

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Consumer Credit Finance Charges: Rate Information and Quotation

Volume Author/Editor: Wallace P. Mors

Volume Publisher: UMI

Volume ISBN: 0-870-14128-7

Volume URL: <http://www.nber.org/books/mors65-1>

Publication Date: 1965

Chapter Title: Front matter, CONSUMER CREDIT FINANCE CHARGES

Chapter Author: Wallace P. Mors

Chapter URL: <http://www.nber.org/chapters/c1618>

Chapter pages in book: (p. -20 - 0)

CONSUMER CREDIT FINANCE CHARGES

Rate Information and Quotation

WALLACE P. MORS
BABSON INSTITUTE



1965

NATIONAL BUREAU OF ECONOMIC RESEARCH, New York

DISTRIBUTED BY

COLUMBIA UNIVERSITY PRESS, New York and London

COPYRIGHT © 1965 BY NATIONAL BUREAU OF ECONOMIC RESEARCH

All Rights Reserved

L.C. CARD NO. 65-24367

PRINTED IN THE UNITED STATES OF AMERICA



Consumer Credit Finance Charges:
Rate Information and Quotation

NATIONAL BUREAU OF ECONOMIC RESEARCH

Studies in Consumer Instalment Financing

1. *Personal Finance Companies and Their Credit Practices*
Ralph A. Young and associates
2. *Sales Finance Companies and Their Credit Practices*
Wilbur C. Plummer and Ralph A. Young
3. *Commercial Banks and Consumer Instalment Credit*
John M. Chapman and associates
4. *Industrial Banking Companies and Their Credit Practices*
Raymond J. Saulnier
5. *Government Agencies of Consumer Instalment Credit*
Joseph D. Coppock
6. *The Pattern of Consumer Debt, 1935-36: A Statistical Analysis*
Blanche Bernstein
7. *The Volume of Consumer Instalment Credit, 1929-38*
Duncan McC. Holthausen with Malcolm L. Merriam and Rolf Nugent
8. *Risk Elements in Consumer Instalment Financing*
David Durand
9. *Consumer Instalment Credit and Economic Fluctuations*
Gottfried Haberler
10. *Comparative Operating Experience of Consumer Instalment Financing
Agencies and Commercial Banks, 1929-41*
Ernst A. Dauer
11. *Consumer Credit Costs, 1949-59*
Paul F. Smith
12. *Consumer Credit Finance Charges: Rate Information and Quotation*
Wallace P. Mors

NATIONAL BUREAU OF ECONOMIC RESEARCH

1965

OFFICERS

Frank W. Fetter, *Chairman*
Arthur F. Burns, *President*
Theodore O. Yntema, *Vice President*
Donald B. Woodward, *Treasurer*
William J. Carson, *Secretary*

Geoffrey H. Moore, *Director of Research*
Douglas H. Eldridge, *Executive Director*
Hal B. Lary, *Associate Director of Research*
Victor R. Fuchs, *Associate Director of Research*

DIRECTORS AT LARGE

Robert B. Anderson, *New York City*
Wallace J. Campbell, *Foundation for Cooperative Housing*
Erwin D. Canham, *Christian Science Monitor*
Solomon Fabricant, *New York University*
Marion B. Folsom, *Eastman Kodak Company*
Crawford H. Greenewalt, *E. I. du Pont de Nemours & Company*
Gabriel Hauge, *Manufacturers Hanover Trust Company*
A. J. Hayes, *International Association of Machinists*
Walter W. Heller, *University of Minnesota*
Albert J. Hettinger, Jr., *Lazard Frères and Company*

H. W. Laidler, *League for Industrial Democracy*
Geoffrey H. Moore, *National Bureau of Economic Research*
Charles G. Mortimer, *General Foods Corporation*
J. Wilson Newman, *Dun & Bradstreet, Inc.*
George B. Roberts, *Larchmont, New York*
Harry Scherman, *Book-of-the-Month Club*
Boris Shishkin, *American Federation of Labor and Congress of Industrial Organizations*
George Soule, *South Kent, Connecticut*
Gus Tyler, *International Ladies' Garment Workers' Union*
Joseph H. Willits, *Langhorne, Pennsylvania*
Donald B. Woodward, *A. W. Jones and Company*

