Financial Behavior

PLAYERS, SERVICES, PRODUCTS, AND MARKETS



H. KENT BAKER
GREG FILBECK
VICTOR RICCIARDI

EDITORS

Financial Behavior

PLAYERS, SERVICES, PRODUCTS, AND MARKETS

H. KENT BAKER
GREG FILBECK
and

VICTOR RICCIARDI





Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and certain other countries.

Published in the United States of America by Oxford University Press 198 Madison Avenue, New York, NY 10016, United States of America.

© Oxford University Press 2017

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, by license, or under terms agreed with the appropriate reproduction rights organization. Inquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above.

You must not circulate this work in any other form and you must impose this same condition on any acquirer.

Library of Congress Cataloging-in-Publication Data

Names: Baker, H. Kent (Harold Kent), 1944- editor. | Filbeck, Greg, editor. |

Title: Financial behavior: players, services, products, and markets /

[edited by] H. Kent Baker, Greg Filbeck, and Victor Ricciardi.

Description: New York City: Oxford University Press, 2017. | Series:

Financial markets and investments series | Includes index.

Identifiers: LCCN 2016036009 | ISBN 9780190269999 (hardcover)

Subjects: LCSH: Investments—Psychological aspects. | Investments—Decision making. | Finance—Psychological aspects.

Classification: LCC HG4515.15 .F56 2016 | DDC 332.601/9—dc23

LC record available at https://lccn.loc.gov/2016036009

987654321

Ricciardi, Victor, editor.

Printed by Sheridan Books, Inc., United States of America

Financial Behavior

FINANCIAL MARKETS AND INVESTMENTS SERIES H. Kent Baker and Greg Filbeck, Series Editors

Portfolio Theory and Management Edited by H. Kent Baker and Greg Filbeck

Public Real Estate Markets and Investments Edited by H. Kent Baker and Peter Chinloy

Private Real Estate Markets and Investments Edited by H. Kent Baker and Peter Chinloy

Investment Risk Management
Edited by H. Kent Baker and Greg Filbeck

Private Equity: Opportunities and Risks Edited by H. Kent Baker, Greg Filbeck, and Halil Kiymaz

Mutual Funds and Exchange-Traded Funds: Building Blocks to Wealth Edited by H. Kent Baker, Greg Filbeck, and Halil Kiymaz

Acknowledgments

The simpler you say it, the more eloquent it is.

—August Wilson

Publishing a book requires the involvement of many people. Although acknowledging everyone who participated in the process would be difficult, we would like to single out the following individuals. First, we greatly appreciate the helpful comments of the anonymous reviewers of our book proposal that helped us fine-tune our proposal.

Second, the chapter authors merit special thanks because without them this book would not have been possible. We firmly believe that every writer needs an editor, because self-editing can be difficult and often leads to missed mistakes. Our task as editors is to help our authors convey content in the most effective manner possible. The difference between the right word and nearly the write word can be enormous. As Arthur Plotnik once said, "You write to communicate to the hearts and minds of others what's burning inside you, and we edit to let the fire show through the smoke." We also adhere to the notion expressed by E. B. White that "The best writing is rewriting." Therefore, based on our edits and comments, most authors rewrote their chapters at least twice. They did so without complaint—at least without any complaints expressed directly to us. Perhaps J. Russell Lynes was correct: "No author dislikes to be edited as much as he dislikes not to be published."

Third, our partners at Oxford University Press performed in the same highly professional manner that they have throughout the Financial Markets and Investments Series. Scott Parris, Anne Dellinger, and Cathryn Vaulman helped steer the book through the early stages of the process while David Pervin and Emily MacKenzie played important roles later in the process. Special thanks also go to Rajakumari Ganessin (Project Manager), Carole Berglie (Copyeditor), and Claudie Peterfreund (Indexer). These are just a few of the people who played important roles in this book project.

Fourth, we appreciate the research support provided by our respective institutions: the Kogod School of Business at American University, the Behrend College at Penn State Erie, and the Business Management Department at Goucher College.

