borrowers with monthly incomes of \$400 or less, the same is not true with respect to borrowers with monthly incomes of \$400 or more. Approximately 60 percent of the consumer finance company borrowers had monthly incomes of from \$400 to \$800 and only about 7 percent of their

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<sup>1</sup>The comparable figure for the commercial bank sample was approximately 50 percent, that of the consumer finance company sample approximately 60 percent.





borrowers had monthly incomes exceeding \$800. On the other hand, the personal loan department sample contained 52 percent of the borrowers with monthly incomes of \$400 to \$800 and 18 percent with monthly incomes in excess of \$800. Thus, the variation in behavior of the commercial bank with respect to borrower's income is much greater than that of the consumer finance companies. It will be interesting to see whether the borrower's other characteristics and the terms of the loan can help explain the greater variation in the income distribution of the commercial bank sample.

A further example of the difficulty in interpreting the behavior of consumer lending institutions on the basis of borrowers' incomes is available. W. David Robbins' study of cash instalment loans, presented a composite distribution of borrowers by income at each of the three types of credit grantors for 1950 and 1951. This table is reproduced as Table V-4 in this chapter. The data in Robbins study were drawn from a much larger sample. In fact, the geographical distribution of the sample does provide great obstacles to analysis; for a composite picture obscures geographic and attitudinal variations in behavior within each of the three types of credit grantors that may be of equal importance to the analysis as the behavior of each of the types of institutions in general. In total, Dr. Robbins' study covered the following:

Numerically and geographically, this study includes 19 personal finance companies operating 2,262 offices located in 38 states, 22 commercial banks located in ten states, and 7 credit unions located in two states.<sup>1</sup>

Although the data relating to borrowers' incomes were gathered from a fewer number of sources, the problems of analysis are no less difficult.

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<sup>1</sup>Robbins, op.cit., p. 8.

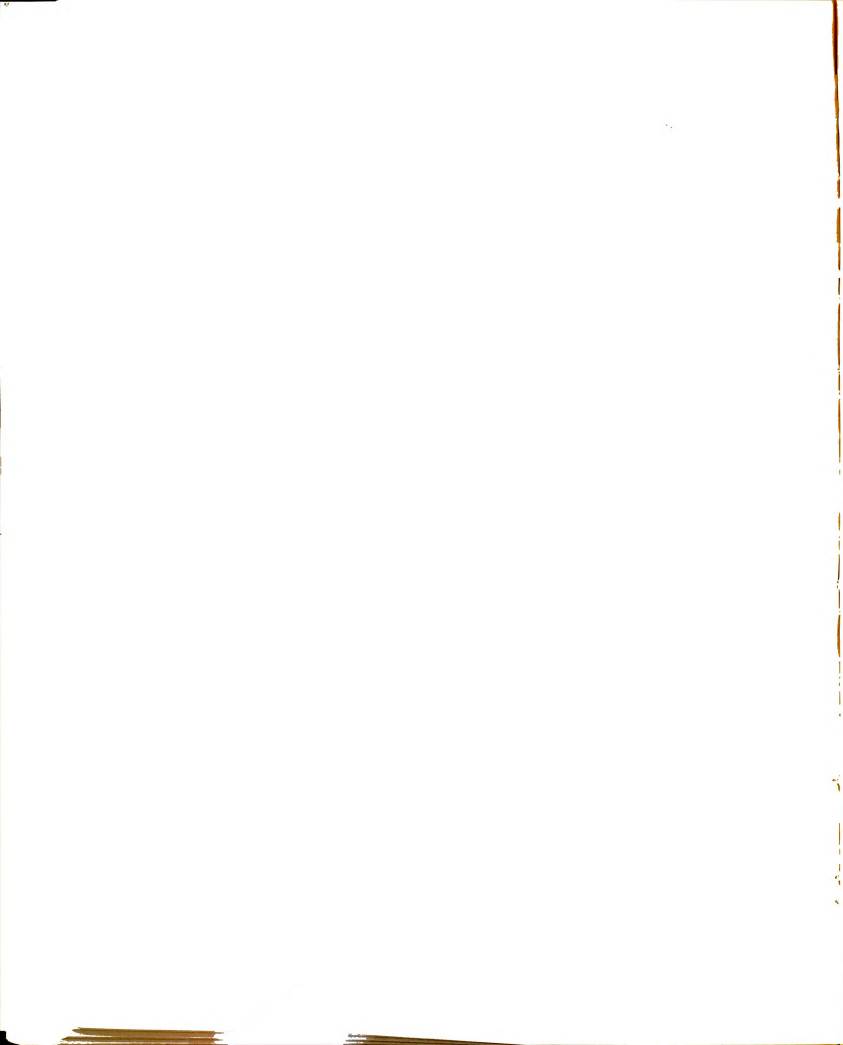


Table V-4. Percent of borrowers from three principal types  
of instalment lending institutions  
by income classes  
1950 and 1951

Monthly Income	Commercial Banks <sup>1</sup>	Credit Unions <sup>2</sup>	Consumer Finance Companies <sup>3</sup>
\$00.01-\$100	1.0%	0.2%	0.0%
100.01-150	4.0	2.1	0.8
150.01-200	14.0	7.9	15.2
200.01-250	20.7	13.7	26.9
250.01-300	23.6	20.7	27.9
300.01-400	22.4	25.5	22.2
400.01-600	11.9	20.7	5.9
Over \$600	2.3	6.3	1.1
Not Reported	0.1	3.0	-0-
Total	100.0	100.1	100.0

<sup>1</sup>Sample of personal loan departments of 12 commercial banks.

<sup>2</sup>Sample of 3 credit unions.

<sup>3</sup>Sample of 14 consumer finance companies.

Source: W. David Robbins, Consumer Instalment Loans (Columbis: Bureau of Business Research; The Ohio State University, 1955), p. 66.

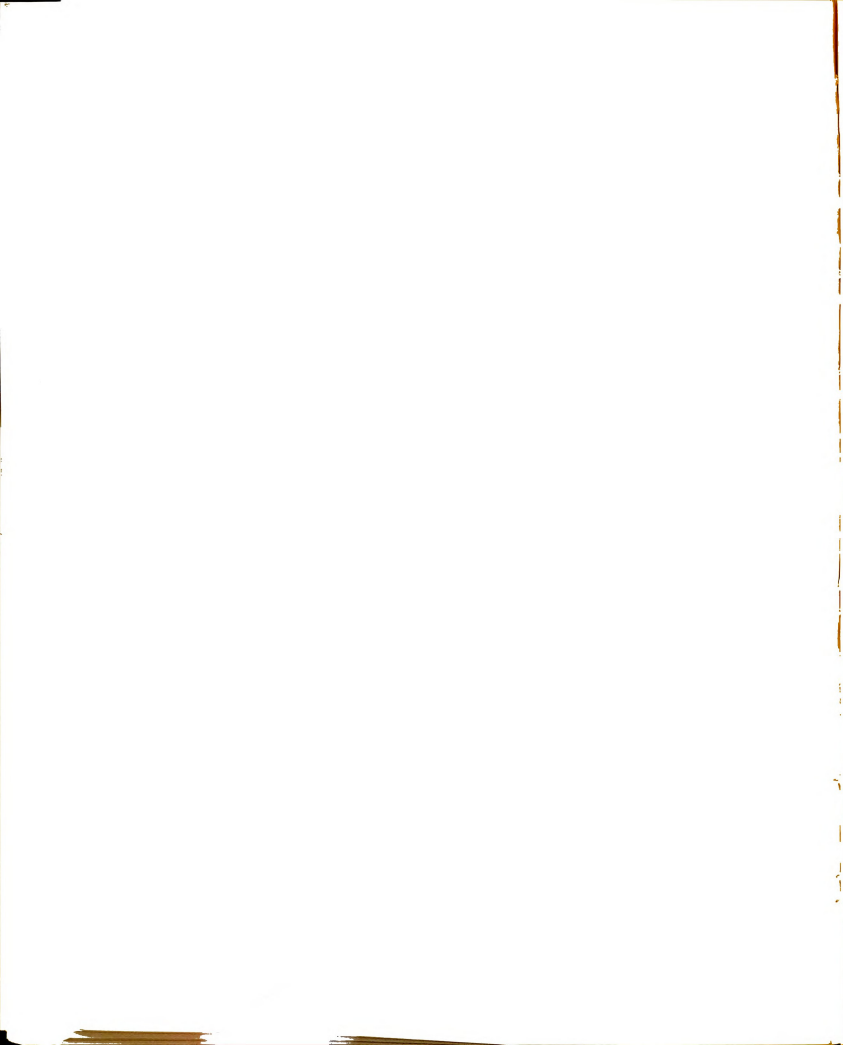


Approximately 19 percent of the borrowers at the commercial bank sample had monthly incomes of \$200 or less. Approximately 10 percent of the borrowers at the credit union sample had monthly incomes of \$200 or less. Lastly, over 14 percent of the borrowers at the consumer finance company sample had monthly incomes of \$200 or less.

Over 14 percent of commercial bank borrowers, 7 percent of consumer finance company borrowers, and 27 percent of credit union borrowers had monthly incomes in excess of \$400. In short, the variations of borrowers' incomes at the sample of commercial banks was greater than that of the consumer finance companies. While there is no doubt that borrowers at consumer finance companies tend toward the lower end of the income distribution, no such definition with respect to the commercial banks is apparent. The willingness of the commercial banks to lend to consumers distributed throughout the income scale is significant; the extent of the significance can be determined when the borrowers' other characteristics as well as the characteristics of the loan are included in the analysis.

#### Size of Income and Other Borrower Characteristics

The hypothesis that the income distribution of borrowers furnishes a basis upon which credit grantors segment the market must be rejected as the result of already discussed a priori considerations as well as the conflicting empirical evidence. The hypothesis must be altered to account for the influence of other borrower characteristics which are observed in relation to the income of the borrower. The following pages are directed at examining some of these other borrower characteristics.



The objective is to determine to what extent such considerations may expose the nature of the segmentation of the market which may exist.

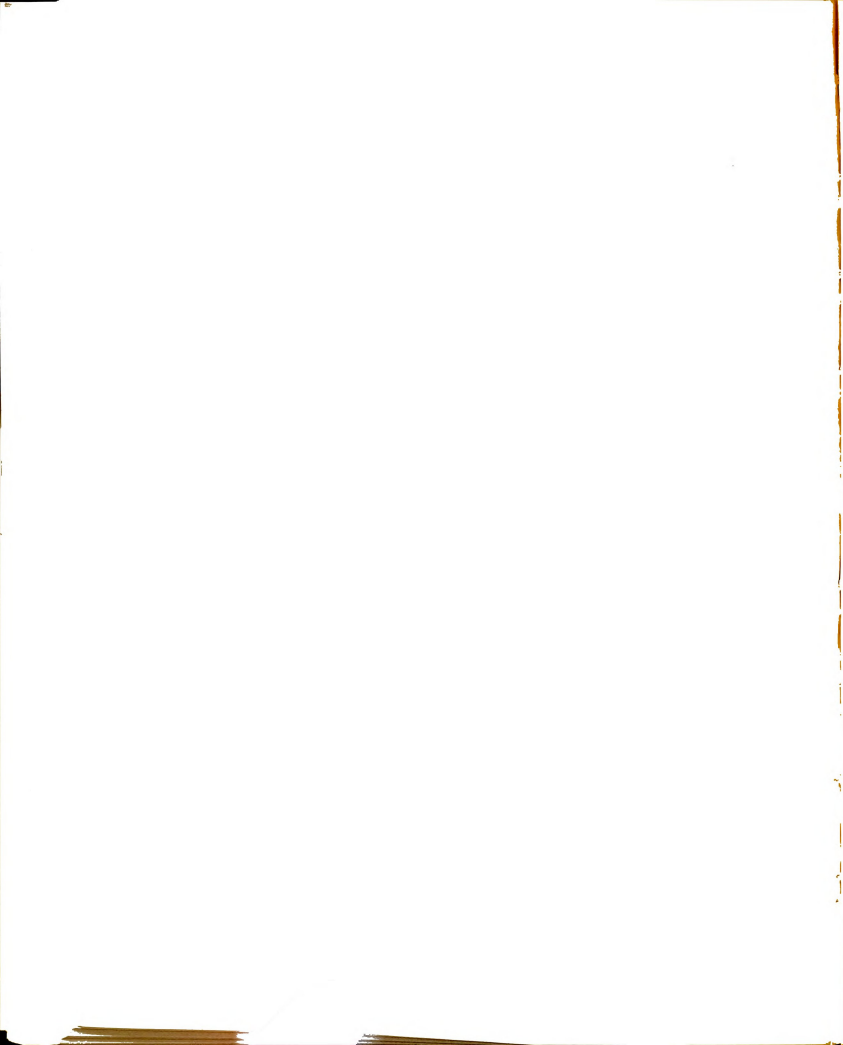
#### Sex

Table V-5 presents the distribution of borrowers who are males by size of monthly income and by institution. The proportion of women borrowers in the lower income groups of the commercial bank sample is greater than that of the credit union or the consumer finance company samples. For monthly incomes in excess of \$500, there seems to be little difference in the proportion of males among the three types of consumer lending institutions. Finally, for all borrowers, the two credit unions had a higher proportion of female borrowers than the commercial bank

Table V-5. Percentage of borrowers who are males,  
by income class and by institution,  
Lansing, Michigan, 1964-65

Monthly Income	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
1-300	37.5%	31.7%	67.4%
301-400	79.0	61.0	83.8
401-500	88.9	89.7	92.6
501-600	92.3	94.6	94.3
601-800	100.0	97.1	97.0
801-999	92.9	100.0	95.5
1000 and Over	100.0	100.0	97.4
All Borrowers	82.9	75.2	89.0





sample; and the commercial bank sample contained a higher proportion of female borrowers than the sample of six consumer finance companies.

From a risk standpoint, the Durand and Smith studies indicated that women borrowers tend to be better risks than male borrowers although the monthly income of females tends to be lower than that of the males. Thus, the higher frequency of female borrowers with low monthly incomes implies that the commercial bank is not taking more risk per se. The observed frequency of female borrowers at both the commercial bank and the consumer finance companies is consistent with the proportion of female household heads in the Lansing Metropolitan area (approximately 15% according to the 1960 Census of Population). We have already commented upon the higher frequency of female borrowers at the sample of two credit unions. Thus, we must conclude that the observed frequency of female borrowers by size of income sheds little additional light on the nature of market segmentation among cash instalment lending institutions.

#### Marital Status

Table V-6 presents the percentage of borrowers who are married by size of income and by institution in Lansing, Michigan. Over all income classes, the commercial bank had a higher frequency of non-married borrowers than the two credit unions or the six consumer finance companies. The observed frequency of non-married borrowers at the one commercial bank is even greater with respect to monthly incomes of \$500 or less.

The higher proportion of non-married borrowers in the commercial bank sample and especially in the lower income groups is related to the higher observed frequency of female borrowers at the commercial bank.

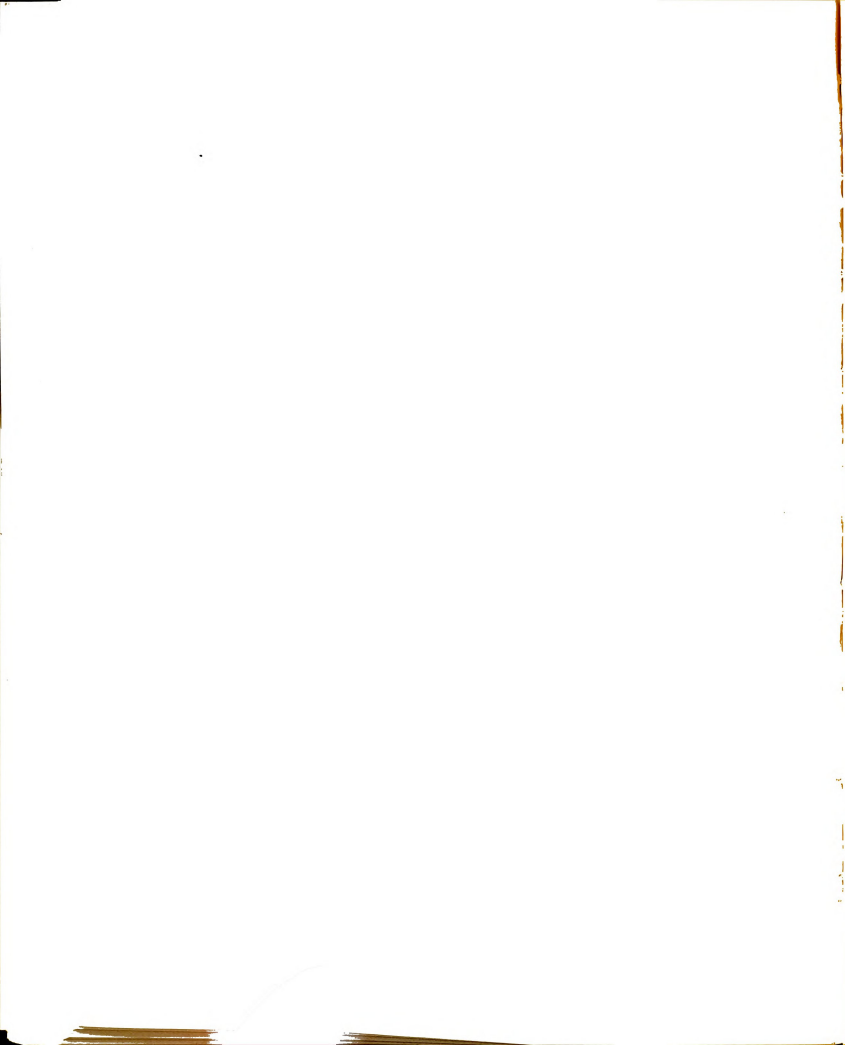


Table V-6. Percentage of borrowers who are married,  
by size of income and by institution,  
Lansing, Michigan, 1964-65

Monthly Income	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
1-300	31.6%	68.3%	46.5%
301-400	61.1	87.9	72.9
401-500	76.0	89.7	85.9
501-600	91.3	96.4	87.4
601-800	100.0	97.1	95.0
801-999	100.0	100.0	95.4
1000 and Over	100.0	100.0	97.4
All Borrowers	78.3	88.7	80.8

Widowed, divorced, and single heads of family in the Lansing area are dominated by females. It then follows that the higher frequency of female borrowers in the commercial bank sample would result in a higher observed frequency of non-married borrowers, especially with respect to borrowers with monthly incomes of \$500 or less.

The examination of borrowers' marital status provides little insight into the nature of market segmentation which may take place in the cash instalment loan segment of the consumer credit market.

#### Age

Table V-7 presents the percentage of borrowers who are 35 years of age or less by size of income and by institution. Over all income groups,



Table V-7. Percentage of borrowers who are 35 years old or less,  
by size of income and by institution,  
Lansing, Michigan, 1964-65

Monthly Income	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
1-300	42.9%	48.9%	41.9%
301-400	47.1	51.8	49.8
401-500	28.0	41.4	44.8
501-600	45.8	40.0	37.9
601-800	52.6	23.5	41.0
800-999	76.9	-0-	38.6
1000 and Over	30.0	-0-	15.4
All Borrowers	45.0	42.9	42.8

there is little difference among the three consumer lending institutions. The approximately 43 percent of borrowers who are 35 years of age or less compares to the Lansing population of 36 percent who are 35 or less but more than 20 years of age. By size of income, there are differences among the three consumer lending institutions which are worth noting. For example, for borrowers with monthly incomes of \$500 or less, the commercial bank sample is somewhat older than that of the credit union or consumer finance company sample. For monthly incomes in excess of \$500, the commercial bank sample is considerably younger than the sample at the other types of institutions.

Dr. Durand's study of risk factors revealed that a slight tendency



existed for older borrowers to be better risks than younger borrowers.<sup>1</sup> Dr. Smith's results showed that age of the borrower was fourteenth on a list of seventeen criteria ranked according to their importance in indicating potential risk.<sup>2</sup> The higher proportion of borrowers 35 years of age or older in the lower income groups of the commercial bank sample is indicative of their preference for lower rather than higher risk. This may be especially so if these lower income borrowers are rationed consumers. If this commercial bank is performing a secondary lending function (a relatively high proportion of unsecured notes in the lower income groups is indicative of this function), this function may not be offered to all rationed consumers, but to rationed consumers with a set of characteristics which denote their stability and consequently lower risk. In any event, this is the first sign of market segmentation among the institutions sampled. The commercial bank apparently expresses a preference for older borrowers in the lower income groups. However, there is no such expression of preference with respect to the higher income groups at the commercial bank; loan characteristics as well as income and wealth considerations presumably are of paramount importance in the bank's behavior toward middle- and upper-income consumers.

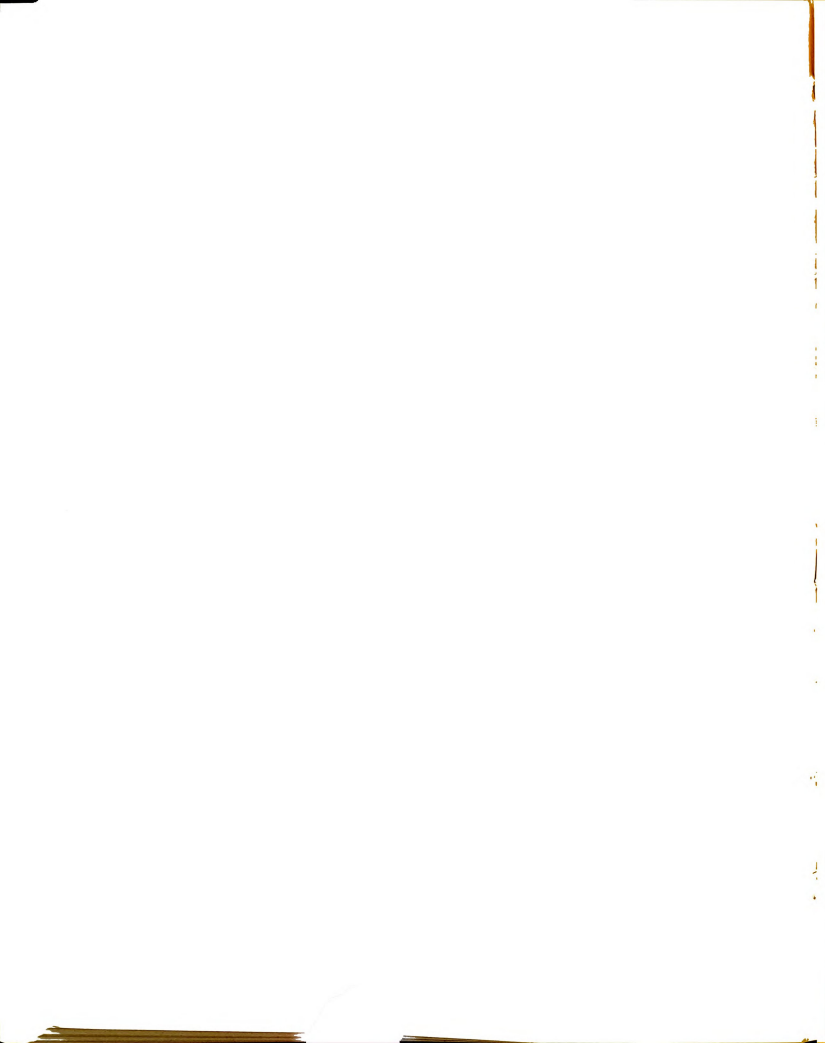
Note that the age of the borrower within the limits defined here has no particular relationship to the borrowers' incomes. As yet, no specific preferences have been expressed by either the credit union sample or the consumer finance company sample.

