

BEHAVIORAL FINANCE AND YOUR PORTFOLIO

A NAVIGATION GUIDE
FOR BUILDING WEALTH

MICHAEL M. POMPIAN



WILEY

BEHAVIORAL FINANCE AND YOUR PORTFOLIO

**A NAVIGATION GUIDE FOR
BUILDING WEALTH**

MICHAEL M. POMPIAN

WILEY

Copyright © 2021 by Michael M. Pompian. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the Web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at www.wiley.com/go/permissions.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

The charts and information in this presentation are for illustrative purposes only, and are based upon sources of information that Sunpointe, LLC generally considers reliable, however we cannot guarantee, nor have we verified, the accuracy of such independent market information. The charts and information, and the sources utilized in the compilation thereof, are subjective in nature and open to interpretation.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993, or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit www.wiley.com.

Library of Congress Cataloging-in-Publication Data

Names: Pompian, Michael M., 1963– author.

Title: Behavioral finance and your portfolio : a navigation guide for building wealth / Michael M. Pompian.

Description: Hoboken, New Jersey : Wiley, [2021] | Includes index.

Identifiers: LCCN 2021008937 (print) | LCCN 2021008938 (ebook) | ISBN

9781119801610 (hardback) | ISBN 9781119802006 (adobe pdf) | ISBN

9781119801993 (epub)

Subjects: LCSH: Finance—Psychological aspects. |

Investments—Psychological aspects. | Investments—Decision making.

Classification: LCC HG101 .P658 2021 (print) | LCC HG101 (ebook) | DDC 332.601/9—dc23

LC record available at <https://lcn.loc.gov/2021008937>

LC ebook record available at <https://lcn.loc.gov/2021008938>

Cover Design: Wiley

Cover Image: © sorbetto/DigitalVision Vectors/Getty Images

10 9 8 7 6 5 4 3 2 1

Founded in 2016, Sunpointe Investments is a wealth management firm that also creates books and articles. Sunpointe is committed to developing first class research and investing content for individuals and financial advisors. Content topics range from portfolio management to behavioral finance and much more.

For a list of article and books, please visit our Web site at www.sunpointeinvestments.com.

*This book is dedicated to my three sons
Nicholas, Alexander, and Spencer.*

Contents

<i>Preface</i>	<i>xv</i>
<i>Acknowledgments</i>	<i>xxi</i>
<i>About the Author</i>	<i>xxiii</i>
PART I	
INTRODUCTION TO BEHAVIORAL FINANCE	1
Chapter 1: What Is Behavioral Finance and Why Does It Matter?	3
Why Behavioral Finance Matters	5
Behavioral Finance: The Big Picture	6
Standard Finance versus Behavioral Finance	15
Chapter 2: Introduction to Behavioral Biases	23
Introduction	23
Behavioral Biases Defined	24
Why Understanding and Identifying Behavioral Biases Is Crucial	25
Categorization of Behavioral Biases	27
Differences between Cognitive and Emotional Biases	27
Difference among Cognitive Biases	28
Emotional Biases	29
A Final Word on Biases	31

PART II**BELIEF PERSEVERANCE BIASES DEFINED
AND ILLUSTRATED 33****Chapter 3: Belief Perseverance Bias #1:
Cognitive Dissonance Bias 35**

Bias Description	35
Am I Subject to Cognitive Dissonance Bias?	38
Investment Advice	39

Chapter 4: Belief Perseverance Bias #2: Conservatism Bias 41

Bias Description	41
Am I Subject to Conservatism Bias?	44
Investment Advice	45

Chapter 5: Belief Perseverance Bias #3: Confirmation Bias 47

Bias Description	47
Am I Subject to Confirmation Bias?	51
Investment Advice	52

**Chapter 6: Belief Perseverance Bias #4: Representativeness
Bias 55**

Bias Description	55
Examples of Representativeness Bias	56
Am I Subject to Representativeness Bias?	60
Investment Advice	62

**Chapter 7: Belief Perseverance Bias #5:
Illusion-of-Control Bias 65**

Bias Description	65
Example of Illusion of Control Bias	66
Am I Subject to Illusion of Control Bias?	69
Investment Advice	70

Chapter 8: Belief Perseverance Bias #6: Hindsight Bias 73

Bias Description	73
Example of Hindsight Bias	74
Am I Subject to Hindsight Bias?	76
Investment Advice	77