Finally, we thank our families for their encouragement and support and dedicate the book to them: Linda and Rory Baker; Janis, Aaron, Kyle, and Grant Filbeck; and Jaymie, Kristin, and Julianna Lunt.

Acronyms and Abbreviations

AAII American Association of Individual Investors

ACA Affordable Care Act of 2010

ACT acceptance and commitment therapy

ADL activity of daily living

AFS Academy of Financial Services

AHEAD Asset and Health Dynamics among the Oldest Old

AI appreciative inquiry

AICPA American Institute of CPAs
AIM Affect Infusion Model
AMH adaptive market hypothesis
APD antisocial personality disorder
AUM assets under management

BLS Bureau of Labor Statistics

BM book-to-market

CALIS Covariance Analysis of Linear Structural

CAPM capital asset pricing model

CBOE Chicago Board Options Exchange

CCAPM consumption CAPM CD certificate of deposit

CEA Council of Economic Advisers

CEO chief executive officer CF/P cash flow-to-price

CFA Chartered Financial Analyst

CFO chief financial officer

CFP Certified Financial Planner

CFTC Commodity Futures Trading Commission

COT commitment of trader

CPA Certified Public Accountant

CPI consumer price index

CPT Cumulative Prospect Theory
CRD Central Registration Depository
CRM customer relationship management

xvi

D/P dividends-to-price
DB defined benefit

DBT dialectical behavioral therapy

DC defined contribution

DJIA Dow Jones Industrial Average

E/P earnings-to-price

EFFH extended functional fixation hypothesis

EMH efficient market hypothesis

EPS earnings per share ETF exchange-traded fund

FCA Financial Conduct Authority

FCAA Financial Counseling Association of America

FDNA Financial DNA Assessment

FEARS Financial and Economic Attitudes Revealed by Search

FINRA Financial Industry Regulatory Authority

FMH fractal market hypothesis

FPA Financial Planning Association
FPSB Financial Planning Standards Board
FPSM Financial Planning Strategy Modes
FTA Financial Therapy Association

GAO Government Accountability Office

GDP gross domestic product GNH gross national happiness

GWAS genome-wide association studies

HFT high-frequency trading
HNWI high net worth individuals
HO homeowners insurance

HRS Health and Retirement Study

HWM high water mark

IAFP International Association for Financial Planning

IAPD Investment Adviser Public Disclosure
IAR Investment Advisor Representative

IARD Investment Adviser Registration Depository

IBCFP International Board for Standards and Practices for Certified Financial

Planners

IBD independent broker-dealers

ICAPM intertemporal capital asset pricing model ICFP Institute of Certified Financial Planners

IOC immediate or cancel IPO initial public offering

IPS investment policy statement
IRA Individual Retirement Account
IRS Internal Revenue Service

KMV key mediating variable

LOP law of one price

M&A merger and acquisition MBS mortgage-backed security MEC modified endowment contract

MFO multi-family office

MI motivational interviewing

MMF money market fund

MMH mood maintenance hypothesis MPT modern portfolio theory MRI magnetic resonance imaging

MS mortality salience

MVO mean-variance optimization

NAIC National Association of Insurance Commissioners National Association of Personal Financial Advisors NAPFA

National Association of Securities Dealers NASD

NBBO national best bid and offer

NEFE National Endowment for Financial Education

NEST National Employment Savings Trust

NFCC National Foundation for Credit Counseling

NFIP National Flood Insurance Program NLSY National Longitudinal Survey of Youth

NPV net present value

New York Stock Exchange **NYSE**

OCIE Office of Compliance Inspections and Examinations

OECD Organization of Economic Cooperation and Development

OPT option pricing theory

PCL [Hare] Psychopathy Checklist PFS Personal Financial Specialist **PMI** Purchasing Managers' Index

qualified default investment alternative **ODIA**

RCT randomized control trial Red FD Regulation Fair Disclosure

Reg NMS SEC Regulation National Market Systems

REIT real estate investment trust RIA Registered Investment Adviser SAA strategic asset allocation SAD seasonal affective disorder Survey of Consumer Finances SCF SEC