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<sup>1</sup> Durand, op.cit., p. 74.

<sup>2</sup> Smith, op.cit., p. 337.





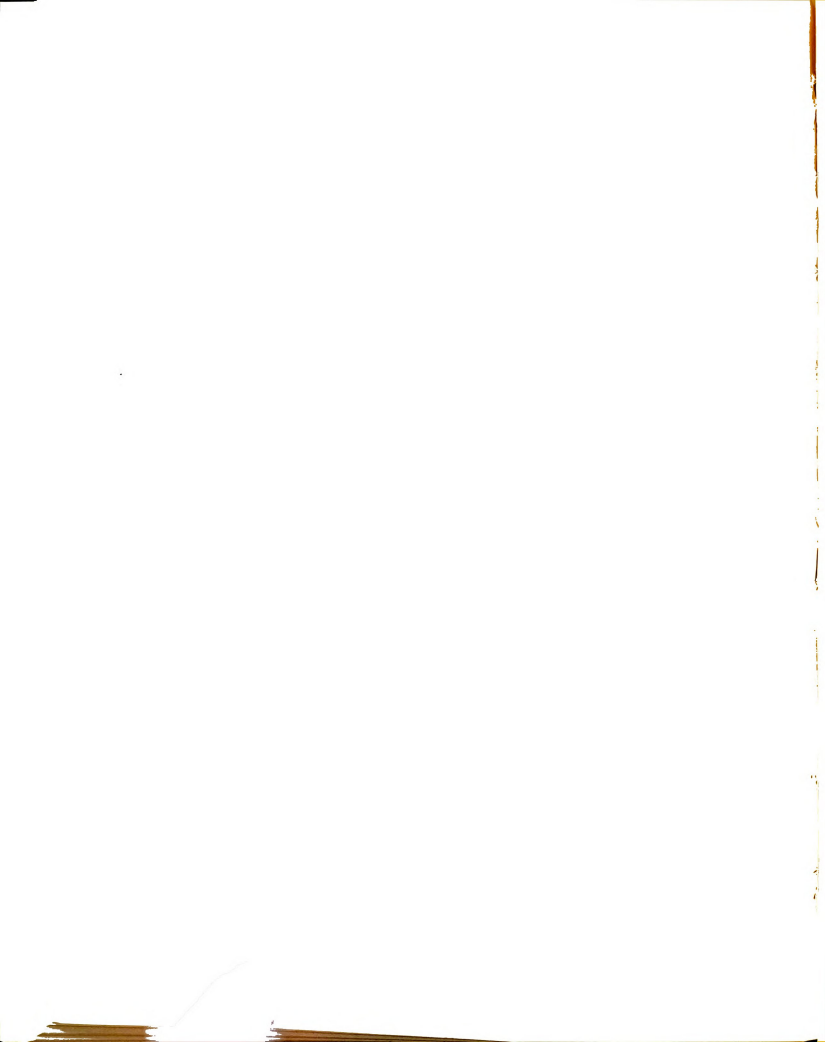
## Years at Present Residence

Table V-8 presents the percentage of borrowers with three years or less at their present residence by size of income and by institution.

Table V-8. Percentage of borrowers with three years or less at present residence, by size of income and by institution, Lansing, Michigan, 1964-65

Monthly Income	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
\$1-300	36.4%	35.9%	53.5%
301-400	41.7	48.2	53.4
401-500	35.7	37.4	51.2
501-600	60.0	44.4	48.3
601-800	66.7	20.6	43.0
801-999	75.0	-0-	38.6
1000 and Over	66.7	20.0	46.2
All Borrowers	52.6	39.7	49.2

Over all income groups, the percentage of borrowers with three years or less at present residence was not much different between the commercial bank and consumer finance company samples. The rather high stability of residence at the credit union sample may be associated with a higher degree of residential stability by government employees. With respect to borrowers with incomes of \$500 per month or less, the commercial bank sample was much more stable than the consumer finance company sample in terms of stability of residence. There was little difference between



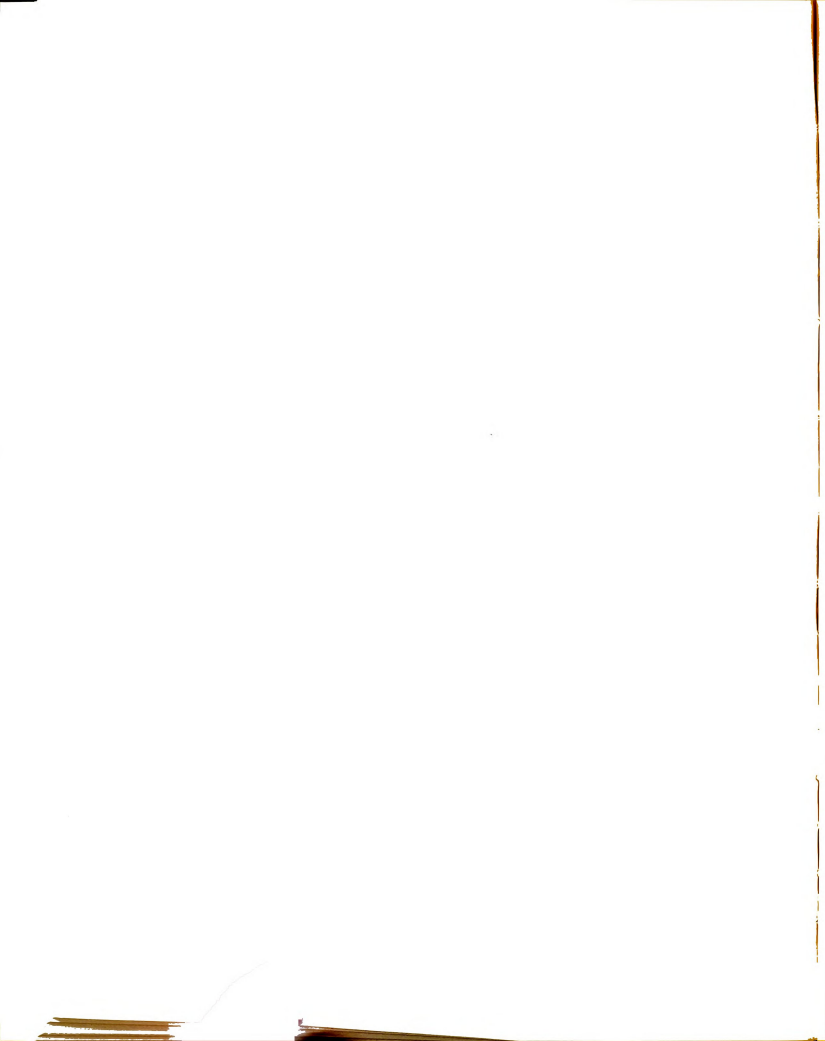
the commercial bank sample and the credit union sample. For borrowers with incomes of more than \$500 per month, the commercial bank sample was much less stable than the consumer finance company sample in terms of stability of residence.

Similar to the results of the age distribution, the commercial bank expressed a preference for greater stability of residence when the borrower's monthly income is \$500 or less. With respect to the consumer finance company sample, stability of residence appears to be a function of the monthly income of the borrowers. Dr. Durand noted in his study of risk factors that stability of residence appears to be associated with good risk.<sup>1</sup> Dr. Smith ranks stability of residence fifth on a list of seventeen criteria ranked in order of their ability to detect potential risk.<sup>2</sup> Dr. Durand noted also that credit executives did not rank stability of residence very highly with respect to its ability to indicate potential risk. The commercial bank which was sampled has, however, apparently expressed a preference for older consumers with residential stability when their incomes are at the lower end of the scale. For incomes toward the higher end of the scale, this same bank does not appear to be concerned with the borrower characteristics such as age and residential stability. Note further, that the credit union sample and the consumer finance company sample do not reveal a preference for borrowers with given characteristics that can be observed. These two institutions, on the basis of the data presented thus far, appear willing to lend to consumers with all types of patterns of characteristics.

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<sup>1</sup> Durand, op.cit., p. 67.

<sup>2</sup> Smith, op.cit., p. 337.



## Years at Present Employer

Table V-9 presents the percentage of borrowers with three years or less at present employer by size of income and by institution. Over all income groups, a slightly higher frequency of borrowers with three years or less at present employer is observed at the commercial bank sample. The differences by size of monthly income, however, are more important. The commercial bank sample shows that borrowers with monthly incomes of \$500 or less possess less employment stability than borrowers with similar incomes at the credit unions or the consumer finance companies. This is especially true of the two lowest income groups. For borrowers with monthly incomes greater than \$500, the commercial bank sample seems to be slightly more stable than the consumer finance company with respect to employment stability.

Table V-9. Percentage of borrowers with three years or less at present employer, by size of income and by institution, Lansing, Michigan, 1964-65

Monthly Income	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
\$1-300	60.0%	65.8%	46.5%
301-400	62.5	32.6	41.7
401-500	31.6	12.9	29.8
501-600	40.0	12.7	28.7
601-800	18.7	-0-	30.5
801-999	45.4	-0-	31.8
1000 and Over	22.2	20.0	35.9
All Borrowers	39.6	24.1	34.7



These results are troublesome. One would have expected that the preference for older borrowers and greater residential stability for the lower income groups at the commercial bank would result also in a preference for greater employment stability by these lower income borrowers. Such a result did not occur. Yet Dr. Durand and Dr. Smith report that employment stability is one of the best individual indicators of potential risk.<sup>1</sup> There does not seem to be any explanation for such behavior on the part of the commercial bank except that, ultimately, the terms of the loan are the foremost considerations of the commercial bank.

On the other hand, the consumer finance company behavior is consistent with the observed frequency of other borrower characteristics. The fact that the credit union sample is associated with government employees makes useful conclusions with respect to its behavior rather difficult.

#### Borrower Liabilities

Table V-10 presents the percentage of borrowers reporting liabilities to specific classes of credit grantors. The percentages reported are not additive. Credit applications at other than the consumer finance companies contained only sketchy information pertaining to outstanding debts of the borrower. However, the results are somewhat indicative of the lending functions of the institutions.

Borrowers at the consumer finance companies reported liabilities to specific types of credit grantors at a greater frequency than that which occurred in the commercial bank or credit union samples. Such a

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<sup>1</sup> Durand, op.cit., pp. 65-67, and Smith, op.cit., p. 337.



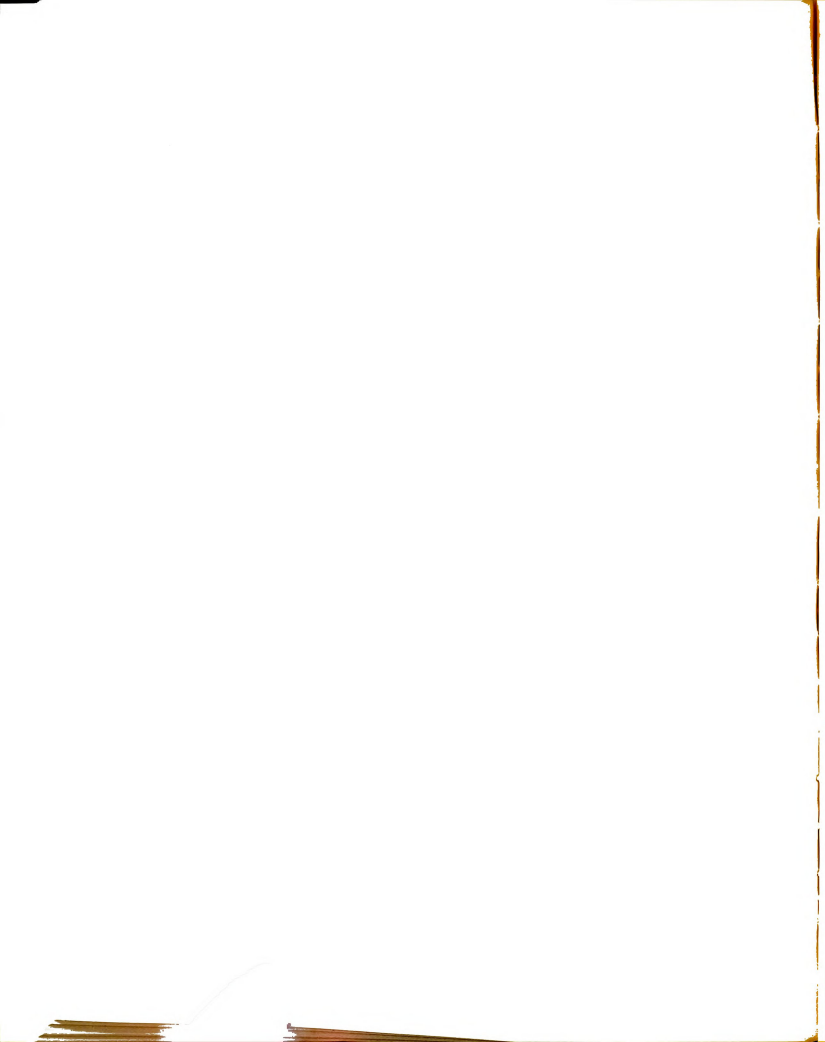


Table V-10. Percentage of borrowers reporting liabilities to selected classes of credit grantors, by size of income and by institution, Lansing, Michigan, 1964-65

	1 Commercial Bank	2 Credit Unions	3 Consumer Finance Companies
Owes Credit Union	9.0%	2.5%	25.2%
Owes Commercial Bank	16.0	8.0	33.8
Owes Consumer Finance Company	9.5	12.0	30.0
Owes Merchant on Sales Finance Company	29.0	2.3	53.5
Owes Professional or Service Firms	12.5	5.5	17.5

result is indicative of the secondary lending function which has been defined in this study. However, no such conclusion is apparent in the commercial bank sample. Whether the commercial bank is functioning as a primary or secondary lender is not to be detected from the data because the greatest frequency of liability reported in the commercial bank sample was in the merchant or sales finance category; credit grantors who are primary lenders. Further, in collecting data at the commercial bank a conscious effort was made to avoid selecting loans for the purchase of automobiles. Thus, the only evidence arising from these data is related to the consumer finance companies as secondary lenders.

#### Summary

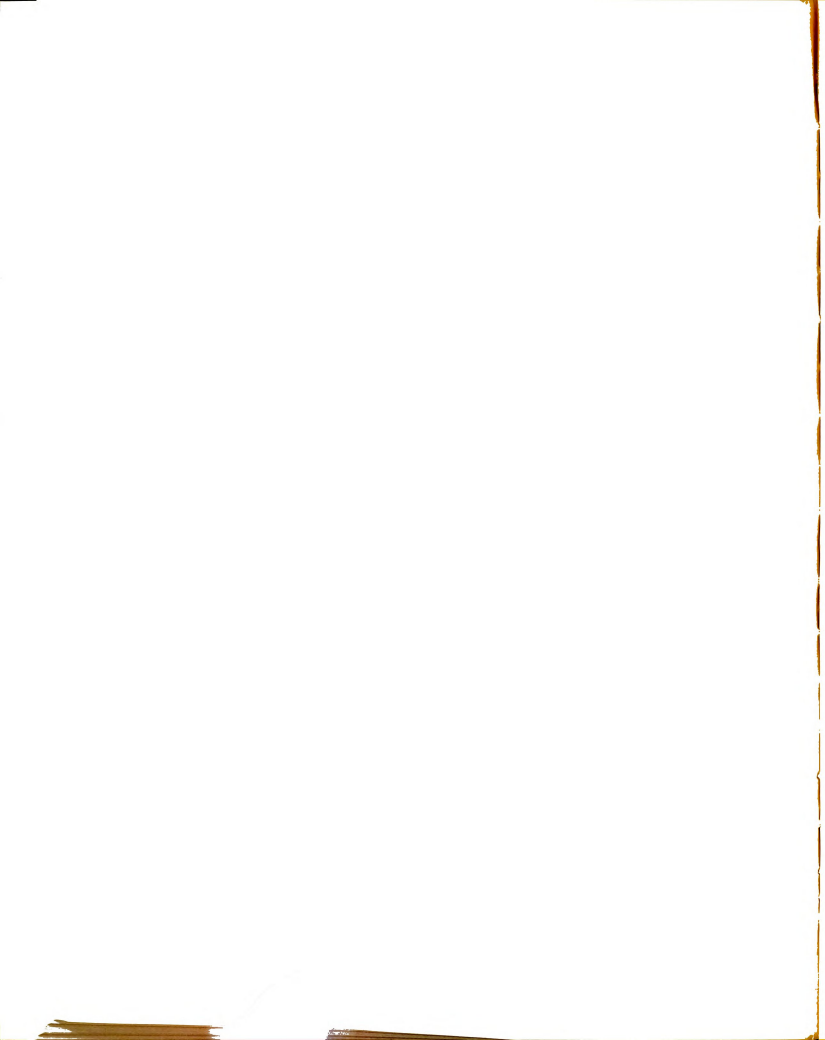
This chapter has presented data concerning the characteristics of borrowers at three types of consumer lending institutions. As a result



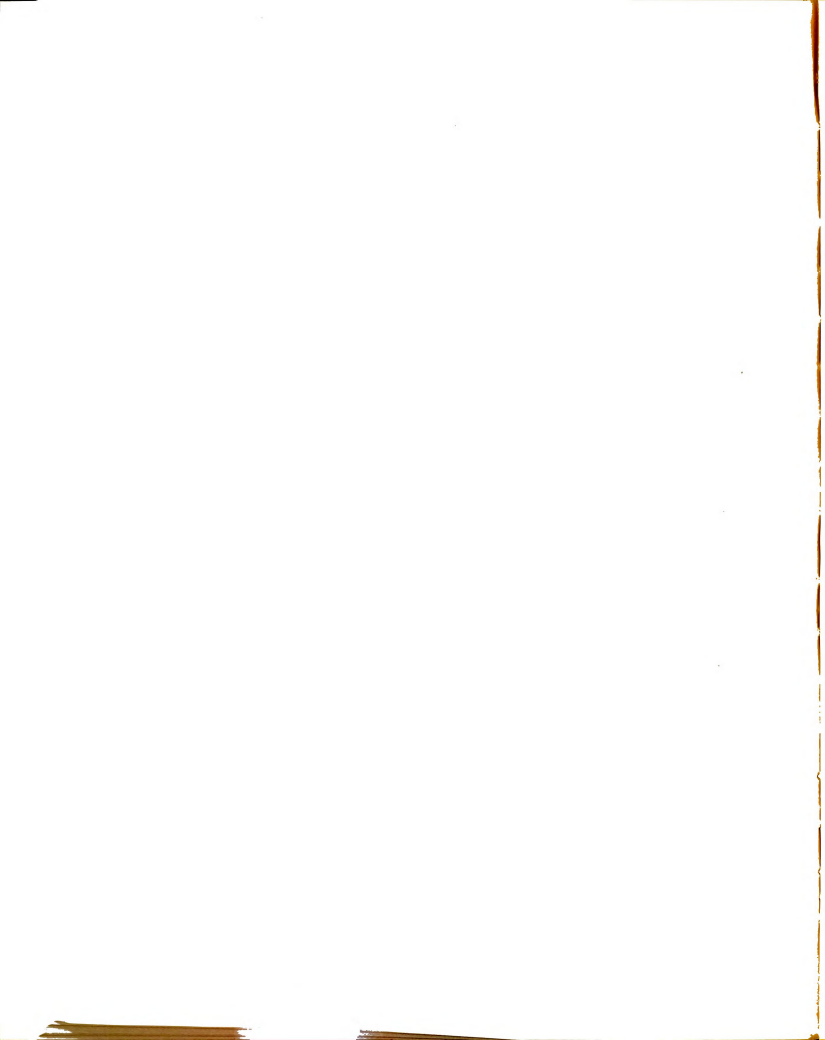
of this analysis, only a few observations were possible. All three of the lending institutions extended credit to lower income consumers at frequencies quite similar to one another. However, the analysis of selected borrower characteristics by income group revealed that the commercial bank sampled expressed some preference for older consumers with greater residential stability than the other two institutions when the consumer's monthly income was \$500 or less. But unexpectedly, the commercial bank expressed no preference or was unable to enforce a preference for lower income borrowers to have a greater degree of employment stability than present at the other two types of credit grantors.

The relationship between the selected borrower characteristics and monthly income for the sample of six consumer finance companies revealed no preference by this type of credit grantor for borrowers with a particular pattern of characteristics. The rather high frequency of outstanding debt by borrowers at the consumer finance companies does imply that these credit grantors are functioning as secondary lenders.

The function of the commercial bank cannot be defined on the basis of an examination of the borrower characteristics related to their monthly incomes. The behavior of the commercial bank can be either that of a primary or secondary lender or both. The lack of relationships with respect to the credit union and consumer finance company samples is indicative of a secondary lender to the extent that no such relationships were expected. The definition of functions, as a matter of fact, really cannot be expressed until the loan characteristics by size of income are examined also. In short, our hypothesis concerning borrower characteristics is supported by the evidence presented. Market segmentation,



to the extent that it does exist, cannot be determined solely on the basis of the characteristics of the borrowers, for such a determination rests upon the hypothesis that borrower characteristics acceptable to the credit grantor have a definite pattern. This hypothesis has been rejected on a priori reasoning as well as the limited empirical data presented in this chapter.



