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# Risk Elements in Consumer Instalment Financing

(Technical Edition)

BY DAVID DURAND

Financial Research Program

Studies in Consumer Instalment Financing

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## Preface

This study presents an analysis of certain factors which are relevant to the selection of credit risks and the determination of credit standards in the field of consumer instalment financing. It constitutes one phase of the investigation in this field, initiated in 1938 by the National Bureau of Economic Research and supported by special grants from the Association of Reserve City Bankers and the Rockefeller Foundation. A study of consumer instalment financing was originally recommended by the National Bureau's Exploratory Committee on Financial Research in its report submitted in 1937, and the broad purposes of such a study were set forth as follows:

"Instalment financing of consumer purchasers 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 instrument 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 judgments 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."

In the five institutional studies previously prepared and published under the consumer instalment financing project—dealing with personal finance companies, sales finance companies, industrial banking companies, consumer financing departments of commercial banks, and government agencies of consumer instalment credit—we presented separate analyses of credit experience in the several areas represented by these agencies. The present study brings together the findings of the individual studies, and makes an integrated analysis of risk factors in the entire field of consumer financing.

The raw materials for this study consisted of about 7,200 reports on loans actually made by 37 firms engaged in consumer instalment financing. These firms included 21 personal loan departments of commercial banks, 2 personal finance companies, 10 industrial banking companies, 3 automobile finance agencies and I appliance finance company. Although the basic data were supplied by a variety of firms in different areas, certain tendencies appeared consistently in most of the samples supplied.

Highly refined statistical methods were employed in this study, in order to assure precise results as well as to test the applicability of such methods to the problems involved. But since many companies may not find feasible the use of elaborate statistical methods, we have limited the discussion in the main text to procedures which are simpler, easier, and

less expensive, and which any company can apply to its own records in order to test its risk experience. The technical discussion of statistical theory and methods has been confined to three appendices. Since these appendices will be of interest chiefly to statisticians with specialized mathematical training, the study has been published in two editions, and the appendices have been eliminated from one of them. This is the technical edition, with appendices.

We welcome the opportunity to express indebtedness to the following firms, which cooperated, at considerable expense to themselves, in furnishing data or other assistance for this study:

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The City National Bank and Trust Company, Columbus, Ohio

The City National Bank and Trust Company, Kansas City, Missouri

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The First National Bank of Boston

The First National Bank of Kansas City, Missouri

The First National Bank and Trust Company in Macon, Georgia

First National Bank and Trust Company of Minneapolis

First Wisconsin National Bank of Milwaukee

The Fourth National Bank, Columbus, Georgia

The Liberty National Bank and Trust Company of Savannah

Manufacturers Trust Company, New York

Midland National Bank and Trust Company, Minneapolis

National Bank of Tulsa

The National City Bank of New York

The National Exchange Bank of Augusta, Georgia
The Pennsylvania Company for Insurances on Lives and
Granting Annuities, Philadelphia
Security-First National Bank of Los Angeles
Springfield National Bank, Springfield, Massachusetts
Trust Company of Georgia, Atlanta

Associates Investment Company, South Bend, Indiana General Motors Acceptance Corporation, New York, New York

The National Shawmut Bank of Boston Reserve Discount Company, St. Louis, Missouri

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Household Finance Corporation, Chicago, Illinois

Citizens Savings and Loan Corporation, Chattanooga, Tennessee

The Community Consumer Discount Company, Warren, Pennsylvania

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Royal Industrial Bank, Louisville, Kentucky Thrift, Incorporated, Des Moines, Iowa Thrift, Incorporated, Evansville, Indiana The collection and analysis of the data presented many difficult technical problems, and much experimental statistical work was required to determine the most appropriate treatment of the material. Mr. Durand, who has been in charge of the analysis from its beginning, has resolved these problems with great skill, patience, and resourcefulness.

By pointing the way to a recurrent statistical testing of credit experience by institutions engaged in consumer instalment financing, Mr. Durand has made a unique contribution to credit practices in the field, and we hope that the completion of this study will stimulate further investigation into the problem of such credit standards. In modern interest theory, much emphasis is placed on credit risk as a factor affecting the gross charge to the borrower, but little attention is given to the elements that comprise or affect risk. By identifying and indicating the role of some of these elements in the field of consumer instalment credit, Mr. Durand's study affords an empirical basis for the elaboration of the risk problem in this single sphere of interest theory.

RALPH A. YOUNG
Director, Financial Research Program

April 1941

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DAVID DURAND,
Financial Research Staff
(National Bureau of Economic Research)

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