DIRECTORS BY UNIVERSITY APPOINTMENT

V. W. Bladen, *Toronto*
Francis M. Boddy, *Minnesota*
Arthur F. Burns, *Columbia*
Lester V. Chandler, *Princeton*
Melvin G. de Chazeau, *Cornell*
Frank W. Fetter, *Northwestern*
R. A. Gordon, *California*

Harold M. Groves, *Wisconsin*
Gottfried Haberler, *Harvard*
Maurice W. Lee, *North Carolina*
Lloyd G. Reynolds, *Yale*
Paul A. Samuelson, *Massachusetts Institute of Technology*
Theodore W. Schultz, *Chicago*

Willis J. Winn, *Pennsylvania*

DIRECTORS BY APPOINTMENT OF OTHER ORGANIZATIONS

Percival F. Brundage, *American Institute of Certified Public Accountants*
Nathaniel Goldfinger, *American Federation of Labor and Congress of Industrial Organizations*
Harold G. Halcrow, *American Farm Economic Association*

Murray Shields, *American Management Association*
Willard L. Thorp, *American Economic Association*
W. Allen Wallis, *American Statistical Association*
Harold F. Williamson, *Economic History Association*
Theodore O. Yntema, *Committee for Economic Development*

DIRECTORS EMERITI

Shepard Morgan, *Norfolk, Connecticut*

N. I. Stone, *New York City*

Jacob Viner, *Princeton, New Jersey*

RESEARCH STAFF

Moses Abramovitz
Gary S. Becker
William H. Brown, Jr.
Gerhard Bry
Arthur F. Burns
Phillip Cagan
Frank G. Dickinson
James S. Earley
Richard A. Easterlin
Solomon Fabricant
Albert Fishlow
Milton Friedman
Victor R. Fuchs

H. G. Georgiadis
Raymond W. Goldsmith
Jack M. Guttentag
Challis A. Hall, Jr.
Daniel M. Holland
Thor Hultgren
F. Thomas Juster
C. Harry Kahn
John W. Kendrick
Irving B. Kravis
Hal B. Lary
Robert E. Lipsey
Ruth P. Mack

Jacob Mincer
Ilse Mintz
Geoffrey H. Moore
Roger F. Murray
Ralph L. Nelson
G. Warren Nutter
Richard T. Selden
Lawrence H. Seltzer
Robert P. Shay
George J. Stigler
Norman B. Ture
Herbert B. Woolley
Victor Zarnowitz

RELATION OF THE DIRECTORS TO
THE WORK AND PUBLICATIONS OF THE
NATIONAL BUREAU OF ECONOMIC RESEARCH

1. The object of the National Bureau of Economic Research is to ascertain and to present to the public important economic facts and their interpretation in a scientific and impartial manner. The Board of Directors is charged with the responsibility of ensuring that the work of the National Bureau is carried on in strict conformity with this object.
2. To this end the Board of Directors shall appoint one or more Directors of Research.
3. The Director or Directors of Research shall submit to the members of the Board, or to its Executive Committee, for their formal adoption, all specific proposals concerning researches to be instituted.
4. No report shall be published until the Director or Directors of Research shall have submitted to the Board a summary drawing attention to the character of the data and their utilization in the report, the nature and treatment of the problems involved, the main conclusions, and such other information as in their opinion would serve to determine the suitability of the report for publication in accordance with the principles of the National Bureau.
5. A copy of any manuscript proposed for publication shall also be submitted to each member of the Board. For each manuscript to be so submitted a special committee shall be appointed by the President, or at his designation by the Executive Director, consisting of three Directors selected as nearly as may be one from each general division of the Board. The names of the special manuscript committee shall be stated to each Director when the summary and report described in paragraph (4) are sent to him. It shall be the duty of each member of the committee to read the manuscript. If each member of the special committee signifies his approval within thirty days, the manuscript may be published. If each member of the special committee has not signified his approval within thirty days of the transmittal of the report and manuscript, the Director of Research shall then notify each member of the Board, requesting approval or disapproval of publication, and thirty additional days shall be granted for this purpose. The manuscript shall then not be published unless at least a majority of the entire Board and a two-thirds majority of those members of the Board who shall have voted on the proposal within the time fixed for the receipt of votes on the publication proposed shall have approved.
6. No manuscript may be published, though approved by each member of the special committee, until forty-five days have elapsed from the transmittal of the summary and report. The interval is allowed for the receipt of any memorandum of dissent or reservation, together with a brief statement of his reasons, that any member may wish to express; and such memorandum of dissent or reservation shall be published with the manuscript if he so desires. Publication does not, however, imply that each member of the Board has read the manuscript, or that either members of the Board in general, or of the special committee, have passed upon its validity in every detail.
7. A copy of this resolution shall, unless otherwise determined by the Board, be printed in each copy of every National Bureau book.