Securities and Exchange Commission

SEO seasoned equity offering

SIP Securities Information Processor

SML security market line SOA Society of Actuaries

SRO self-regulatory organization Social Science Research Network SSRN SVI Google Search Volume Index

xviii Acronyms and Abbreviations

SWF sovereign wealth fund TAA tactical asset allocation

TBW Taylor, Bean & Whitaker Mortgage Corporation

TMT terror management theory

UHNW ultra-high net worth UX user experience

VIX CBOE Volatility Index

About the Editors

H. Kent Baker, CFA, CMA, is a University Professor of Finance in the Kogod School of Business at American University. Professor Baker is an author or editor of 26 books, including Investor Behavior—The Psychology of Financial Planning and Investing, Behavioral Finance—Investors, Corporations, and Markets, Portfolio Theory and Management, Survey Research in Corporate Finance, and Understanding Financial Management: A Practical Guide. As one of the most prolific finance academics, he has published more than 160 peer-reviewed articles in such journals as the Journal of Finance, Journal of Financial and Quantitative Analysis, Financial Management, Financial Analysts Journal, and Journal of Portfolio Management. He has consulting and training experience with more than 100 organizations. Professor Baker holds a BSBA from Georgetown University; M.Ed., MBA, and DBA degrees from the University of Maryland; and an MA, MS, and two PhDs from American University.

Greg Filbeck, CFA, FRM, CAIA, CIPM, PRM holds the Samuel P. Black III Professor of Finance and Risk Management at Penn State Erie, the Behrend College, and serves as the Interim Director for the Black School of Business. He formerly served as Senior Vice-President of Kaplan Schweser and held academic appointments at Miami University and the University of Toledo, where he served as the Associate Director of the Center for Family Business. Professor Filbeck is an author or editor of seven books and has published more than 90 refereed academic journal articles in the *Financial Analysts Journal*, *Financial Review*, and *Journal of Business*, *Finance*, and Accounting among others. Professor Filbeck holds and conducts training worldwide for candidates for the CFA, FRM, and CAIA designations. Professor Filbeck holds a BS from Murray State University, an MS from Penn State University, and a DBA from the University of Kentucky.

Victor Ricciardi is Assistant Professor of Financial Management at Goucher College. He teaches courses in financial planning, investments, corporate finance, behavioral finance, and the psychology of money. He is a leading expert on the academic literature and emerging research issues in behavioral finance. He co-edited *Investor Behavior—The Psychology of Financial Planning and Investing*. Professor Ricciardi is the editor of several eJournals distributed by the Social Science Research Network (SSRN) at

www.ssrn.com, including: behavioral finance, financial history, behavioral economics, and behavioral accounting. He received a BBA in accounting and management from Hofstra University and an MBA in finance and Advanced Professional Certificate (APC) at the graduate level in economics from St. John's University. He also holds a graduate certificate in personal family financial planning from Kansas State University. He can be found on Twitter@victorricciardi.

About the Contributors

Irene Aldridge is the Managing Director, Research and Development, AbleMarkets. com and ABLE Alpha Trading LTD, where she designs, implements, and deploys proprietary trading strategies. She is also President of AbleMarkets.com, a platform of predictive market microstructure analytics. Ms. Aldridge is the author of High-Frequency Trading: A Practical Guide to Algorithmic Strategies and Trading Systems. Before joining ABLE Alpha, she taught graduate quantitative finance courses at several U.S. universities. She has contributed to many government regulatory panels, including the U.K. Government Foresight Committee for Future of Computer Trading and the U.S. Commodity Futures Trading Commission's Subcommittee on High-Frequency Trading. Ms. Aldridge holds a BE in Electrical Engineering from Cooper Union, an MS in Financial Engineering from Columbia University, and an MBA from INSEAD. She has also studied in two PhD programs, including IEOR at Columbia University.