## CHAPTER VI

### LOAN CHARACTERISTICS AND THE THEORY OF THE MARKET STRUCTURE

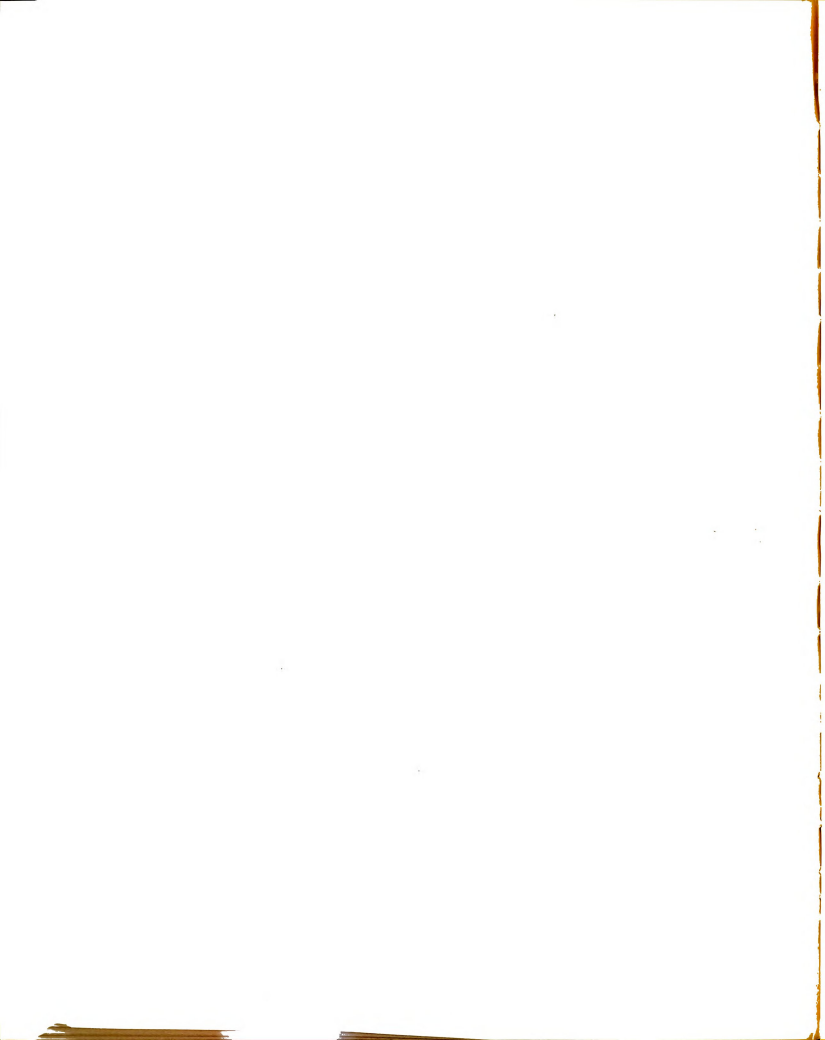
The discussion to be pursued in this chapter is based on the premise that the behavior of consumer cash instalment lending institutions can be observed via an analysis of the characteristics of the loans which the respective institutions have granted. These characteristics are: purpose of the loan, collateral for the loan, maturity, and loan size. In examining this premise and its implications, the goal of the analysis is to place the institutions which have been sampled within the framework of the primary-secondary market structure hypothesized in the earlier chapters of this study.

#### Legal Limitations to Loan Size

The freedom of credit grantors to select the consumer financing function or functions they wish to offer is not absolute. Legislative limits to loan size exist with respect to all three of the major institutional credit grantors, though their effect on the behavior of these institutions certainly is not uniform. Any discussion of loan characteristics, therefore, must take cognizance of these legislative loan limits.

The legislative limits on loan size imposed upon the commercial banks and credit unions usually take the form of a functional relationship between loan size and one or more of a number of balance sheet items such as surplus, net worth, assets, or major liabilities. Commercial banks regulated by the Banking Department of the State of Michigan, for example, face a loan size limit equal to \$10,000 or 3 percent of capital and





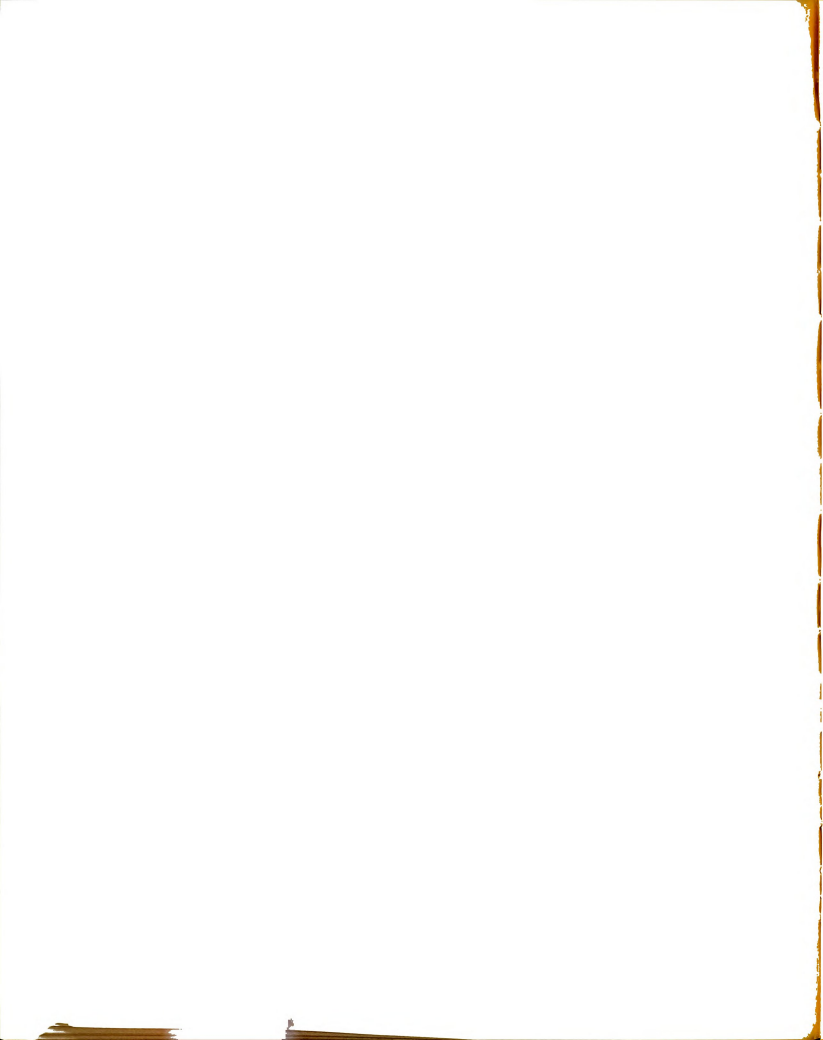
surplus, whichever is greater, a limit within which an overwhelming majority of consumer goods and services can be financed. Thus commercial bank financing of consumers is not particularly affected by the legislative limits that are imposed. Commercial banks chartered in Michigan, as well as national banks operating in Michigan, are free to determine the breadth of the consumer financing function they wish to perform because legislative obstacles with respect to loan size are not effective.<sup>1</sup>

Federal credit unions are faced with a maximum loan limit which is a function of their unimpaired capital and surplus. The maximum loan cannot exceed 10 percent of the federally-chartered credit union's unimpaired capital and surplus. State-chartered credit unions in Michigan cannot grant non-real estate loans in excess of \$750 or 10 percent of their unimpaired capital and surplus, whichever is greater. However, a non-real estate loan can never exceed \$10,000. Legislative loan limits faced by credit unions can have a very practical effect on credit union behavior; the breadth of the consumer financing function which a given credit union can perform is a function of the size of the credit union. A credit union must have approximately \$100,000 of unimpaired capital and surplus in order to attain the ineffective legislative loan limit currently applicable to the commercial banks.

The legislative limit imposed upon consumer finance companies with respect to loan size is established without regard to the size of the credit grantor in Michigan as well as in all states providing for this type of consumer financing organization. In Michigan, the maximum loan

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<sup>1</sup> State-chartered commercial banks must possess an industrial loan license in order to require the amortization of loans. The usury rate of 7 percent discounted is applicable also to amortizable loans.



which a consumer finance company may grant is \$1,000 (raised from \$500 as of September, 1963). This limitation is obviously more restrictive than that of either the credit unions or the commercial banks. A credit union needs only \$100,000 in unimpaired capital and surplus to face the same loan size limit that is now faced by the consumer finance companies. This severe restriction on the lending policies of consumer finance companies is the basis for their specialization in the secondary segment of the market structure hypothesized in this study.

#### Purpose of the Loan

Table VI-1 presents the percentage distribution of loans by purpose at the three types of consumer lending institutions. There are some significant differences among the institutions arising from the influence of loan size limits as well as the breadth of the lending function that each institution performs.

A comment should be made concerning the accuracy of the loan purpose stated by the borrower. Because of the fact that a number of financing alternatives are available to the consumer, the purpose of the loan may or may not reflect the actual circumstances causing the borrowing. Thus, the loan to finance current expenses may have arisen because the borrower's current income budgeted for current expenses was applied to the purchase of a durable good, a vacation, or some other purpose. As a result of the lender's unawareness of the full circumstances surrounding the application for credit, the ultimate use of the funds borrowed cannot be determined. In addition, borrowing funds to consolidate previously existing debts is not a good classification of loan purpose. The use

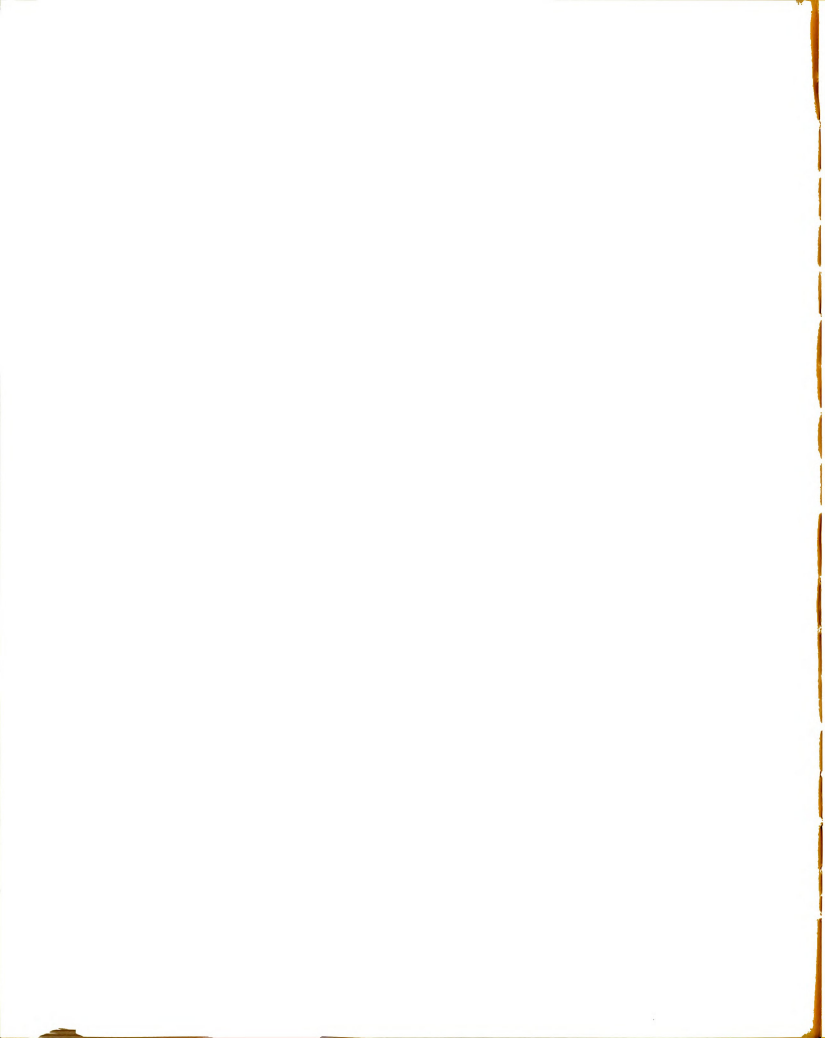
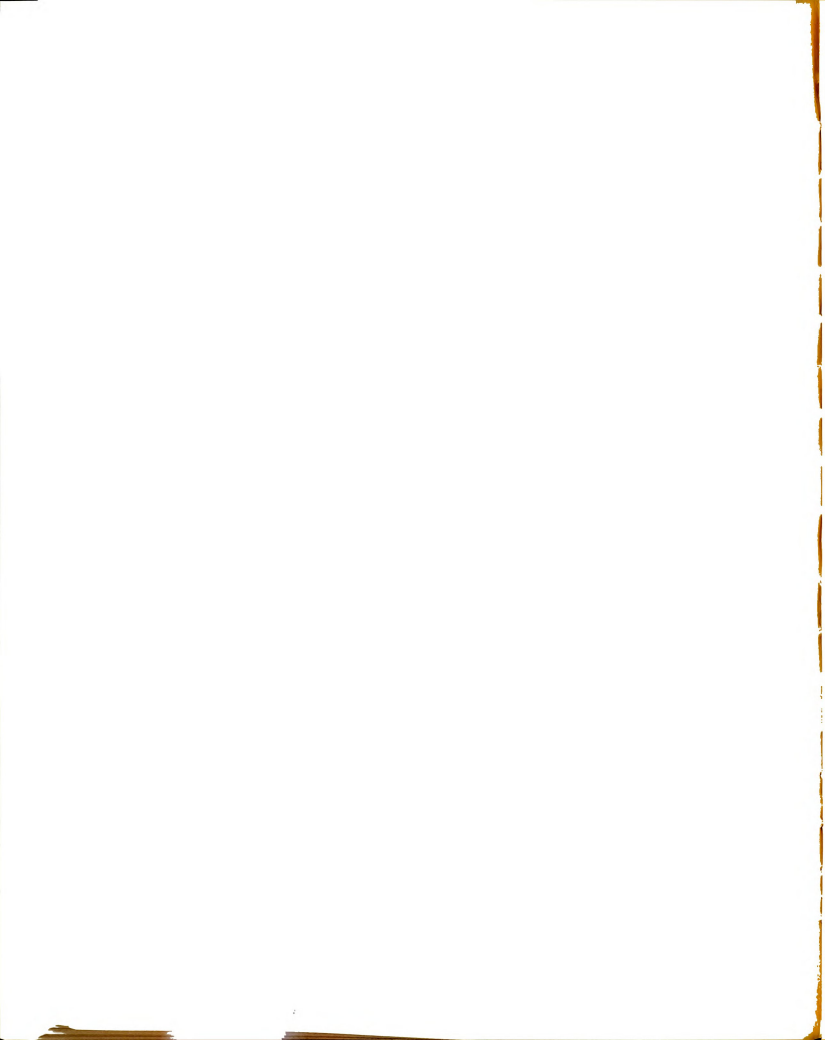


Table VI-1. Percentage distribution of loans by purpose of loan  
at three consumer lending institutions in  
Lansing, Michigan, 1964-65

Purpose of Loan	1 Commercial Bank	3 Credit Unions	6 Consumer Finance Companies
Various Current Expenses	12.0	10.5	23.1
Debt Consolidation	14.0	10.3	24.2
Purchase of Durable Goods (includes automotive equipment)	27.0	43.5	7.9
Buy, Build, or Modernize Real Estate	10.0	12.5	4.2
Health Expenses	3.5	5.5	3.8
Vacation	2.0	2.5	6.5
Repair Motor Vehicle	4.5	6.0	5.4
All Other Purposes	27.0	9.2	24.9
Total	100.0	100.0	100.0
Number of Loans	200	600	1,170

of that previously existing debt represents the true purpose for which the funds were borrowed. In short, loan purpose must be distinguished from loan use. If we were concerned solely with the purchase of goods and services which consumer credit finances, the accompanying analysis would not be particularly satisfactory. However, we are concerned with the circumstances under which consumer credit grantors will extend credit. For this purpose, an analysis of loans by purpose is worthwhile.

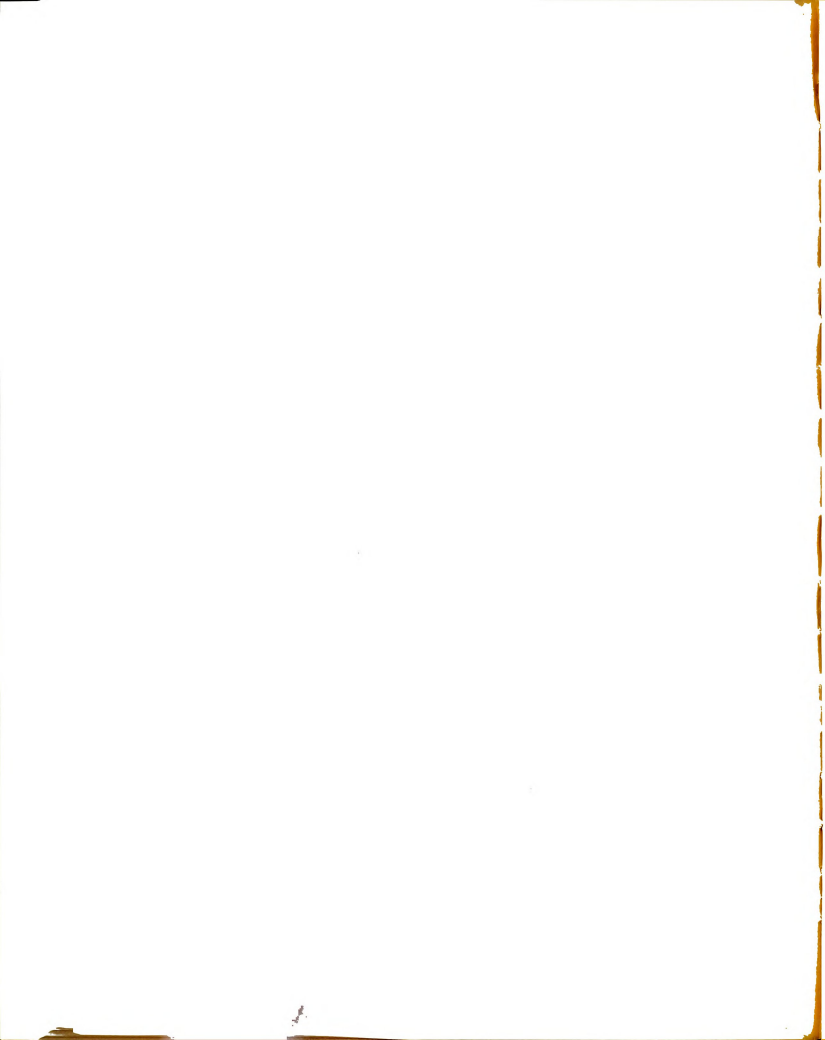


Three differences between the credit grantors stand out in Table VI-1. First, the consumer finance companies provided credit for current expenses and debt consolidation to a far greater extent than either the one commercial bank or the three credit unions. Whereas approximately 47% of the consumer finance company loans were devoted to these purposes, only 26 percent of the commercial bank loans and approximately 21 percent of the credit union loans were devoted to current expenses and debt consolidation.

The second significant difference concerns the financing of durable goods. 27 percent of the commercial bank loans were devoted to this purpose; 43.5 percent of the credit union loans were devoted to this purpose. But only about 6 percent of the consumer finance company loans were extended for the purpose of purchasing durable goods. What is more, 10.0 percent of commercial bank loans and 12.5 percent of the credit unions loans were for the financing of real property. Only 4.2 percent of the consumer finance company loans were devoted to this purpose. This result is the mirror image of the average size of loan granted as well as the variability in loan sizes. Consumer finance companies with the smallest average loan size of the three types of credit grantors had a smaller percentage of their loans supposedly used for the purchase of durable goods. The \$1,000 limit on consumer finance company loans is hardly adequate to finance such activities. Credit union and commercial bank financing of real estate activities also reflects the influence of loan size.

The "all other purposes" category is a conglomerate of loan purposes. This consolidation was made for a number of reasons. Firstly,

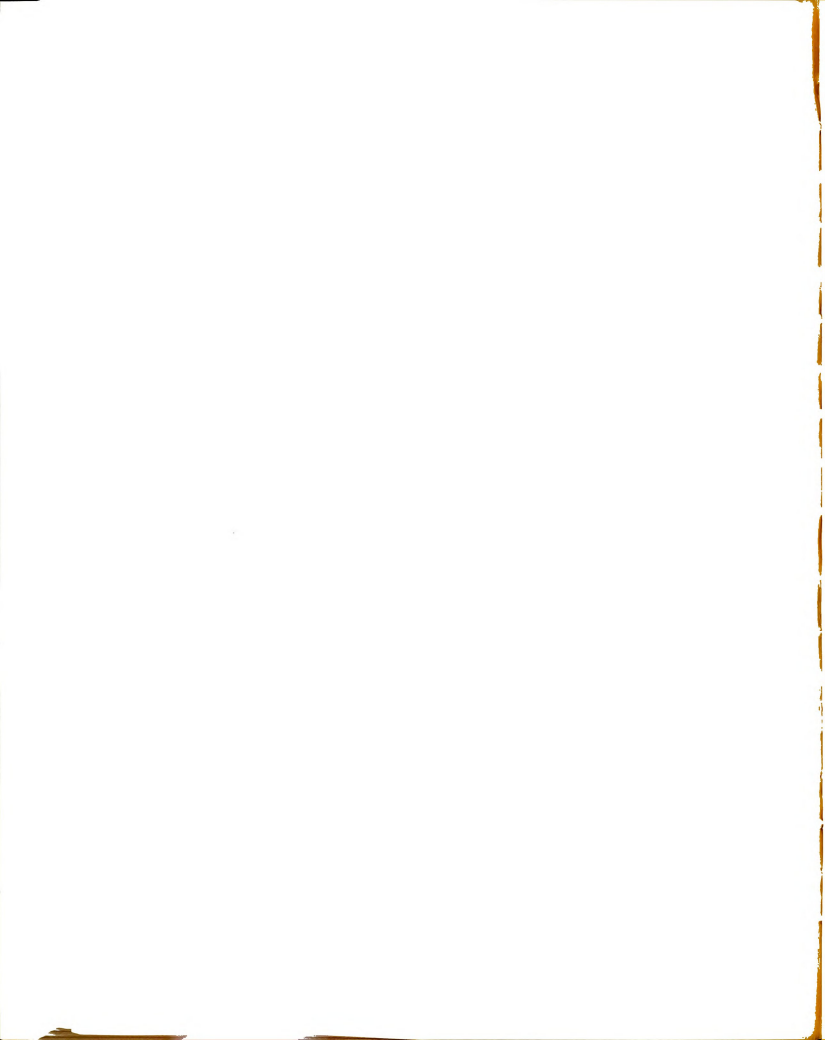




most of the items which make up the category appeared at frequencies of less than 1 in 100. Secondly, a number of the items only appeared on the records of one or a few of the credit grantors. Consequently, were Table VI-1 to be expanded to include all these items, the table would be exceedingly long without contributing anything additional to the analysis. These extraneous items include the following: refinancing of a sales finance customer, pay-off of a competitor, purchase of rewrite of an account from another branch, renewal of loan contract, education, clothing, gifts, funeral expenses, and loans to relatives and friends. These other purposes were about three times more important at the commercial bank and the sample of consumer finance companies than the three credit unions.

