

Handbook of Consumer Finance Research

Handbook of Consumer Finance Research

Jing Jian Xiao, Ph.D.
Editor

Jing Jian Xiao, Ph.D.
University of Rhode Island
Transition Center
2 Lower College Rd.
Kingston RI 02881
USA
jfei.editor@gmail.com

ISBN: 978-0-387-75733-9

e-ISBN: 978-0-387-75734-6

Library of Congress Control Number: 2007941873

© 2008 Springer Science+Business Media, LLC

All rights reserved. This work may not be translated or copied in whole or in part without the written permission of the publisher (Springer Science+Business Media, LLC, 233 Spring Street, New York, NY 10013, USA), except for brief excerpts in connection with reviews or scholarly analysis. Use in connection with any form of information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed is forbidden.

The use in this publication of trade names, trademarks, service marks, and similar terms, even if they are not identified as such, is not to be taken as an expression of opinion as to whether or not they are subject to proprietary rights.

Printed on acid-free paper

9 8 7 6 5 4 3 2 1

springer.com

Preface

For several reasons, American consumers are now facing many financial challenges. First, the social security system will likely be insolvent within the next 40 years. Second, private industries are moving from defined benefit pensions to defined contribution retirement plans. These trends require individual consumers to take more responsibility for their financial future. Another factor is the rising cost of higher education that many consumers now have to consider when planning their children's college education. In addition, easily accessible credit has pushed many consumers deep into debt, leading to record high individual bankruptcy filings, increased demand for credit counseling, and increased numbers of debt consolidations. These growing social issues recently prompted government and private organizations to sponsor joint efforts of financial education and research. Out of these developments grows the need for a book to summarize research findings and point out future directions. *Handbook of Consumer Finance Research* answers this call by addressing these social issues as well as directly helping consumer finance researchers, policy makers, educators, and practitioners to design, implement, and evaluate financial education and research initiatives.

Active, multidisciplinary researchers in consumer finance have contributed the chapters that provide a comprehensive overview of the current research. All chapters have received blind reviews by peers who are qualified researchers, some of whom are also chapter contributors. In each chapter, the author first critically reviews the research publications on the focused topic, then assesses the status of the research, and provides directions for future research. The authors were asked to search literature in multiple fields for the latest research in consumer finance, compile the findings, and present it in a manner accessible to people who are not specially trained in the field. In several chapters, the authors also present their original research.

The handbook is divided into four parts consisting of 25 chapters. Part I has six chapters that review research on basic concepts and theories in consumer finance such as risk tolerance, financial wellness, retirement savings, financial education, behavior theory application, and consumer economic socialization. Part II reviews consumer finance research in the Internet setting including e-banking, online insurance, and online shopping. The nine chapters in Part III describe consumer financial issues among special populations such as high school students, college students, older consumers, low-income consumers, family business owners, individual

investors, and racial and ethnic minority consumers (Hispanic, African, and Asian Americans). Part IV discusses consumer financial issues on special topics such as healthcare, marriage, family communication, bankruptcy, workplace, regulation, and applied research.

The first of its kind to provide a comprehensive picture of consumer finance research, this book lays the foundation on which to develop more quality research in consumer finance. It helps to generate helpful information for financial educators, researchers, and policy makers to improve consumer financial well-being and quality of life. In addition, most contributors are professors who teach consumer finance and related courses at the university level making the material accessible to graduate and undergraduate students as well as professionals. Overall, it enriches the literature of consumer science, economics, finance, business, family studies, human development, and related fields.

Jing Jian Xiao
University of Rhode Island
Rhode Island, United States
August 2007

Acknowledgments

The following reviewers provided constructive blind reviews that helped greatly improve the quality of the book:

Myria Allen, Associate Professor, University of Arkansas
Joan Grey Anderson, Professor, University of Rhode Island
David Cordell, Associate Professor, Texas Tech University
Sharon Danes, Professor, University of Minnesota
Lucy Delgadillo, Assistant Professor, Utah State University
Sharon DeVaney, Professor, Purdue University
Jeff Dew, Research Associate, University of Virginia
Elizabeth Dolan, Associate Professor, University of New Hampshire
John Grable, Associate Professor, Kansas State University
Sherman Hanna, Professor, Ohio State University
Celia Hayhoe, Assistant Professor, Virginia Tech
George Haynes, Professor, Montana State University
Tahira Hira, Professor, Iowa State University
Joan Koonce, Associate Professor, University of Georgia
Yoon Lee, Associate Professor, Utah State University
Suzanne Lindamood, Research Attorney, Ohio Legislative Service Commission
Căzilia Loibl, Assistant Professor, Ohio State University
Lewis Mandell, Professor, State University of New York at Buffalo
Rob Mayer, Professor, University of Utah
Yoko Mimura, Research Professional, University of Georgia
Barbara O'Neill, Professor, Rutgers University Cooperative Extension
Janice Prochaska, President and CEO, ProChange Behavior Systems
Kathryn Rettig, Professor, University of Minnesota
Peter Rose, Professor Emeritus, Texas A&M University
Tansel Yilmazer, Assistant Professor, Purdue University