Michal Strahilevitz is a Visiting Associate Professor at The Center for Advanced Hindsight at Duke University. Previously, she was a faculty member at Golden Gate University, University of Arizona, University of Miami, and University of Illinois. She was also a visiting faculty member at the University of Michigan, and University of California at Berkeley. She has published in the Journal of Consumer Research, Journal of Marketing Research, Journal of Consumer Psychology, Journal of Business Research, and Journal of Nonprofit & Public Sector Marketing. Much of her published research focuses on how emotions affect decision making in areas related to investing, shopping, and donating to charity. She blogs for Psychology Today and consults for-profit and nonprofit companies. Professor Strahilevitz received an MBA from Tel Aviv University and a PhD from the University of California at Berkeley.

James E. Brewer Jr. is President of Envision Wealth Planning and Envision 401(k) Advisors. He works with individuals and small businesses to incorporate their values into their financial vision using a holistic, behavioral financial planning process. He is a Certified Financial Planner professional, Accredited Investment Fiduciary, Chartered Retirement Planning Consultant, and Professional Plan Consultant. Mr. Brewer was a Top 100 Social Media Financial Advisor in the United States from 2013 to 2015. His thought leadership has been featured or cited in U.S. News and World Report, The Wall

Street Journal, Voices: James Brewer, on Using ERISA 3(38) Investment Managers, and Forbes. He holds an M.S. from the Massachusetts Institute of Technology.

Peter Brooks is a Behavioral Finance Transformation Director with Barclays. He joined Barclays in March 2007 and works with a team of experts to develop and implement commercial applications drawing on behavioral portfolio theory, the psychology of judgment and decision making, and decision sciences. He has worked in London and Singapore, and his current position focuses on bringing the best of behavioral finance to self-directed investors through Internet channels. Dr. Brooks has published in the *Journal of Risk and Uncertainty, Theory and Decision,* and contributed to the *Wiley Encyclopedia of Operations Research and Management Science.* He has been a regular contributor to the leading print and television media on topics related to investing private wealth. He holds a PhD in behavioral and experimental economics from the University of Manchester. His doctoral thesis focused on experimental research into individual attitudes to monetary gains and losses.

Elissa Buie, CFP, is CEO of Yeske Buie, and holds an appointment as Distinguished Adjunct Professor in Golden Gate University's Ageno School of Business, where she teaches the capstone case course in the financial planning program. She is a past chair of both the Financial Planning Association and the Foundation for Financial Planning, the latter being the only nonprofit devoted solely to fostering and supporting the delivery of pro bono financial planning services to those in need. She is also a dean in the FPA's residency program. She has published in the Journal of Financial Planning and contributed chapters to the first and second editions of the CFP Board's Financial Planning Competency Handbook and Investor Behavior: The Psychology of Financial Planning and Investing. She holds a BS in commerce from the University of Virginia's McIntire School and an MBA from the University of Maryland.

Pattanaporn Chatjuthamard is an Associate Professor of Finance at Sasin Graduate Institute of Business Administration of Chulalongkorn University, Bangkok, Thailand. Before joining the faculty at Sasin, she was an assistant professor at Texas A&M International University in Laredo, Texas, between 2002 and 2006. She was also a visiting professor at Levin Graduate Institute, the University at Buffalo, in 2006. Her primary research interests include corporate finance, corporate governance, and international financial markets. She has published in leading scholarly and professional journals, including the Journal of Financial Intermediation, Journal of Corporate Finance, Journal of Banking and Finance, Journal of Financial Research, Journal of Business Ethics, and International Review of Economics and Finance. Professor Chatjuthamard received a PhD from the University of Wisconsin Milwaukee.

Marguerita M. Cheng is the Chief Executive Officer at Blue Ocean Global Wealth. Before co-founding Blue Ocean Global Wealth, she was a Financial Advisor at Ameriprise Financial and an analyst and editor at Towa Securities in Tokyo, Japan. Ms. Cheng is a spokesperson for the AARP Financial Freedom Campaign, a regular columnist for *Kiplinger*, and former Financial Planning Association (FPA) national board member. As a Certified Financial Planner Board of Standards (CFP Board) Ambassador, Ms. Cheng helps educate the public, policymakers, and media about the benefits of competent, ethical financial planning. She is a CFP professional, a Chartered

Retirement Planning Counselor, a Certified Divorce Financial Analyst, and Retirement Income Certified Professional.