#### Significance of Loan Purpose

These significant differences among the consumer instalment lending institutions in the cash instalment credit segment of the market provide considerable insight into the behavior of the sampled institutions in the Lansing, Michigan market. The consumer finance companies tended to specialize in loans to finance current expenses and to provide for debt consolidation. Though the need to consolidate one's debts need not necessarily arise from financial mismanagement, it is a form of debt funding which results in a program of liquidation usually more consistent with the consumer's ability to repay. Moreover, the debt that is consolidated often does not arise from the purchase of durable goods that would provide credit grantors with adequate collateral. The role of the consumer finance companies, then, is consistent with that of a secondary lender as



that term has been defined in this study.

The credit unions, on the other hand, extended credit for the purchase of durable goods and real property in over one-half the loans sampled. Loans for current expenses and debt consolidation accounted for about 20 percent of the credit union loans; and loans for nondurable purposes accounted for the balance. On this basis, the credit unions are not evidently specialists in the primary lending segment of the market. The observation of loan purposes indicates that these institutions are willing to extend credit for purposes in which the item would provide inadequate collateral. However, this statement only holds until we have analyzed the collateral securing the credit union loans. In any case, the credit unions have displayed considerably more versatility in loan purposes than the consumer finance companies.

The commercial bank sampled exhibited characteristics with respect to loan purpose that lie somewhere between the consumer finance companies and the credit unions. Durable goods financing and real property financing represented 37 percent of the loans sampled. About 26 percent of the loans are for the purpose of financing current expenses or for debt consolidation. Loans for nondurable purposes accounted for the balance. Because the commercial bank purchases the paper of retail appliance and furniture merchants, direct loans for the purpose of purchasing durable goods are not likely to be emphasized by the commercial bank. The direct loan portion of the bank's consumer credit activities is likely to be directed at the financing of nondurable goods and services in order to complement the indirect consumer financing activities which have preceded the direct loan segment in terms of emphasis. Thus, the commercial bank



exhibited a willingness to provide credit to consumers for many purposes. The higher loan size limit for the commercial bank, in fact, permits the commercial bank more flexibility in loan services than the consumer finance companies.

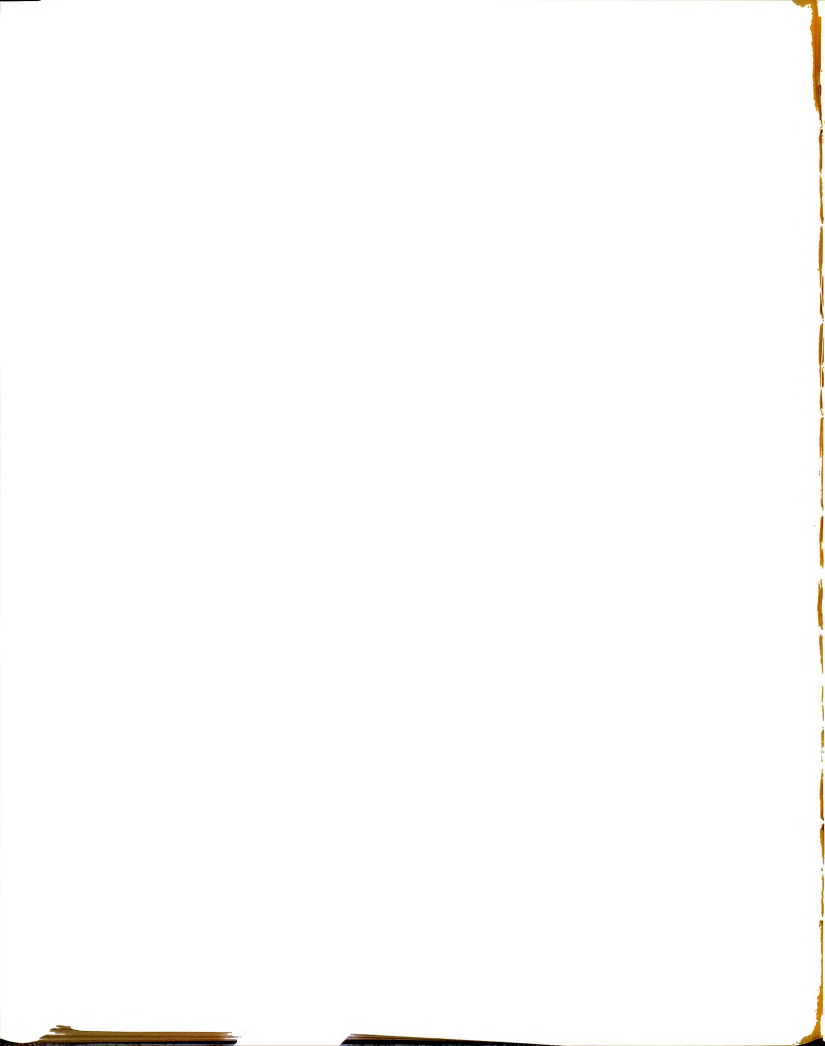
We note, then, that with respect to loan purpose, the consumer finance companies seem to be almost exclusively secondary lenders. The commercial bank and the credit unions, on the other hand, express a willingness and have the ability to function in both segments of the market structure hypothesized in this study.

#### Evolutionary Changes

Data were not available concerning changes in the frequency of loans for specified purposes for credit grantors in the Lansing area. Reference to other sources carries the disadvantage that the data reflect credit grantors of different sizes and in different geographic locations. However a brief review of some of these other sources may be helpful. John Chapman's study of commercial banks and consumer instalment credit in 1940 presented data concerning loan purpose. The data were gathered from one bank on two different dates in 1936 and 1937.<sup>1</sup> Consolidation of debt and other obligations accounted for 31 percent of the total loans for the one bank located in New York City. Mr. Chapman noted, however, that the range among other banks in his sample was 10 percent to 50 percent. Durable goods and household expenditures amounted to 10 percent of the loans sampled at the one bank. They range 14 percent to 50 percent. Health expenses amounted to 14 percent of the loans sampled; the range was 3 percent to 30 percent. Such data provide little room for

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<sup>1</sup> John Chapman, op.cit., p. 78.



comparison with the experience of the one commercial bank in our sample. But it is to be reiterated that the direct loan department of a commercial bank is usually conceived to provide for consumer expenditures that will not normally compete with the bank's indirect financing activity. This is true for much stronger reasons than simply the desire to reduce competition among various bank departments. The banker has no intention of alienating the goodwill he has developed with his business customers, many of whom sell consumer instalment credit contracts to the bank.

The 1964 Finance Facts Yearbook published by the National Consumer Finance Association provides data concerning loan purpose for the period 1948 through 1963, for selected years.<sup>1</sup> The data indicate that debt consolidation has increased in importance over the period. Since 1958 debt consolidation accounted for about 40% of consumer finance company loans. This is an increase from about a 30 percent level around 1950. Home furnishing and appliances and automobile purchases or repairs have increased in importance from 1948 to 1963. The respective levels are approximately 6 percent and 17 percent. The influence of loan size with respect to these categories cannot be overlooked. The comparability of the data with Michigan experience is not clear inasmuch as maximum loan size varies considerably among the states and Michigan is at a level below that of other industrialized states in the nation. However, it is still clear that consumer finance companies are increasingly specializing in secondary lending functions, particularly the function of providing credit for current expenses and debt consolidation. The encroachment

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<sup>1</sup> National Consumer Finance Association, Finance Facts Yearbook - 1964 (Washington, D.C., 1964), p. 50.





of the commercial banks and the credit unions in these areas places the consumer finance companies in a very disadvantageous position with respect to institutional organization and functions, and with respect to their inability to challenge these other institutions in their traditional areas of activity in the consumer instalment credit market.

Data with respect to the credit unions are not available to any worthwhile extent. But it can be pointed out that, credit unions, like the commercial banks, have expanded their consumer services to include lines of credit, instant money, and other forms of consumer financing arrangements that consumer finance companies are unable to offer. Thus, the data with respect to the institutions sampled in the Lansing area are part of the evolution of the commercial banks and credit unions to full-service consumer lending institutions. And because of this evolution, consumer finance companies are constantly becoming specialists in the secondary lending segment of the market, a role, though traditional, is not at all acceptable to them; for it is an indication that these institutions have failed to evolve and keep pace with their primary competitors, profit considerations notwithstanding.

#### Collateral for the Loans

The nature of the collateral taken by each of the three types of institutional credit grantors in the Lansing market for cash instalment credit enhances our insights into lender behavior. Table VI-2 presents the percentage distribution of loans by type of collateral at each of the three institutional credit grantors. Scanning the table reveals that the three types of institutions separate themselves into three distinct categories.



Table VI-2. Percentage distribution of loans by type of collateral  
at three consumer lending institutions in  
Lansing, Michigan, 1964-65

Collateral	1 Commercial Bank	3 Credit Unions	6 Consumer Finance Companies
Auto	7.6	30.0	5.8
Auto and Household	3.3	14.2	3.3
Auto and Co-maker	0.5	5.7	-
Auto, Household and Co-maker	-	1.0	-
Auto and Savings Shares	-	0.7	-
Household goods	4.1	4.3	44.8
Household goods and Other	-	0.5	1.5
Unsecured Note	47.7	35.5	38.5
Real Estate	0.5	14.2	-
Co-maker	3.6	5.7	2.5
Other Security	5.1	1.2	3.7
Savings Shares	12.2	5.2	-
Marketable Securities	-	0.2	-
Cash Value of Life Insurance	6.1	-	-
Marketable Securities and Cash Value of Life Insurance	1.5	-	-
Not Reported	10.7	-	-
Total	100.0 <sup>1</sup>	100.0 <sup>1</sup>	100.0 <sup>1</sup>
Number of Loans	200	600	1,133

<sup>1</sup> Totals may not add due to rounding.

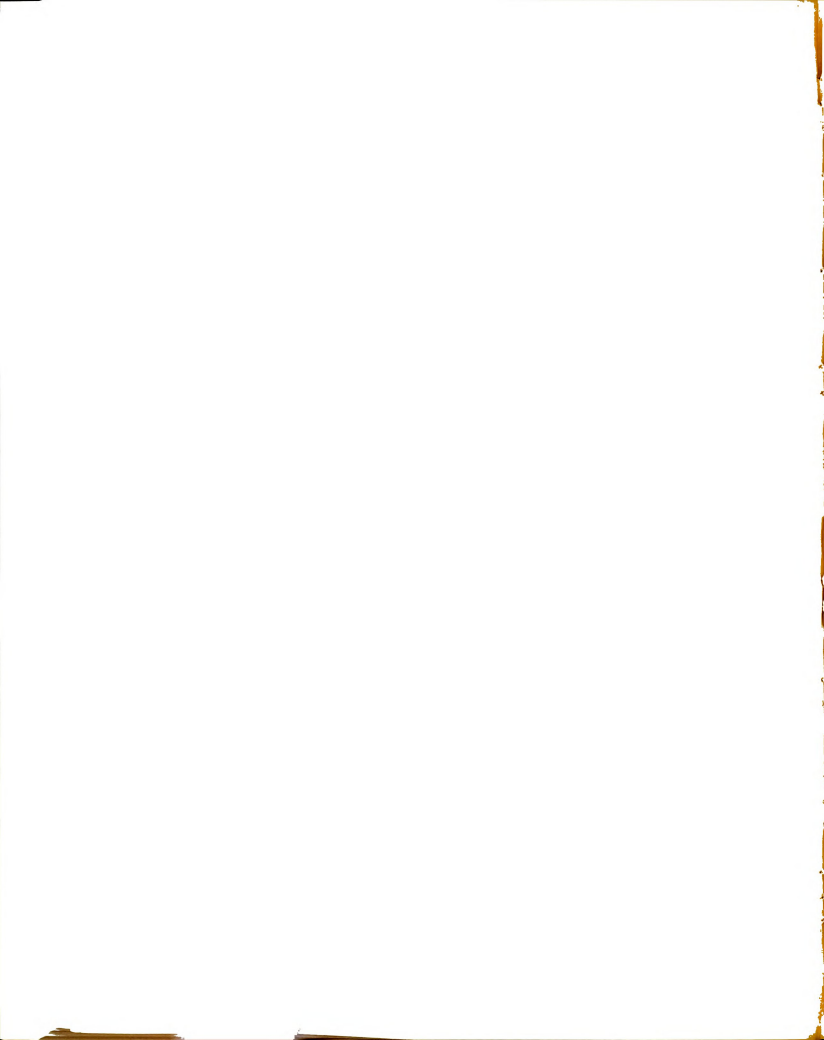


The three credit unions are distinguished from the one commercial bank and the consumer finance companies by the fact that over 71 percent of their loans were secured by automobiles, real estate or liquid assets. It is to be noted especially that this figure exceeds the proportion of loans for the purchase of durable goods by a considerable margin.

The six consumer finance companies are at the other extreme. Slightly more than 9 percent of their loans are secured by automobiles or liquid assets. What is more, their automobile collateral usually consists of used cars rather than new cars. As a result, the durability and resaleability of consumer finance company collateral is inferior to the automobile collateral typically assigned to the three credit unions. This fact implies that the consumer finance companies rarely have a lien position on what is normally considered to be first-class collateral.

The behavior of the commercial bank was somewhat similar to that of the credit union although the magnitude was somewhat lower. Approximately 32 percent of the commercial bank loans are secured by automobiles, real estate, and liquid assets. This figure exceeds the percentage of the loans for the purpose of purchasing durable goods by 5 percentage points. The margin for the credit unions was about 28 percentage points. In other words, the one commercial bank required first-class collateral for loans for nondurable goods expenditures to a far lesser extent than did the credit union.

Thus, with respect to collateral, the credit union is more of a primary lender than the one commercial bank sampled; in fact, the behavior of the consumer finance companies, almost exclusively secondary lenders, was closer to that of the one commercial bank than the behavior of the



bank to that of the credit union sample. It is clear also that the credit unions do not behave in a manner consistent with that of an exclusively primary lender; there is an indication that they, too, are willing to perform secondary lending functions. Note, too, that our conclusions with respect to collateral are substantially similar to the conclusions inferred from the analysis of loan purposes, though the differences in behavior are greater here.

#### Evolutionary Influences

An evolution has occurred with respect to the collateral positions of these credit grantors, particularly the commercial banks and the consumer finance companies. Aggregate data, however, do not satisfactorily reveal these changes, as was demonstrated with respect to loan purpose. It can be pointed out, however, that commercial banks, at least those that have emphasized consumer banking, have altered their attitudes toward collateral considerably. In the prewar period, the single or double endorsement note was a common occurrence. In fact, the consumer finance companies stressed that their loan services would permit consumers to avoid the embarrassment of co-signers by taking other forms of collateral such as liens against durable goods. In the postwar period, the commercial banks changed their attitudes considerably and began to accept other forms of collateral. Consumer finance companies, in order to compete against the lower bank rates, then began to offer credit on signature notes, unsecured notes. We now have evolved to the point where both these institutions now offer credit on an unsecured basis, though with respect to the commercial banks, a rate differential





does exist between collateralized notes and unsecured loans. Thus, it is apparent that the consumer finance companies have become, almost exclusively, secondary lenders; extending credit on the basis of the consumer's character. Commercial banks, however, have not evolved fully to this point, nor is there any expectation that this will occur. To be consistent with the full-service banking concept, commercial banks will want to provide consumer credit for a multitude of reasons and under a number of circumstances. Some commercial banks, exemplified by the analysis of the one commercial bank sampled, do offer secondary loan functions. These banks have literally spread themselves throughout the consumer instalment credit market. And the consumer finance companies, in their effort to differentiate themselves from the commercial banks, more and more have become specialists in the secondary lending functions which this study has described.

Credit union behavior, it should be added, has proceeded along the same lines as those of the commercial banks. But it is important to recognize that their evolution has been compressed in the postwar period, unlike the commercial banks. Thus, the credit unions have a lot of catching up to do within the limits of the legal structure under which they operate, and their continuing rapid rate of growth in the postwar period is evidence of their desire to become, at the least, a full-service consumer lending institution.

The results of the analysis of the collateral position of these credit grantors, confirmed by the analysis of loan purposes, adequately describes the present stage of the evolution of these consumer credit institutions. And this brief discussion concerning evolutionary changes



clearly infers the direction in which further evolution will proceed.

#### Length of Loan Contract

The importance of contract length with respect to the behavior of institutional credit grantors lies in its relation to the goods and services which the credit grantors finance. For the primary lender, contract length would bear some relation to the durability and resaleability of the goods which he finances. For the secondary lender, contract length would bear some relation to the borrower's income available for debt repayment and the stability of the borrower's income.

Table VI-3 presents a percentage distribution of loans by length of loan contract at each of the three types of consumer lending institutions which were sampled. The results are difficult to interpret largely because of the rather wide variety of purposes for which funds were extended to consumers by these institutions. In addition, the maximum contract length of thirty-six months permitted the consumer finance companies is equal to the contract length which has become rather typical of consumer loans, particularly automobile loans. Thus, the ability to distinguish between the influence of the income constraint and the influence of the durability and resaleability of the durable goods which are financed is not very feasible. Any conclusions as to the insight provided by an examination of contract length must be very tentative. In fact, it would require a rather detailed analysis of an extensive loan sample to determine the relationship of contract length to income and to the durability of the consumer good.

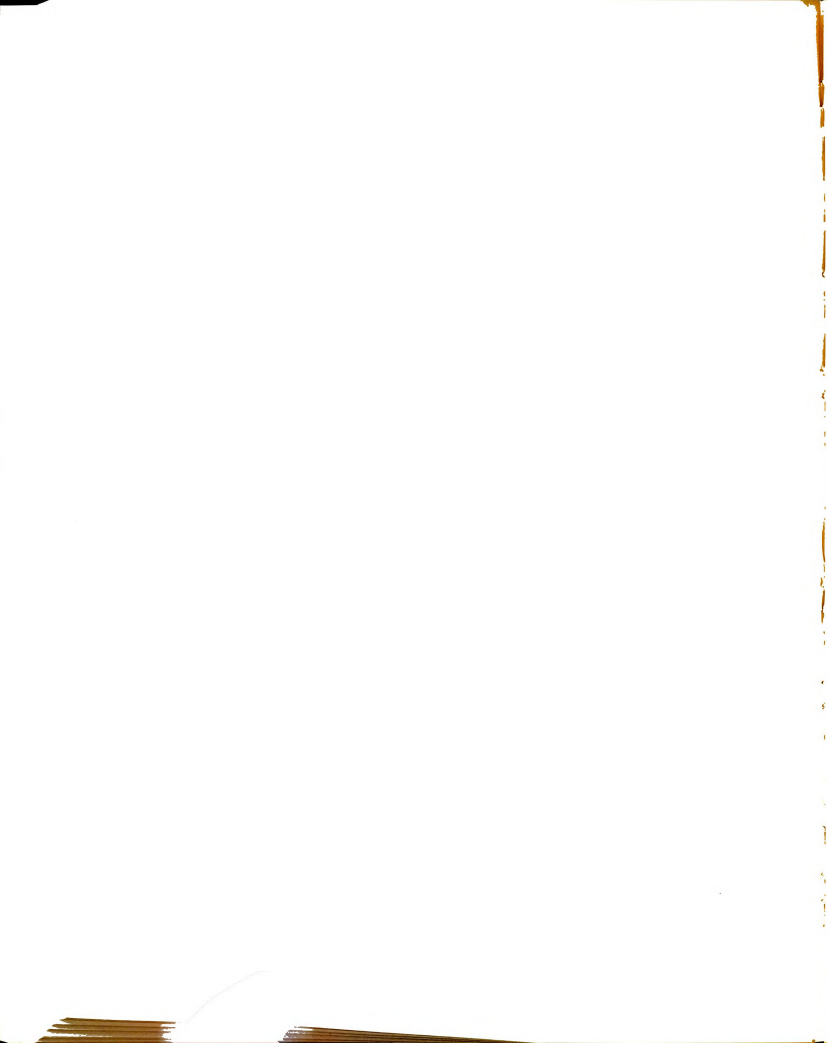
Our first observation concerns the consumer finance companies.



Table VI-3. Percentage distribution of loans by length of contract  
at three consumer lending institutions in  
Lansing, Michigan, 1964-65

Contract Length (in months)	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
1 to 11	3.5	8.6	3.7
12	17.1	5.1	4.2
13 to 23	14.1	18.7	10.0
24	30.2	16.7	33.7
25 to 35	4.0	16.7	13.4
36	29.1	25.1	35.0
37 to 47	-	5.1	-
48 or More	2.0	4.0	-
Total	100.0	100.0	100.0
Number of Loans	199	395	1,082

About 82 percent of the loans sampled had contract lengths of 24 months or more. Since the consumer finance companies do very little financing of durable goods, there is little likelihood that durability has much affect on contract length. Consequently, the borrower's income, as well as other factors, tend to control the length of the contract. Given the size of the loan granted, the longer the length of the contract, the greater is the amount of debt a consumer subsequently can add to his outstanding debt. Or, to put it another way, given the size of the loan, the longer the contract length, the smaller is the ratio of debt



repayment to income available for debt repayment. If the consumer applies to the secondary lender for credit only when he has acquired the maximum permitted by the primary lenders, it would be expected that the length of the contract will need to be extended in order to accommodate the consumer without exceeding the income constraint. The behavior of the consumer finance companies in the sample seems to be consistent with such a theory.

Of course, the relatively long length of contract maturities can be the result of another factor. Income from loans is a function of time as well as the rate charged. All other things equal, the credit grantor would prefer longer terms than shorter terms. But all other things are not equal. It has been a cardinal principal of credit management that risk is directly related to contract length though not necessarily in proportion to contract length. Thus, extending contract terms to acquire additional income carries with it the additional risk of lending. In terms of the relation of debt repayment to income available for debt repayment, extending the terms of the contract increases the uncertainty as to the future income available for debt repayment. In the Lansing area, however, the dominant employers are the state government and a very successful automobile enterprise. Income stability, particularly of state employees, tends to be rather high compared to some other economic regions. This fact permits credit grantors to extend contract length to acquire additional gross income without a significant increase in the risk associated with longer contract maturities. In light of this phenomenon, it is difficult to state with any degree of reliability that the relatively long length of consumer finance company





loans is the result of relating contract maturity to the borrower's income available for debt repayment. Though such a relationship is consistent with the theory postulated in this study, the economic environment of the Lansing metropolitan area does not permit the relationship to be isolated.