PART III:	
INFORMATION PROCESSING BIASES DEFINED AND ILLUSTRATED	79
Chapter 9: Information Processing Bias #1: Mental Accounting Bias	81
Bias Description	81
Practical Application	83
Am I Subject to Mental Accounting Bias?	85
Investment Advice	88
Chapter 10: Information Processing Bias #2: Anchoring Bias	91
Bias Description	91
Example of Anchoring and Bias	92
Am I Subject to Anchoring Bias?	94
Investment Advice	95
Bonus Discussion: Investment Strategies That Leverage Anchoring Bias	96
Chapter 11: Information Processing Bias #3: Framing Bias	99
Bias Description	99
Example of Framing Bias	101
Am I Subject to Framing Bias?	105
Investment Advice	107
Chapter 12: Information Processing Bias #4: Availability Bias	109
Bias Description	109
Example of Availability Bias	110
Am I Subject to Availability Bias?	113
Investment Advice	114
Chapter 13: Information Processing Bias #5: Self-Attribution Bias	117
Bias Description	117
Example of Self-Attribution Bias	118
Am I Subject to Self-Attribution Bias?	119
Investment Advice	121

Chapter 14: Information Processing Bias #6: Outcome Bias	123
Bias Description	123
Am I Subject to Recency Bias?	125
Chapter 15: Information Processing Bias #7: Recency Bias	129
Bias Description	129
Example of Recency Bias	130
Am I Subject to Recency Bias?	134
Investment Advice	135
PART IV:	
EMOTIONAL BIASES DEFINED AND ILLUSTRATED	137
Chapter 16: Emotional Bias #1: Loss Aversion Bias	139
Bias Description	139
Example of Loss Aversion Bias	140
Am I Subject to Loss Aversion Bias?	142
Investment Advice	144
Chapter 17: Emotional Bias #2: Overconfidence Bias	145
Bias Description	145
Examples of Overconfidence Bias	146
Am I Subject to Overconfidence Bias?	148
Investment Advice	151
A Final Word on Overconfidence	153
Chapter 18: Emotional Bias #3: Self-Control Bias	155
Bias Description	155
Example of Self-Control Bias	156
Am I Subject to Self-Control Bias?	159
Investment Advice	160
Chapter 19: Emotional Bias #4: Status Quo Bias	163
Bias Description	163
Example of Status Quo Bias	164
Am I Subject to Status Quo Bias?	165
Investment Advice	167

Chapter 20: Emotional Bias #5: Endowment Bias	169
Bias Description	169
Example of Endowment Bias	170
Am I Subject to Endowment Bias?	172
Investment Advice	173
Chapter 21: Emotional Bias #6: Regret Aversion Bias	175
Bias Description	175
Example of Regret Bias	176
Am I Subject to Regret Bias?	179
Advice	180
Chapter 22: Emotional Bias #7: Affinity Bias	183
Bias Description	183
Example of Affinity Bias	184
Am I Subject to Affinity Bias?	186
Investment Advice	188
PART V:	
BEHAVIORAL INVESTOR TYPES	189
Chapter 23: Staying on Target to Reach Financial Goals is Hard	191
Non-Financial Examples of Self-Defeating Behavior	192
Financial Examples of Self-Defeating Behavior	196
Chapter 24: Introduction to Behavioral Investor Types	201
Introduction	201
What Is My Behavioral Investor Type?	204
Step 1: BIT Orientation Quiz	205
Step 2: Bias Identification Quiz	210
Step 3: Advice for Each BIT	216
Summary	216
Chapter 25: Preserver Behavioral Investor Type	217
Upside/Downside Analysis	219
Bias Analysis of Preservers	220
Advice for Preservers	224

Chapter 26: Follower Behavioral Investor Type	225
Upside/Downside Analysis	227
Bias Analysis of Followers	228
Other Important Follower Biases: Hindsight, Cognitive Dissonance and Regret	232
Advice for Followers	233
Chapter 27: Independent Behavioral Investor Type	235
Upside/Downside Analysis	237
Bias Analysis of Independents	238
Self-Attribution	240
Conservatism Bias	241
Representative Bias	242
Advice for Independents	242
Chapter 28: Accumulator Behavioral Investor Type	243
Upside/Downside Analysis	245
Accumulator Bias Analysis	246
Advice for Accumulators	251
Chapter 29: Asset Allocation Case Studies for Each Behavioral Investor Type	253
PART VI: BEHAVIORAL ASPECTS OF PORTFOLIO IMPLEMENTATION	271
Chapter 30: Behavioral Finance Aspects of the Active versus Passive Debate	273
The Logic of Passive Management	274
The Potential Benefits of Active Management	274
Advice: Use the Best Practical Allocation for Your Portfolio	277
Chapter 31: Behaviorally Aware Portfolio Construction	279
Introduction	279
Goals-based Investing	280

Consolidating Accounts into a Portfolio View	281
Portfolio Approach	282
Chapter 32: Behavioral Finance and Market Corrections	285
The Most Recent Panic	286
<i>Index</i>	<i>291</i>

Preface

If successful, this book will change your idea about what an optimal portfolio is. It is intended to be a guide to both understanding irrational investor behavior and creating portfolios for individual investors that account for these irrational behaviors. In this book, an optimal portfolio lies on the efficient frontier, but may move up or down it depending upon the individual needs and preferences of you as an individual investment decision-maker. When applying behavior finance to real-world investment portfolios, an optimal portfolio is one that an investor can comfortably live with, so that he or she has the ability to adhere to his or her investment program, while at the same time reach long-term financial goals.