C. W. Copeland is an Assistant Professor of Insurance for The American College of Financial Services. He has 18 years of college teaching experience and nearly 20 years as a financial services practitioner. He is a registered representative with Cape Securities and an Investment Advisor Representative with Cape Investment Advisors and maintains a Series 65, Series 7, Series 6, Series 63, Life and Health, Property and Casualty Insurance licenses in multiple states. He co-authored Applications in Financial Planning II, and edited McGill's Life Insurance, 10th Edition, Essentials of Life Insurance Products, 4th Edition, Essentials of Disability Income Insurance, 4th Edition, and Financial Services Overview: FP99 Financial Services Practicum. Professor Copeland holds a PhD in financial planning from the University of Georgia with a research focus on behavioral finance. He also holds the Retirement Income Certified Professional (RICP) designation, Chartered Financial Consultant (ChFC), and Chartered Life Underwriter professional designations.

Henrik Cronqvist is Professor of Finance at the University of Miami, where he conducts interdisciplinary research and teaches finance, entrepreneurship, and management. His research involves behavioral finance and corporate finance. His work has been published in top journals in economics, including the American Economic Review and Journal of Political Economy, as well as in finance, including the Journal of Finance, Journal of Financial Economics, and Review of Financial Studies. He is often invited to give seminars at academic conferences and to executives and public policymakers around the world. Several of his research papers have been recognized with best paper awards at international conferences, and have been sponsored by competitive research grants. His work has been featured in BusinessWeek, The Economist, Financial Times, The Wall Street Journal, and on CNBC and CNN. Professor Cronqvist received a PhD in finance from the University of Chicago.

Benjamin F. Cummings, CFP®, is an Associate Professor of Behavioral Finance at the American College of Financial Services. Before his current position, he was an Assistant Professor at Saint Joseph's University in Philadelphia, PA and a Scholar in Residence at CFP Board in Washington, DC. Professor Cummings also worked for FJY Financial, a fee-only financial planning firm in Reston, Virginia. He has completed award-winning research on the use and value of financial advice, and has worked on funded projects related to the regulation of professional financial advice. Professor Cummings received a PhD in personal financial planning from Texas Tech University.

Greg B. Davies recently founded Centapse, a firm dedicated to applying sophisticated behavioral insight to design, develop, and deploy solutions across industries to help people and organizations make better decisions. Over the last decade, as head of Behavioral-Quant Finance at Barclays, Dr. Davies built and led the world's first applied behavioral finance team, implementing behavioral design into the bank's tools, systems, propositions, products, and organizational processes. He is an Associate Fellow at Oxford University's Saïd Business School, and his first book, *Behavioral Investment Management*, was published in 2012. He has authored papers in multiple academic disciplines, and is a frequent media commentator on behavioral finance. Dr. Davies co-created the

"reality opera" *Open Outcry*, which turns the behavior of a functioning trading floor into a musical performance, which received its première in London in November 2012. He holds an undergraduate degree from the University of Cape Town, and an MPhil in economics and PhD in behavioral decision theory, both from Cambridge University.

Erik Devos is the JP Morgan Chase Professor in Business Administration and Professor of Finance at the College of Business Administration of the University of Texas El Paso. He previously taught at Ohio University and Binghamton University (SUNY). He has published in finance and accounting journals such as Review of Financial Studies, Journal of Accounting and Economics, Journal of Corporate Finance, Financial Management, and Journal of Banking and Finance. He has also published in real estate journals such as Real Estate Economics, Journal of Real Estate Economics and Finance, and Journal of Real Estate Research. Professor Devos serves as an associate editor for the Financial Review. He received a master's degree in financial economics from Erasmus University in Rotterdam and a PhD in finance from Binghamton University (SUNY).

Paul Dolan is an internationally renowned expert on happiness, behavior, and public policy. He is currently Professor of Behavioural Science in the Department of Social Policy at the London School of Economics and Political Science, and Director of the new Executive MSc in Behavioural Science. In 2010, he co-authored the *Mindspace* report published by the U.K. Cabinet Office, advising local and national policymakers on how to effectively use behavioral insights in their policy setting. He received a PhD from the University of York.