Credit union and commercial bank behavior is even more difficult to isolate. Previous analysis has shown that both types of institutions extend credit for a wide range of purposes. To distinguish between the income and durability influence on contract length would require a sample which is substantially greater than that which was obtained for this study. As a result, little can be said with respect to contract length and the behavior of these two types of institutional credit grantors. This is especially so in light of the wide range of contract maturities which these institutions have extended to consumers in the Lansing metropolitan area. The proportion of loans for high value durable goods to total loans is somewhere in the neighborhood of 50 percent. Consequently, there is no way to interpret the distribution of loans by length of contract at the commercial bank and the two credit unions.

It should be noted also with respect to these two types of institutions that the stability of employment and hence of income in the Lansing area furnishes an incentive to these credit grantors to extend terms for durable as well as nondurable purposes. Analysis under this condition would not be expected to yield significant results.

#### Loan Size

##### Average Loan Size in Lansing, Michigan

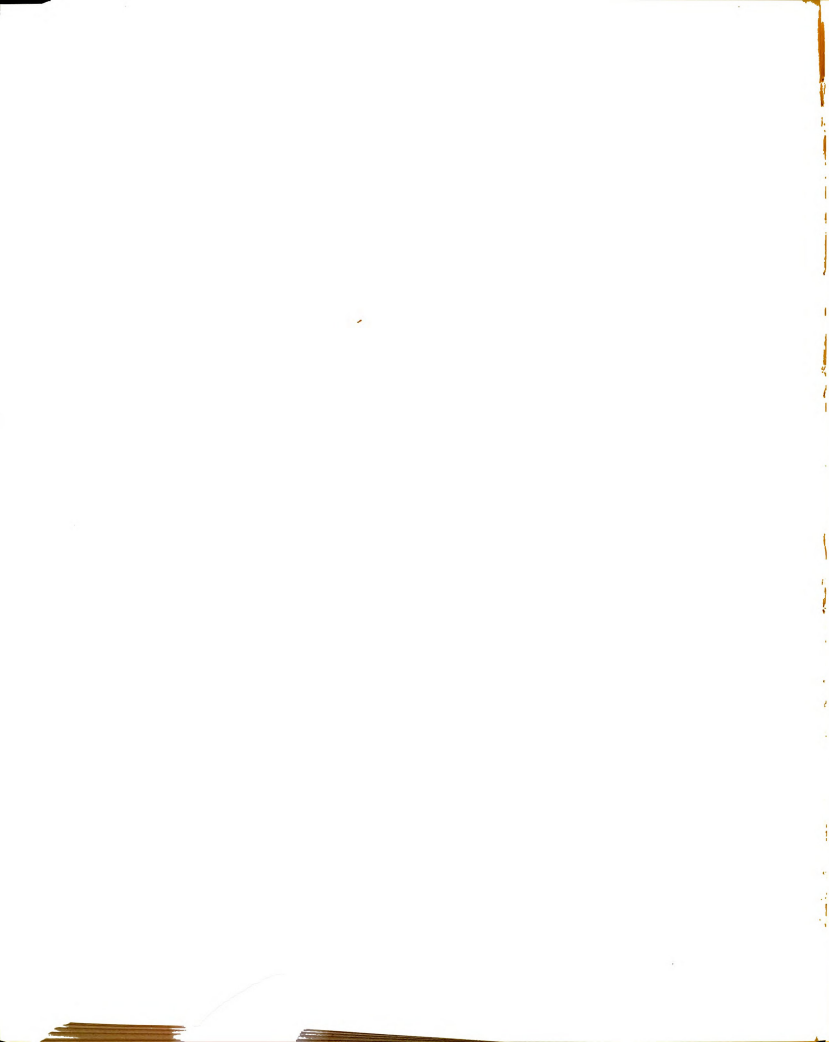
A questionnaire was sent to each of the institutions in the Lansing



metropolitan area making cash loans to consumers. Among the data requested were the gross dollar volume of loans extended for the period January 1, 1964 to June 30, 1964 and the number of loans granted during this period. From the data the average size of loan at each of the institutions was computed.

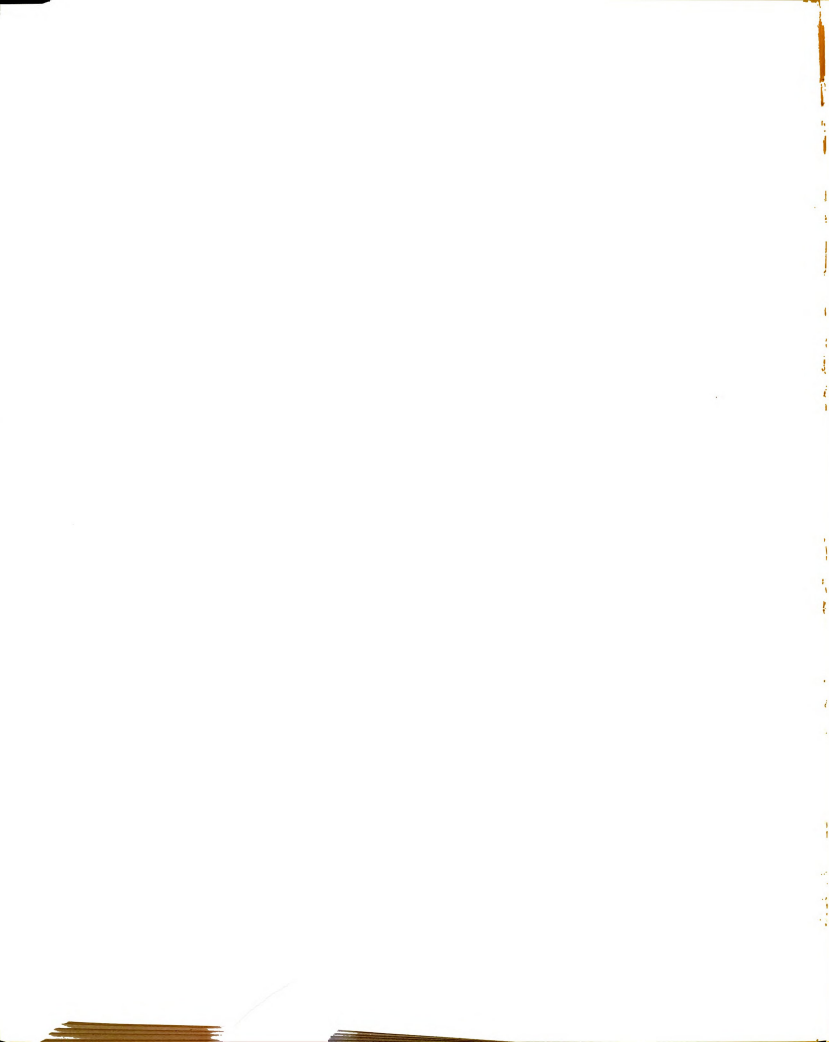
The average loan size at these three commercial banks returning the questionnaire was \$2,825. This figure would have been much lower had one reporting bank been eliminated because of an average size of loan of \$6,000. The average size of loan granted by the one commercial bank sampled for borrower and loan characteristics was \$1,178. This large loan size figure is strongly influenced by commercial bank participation in new automobile financing, an area in which commercial banks have achieved dominance over other lending institutions in the postwar period. In making their financial services known to the public, the commercial banks in the Lansing area have concentrated most of their attention to the direct financing of new automobiles. This one specialized function of commercial banks is reflected in the high average loan size that is exemplified by the three commercial banks responding to the questionnaire as a result of this emphasis and as a result of the relationship between prices of new autos and prices of most other consumer durable goods.

The average loan size of thirty of the forty federal and state credit unions in the Lansing metropolitan area was \$937 for the period January 1, 1964 to June 30, 1964. However, there was considerable variation among the credit unions responding to the questionnaire, largely the result of the limit to average loan size resulting from limited unimpaired capital and surplus. Thus average size of loan



granted varied from a low of \$174 to a high of \$2,191. Thirteen of the thirty responding credit unions reported an average loan size of \$1,000 or more. Only nine of the thirty responding credit unions reported an average loan size of \$600 or less. In general, the data reflect that the size of the credit union has a strong influence on the breadth of the financing function the credit union performs. It should be added, however, that each credit union is obligated by their respective controlling law to give preference to the smaller-sized loans should a situation arise where applying members must be rationed, a situation which has not appeared during the period for which data were requested.

Twelve of the twenty-one consumer finance companies in the Lansing metropolitan area responded to the questionnaire. The average size of loan extended by these companies was \$512 for the period January 1, 1964 to June 30, 1964. The variation in the average size of loan granted was much narrower than that of the credit unions. The lowest average was \$243, the highest average loan size was \$659. Eight of the twelve consumer finance companies reported average loan size of \$500 or more. Thus the range of goods and services financed by consumer finance companies was considerably smaller than that of the commercial banks and most of the credit unions. As a result, the position of the consumer finance companies in the consumer cash instalment credit market is unique in the sense that they do not offer much competition to the other credit grantors with respect to the financing of high-priced consumer goods and services.



Variability in Size of Loans Granted

Table VI-4 presents the percentage distribution of loans granted from a sample of consumer lending institutions in Lansing, Michigan by type of institution and by size of loan. The data are an indication of the extent to which these lending institutions provide financing for the various goods and services demanded by consumers.

Table VI-4. Percentage distribution of loans by size of loan  
at three consumer lending institutions in  
Lansing, Michigan, 1964-65

Size of Loan	1 Commercial Bank	2 Credit Unions	6 Consumer Finance Companies
\$0.01 - \$100.00	1.5	3.2	2.2
100.01 - 300.00	23.0	12.5	18.6
300.01 - 500.00	18.5	10.8	19.9
500.01 - 750.00	13.0	12.7	16.0
750.01 - 999.000	8.5	5.5	7.1
1000.00	-	-	36.2
1000.01 - 2000.00	31.5	42.7	-
Over 2000.00	4.0	12.6	-
Total	100.0	100.0	100.0

All three consumer lending institutions apparently are willing to meet practically all the credit needs of the consumer with the exception of consumer finance companies and the financing of high-priced durable goods. Surprisingly, the distribution of loans by size for the commercial

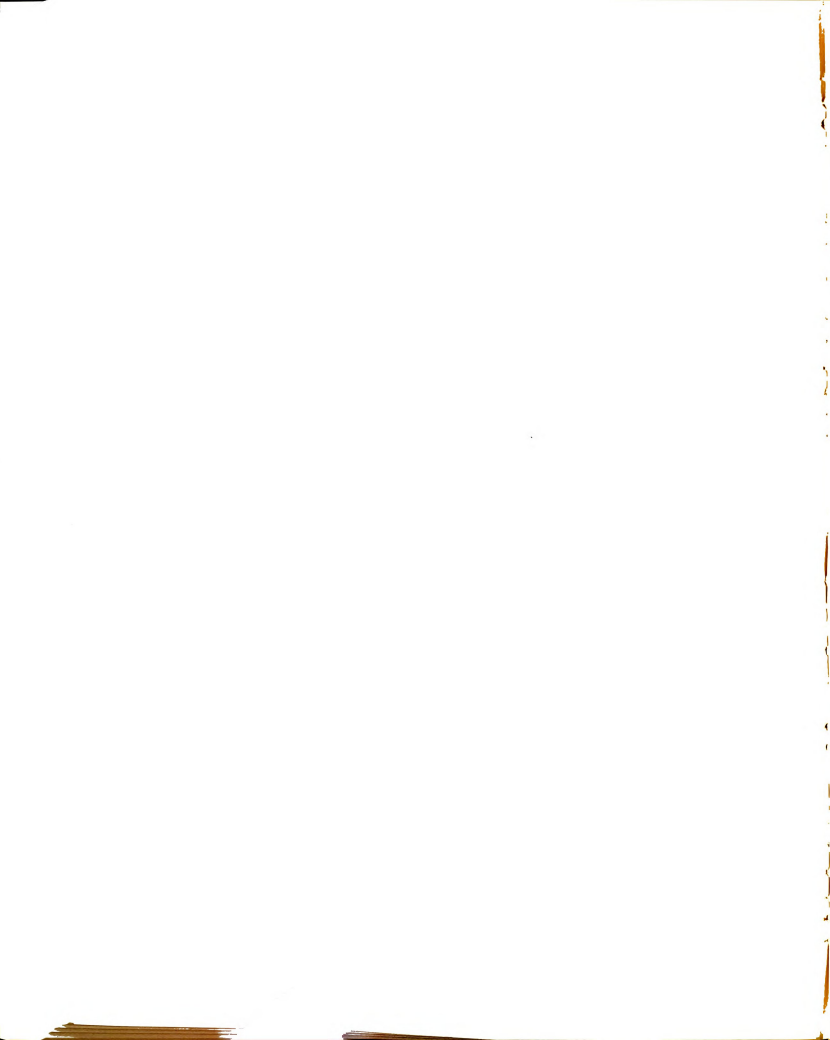




bank and the six consumer finance companies are substantially alike to the extent permitted within the legislative loan limit imposed upon the licensed consumer finance companies. For small loans, the maximum charges permitted the commercial banks provides them with a substantial advantage over the consumer finance companies. A \$100 loan at a commercial bank for twelve months will cost \$9 excluding insurance premiums and filing fees. The same size loan at the consumer finance companies will cost the consumer \$17. Putting it another way, the effective rate for a \$100 loan at a consumer finance company is 2.5% per month; the effective rate of charge is only 1.5% (approximately) for the same loan at a commercial bank.<sup>1</sup> The circumstances surrounding the granting of small loans at the commercial bank may be responsible for the bank's willingness to accommodate the small loan needs of consumers. This is a hypothesis that has been examined in another section of this chapter. The point to be established here is that the commercial bank sampled appears willing to finance all the credit needs of the consumer with respect to loan size if the consumer meets the conditions established by the bank for the granting of these loans. As a result, the small loan segment of the cash instalment credit market is not necessarily the exclusive domain of the consumer finance companies as is oftentimes stated. The commercial bank, and the credit unions to a lesser degree, provided small loans to consumers at a rate considerably below that usually charged by consumer finance companies in Lansing, Michigan. On the other hand, the consumer finance

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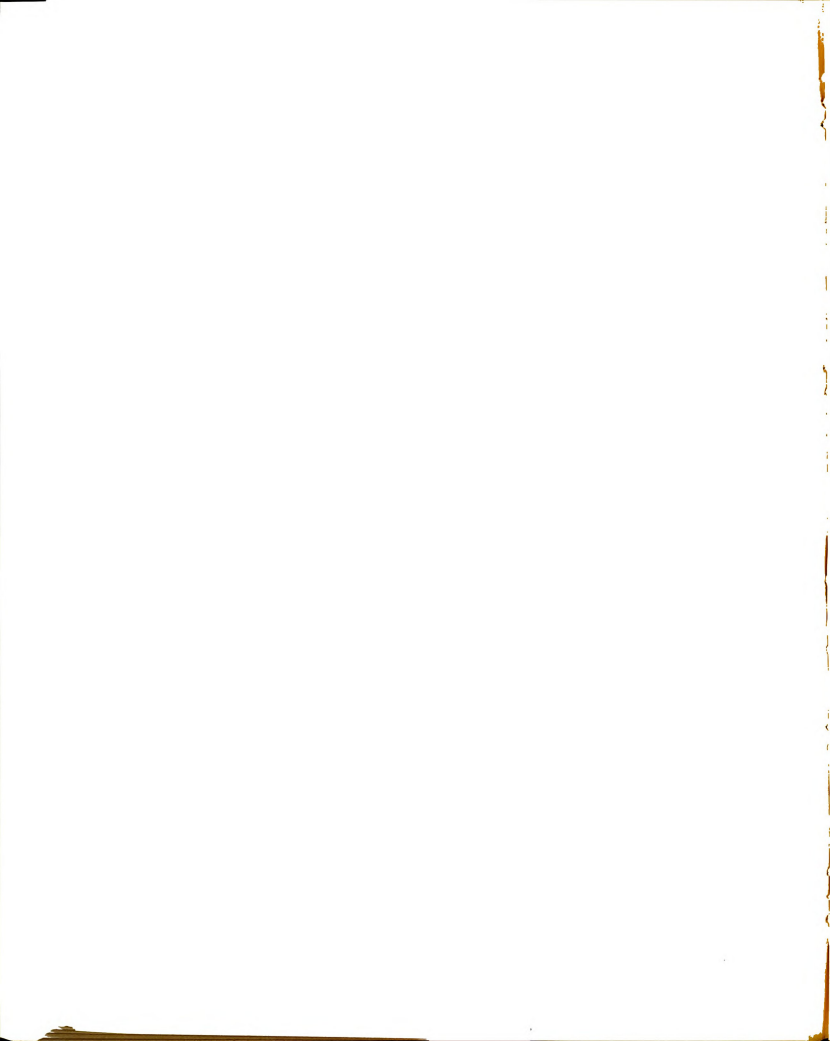
<sup>1</sup> The differential between bank rates and consumer finance company rates will narrow as loan size increases on the assumption that both institutions charge the maximum permitted. On a \$1,000 loan the effective monthly rate at a consumer finance company in Michigan is 1.842%.



companies have not been able to participate in the financing of higher-priced consumer goods and services because of the relatively lower legal ceiling on loan size. The position of the consumer finance companies in the cash instalment credit market is unique because they are effectively excluded from financing higher-priced durable goods while the commercial banks and the credit unions are not excluded from competing for smaller-sized loans

#### A Comment on Loan Size Data

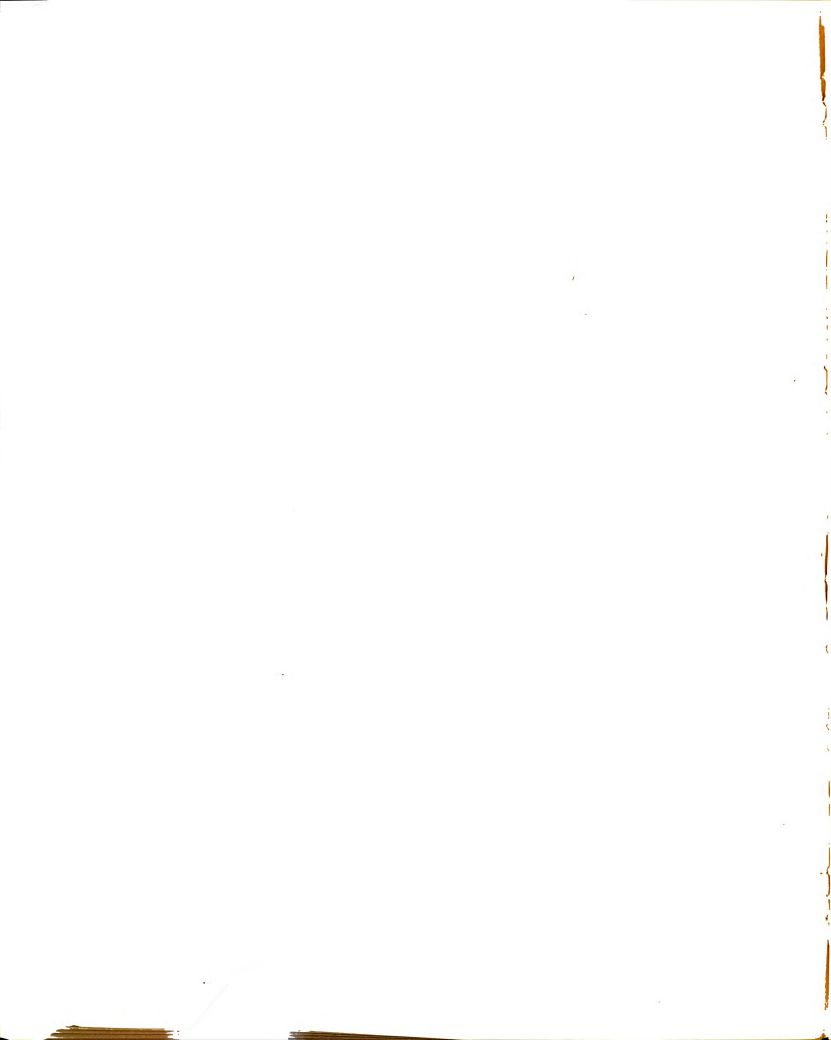
Loan size data can be misleading in the sense that such data does not necessarily reflect actual cash outflows on the part of the credit grantor. The reason for the divergence of loan size from cash outflow arises from the accounting procedures employed by credit grantors in the case of loan renewals in which additional amounts of credit are granted. An example amply illustrates the nature of this divergence. A consumer who has originally borrowed \$1,000 and received \$1,000 in cash subsequently repays \$300 of the principal amount. The consumer now requests a cash loan of \$300 for one reason or another. On the books of the credit grantor, this new loan will be recorded as a \$1,000 loan although the consumer actually receives only \$300. The reasons for this procedure are legal restrictions on the number of loans a credit grantor can issue to one consumer and the simplification of the accounting records such a procedure offers. In any event, the actual size of the loan is overstated as a result of this procedure. The average loan size figure will be overstated the larger the proportion of loans granted to present borrowers. An examination of annual reports of small loan companies and interviews with a number of credit union officials indicate that approximately 60%



of the loans granted are to present borrowers. Consequently, actual loan size figures are substantially overstated.

Yet, the inferences drawn from the analysis of average loan size data such as in the preceding pages is not necessarily invalidated for these figures still give an indication of the goods and services which the credit grantor finances. It need only be added that the largest proportion of loans granted are for smaller-sized loans rather than higher-sized loans assuming a fairly high proportion of loans to present borrowers. In effect, then, the actual variability of loan size experienced by credit grantors is greater than the reported variability. This is particularly relevant to the credit grantor offering smaller-sized loans such as the consumer finance companies. Looking at it in another fashion, the original loan becomes a tentative ceiling for a line of credit to the consumer inasmuch as he is very frequently permitted (even encouraged) to restore the loan to its original balance after providing sufficient assurances of a good repayment habit.