*(Resolution adopted October 25, 1926,
as revised February 6, 1933, and February 24, 1941)*

Contents

ACKNOWLEDGMENTS	xiii
FOREWORD, <i>by Robert P. Shay</i>	xv
1. SUMMARY OF FINDINGS	3
2. METHODS OF COMPUTING AND QUOTING FINANCE CHARGES	8
Methods of Computing Finance Charges	9
The Three General Methods	9
Historical Development: Instalment Cash Lending	9
Historical Development: Retail Instalment Financing	19
Present Status	24
Recent Legislative Trends	27
Methods of Quoting Finance Charges	33
Instalment Cash Lending	33
Retail Instalment Financing	35
Legislative Proposals for Uniformity in Method of Finance Charge Quotation	36
3. CONSUMER USES OF FINANCE CHARGE INFORMATION	39
Measures of Credit Cost	39
Finance Charges in Dollars	39
Size and Number of Monthly Payments	40
Computational Rates of Charge and Computational Equivalents	41
Finance Rates	43
Multiple Effective Rates	44

Influence of Finance Charge Information on Consumer Behavior	45
Finance Rate vs. Size of Monthly Payment	45
Use of Debt vs. Liquid Assets	52
4. PROCEDURES AND PROBLEMS IN CONVERTING EXISTING FINANCE CHARGE INFORMATION TO COMPARABLE FORMS	61
Converting Computational Rates (Equivalents) to Dollar Charges and to Monthly Payments	61
Converting One Form of Computational Rate (Equivalent) to Another	61
Converting Computational Rates (Equivalents) or Dollar Charges to Monthly and Annual Finance Rates	62
Choice and Use of Formulas	62
Relevance of <i>Ex Ante</i> Computations	66
Graduated Rate Contracts	67
Treatment of Recording and Filing Fees	68
Treatment of Minimum Charges	69
Special Financing Plans	69
Meaningfulness of Retail Instalment Finance Rates	73
Converting Finance Charges to Rates Comparable with Usury Ceilings	75
5. CONSUMER KNOWLEDGE OF FINANCE CHARGES	80
Illinois Survey	80
San Francisco Area Survey	81
Survey Research Center Survey	82
National Bureau-Consumers Union Survey	84
Concluding Remarks	89
APPENDIXES	
A. Effects of Different Methods of Computing Finance Charges on Maturity Patterns of Finance Charges	92
B. Equivalent Effective Monthly and Annual Finance Rates Converted from Annual Add-On and Discount Rates for Selected Even Monthly Payment Contract Maturities	102

Contents	ix
C. State Supervisors' Opinions on the Ability of Financing Agencies to Convert Finance Charges to Effective Annual Rates	106
D. Prepayment, Refinancing, Extension, and Delinquency	109
GLOSSARY	126
INDEX	129