Michael Dowling is an Associate Professor of Finance in ESC Rennes School of Business in France, where he primarily researches behavioral asset pricing, especially in energy markets. He has published in such journals as *Energy Economics and Energy Policy* and *Economics Letters*. Professor Dowling is currently the Co-Editor-in-Chief of the *Journal of Behavioral and Experimental Finance*, which concentrates on rigorously investigating the extent to which behavioral principles drive financial behavior. He received a PhD from Trinity College Dublin.

Harold Evensky is Chairman of Evensky & Katz/Foldes Financial, a 30-year-old wealth management firm, and Professor of Practice at Texas Tech University. He has served as chair of the CFP Board of Governors and the International CFP Council and he is the research columnist for the Journal of Financial Planning. Mr. Evensky has been named by Investment Advisor as one of the "25 most influential people in the financial planning industry," by Financial Planning as one of five "Movers, Shakers and Decision Makers, The Most Influential People in the Financial Planning Profession," and by Investment News as one of the "25 Power Elite" in the financial services industry. He co-authored New Wealth Management, Wealth Management, and co-edited The Investment Think Tank: Theory, Strategy, and Practice for Advisors and Retirement Income Redesigned: A Master Plan for Distribution. He received his BCE and MS degrees from Cornell University.

Steve Z. Fan is an Associate Professor of Finance at the College of Business and Economics, University of Wisconsin Whitewater. Before his career in finance, he worked as a research assistant professor at Marquette University. Professor Fan's research focuses on equity anomalies, corporate governance, and institutional investors. He has published in *Multinational Finance Journal, International Journal of Business and Finance Research*, and *Journal of Finance and Accountancy*, among others. Professor Fan received a BS in mechanical engineering from Zhangzhou University, China, a PhD in biomedical engineering from a joint program from University Tennessee and University of Memphis, and a PhD in finance from the University of Wisconsin Milwaukee.

Deborah W. Gregory is an Assistant Professor at Bentley University in Waltham, Massachusetts. As a certified Jungian psychoanalyst (IAAP, C.G. Jung Institute, Boston) and Chartered Financial Analyst (CFA). Professor Gregory's research focuses on the behavioral aspect of individuals' relation to money. She received a scholarly award from Bentley for her book *Unmasking Financial Psychopaths: Inside the Minds of Investors in the Twenty-First Century* (2014). She has published in the *Journal of Finance, Financial Analysts Journal, NYU Salomon Brothers Monograph Series, Journal of Business and Economic Studies, Journal of Financial Crime,* and *Journal of Behavioral Finance & Economics,* among others. Professor Gregory received a PhD in finance from the University of Florida.

John J. Guerin is the owner of Delta Psychological Associates, P.C. He has more than 30 years of experience in the practice of both clinical and organizational psychology. Experience with both group dynamics and family systems has allowed him to effectively coach individuals in organizations and to work with groups in corporate and family-based businesses. With more than 20 years of experience in mediation and forensic practice, he has demonstrated skills in forging consensus in challenging situations and helping organizations navigate difficult adversarial situations and cultural transitions. Dr. Guerin is an expert in organizational, team, and individual assessment, using high standards in scientific assessment methodology. He is active in emergent efforts to collaborate across professional boundaries and develop more effective tools for diagnosis and intervention. He is a Licensed Psychologist in independent practice in Pennsylvania and New Jersey, and collaborates with organizational consulting firms as an independent consultant. He received an M.A. degree from the University of Chicago and a PhD from Temple University in Philadelphia.

L. Paul Hood Jr. is the Director of Planned Giving at The University of Toledo Foundation. He previously served as Director of Gift Planning for The University of Montana Foundation. A self-styled "recovering tax lawyer," Mr. Hood practiced tax and estate planning law for 20 years in Louisiana. He is the author or co-author of five books on estate planning, charitable planning, buy-sell agreements, and business valuation and is a frequent speaker and writer on estate planning and business valuation. The father of two teenaged boys, he enjoys reading, but his passion is baseball. Mr. Hood served as President of the Toledo Area Partnership for Philanthropic Planning in 2014.