Of all the loan characteristics, loan size data provide the smallest contribution to our insight into the market behavior of credit grantors. The willingness to grant loans within very broad limits is as much the result of legal restraints on behavior as it is the result of implementing marketing policies. That is, the consumer who desires a very small loan will not be turned down if there is a reasonable expectation that his future credit needs will require larger sums. The granting of the very small loan can be viewed as an investment by the credit grantor. This practice is no doubt common and, as such, fails to shed any light on fundamental elements of market behavior.



## CHAPTER VII

### SUMMARY AND CONCLUSIONS

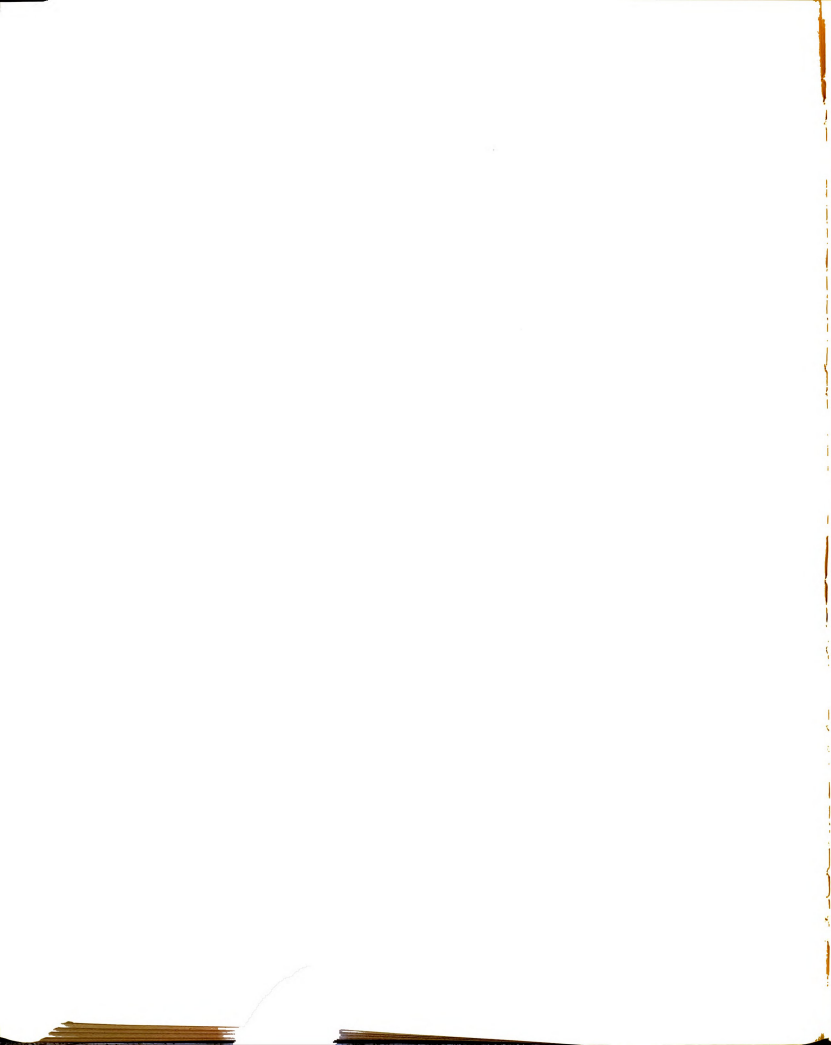
The objective of this study has been to analyze the market behavior of the three major credit grantors in the consumer cash instalment credit market. The analysis was founded upon a number of factors which were felt to be absent in previous studies of this market. These factors include the recognition of geographical limits to markets in general and to the consumer credit market in particular, and the postulation of a functional theory of market behavior.

#### Foundations for the Functional Theory

The previous studies of cash instalment credit grantors are characterized by a framework based on institutional organization. That is, one finds a large number of references to the market of the commercial banks, or the market of the consumer finance companies, etc. Inevitably, discussions formulated on this basis lead to conclusions that these organizational market segments either overlap or that the sub-markets are indeed segregated.

The logic of the organizational approach contains the implicit assumption that financial institutions are specialized economic units; that is, each performs only one function with respect to a given market. The approach also contains the implicit assumption that each of the institutions are unique inasmuch as the legal structures under which each of them operates are unique also. And finally, this approach has its roots in the extremes of financial specialization which was characteristic

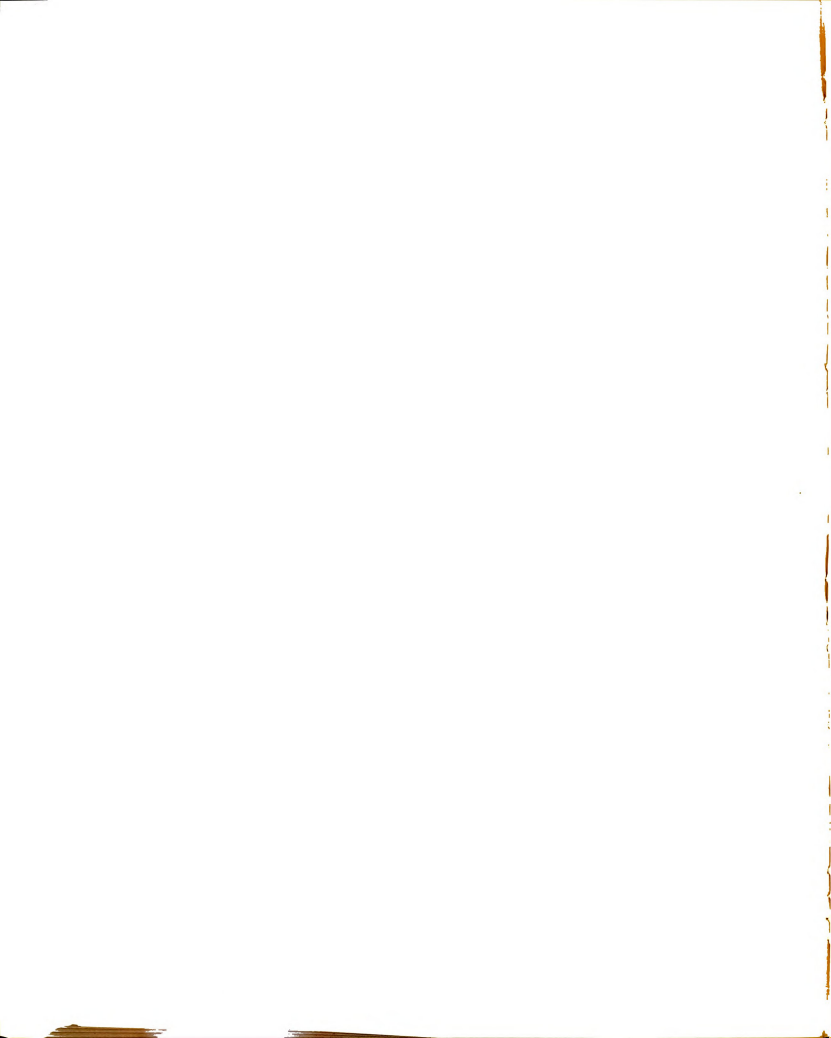




of the pre-World War II years.

The organizational approach to the study of the consumer credit markets is divorced from the microeconomic theory of markets because of the implicit assumptions we have been discussing. Microeconomic theory does not differentiate among suppliers by type of institutional organization. Yet, the elements of microeconomic theory do provide the flexibility necessary to meaningfully account for changes and developments in the market that cannot be accounted for successfully by the organizational approach to market study. The theory which has been postulated in this study is based on the principle that credit grantors should not be distinguished by their organization during the analysis. Rather, the observations of the market behavior of the various credit grantors should be related to a theory of functional behavior. It can then be concluded that the supply of credit for each of the functions is the sum of all the institutional credit grantors or that not all credit grantors can be wholly included in the supply of credit for each of the individual market functions.

The functional approach also permits the analyst to divorce the analysis from the regulatory influences which determine at least a part of market behavior. As much as possible, the functional approach ignores the existing regulatory structure. The conclusions, then, can reveal more distinctly the influence of the regulatory structure on market behavior, including its limitations upon market behavior. If we can, for the moment, disregard the overall designs of public control of financial institutions, the elements of microeconomic theory can be used to relate external factors, such as public regulation, to market behavior.



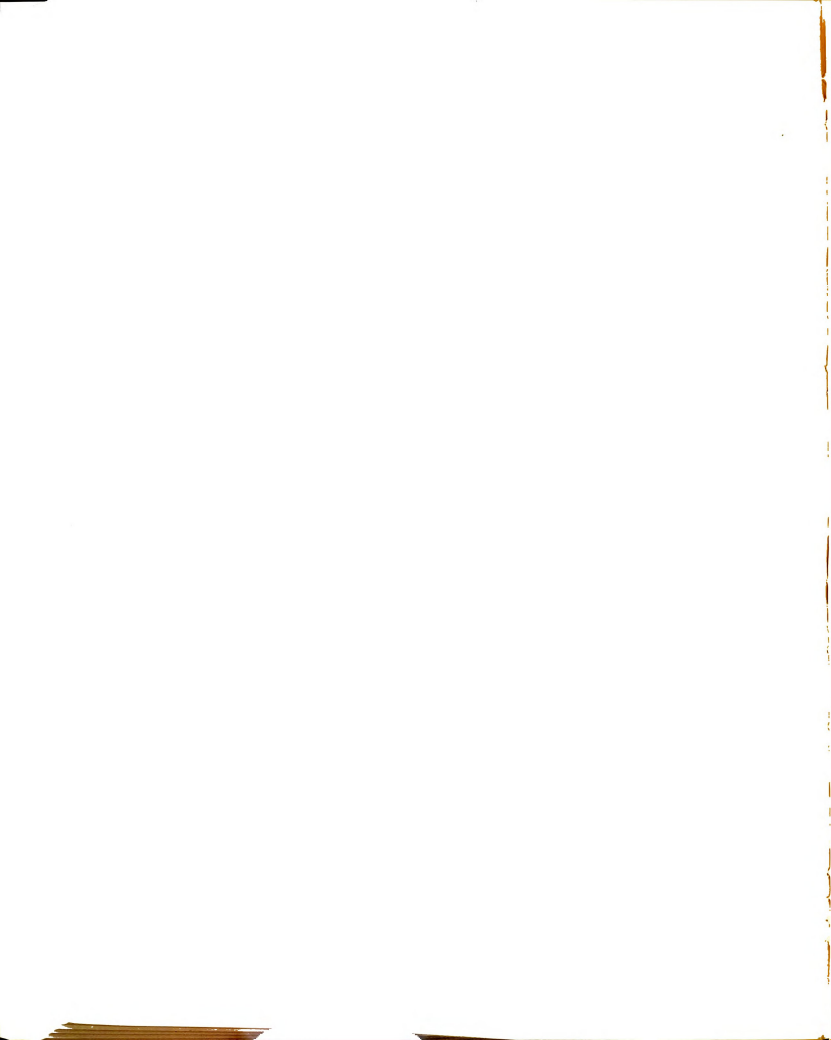
From this origin, the effects of public regulation can be re-examined and the determination of net benefit or disadvantage to the public welfare resulting from such control can be more fruitfully evaluated.

Hence, the functional approach to market behavior offers another approach to the description of market behavior and of regulatory influences. And because it is functional, it contains no preconceived notions as to how the market should be structured. The functional approach to market behavior only is aimed at describing the structure of the market and the basis of that structure.

#### The Heart of the Functional Theory

Capital markets, by their very nature, are imperfect. There are many ways in which credit grantors can differentiate their loan services with respect to each other and with respect to all the borrowers in the capital market. With respect to the consumer capital market, differentiation is manifested in two distinct forms. The income constraint is a basic element in every capital market transaction. However, credit grantors can differentiate their loan services by applying varying standards to the determination of future cash resources available for debt repayment and by applying different capitalization rates to that future flow of cash resources. In the first instance, then, credit grantors differentiate among themselves by varying the effects of the income constraint on their loan transactions.

The second major form of differentiation is the wealth constraint. Largely because of the uncertainty attached to consumer lending operations, some credit grantors, those less willing to consume a rather high

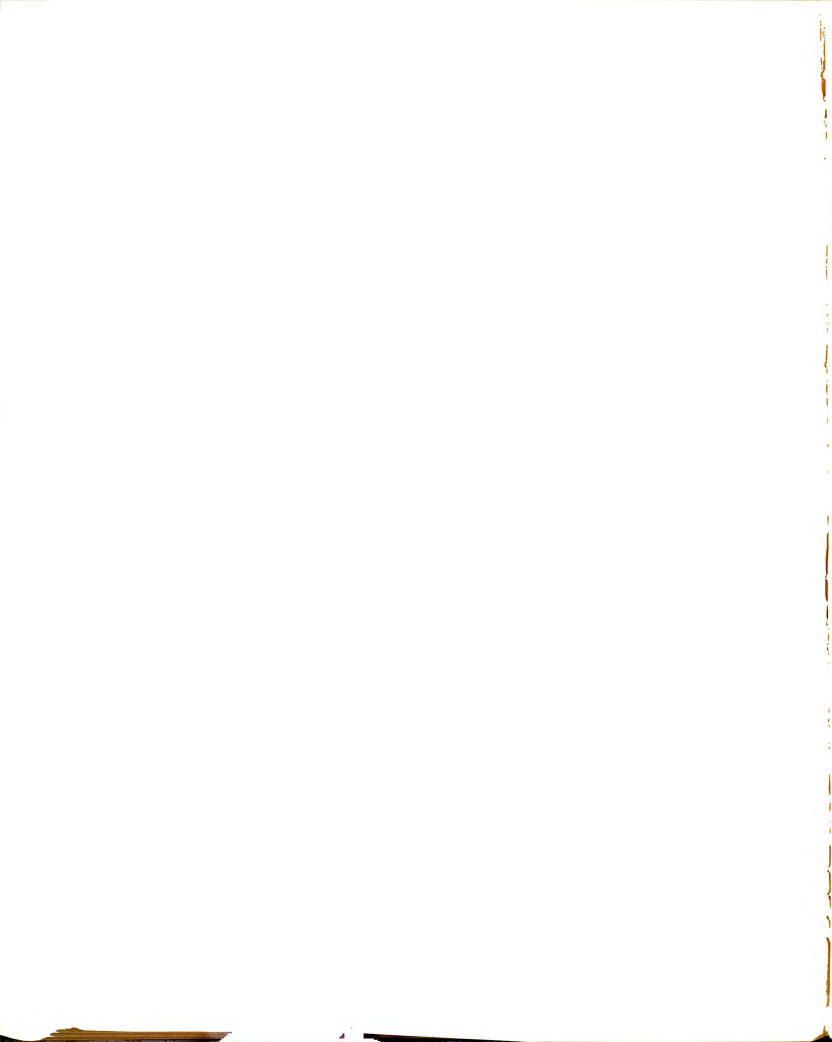


level of uncertainty, prefer to employ a concept of risk and uncertainty which takes into account the residual value of the consumer's wealth. By employing such a concept, a credit grantor reduces risk and uncertainty by reducing his dependence upon the consumer's expected future cash resources available for repayment of debt. By employing a wealth constraint, a credit grantor can, in effect, reduce the level of risk and uncertainty to quantitative terms.

There is a third form of constraint which is imposed by all credit grantors: the moral character of the consumer. Its importance in the financial transaction will vary from credit grantor to credit grantor because of the subjectivity surrounding the evaluation of a consumer's moral character. Furthermore, those credit grantors who employ a wealth constraint need not rely quite so heavily on the borrower's moral character inasmuch as the consumer's wealth provides the credit grantor with an adequate margin to compensate for errors of judgement. Uncertainty, then, is reduced at two levels; with respect to the income constraint and with respect to the evaluation of moral character. As a result, the market for consumer instalment credit has a market structure consisting of two levels: the group of credit grantors which chiefly rely upon the wealth constraint and the group of credit grantors which only rely upon the income constraint.

#### The Structure of Institution Supply

The specification of the structure of institutional supply of consumer cash instalment credit is termed, in this thesis, the primary-secondary structure of the market. The primary lender is faced with a



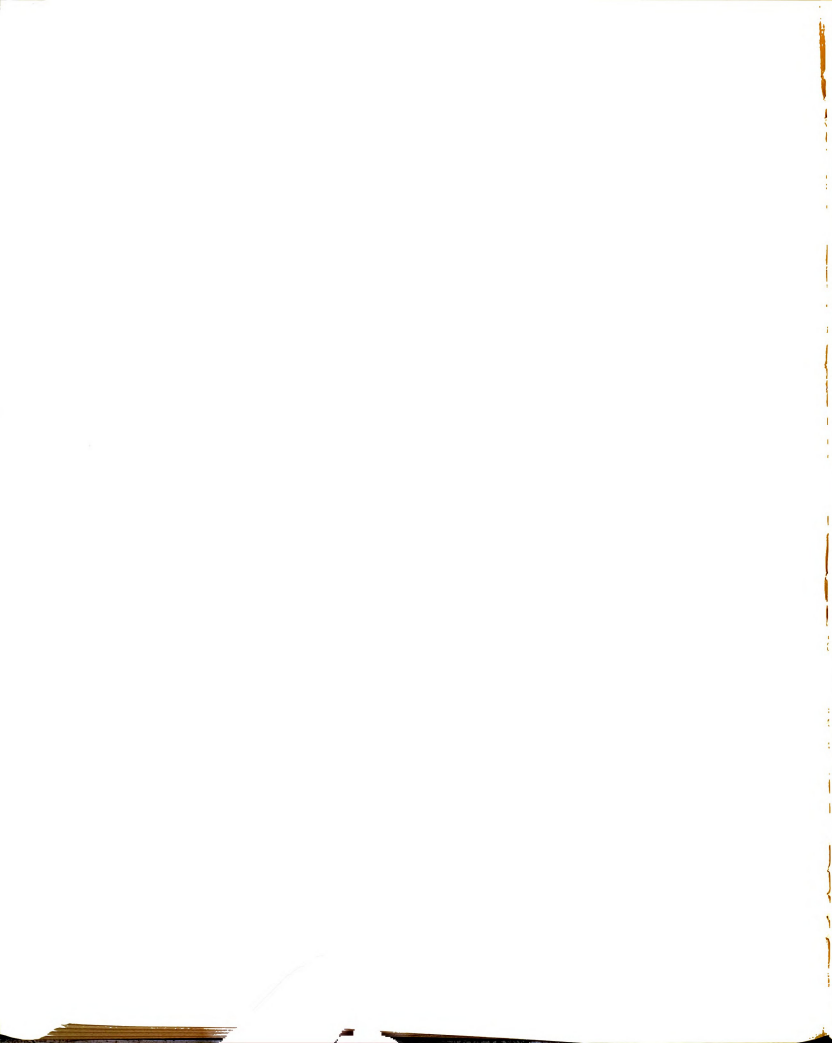
legal maximum rate of charge which requires the more precise measurement of risk associated with the monetary concept of risk. The wealth constraint is employed by the primary lender to meet this requirement.

The secondary lender does not rely upon accessibility to the wealth of the consumer in making his credit decisions. Risk is measured by the pattern of the borrower's characteristics. The much higher rate of charge permitted the secondary lender is the reason for his indifference to the more accurate determination of risk, though it is evident that rates would have been at a high level in the absence of public control of the maximum rate of charge. Relying almost completely on the income constraint and the evaluation of the moral character of the borrower, secondary lenders view collateral simply as a psychological weapon; there is little or no expectation that exercising claims against wealth will produce significant reductions of potential loss. In short, the collateral which secondary lenders may incorporate in their loan transactions is quite inferior to that which would be acceptable to a primary lender.

The supply curve of consumer cash instalment credit is upward sloping as a result of this market structure. Moreover, the supply curve becomes quite inelastic at the point where primary lenders leave the market and secondary lenders enter the market. This is the result of the distinctly different base for determining risk by each of the two types of credit grantors. The source of the difference in the respective levels of the finance rate is the different methods of risk determination and the differing levels of uncertainty which accompany them.

It is important also to note that the finance charge is a function



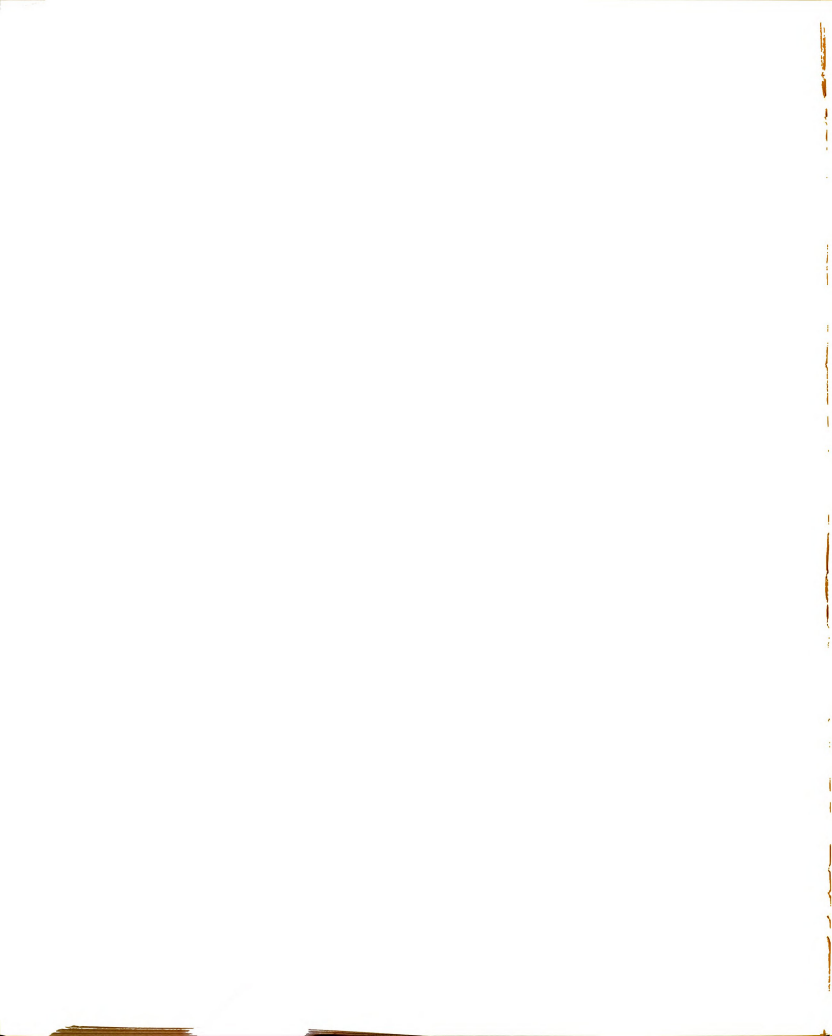


of the nature of the wealth which primary lenders can acquire claims against. As the quality of the wealth falls from one of high quality to one of low, but acceptable, quality, the finance charge of the primary lender rises. With respect to the secondary lending segment, the slope of the finance charge is indeterminant. Since the evaluation of the applicant is indefinite there is no completely sound basis for discriminating among applicants with respect to rate of charge. Theoretically, however, one would expect the finance rate to rise as the quality of the applicants fall from high to low. Where public control of the maximum finance charge is present, one would expect the finance charge to rise quickly to that maximum level, given that finance rate discrimination among borrowers is very difficult and perhaps impractical.