Tables

1. Frequency Distribution of State Contract Usury Ceilings and Method of Expressing These Ceilings, 1964	10
2. Allocation of Finance Charge Earned (Gross Revenue) on a Hypothetical Loan Under Per Cent Per Month and Precomputation	30
3. Added Gross Revenue from Precomputation as a Percentage of Gross Revenue from Per Cent Per Month for Selected Loan Sizes, Maturities, and Graduated Rates	31
4. Disclosure Requirements of Consumer Financing Laws and Disclosure Practices of Consumer Financing Agencies and Sellers	34
5. Fraction Accepting One or More Alternative Finance Plans for Specified Variant Groups, Credit Users Only	49
6. Estimated Finance Rate and Monthly Payment Elasticity of Demand for Households Classified as Rationed or Unrationed on Three Bases	50
7. Consumer Attitudes Toward Credit Users with Liquid Assets	54
8. Relation Between Personal Debt and Liquid Assets, by Income Group, Early 1959	55
9. Distribution of Personal Debt and Liquid Assets, by Income Group, Early 1959	57
10. Cumulative Percentage Distribution of Consumer Estimates of Finance Rates on Auto Financing, 1959, by Selected Income Groups, and New-Car Instalment Financing Rates, 1954-55 and 1959	59

Tables	xi
11. Relation of Average Operating Profit and Average Finance Reserve Per New Car Unit, 1950-59	74
12. Distribution of Effective Annual Interest Rates Paid, According to Interest Rates Stated by Respondents, 1956-57	82
13. Distribution of Effective Annual Interest Rates Paid by Respondents on New and Used Cars, 1956-57	83
14. Distribution of Consumer Estimates and Actual Finance Rates on Auto Financing, 1954-55 and 1959	84
15. Question 25A, Reinterview Questionnaire, May 1960, Consumers Union Members' Panel	85
16. Distribution of Reported Annual Rates and Derived Finance Rates by Amount Borrowed	87
17. Estimated Distribution and Mean Effective Rates of Sample of Households, Classified by Rate Information and Loan Size	87
18. Respondents Reporting 6 Per Cent, by Class Intervals of Actual Rates Paid	89
A-1. Selected Computational Rates and Equivalent Effective Monthly Finance Rates for Varying Maturities	93
A-2. Selected Computational Rates and Equivalent Effective Annual Finance Rates for Varying Maturities	97
A-3. Equivalent Effective Monthly Rates for Selected Annual Add-On Plus and Annual Discount-Plus Computational Rates for Varying Maturities	99
B-1. Equivalent Effective Annual Finance Rates for Selected Annual Add-On Rates with Varying Contract Maturities and Even Monthly Payments	102
B-2. Equivalent Effective Annual Finance Rates for Selected Annual Discount Rates with Varying Contract Maturities and Even Monthly Payments	104
C-1. State Supervisor Opinions on the Ability of the Personnel of Financing Agencies to Determine Finance Rates	107
D-1. State Supervisor Survey Replies to Questions on Prepayment Refunds	117

Charts

- I. Comparable Effective Annual Finance Rates for Monthly Payment Contracts with 6, 7, and 8 Per Cent Annual Add-On and Discount Rates, by Maturity 64
- A-I. Effective Monthly Finance Rates Equivalent to Selected Annual Add-On, Annual Discount, and Per Cent Per Month Rates on Monthly Payment Contracts, by Maturity 94

Acknowledgments

I AM PARTICULARLY INDEBTED to Robert P. Shay, Director of the Consumer Credit Study, who made many valuable contributions at every step of the way. Geoffrey H. Moore and F. Thomas Juster of the National Bureau and John M. Chapman of Columbia University also worked closely with me throughout the study.

Members of the Advisory Committee for the Consumer Credit Study are Paul W. McCracken, Chairman, University of Michigan; Frank Barsalou, Pacific Finance Corporation; Dorothy S. Brady, University of Pennsylvania; E. Douglas Campbell, Associates Investment Company; John M. Chapman, Columbia University; Mona Dingle, Division of Research and Statistics, Board of Governors of the Federal Reserve System; Bertrand Fox, Harvard University; Raymond W. Goldsmith, Yale University; Robert E. Lewis, First National City Bank of New York; Roger F. Murray, Columbia University and the National Bureau of Economic Research; Roland I. Robinson, Michigan State University; Herbert Stein, Committee for Economic Development; Van Buren Thorne, Jr., General Motors Acceptance Corporation; William L. Wilson, C.I.T. Financial Corporation. Others who formerly served on the Advisory Committee are Willcox B. Adsit, Gordon E. Areen, George Dimmler, the late George W. Omacht, Sidney E. Rolfe, and LeRoy A. Weller. The members of the advisory committee have generously assisted in planning and reviewing the work of the staff of the Consumer Credit Study, but their concurrence with the views expressed in this report is not to be assumed.