Sharon Panulla at Springer provided helpful guidance, suggestions, and encouragement at all stages of the book production. Two other staffers at Springer, Anna Tobias and Jennifer Hadley, provided prompt and able assistance at various stages of the book.

When the book was planned and developed, I was the TCA Professor and Director of Take Charge America Institute for Consumer Financial Education and Research (TCAI) at the University of Arizona. I appreciate continuous support and encouragement from Soyeon Shim, the Director of the Norton School of Family and Consumer Science, University of Arizona. I also thank Mike Hall, Mike Sullivan, Peter Rose, and other TCAI board members for their support of the book idea. TCAI research council members, John Grable, George Haynes, Angela Lyons, and Peter Rose, contributed and/or reviewed chapters for the book.

Vicki Fitzsimmons, Brian Haroldson, and Sha Jin provided invaluable assistance at the final editing stage.

Contents

Preface v

Acknowledgments vii

Contributors xiii

List of Figures xvii

List of Tables xix

Part I Concepts and Theories of Consumer Finance

1 Risk Tolerance 3
John E. Grable

2 Personal Financial Wellness 21
Sohyun Joo

3 Retirement Savings 35
Sherman D. Hanna and Samuel Cheng-Chung Chen

4 Financial Education and Program Evaluation 47
Jonathan J. Fox and Suzanne Bartholomae

5 Applying Behavior Theories to Financial Behavior 69
Jing Jian Xiao

6 Consumer Economic Socialization 83
Ivan Beutler and Lori Dickson

Part II Internet and Consumer Finance

- 7 E-banking** 105
Jinkook Lee, Jinsook Erin Cho, and Fahzy Abdul-Rahman
- 8 Online Insurance** 125
Robert N. Mayer
- 9 Online Shopping** 137
Yi Cai and Brenda J. Cude

Part III Consumer Finances of Special Populations

- 10 Financial Literacy of High School Students** 163
Lewis Mandell
- 11 Risky Credit Card Behavior of College Students** 185
Angela C. Lyons
- 12 Financial Issues of Older Adults** 209
Sharon A. DeVaney
- 13 Consumer Finances of Low-Income Families** 223
Steven Garasky, Robert B. Nielsen, and Cynthia Needles Fletcher
- 14 Management Issues of Business-Owning Families** 239
George W. Haynes, Sharon M. Danes, and Deborah C. Haynes
- 15 Gender Differences in Investment Behavior** 253
Tahira K. Hira and Căzilia Loibl
- 16 Financial Behavior of Hispanic Americans** 271
Kittichai Watchravesringkan
- 17 Money Matters of African Americans** 287
Cathy Faulcon Bowen
- 18 Financial Behaviors of Asian Americans** 303
Rui Yao

Part IV Consumer Finance in Various Settings

19 Consumer Financial Issues in Health Care 319
Deanna L. Sharpe

20 Marriage and Finance 337
Jeffrey Dew

21 Consumer Finance and Parent-Child Communication 351
Myria Watkins Allen

22 Consumer Bankruptcy 363
Jean M. Lown

23 Workplace Financial Education 375
Jinhee Kim

24 Regulating Consumer Lending 387
David A. Lander

25 Promoting Applied Research in Personal Finance 411
Sharon A. Burns

Index 419

Contributors

Fahzy Abdul-Rahman, Ph.D. Candidate, Department of Consumer Sciences, Ohio State University, 1787 Neil Avenue, Columbus, OH 43210, USA, abdul-rahman.4@osu.edu

Myria Watkins Allen, Ph.D., Associate Professor, Department of Communication, University of Arkansas, Fayetteville, AR 72701, USA, myria@uark.edu

Suzanne Bartholomae, Ph.D., Adjunct Assistant Professor, Department of Human Development and Family Science, Ohio State University, Columbus, OH 43210, USA, sbartholomae@ehe.ohio-state.edu

Ivan Beutler, Ph.D., Professor, School of Family Life, Brigham Young University, 2048 JFSB, Provo, UT 84602, USA, ivan.beutler@byu.edu