#### The Manifestation of the Theory

Although credit grantors may orient their loan services toward either one of the two concepts of risk which form the heart of this market structure theory, it is not a sufficient basis for informing potential customers of the financial services which are available from the credit grantor. Risk and uncertainty are indefinite concepts, especially in the minds of the untrained. Consequently, risk concepts must be "translated" into loan services as a precondition to the successful marketing of the loan services.

It is because the behavior of the primary and secondary credit grantors is expressed in terms of loan functions rather than risk concepts that the theory which has been postulated in this thesis can be tested. By observing the various elements of a loan transaction, such



as borrower characteristics and loan characteristics, the orientation of the credit grantor toward either one of the risk concepts may be revealed. This is the basic hypothesis which is tested by a case study in Chapters V and VI. A review of the results of the test will now be considered.

#### Evaluation of the Evidence

##### A Test Rather Than Statistical Confirmation

The theory which has been reviewed in the preceding pages of this chapter was tested with the view of indicating that the theory does offer insights into the market behavior of credit grantors. A complete test, including statistical validity, was not conducted for a number of reasons. Firstly, a complete empirical study would have required this study to have been expanded far beyond the time limits normally considered reasonable. The statistical problems alone are the basis for a study.

Secondly, a complete empirical test would have required the co-operation of a number of trade associations and credit grantors. To acquire such cooperation requires the researcher to have the support, financial and otherwise, of a large number of people and organizations not easily accessible to a tyro in the field. In addition, market structure theory is founded, in part, upon the recognition that there are real geographic limits to a market. A full statistical study of the Lansing, Michigan metropolitan area depends on the cooperation of a number of rather small and medium-sized financial institutions, few of which had been approached previously to reveal information which they



consider to be of the utmost secrecy. Such cooperation would have required salesmanship skills far beyond those which this investigator possesses. In many cases, it was an immovable object confronted by an apparently not too irresistible force.

But most importantly, this theory is a departure from the traditional approach to the analysis of market behavior. Yet, the test of the theory by a case study is similar to the analysis which is the heart of the traditional approach. Under this condition, a complete statistical test of the theory serves no purpose if the reader does not accept the basic premises of the theory. The limited test used in this study is aimed at demonstrating that the analysis in the statistical sections of the report are consistent with the theory which has been hypothesized. This objective is sufficient to accomplish the study's main objective: to describe market behavior in such a way as to more effectively evaluate the market forces which are present.

#### Scope of the Statistical Data

In the Lansing, Michigan metropolitan area the sample of loan applications of the various types of credit grantors was severely limited. Thus, the case study approach was used. Of the six commercial banks in the Lansing urban area, three replied to the brief questionnaire and only one commercial bank permitted 200 of its direct loans to be sampled. As a result, the validity of the data is limited only to the commercial bank sampled.

Of the forty state and federally chartered credit unions in the Lansing metropolitan area, thirty replied to the questionnaire, and two



credit unions provided a sample of 400 loan files. In addition, one credit union provided data concerning loan characteristics of 200 loans. The validity of the data generally is limited to the two credit unions which provided detailed samples. It is to be noted that both are government employees' credit unions and their behavior is quite similar to one another. Consequently, the sample of 400 loans is indicative of the behavior of these two credit unions when taken together.

Twelve of the twenty-one consumer finance companies in the Lansing metropolitan area replied to the questionnaire. Six of the companies permitted a sample of loans, totaling 1,200 in all. The comprehensiveness of the law regulating these companies results in behavior that is not substantially different among the consumer finance companies sampled. Thus, the analysis devoted to these companies can be considered as indicative of consumer finance companies for the Lansing metropolitan area. Further confirmation of this relationship is available in the traditional studies. These studies reveal that more than any other institution, the behavior of commercial banks in the consumer installment credit market varies more considerably, both by size of bank and by geographic location of bank. There is little, if any, variation among consumer finance companies.

In summary, then, given the geographical limitations on the market, the test of the theory postulated in this study is limited to one commercial bank, credit unions in a very general sense, and consumer finance companies.





### Borrower Characteristics

The market structure theory presented in this study produces two implications with respect to the expected findings of an analysis of borrower characteristics at primary and secondary credit grantors. Since the primary lender is largely guided by the loan characteristics of the transaction, his interest in borrower characteristics is passive. Other than as a means for determining that the applicant's moral character is acceptable, borrower characteristics exert little or no influence upon the credit decision. It was noted, however, that inasmuch as the durability and resaleability of consumer durable goods does vary, the importance of borrower characteristics also varies. In either case, it is hypothesized that no discernible pattern can be observed with respect to the characteristics of borrowers at primary credit grantors.

Borrower evaluation by secondary credit grantors is too indefinite to produce an expectation of a pattern to the characteristics of the borrower. Statistical studies of borrower characteristics and repayment record do not reveal any single pattern of borrower characteristics that is an indication of an acceptable repayment record. Consequently, undesirable characteristics can be offset frequently by desirable borrower characteristics. The result is a large number of combinations of desirable and undesirable characteristics none of which offers the credit grantor an incentive to exert a preference for any given combination that is observable from a review of loan files.

Borrower characteristics at each of three types of institutional credit grantors; one commercial bank, two credit unions, and six consumer finance companies; were analyzed by the size of the borrower's

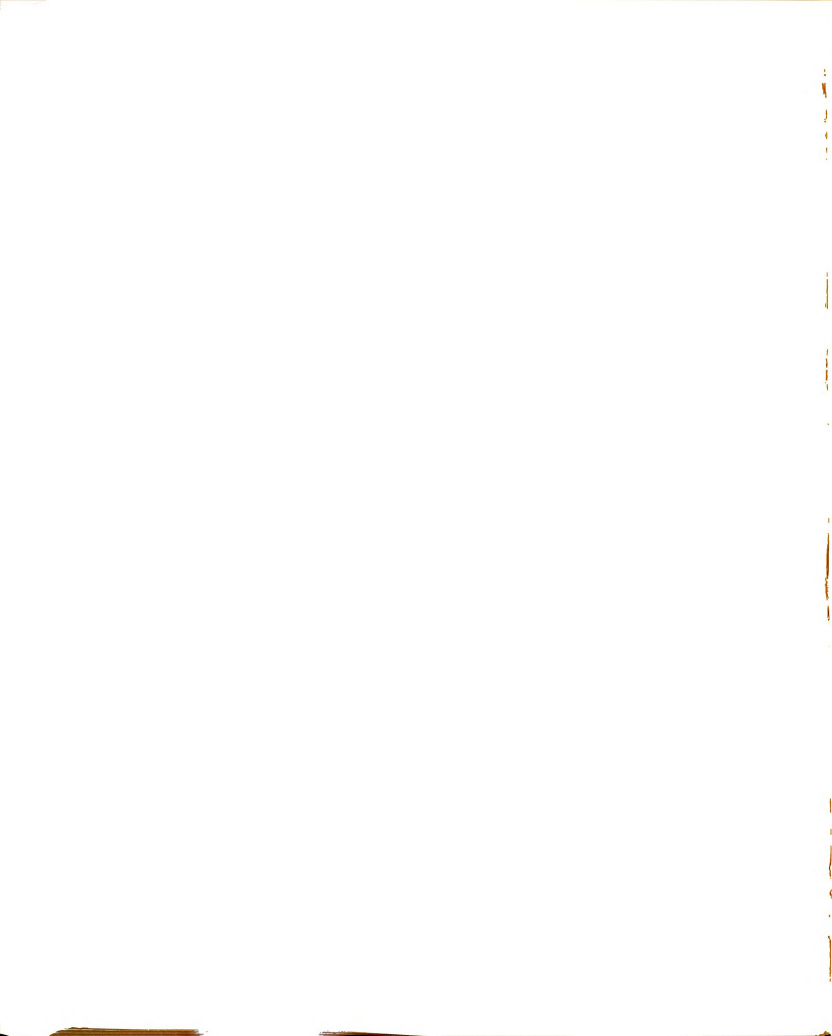


income. These characteristics included, age, sex, marital status, years at present residence, years at present employer, liabilities reported, and monthly income. As a result of the analysis of borrower characteristics, only a few observations were possible.

Firstly, the analysis reveals that all three types of credit grantors extended cash credit to lower income consumers at frequencies quite similar to one another. It was pointed out, however, that the credit union sample is biased by the fact that government employees generally display an income distribution that is to the left of the income distribution of the general labor force.

A clear pattern to any one of the borrower characteristics when related to monthly income was not revealed. The commercial bank sample, however, did reveal some preference for older consumers with greater residential stability when the consumer's monthly income was \$500 or less. It was to be expected that the commercial bank would reveal also a preference for greater employment stability in this lower income group. However, either the bank did not express a preference for this characteristic or the bank was unable to enforce such a preference because employment stability in this income group was not dissimilar to either the credit union or consumer finance company samples.

It is to be concluded that institutional credit grantors do not differentiate themselves with respect to the income distribution of their borrowers as the traditional approach so often has concluded. Similarly, institutional credit grantors do not differentiate themselves with respect to certain of their borrowers' characteristics. This is not to say that differentiation may not occur with respect to this aspect of



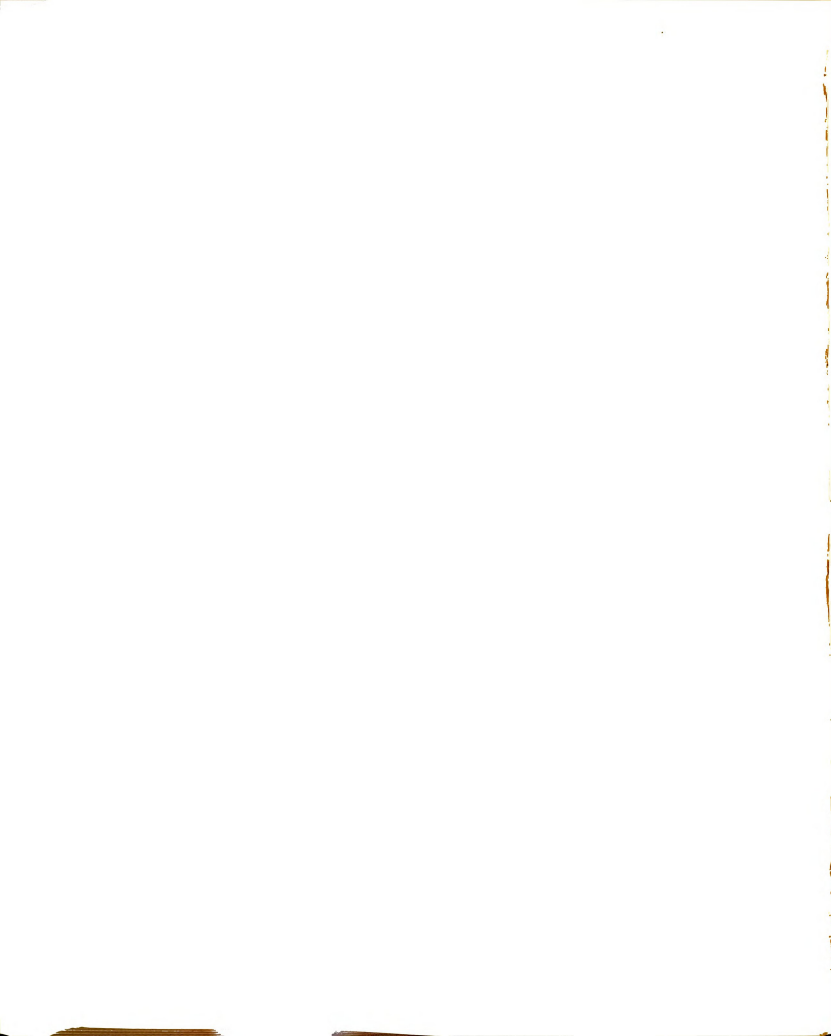
financial services. It is to say that there should not be an expectation of differentiation among various types of institutional credit grantors.

The assumption of uniformity of behavior within a particular type of institutional grouping is not particularly sound when geographic and other factors are considered. It was pointed out that if any other commercial bank in the Lansing area had been sampled, it would have been likely to resemble a truly primary lender. Further, the commercial bank which was sampled does represent the only truly consumer-oriented bank in the Lansing area with respect to financial loan services. In short, institutional organization and consumer loan services with respect to borrower characteristics are not perfectly correlated. Inter-institutional duplication of loan services does occur. Substitution is available to consumers in the Lansing metropolitan area with respect to acquiring loan services.

Finally, it is to be noted that the analysis of borrower characteristics does not furnish an adequate basis for classifying credit grantors into primary and secondary lenders. Though partial classification was possible, especially with respect to the consumer finance companies, such a partial classification is far from adequate.

#### Loan Characteristics

We hypothesized that differentiation among institutional credit grantors, to the extent that it does occur, only can be observed by analyzing the loan characteristics of consumer financial transactions. Moreover, that loan characteristics do reveal the extent to which credit



grantors rely upon either one or both of the risk concepts which are the source of the nature of the market structure is borne out both by the results of the analysis of loan characteristics in Chapter VI and our conclusion that the analysis of borrower characteristics provided no help in understanding the structure of the supply of consumer cash instalment credit.

#### Purpose of the Loan

The analysis of loan purposes indicated that institutional credit grantors do place different degrees of emphasis upon the goods and services they are willing to finance. The commercial bank sample and the credit union sample revealed rather high frequencies of loans for the purpose of purchasing durable goods. Though these institutions did exhibit a willingness to lend for many other purposes, the high frequency of durable goods loans is an indication that the commercial bank and the two credit unions are oriented toward the primary lending segment of the cash instalment credit market.

The consumer finance company sample had the highest proportion of loans for the purpose of debt consolidation and current expenses. Moreover, the low frequency of loans for the purpose of purchasing durable goods further indicates the orientation of the consumer finance companies toward the secondary lending segment of the market.

In general, the credit unions and the commercial banks indicated a willingness to perform in both segments of the consumer cash instalment credit market. The consumer finance companies, on the other hand, indicated, on the basis of loan purpose, that they are specialists in the





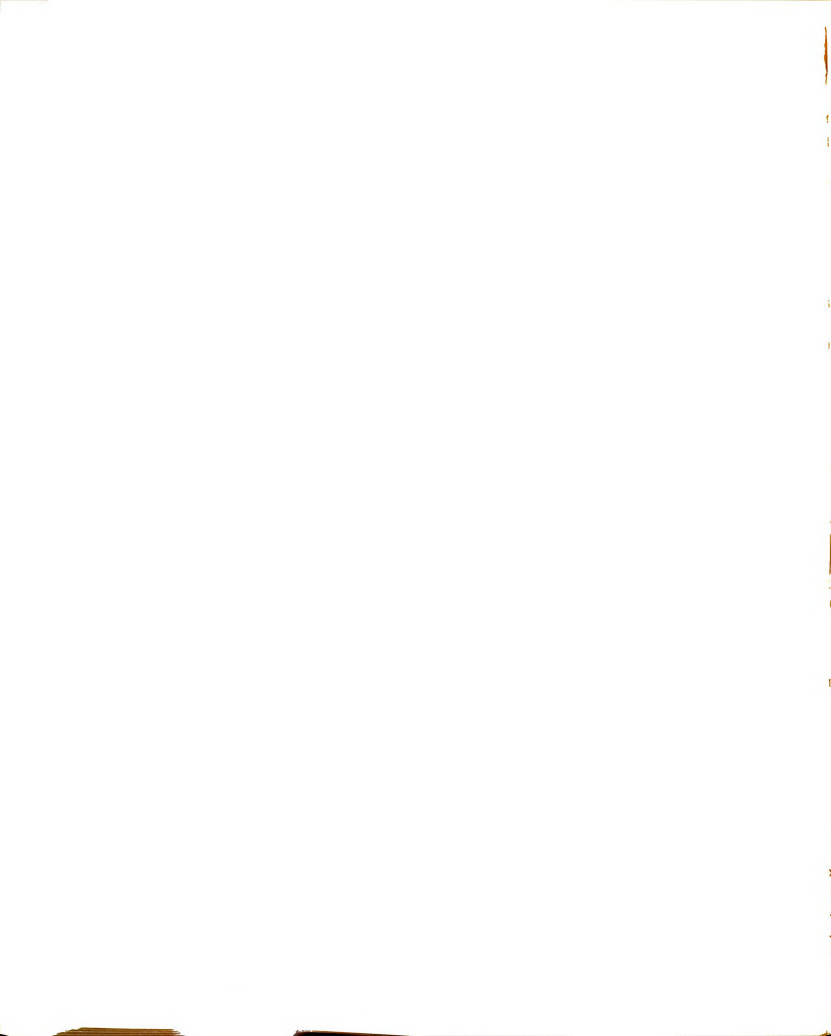
secondary lending segment of the market.

#### Collateral

The lending functions of the institutional credit grantors are brought even more sharply into focus when the collateral provisions of loan contracts are analyzed. More than any other single factor, examination of collateral provides for a clear definition of the lending functions of the institutional credit grantors.

The data revealed that the consumer finance companies were not accessible to first-class consumer wealth. Only about 9 percent of the collateral consisted of liquid assets or automobiles. This finding is clearly consistent with the behavior of a secondary lender. When added to our previous finding concerning loan purpose, there is little doubt that the consumer finance companies are specialists in the secondary lending segment of the market.

Credit union behavior with respect to collateral indicates that they are strongly oriented toward the primary lending function described in this study. Over 71 percent of the credit union loans are secured by first class collateral. This proportion, moreover, exceeded the proportion of loans used for the purpose of purchasing durable goods by a considerable margin. But it is to be emphasized that though the credit unions do have a currently strong orientation toward the primary lending function, there are indications that these institutions are willing also to perform secondary lending functions and that this willingness is increasing. Finally, it must be kept in mind that most credit unions are able to check-off the loan payment from the borrowers paycheck.



Such a privilege is extremely conducive to the conduct of an aggressive secondary lending program that many credit unions have exploited. In a sense, then, this privilege of checking-off permits the credit union to perform secondary lending functions while retaining its orientation to the concept of risk embodied in the primary lending segment of the market. Especially with respect to the highly stable government employees, such an attitude represents but a slight alteration of the primary lending concept postulated in this study.

The behavior of the commercial bank with respect to collateral does not indicate as strong a primary risk concept orientation as that of the credit unions. The proportion of loans secured by first-class collateral is only slightly more than the proportion of loans for the purpose of purchasing consumer durable goods. It is rather clear, then, that the commercial bank sample indicates a willingness to perform both the primary and secondary lending functions. Such an indication, moreover, is consistent with the concept of full-service banking which has been actively promoted by many commercial banks in the United States, including the one commercial bank which was sampled.

#### Length of Loan Contract

The analysis of contract length adds to our insight into the market behavior of institutional credit grantors. Length of loan will be a function of the resaleability and durability of the goods which a primary lender finances. For the secondary lender, contract length will be a function of the income constraint which the borrower may face. The fact that 82 percent of the consumer finance companies' loans had maturities



of 24 months or more is indicative of a secondary lending function; a function which requires the credit grantor to adjust the maturity so as to extend credit within the constraint of the borrower's cash resources available for debt repayment.

The relatively shorter maturity of loan contracts at the one commercial bank and the two credit unions would seem to be somewhat consistent with a primary lending function. However, the overall employment stability of the Lansing metropolitan area encourages credit grantors to extend loan contracts in order to increase their gross revenues. In addition, the dual nature of commercial bank and credit union behavior does not provide an adequate framework for obtaining a clear picture of the relationship between contract maturity and lending functions.

#### The Conclusions and Their Implications

The limited evidence presented in this study indicates that the traditional studies which showed that the consumer finance companies were practically the only supplier of small loans no longer is applicable today. In the Lansing area, at least one commercial bank and two credit unions indicated a willingness to participate in this segment of the market and with considerable advantage over the consumer finance companies.

In fact, the secondary lending segment of the consumer cash installment credit market no longer can be considered the exclusive domain of the consumer finance companies. The shift in the behavior of the commercial banks and the credit unions from the market behavior frequently described in the more traditional studies is, perhaps, of more significance than the innovations in consumer financing which have occurred in



the postwar period. In fact, these innovations are the direct result of the breakdown of the rigid consumer credit market structure which has been described often.

### Institutional Evolution

The increased interest of the commercial banks and the credit unions in secondary lending functions has resulted from the evolution of the philosophy of these institutions to one of general purpose financial institutions. The concept of full-service banking epitomizes this new philosophy. Consequently, the commercial banks and the credit unions actively engage in both the primary and secondary segments of the consumer cash instalment credit market.

There is no question that the consumer finance companies also covet the privilege to participate in both segments of the market. But in their case, desire and accomplishment have not been successfully harmonized. The failure to become at least a general purpose consumer lending institution is the result of the pronounced dependence of the consumer finance companies upon the attitudes of state regulators and legislators. Their lack of realization of the changes which have taken place in the financial system has deprived the consumer finance companies of an equal opportunity to maintain and develop their share of the market for consumer instalment credit. And in the process, the consumer finance companies have been deprived of an effective competitive implement; the expansion of loan services in order to offset the insurmountable competition which is developing with respect to their present loan services. As a result, consumer finance companies have found themselves





becoming increasingly specialized in order to meet the competition of the commercial banks and the credit unions. This evolution in reverse has forced them to move into risk areas considered undesirable by them. In effect, then, the evolution of the financial system which has carried the commercial banks and the credit unions into new areas of service has passed over the consumer finance companies altogether.

#### The Economics of the Evolution

The increased interest of the commercial banks and the credit unions in secondary lending functions has evolved from sound economic facts and principles. An efficient financial system requires a great deal of overhead: skilled personnel, productive organization, and reliable controls. Profitability of financial institutions, then, is a function of the efficiency with which the large overhead is employed. In other words, financial institutions have become one of the foremost examples of a joint-cost industry. The same overhead can provide for the efficient marketing of a number of services. The optimum use of the overhead is consistent with increased institutional profitability and increased benefits to the public welfare.