I wish to thank the directors' reading committee for their comments on the manuscript: Gabriel Hauge, Boris Shishkin, and Willis J. Winn. A staff reading committee of the National Bureau

offered helpful comments on a draft of the study. Members were Daniel M. Holland, Massachusetts Institute of Technology; Richard M. Easterlin, University of Pennsylvania; and Roger F. Murray, Columbia University. Valuable comments also were received from Robert W. Johnson M. R. Neifeld, LeRoy A. Weller, and William L. Wilson.

Florence Liang gave statistical assistance, H. Irving Forman drew the charts, and editorial assistance was provided by Marie-Christine Culbert.

Foreword

EARLY IN THE TWENTIETH CENTURY the form in which finance charges were to be disclosed became an important part of the discussions which led to the formulation of the Uniform Small-Loan Law, first drafted in 1916 by the Russell Sage Foundation. This period witnessed the development of the modern techniques of instalment selling of durable consumer goods and the growth of the institutions which today provide a wide variety of credit services to consumers under quite different systems of computing and quoting finance charges. This study by Wallace P. Mors traces the origins of the procedures currently in use, in order to show why the consumer is faced with varying forms of information. The author goes on to analyze and evaluate the usefulness of this information to consumer borrowers.

In drawing up plans for the National Bureau's current study of consumer credit, of which this report forms a part, the subject of consumer credit finance charges was given central importance for several reasons. First, there were no statistical series measuring changes in the cost of credit, although estimates of the amount of credit extended, repaid, and outstanding had been developed in earlier National Bureau studies and later extended by Federal Reserve System estimates. Second, there had been recurrent questions about the amount of consumer credit charges in relation to the costs of providing credit. It was known that consumer credit charges were higher than those in other sectors where the amounts involved were larger and the costs consequently lower. But without empirical measurement of the relation between consumer credit charges and their component costs, there was little basis for judging whether charges were excessive or not. Third, little was known about how

borrowers reacted to finance charges, and it was believed by many that lack of knowledge contributed to excessive charges and misuse of credit. Finally, there was the question of how different methods of quoting finance charges affected the ways in which borrowers used consumer credit.

The results of some studies designed to remedy these gaps in knowledge about finance charges have already appeared as National Bureau studies, and the remainder are nearing completion. The preliminary results of my work on automobile finance charges appeared as *New-Automobile Finance Rates, 1924-62*. Paul F. Smith's book, *Consumer Credit Costs, 1949-59*, revealed the relation of finance charges to component costs for four major types of credit institutions. *Consumer Sensitivity to Finance Rates*, by F. Thomas Juster and myself, showed that some borrowers are sensitive to changes in the rate of charge for credit, although relatively few estimate finance rates reasonably well. Finally, Mors's study provides a thorough analysis of the kinds of finance charge information given borrowers and its usefulness in helping to make rational credit decisions.

A major finding about the usefulness of finance charge information is that no one method of quoting charges conveys enough information about credit cost to satisfy all questions involved in credit decisions. Dollar charges, monthly or annual effective rates, and monthly payments convey valuable information, but the usefulness of each of these methods varies with different borrowing situations. As a further complication, Mors finds that state legislation contributes to a still greater diversity in information provided. He concludes that consumers do not receive easily comparable information from alternative suppliers of credit.

Mors' unraveling of the complexities in finance charge information—based on alternative mathematical formulas, legal and legislative factors, and a wide variety of credit transactions—should prove invaluable to those who seek to improve their ability to compare credit costs as well as to others who wish to evaluate the varied legislative proposals designed to expand or simplify the information given consumer borrowers.

The Consumer Credit Study was made possible by research grants to the National Bureau from four finance companies: Associates Investment Company, C.I.T. Financial Corporation, General Motors Acceptance Corporation, and Pacific Finance Corporation. These institutions are, of course, not to be held responsible for any of the statements made or views expressed in this study.

ROBERT P. SHAY

Director, Consumer Credit Study