Cathy Faulcon Bowen, Ph.D., Associate Professor, Department of Agricultural and Extension Education, The Pennsylvania State University, 323 Agricultural Administration, University Park, PA 16802, USA, cbowen@psu.edu

Sharon A. Burns, Ph.D., CPA (Inactive), Executive Director of the Association for Financial Counseling and Planning Education, 1500 West Third Avenue, Suite 223, Columbus, OH 43212, USA, sburns@afcpe.org

Yi Cai, Ph.D., Assistant Professor, Department of Family and Consumer Sciences, California State University at Northridge, 18111 Nordhoff St., Northridge, CA 91330-8308, USA, yi.cai@csun.edu

Samuel Cheng-Chung Chen, Ph.D. Student, Department of Consumer Science, The Ohio State University, 2197 Lehner Rd., Columbus, OH 43224, USA, chensam11@gmail.com

Jinsook Erin Cho, Ph.D., Associate Professor of Design and Management, Parsons, New School University, 72 Fifth Avenue, Room 524, New York, NY 10011, USA, choje@newschool.edu

Brenda J. Cude, Ph.D., Professor, Department of Housing and Consumer Economics, University of Georgia, Dawson Hall, Athens, GA 30602, USA, bcude@uga.edu

Sharon M. Danes, Ph.D., Professor, Department of Family Social Science, University of Minnesota, 275F McNeal, 1985 Buford Avenue, St. Paul, MN 55108, USA, sdanes@umn.edu

Sharon A. DeVaney, Ph.D., Professor, Purdue University, 812 West State Street, West Lafayette, IN 47906-2060, USA, sdevaney@purdue.edu

Jeffrey Dew, Ph.D., Research Associate, The University of Virginia, Dawson's Row 2, Charlottesville, VA 22903, USA, jpd197@juno.com

Lori Dickson, Graduate Student, Department of English, Brigham Young University, USA, lori.d@byu.edu

Cynthia Needles Fletcher, Ph.D., Professor, Department of Human Development and Family Studies, Iowa State University, 4380 Palmer Building, Ames, IA 50011, USA, cynthia@iastate.edu

Jonathan J. Fox, Ph.D., Associate Professor, Department of Consumer Sciences, Ohio State University, Columbus, OH 43210, USA, fox.99@osu.edu

Steven Garasky, Ph.D., Associate Professor, Department of Human Development and Family Studies, Iowa State University, 4380 Palmer Building, Ames, IA 50011, USA, sgarasky@iastate.edu

John E. Grable, Ph.D., The Vera Mowery McAninch Professor of Human Development and Family Studies, Institute of Personal Financial Planning, School of Family Studies and Human Services, Kansas State University, 18 Justin Hall, Manhattan, KS 66506, USA, jgrable@ksu.edu

Sherman D. Hanna, Ph.D., Professor, Department of Consumer Science, The Ohio State University, 1787 Neil Avenue, Columbus, OH 43210, USA hanna.1@osu.edu

Deborah C. Haynes, Ph.D., Associate Professor, Department of Health and Human Development, Montana State University, 205B Herrick Hall, Bozeman, MT 59717, USA, dhaynes@montana.edu

George W. Haynes, Ph.D., Professor, Department of Agricultural Economics and Economics, Montana State University, 210E Linfield Hall, Bozeman, MT 59717, USA, haynes@montana.edu

Tahira K. Hira, Ph.D., Professor, Department of Human Development and Family Studies, Iowa State University, 1750 Beardshear Hall, Ames, IA 50011, USA, tkhira@iastate.edu

Sohyun Joo, Ph.D., Educational Consultant, Financial Planning Standards Board of Korea, 17th FL., Seongji Bldg., Dohwa 2-dong, Mapo-gu, Seoul 121-743, Korea, sjookwun@yahoo.com

Jinhee Kim, Ph.D., Associate Professor, University of Maryland, 1204 Marie Mount Hall, College Park, MD 20742, USA, jinkim@umd.edu

David A. Lander, J.D., Adjunct Professor, St. Louis University School of Law School, 3700 Lindell Blvd., St. Louis, MO 63108, USA, cdlander@charter.net

Jinkook Lee, Ph.D., Professor, Department of Consumer Sciences, Ohio State University, 1787 Neil Avenue, Columbus, OH 43210, USA, lee.42@osu.edu

Căzilia Loibl, Ph.D., Assistant Professor, Department of Consumer Sciences, The Ohio State University, 1787 Neil Avenue, 265N Campbell Hall, Columbus, OH 43210, USA, loibl.3@osu.edu