Consumer finance companies have not benefited from the joint-cost principle. They are specialists; hence, their overhead is applied to but one financial service: secondary loan services. This implies that skills which have been developed over a long period of time are not being used to their optimum. Such waste cannot have a positive effect upon the public welfare.



### The Legal Structure and Financial Evolution

The willingness of commercial banks and credit unions to participate in the secondary lending segment of the consumer cash instalment credit market provides an example of institutional behavior which is not guided by traditional thinking. The inability of the consumer finance companies to offer services similar to the commercial banks or the credit unions highlights the plight of the traditional regulatory structure. That the legal structure can be both a benefactor and then an enemy is a fair description of the attitude of the consumer finance companies at the present time.

Economic evolution quite frequently seems to proceed ahead of the legal structure upon which it depends for support. The heated debates which have developed over the past few years with respect to the powers of commercial banks, savings and loan associations, and life insurance companies, to give but a few examples, is simply the manifestation of this phenomenon.

But all regulatory structures have not been restrictive. The permissive structures surrounding the commercial banks and most of the credit unions was a necessary condition to the evolution of these institutions. When these institutions decided they were ready, they expanded their services into areas once deemed the exclusive domain of financial institutions operating under more restrictive regulatory structures.

In the consumer instalment credit market, the burden of a restrictive regulatory structure has fallen upon the consumer finance companies. They are "locked" into their role of the secondary lending specialist by a neglectful legal structure. Were they to be permitted a regulatory

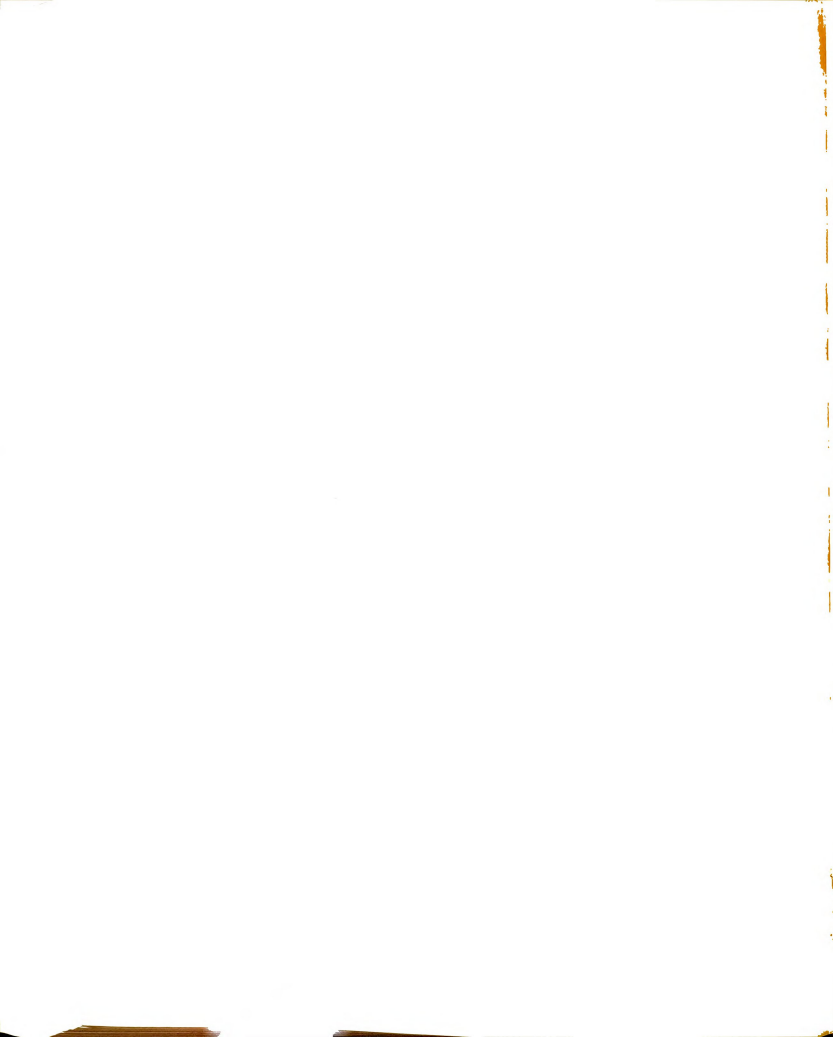


structure as permissive as those of the commercial banks and the credit unions, the burden would be eliminated. In other words, if the legal structure were to be constructed along functional lines rather than institutional lines, the consumer finance companies, as well as other interested financial institutions, would be permitted the same opportunity to efficiently develop the use of their overhead resources to the benefit of the general welfare.

In essence, then, this study does support the efforts of the National Conference of Commissioners on Uniform State Loans. The development of a Uniform Consumer Credit Code explicitly recognizes that institutional differences with respect to organization do not imply that there will be also institutional differences with respect to behavior in the consumer cash instalment credit market. The consideration of a Uniform Consumer Credit Code represents a change in attitude of many interested parties from one of institutional specialization to one of market functions. In addition, the consideration of a Uniform Consumer Code argues for nondiscriminatory regulation where such regulation would create no detrimental effects on other reasons for regulation such as the protection of depositors, etc.

When all is said and done, the question which must ultimately be asked is: Would a legal structure consistent with functional relationships provide for an increase in the general welfare in order that regulatory discrimination can be eliminated and in order that the regulatory structure no longer lags the economic evolution which has become an integral part of the financial system?

If this study has contributed in any way to those who must answer



this question, then the study will be considered a success. As a first step, this study is directed at opening additional doors for thinking through the problems of one segment of the most efficient financial system in the history of civilization. That it can be made even more efficient has been the guiding postulate of those who have indeed made such a system more efficient. On the assumption that the work is not yet ended, this study is humbly offered.





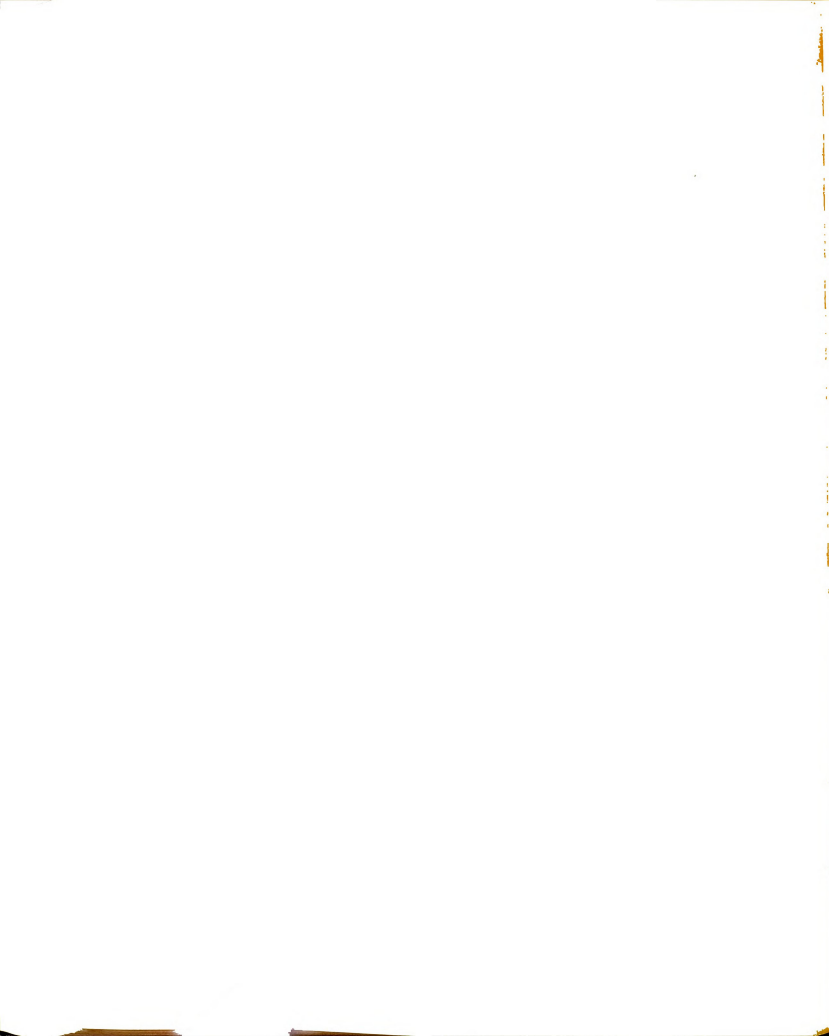
## BIBLIOGRAPHY

## Books

- Abbott, Lawrence. Quality and Competition. New York: Columbia University Press, 1955.
- American Bankers Association. The Commercial Banking Industry. A Monograph Prepared for the Commission on Money and Credit. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961.
- Bain, Joe S. Industrial Organization. New York: John Wiley and Sons, 1959.
- Barrett, Roger S. Compilation of Consumer Finance Laws. Washington, D.C.: National Consumer Finance Association, 1952.
- Bergengren, Roy F. Cooperative Banking: A Credit Union Book. New York: Macmillan Company, 1923.
- Chamberlain, Edward H. Towards a More General Theory of Value. New York: Oxford University Press, 1957.
- Chapman, John M. Commercial Banks and Consumer Instalment Credit. Studies in Consumer Instalment Financing. New York: National Bureau of Economic Research, 1940.
- Clark, Evans. Financing the Consumer. New York: Harper and Brothers, 1931.
- Conference Board Economic Forum. The Economics of Consumer Debt. New York: National Industrial Conference Board, 1955.
- Cover, John H. (ed.). Financing the Consumer. Chicago: University of Chicago Press, 1937.
- Croteau, John T. The Economics of the Credit Union. Detroit: Wayne State University Press, 1963.
- \_\_\_\_\_. The Federal Credit Union, Policy and Practice. New York: Harper and Brothers, 1956.
- Durand, David. Risk Elements in Consumer Instalment Financing. Studies in Consumer Instalment Financing. New York: National Bureau of Economic Research, 1941.
- Edwards, Franklin R. Concentration and Competition in Commercial Banking: A Statistical Study. Research Report Number 26. Boston: Federal Reserve Bank of Boston, 1964.



- Exploratory Committee on Financial Research. A Program of Financial Research. Volume I. New York: National Bureau of Economic Research, 1937.
- Friedman, Milton. Price Theory. Chicago: Aldine Publishing Company, 1962.
- Gies, Thomas G., Fricke, Cedric V., and Segar, Martha. Consumer Finance Companies in Michigan. Ann Arbor: Bureau of Business Research, University of Michigan, 1961.
- Grebler, Leo, and Brigham, Eugene. Savings and Mortgage Markets in California. Pasadena: California Savings and Loan League, 1964.
- Haberler, Gottfried. Consumer Instalment Credit and Economic Fluctuations. Studies in Consumer Instalment Financing. New York: National Bureau of Economic Research, 1942.
- Harberger, Arnold (ed.). The Demand for Durable Goods. Chicago: University of Chicago Press, 1960.
- Hardy, Charles O. (ed.). Consumer Credit and Its Uses. New York: Prentice-Hall, Inc., 1938.
- Horvitz, Paul M. Economies of Scale in Banking. Private Financial Institutions. A Series of Research Studies Prepared for the Commission on Money and Credit. Englewood Cliffs: Prentice-Hall, Inc., 1963.
- Jennings, Henrietta Cooper. The Consumer in Commercial Banking. New York: Consumer Credit Institute of America, 1939.
- Johnson, Robert W. Methods of Stating Consumer Finance Charges. New York: Columbia University Press, 1957.
- Juster, Thomas F., and Shay, Robert P. Consumer Sensitivity to Finance Rates: An Empirical and Analytical Investigation. New York: National Bureau of Economic Research, 1964.
- Kelso, Robert W. Social Background of the Small Loan Business in the United States. Institute of Social Work Study Number 1. Ann Arbor: University of Michigan Press, 1947.
- Kisselgoff, Avram. Factors Affecting the Demand for Consumer Instalment Sales Credit. New York: National Bureau of Economic Research, 1952.
- Kreps, Clifton H., Jr. Characteristics of Local Banking Competition. Banking and Monetary Studies. Deane Carson (ed.). Homewood, Illinois: Richard D. Irwin, Inc., 1963.



Werboff, Lawrence L. and Rozen, Marvin E. Market Shares and Competition Among Financial Institutions. Private Financial Institutions. A Series of Research Studies Prepared for the Commission on Money and Credit. Englewood Cliffs: Prentice-Hall, Inc., 1963.

Young, Ralph A. Personal Finance Companies and Their Credit Practices. Studies in Consumer Instalment Financing. New York: National Bureau of Economic Research, 1940.

#### Articles and Periodicals

Abramson, Victor. "Private Competition and Public Regulation," National Banking Review, I (September, 1963), 101-105.

Bain, Joe S. "Market Classification in Modern Price Theory," Quarterly Journal of Economics, 56 (August, 1942), 560-574.

Brehm, Carl T. "Aspects of Consumer Lending," Michigan Economic Record, 4 (January, 1962), 3 and 6.

Brimmer, Andrew F. "Michigan Banking," Michigan Economic Record, 2 (April, 1960), 7 and 8.

Garrison, Anne C. "Credit Unions," Michigan Economic Record, 5 (October, 1963), 3 and 6.

Gilles, James and Curtis, Clayton. "A Note on the Small Mortgage Market," Journal of Finance, XIV (September, 1959), 411-414.

Lorenz, Otto. "State Laws Hamper Procedural Economies," Personal Finance Law Quarterly Report, X (Winter, 1955), 15.

Motter, David C. and Carson, Deane. "Bank Entry and the Public Interest: A Case Study," National Banking Review, I (June, 1964), 469-512.

National Bureau of Economic Research. "Research in the Capital Markets," Journal of Finance, XIX (May, 1964), Supplement.

Persons, W. Frank. "The Small Loan Business," American Economic Review, XXI (March, 1931), Supplement.

Phelps, Clyde W. "Monopolistic and Imperfect Competition in Consumer Loans," Journal of Marketing, VIII (April, 1944), 382-393.



Phillips, Almarin. "Competition, Confusion, and Commercial Banking," Journal of Finance, XIX (March, 1964), 32-46.

Poapst, J. V. and Water, R. W. "Individual Investment: Canadian Experience," Journal of Finance, XVIII (December, 1963), 647-666.

\_\_\_\_\_. "Rates of Return on Consumer Durables," Journal of Finance, XIX (December, 1964), 673-678.

Shull, Bernard. "Commercial Banking as a 'Line of Commerce'," National Banking Review, 1 (December, 1963), 187-206.

Shull, Bernard and Horvitz, Paul M. "Branch Banking and the Structure of Competition," National Banking Review, 1 (March, 1964), 301-341.

Smith, Paul F. "Costs of Providing Consumer Credit: A Study of Four Major Types of Financial Institutions," Journal of Finance, XVII (September, 1962), 476-496.

\_\_\_\_\_. "Measuring Risk on Consumer Instalment Credit," Management Science, 11 (November, 1964), 327-341.

Upton, Miller. "Expanded Cooperating Between Commercial Banks and Finance Companies in Financing Consumer Credits," Journal of Finance, II (October, 1947), 55-67.

Yntema, Theodore O. "The Market for Consumer Credit: A Case in Imperfect Competition," Annals of the American Academy of Political and Social Science, 196 (March, 1938), 79-85.

"Revision of Consumer Credit Statistics," Federal Reserve Bulletin, 39 (April, 1953), 336-354.

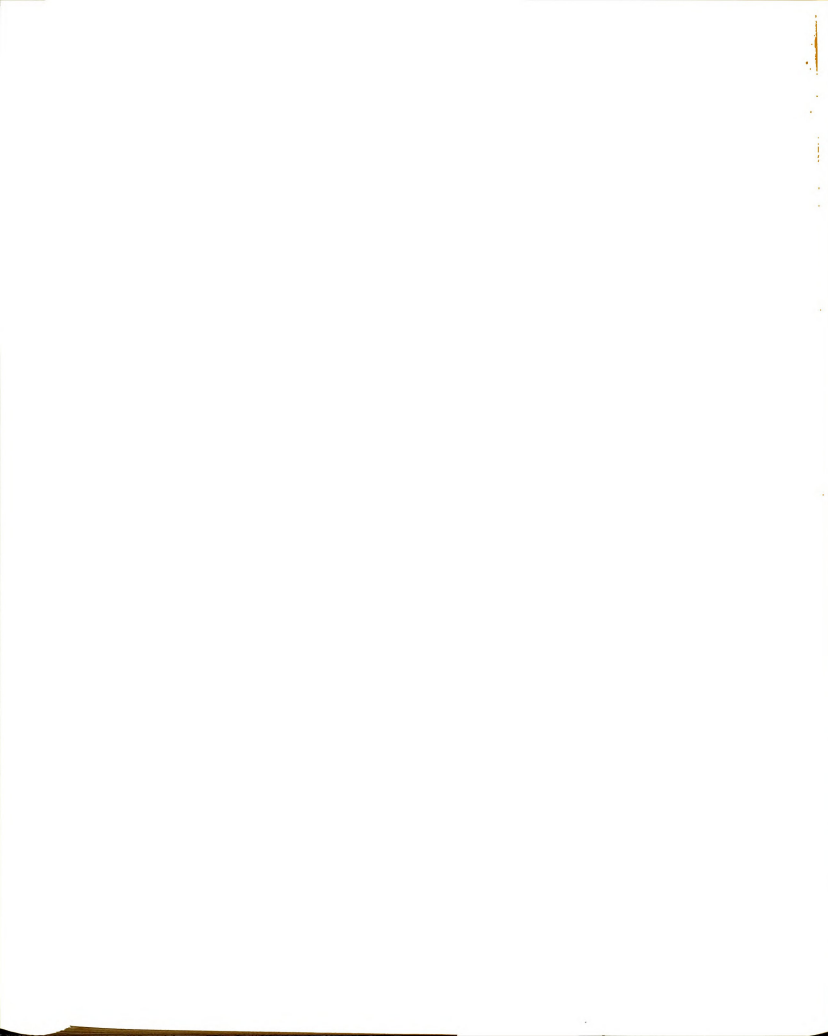
"Statistics of Consumer Loans at Commercial Banks," Federal Reserve Bulletin, 28 (October, 1942), 992-994.

"Survey of Financial Characteristics of Consumers," Federal Reserve Bulletin, 50 (March, 1964), 285-294.

#### Reports

Dauer, Ernst A. The Nature of Competition in Consumer Credit. Speech to the Tenth Annual National Consumer Credit Conference. Columbus, Ohio: April 21, 1958.





American Bankers Association. Analyzing the Cost Factors of Instalment Lending. A Study Prepared by the Consumer Instalment Credit Committee. New York: American Bankers Association, 1946.

American Bankers Association. Know Your Earnings on Instalment Loans. A Study Prepared by the Consumer Instalment Credit Committee. New York: American Bankers Association, 1960.

Bureau of Business and Economic Research. Michigan Statistical Abstract. East Lansing: Michigan State University, 1964.

Division of Consumer Finance, Department of Financial Institutions, State of Illinois. 1963 Analysis of Reports.

Michigan State Banking Department. Annual Reports of the Commissioner. 1957-1964.

National Conference of Commissioners on Uniform State Laws. Report of the Special Committee on Retail Instalment Sales, Consumer Credit, and Small Loans and Usury. 1964.

Report of the Royal Commission on Banking and Finance. Ottawa: The Queen's Printer, 1964.

Small Loans Department, Department of Commerce, State of Ohio. Annual Report and Roster of Small Loan Licensees. 1964.

#### Other Sources

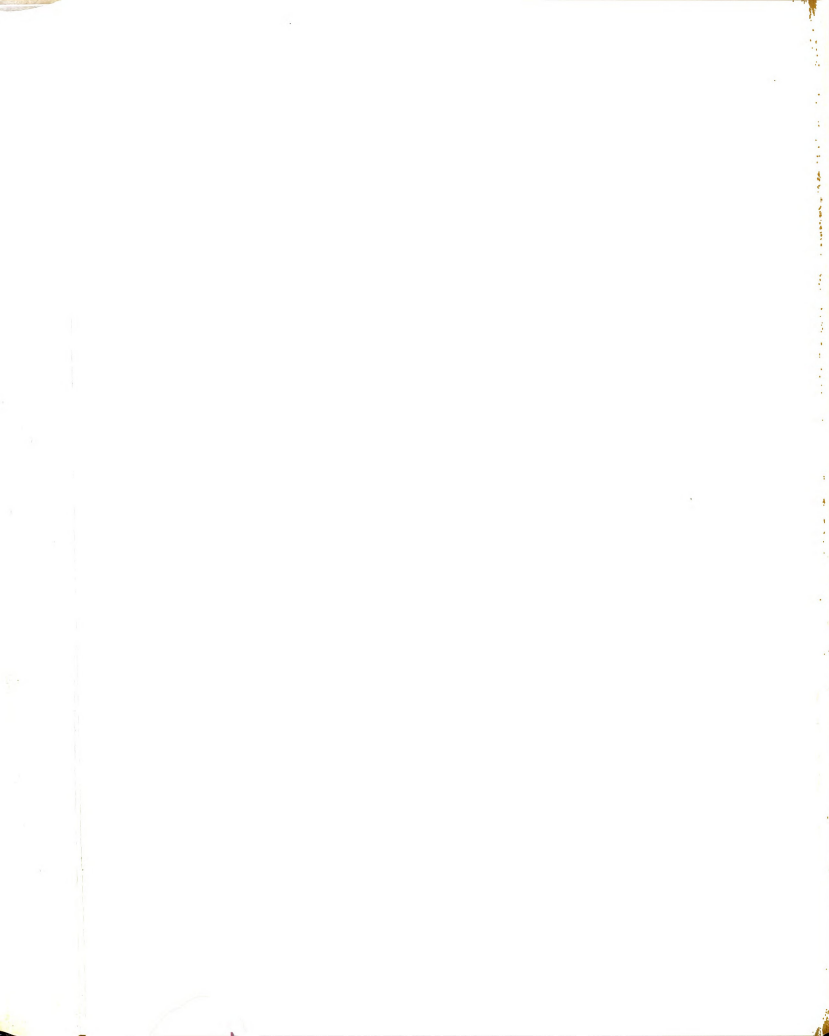
U.S. Congress, Subcommittee on Domestic Finance. A Study of Selected Banking Services by Bank Size, Structure, and Location. 88th Cong. 2nd Sess., 1964.

Upton, R. Miller. "The Importance of Direct Costs in the Granting of Consumer Instalment Credit." Unpublished Ph.D. dissertation, Northwestern University, 1948.

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