Jean M. Lown, Ph.D., Professor, Utah State University, FCHD, 2905 Old Main Hall, Logan, UT 84322, USA, lown@cc.usu.edu

Angela C. Lyons, Ph.D., Associate Professor, University of Illinois at Urbana-Champaign, 440 Mumford Hall, 1301 West Gregory Drive, Urbana, IL 61801, USA, anglyons@uiuc.edu

Lewis Mandell, Ph.D., Professor, Department of Finance, State University of New York at Buffalo, 375 Jacobs Hall, University at Buffalo, Buffalo, NY 14260-4000, USA, lewm@Buffalo.edu

Robert N. Mayer, Ph.D., Professor, Department of Family and Consumer Studies, University of Utah, 225 S 1400 East, Salt Lake City, UT 84112, USA, robert.mayer@fcs.utah.edu

Robert B. Nielsen, Ph.D., Assistant Professor, Department of Housing and Consumer Economics, University of Georgia, 205 Dawson Hall, Athens, GA 30605, USA, rneisen@uga.edu

Deanna L. Sharpe, Ph.D., Associate Professor, Personal Financial Planning Department, University of Missouri-Columbia, 239 Stanley Hall, Columbia, MO 65211, USA, sharped@missouri.edu

Kittichai Watchravesringkan, Ph.D., Assistant Professor, Department of Consumer, Apparel, and Retail Studies, University of North Carolina at Greensboro, PO Box 26170, Greensboro, NC 27402-6170, USA, k_watchr@uncg.edu

Jing Jian Xiao, Ph.D., Professor, Department of Human Development and Family Studies, University of Rhode Island, Transition Center, Kingston, RI 02881, USA xiao@uri.edu

Rui Yao, Ph.D., Assistant Professor, Department of Human Development, Consumer and Family Sciences, South Dakota State University, NFA 311, Box 2275A, Brookings, SD 57007, USA, rui_yao@yahoo.com

List of Figures

1.1	Principal factors affecting financial risk tolerance. Adapted and modified from Irwin (1993)	13
2.1	Financial wellness diagram	30
5.1	The theory of planned behavior	73
5.2	Stages by processes of change (Pro-Change Behavior Systems, 2002) . .	77
9.1	Percent of American Internet users who report various activities	138
9.2	Estimated quarterly e-commerce sales as a percent of total retail sales in the United States: Fourth quarter 1999 to fourth quarter 2006	139
9.3	Reasons Internet users started using the Internet	142
9.4	Reasons Internet non-users do not go online	143
9.5	A cumulative and recursive model of successive kinds of access to digital technologies	144
9.6	Types of products purchased online: New vs. very experienced users . . .	147
9.7	American consumers' concerns about personal information when shopping online: 2001 and 2002	152
14.1	The sustainable family business model	242

List of Tables

1.1	The Allais paradox.	7
1.2	Factors associated with financial risk tolerance	12
3.1	Household aftertax income and expenditures as percent of aftertax income, 2005	38
3.2	Selected retirement adequacy studies	43
4.1	Five-tiered approach to program evaluation	59
5.1	Change strategies and tactics that match change stages	76
6.1	Children's consumer economic socialization: Recent studies	86
6.2	Consumer sophistication as stages of socialization: A marketing perspective	92
7.1	Description of variables	111
7.2	Non-adopters of electronic banking technologies (1995 and 2004 SCF)	113
7.3	Non-adoption rate of five electronic banking technologies across demographic characteristics (2004 SCF)	114
7.4	RII (repeated imputed inferences) results of logistic regression of adoption of electronic financial services (2004 SCF)	115
7.5	Comparison of ATM adoption: 1995 versus 2004	117
7.6	Comparison of debit card adoption: 1995 versus 2004	117
7.7	Comparison of direct deposit adoption: 1995 versus 2004	118
7.8	Comparison of direct payment adoption: 1995 versus 2004	119
10.1	Test results by demographics	168
10.2	Test results by aspirations	170
10.3	Test results by money management education	170
11.1	Demographic profile of college students by credit card usage and degree of financial risk	191
11.2	Financial characteristics of college students by credit card usage and degree of financial risk	193
11.3	Probability college students are financially at risk (students with credit cards)	197
13.1	Family financial resource ownership rates by annual income quintiles: 2001 and 2003	225
13.2	Individual health insurance coverage rates: 2001 and 2003	226

15.1 Mean and standard deviation of sample characteristics 262

15.2 Pearson correlation coefficients between the portfolio diversification
index and investment behavior 262

15.3 OLS regression for predicting portfolio diversification 263