Given the run-up in stock prices from 2009, in the wake of the global financial crisis, to 2020, and the bear market brought on by the novel coronavirus, understanding irrational investor behavior is as important as it has ever been. This is true both for the markets in general, but most especially for individual investors. The intended audience for the book is sophisticated individual investors who wish to become more introspective about their own behaviors, and to truly try to understand how to create a portfolio that works for them. The intention is that it is a guidebook, to be used and implemented in the pursuit of building better portfolios. When considering behavioral finance, investors rightly have questions. Some of these are:

- What are the most common investor biases that cause investment mistakes?
- What are the most impactful biases?
- How do I create the best allocation for me, taking into consideration my behavioral tendencies?

- How do I stick to a long-term investment plan?
- Should I buy individual stocks or stick to a diversified portfolio?

This book will answer these questions. There is difference between this book and my prior books. Most of my prior work has been written through the lens of how financial advisors advise: That is, how financial advisors can work better with their clients. This book, however, is written from the point of view of the investor. The only part of the book that has the financial advisor perspective is the case studies at the end. This is intentional. I want you, the investor, to pretend you are an advisor. This way you can implement the lessons in the book, which will drive home the learning.

In the last 25 years, the interest in behavioral finance as a discipline has not simply emerged, but rather exploded onto the scene, with many articles written by very prestigious authors in prestigious publications. We will review some of the key people who have shaped the current body of behavioral finance thinking, and review work done by them. And then the intent is to take the study of behavioral finance to another level: Developing a common understanding (definition) of behavioral biases in terms that advisors and investors can understand, and then demonstrate how they are to be used in practice through the use of case studies—a “how-to” of behavioral finance. We will also explore some of the new frontiers of behavioral finance, things not even discussed now that may be common knowledge in 25 years.

A Challenging Environment

Investors have never had more challenging times to invest in. Many investors thought they had found nirvana in the late 1990s, only to find themselves in quicksand in 2001 and 2002. And then we had the bull market of the 2000s only to get taken down by the 2008–2009 Great Recession. Today, we have had the longest bull market in history interrupted by the novel coronavirus bear market. In today’s environment, as well as in the past, investors are continuously asking themselves:

- “Is asset allocation important or should I concentrate my investments?”
- “Should I invest in alternative investments?”

- “Should I have any bonds?”
- “Should I take the same approach to investing in college money as retirement money?”
- “Should I hold cash or stay fully invested?”
- “How should I modify my portfolio allocation based on my behavioral biases?”

To that end, investors need a handbook like this one that can help them deal with the behavioral and emotional side of investing, so that they can help themselves understand why they have trouble sticking to a long-term program of investing. By implementing the lessons in the book, you too can reach financial goals.

Why This Book?

When I began taking an interest in how portfolios might be adjusted for behavioral biases back in the late 1990s, when the technology bubble was in full force, I sought a book like this one, but couldn't find one. I did not set a goal of writing a book at that time, I merely took an interest in the subject, and began reading. It wasn't until my wife, who was going through a job transition and came home one night talking about the Myers-Briggs personality type test she had taken, did I begin to consider the idea of writing about behavioral finance. My thought process at the time was relatively simple: Doesn't it make sense that people of differing personality types would want to invest differently? I couldn't find any literature on this topic. Fast-forward to today and this is my fifth book, and one that brings together a “greatest hits” of my work.

As a wealth manager myself, I have found the value of understanding the behavioral biases that investors have and discovered some ways to adjust investment programs for these biases. You will learn about these methods. By writing this book, I hope to spread the knowledge that I have developed and accumulated, so that other advisors and investors can benefit from these insights. Up until now, there has not been a book available that has served as a guide for the advisor or sophisticated investor to create portfolios that account for biased investor behavior. My fervent hope is that this book changes that.

Who Should Use This Book?

For individual investors who have the ability to look introspectively and assess their behavioral biases, this book is ideal. Many individual investors who choose either to “do it yourself” or rely on a financial advisor only for peripheral advice, often find themselves unable to separate their emotions from the investment decision making process. This does not have to be a permanent condition. By reading this book and delving deep into your behaviors, individual investors can indeed learn to modify behaviors and create portfolios that help them to stick to their long-term investment programs, and thus reach their long-term financial goals. Financial Advisors can also greatly benefit from the book.

When to Use This Book

First and foremost, this book is generally intended for investors who want to apply behavioral finance to the asset allocation process and create better portfolios for themselves. Some suggestions for when to take it off the shelf are:

- *There is an opportunity to create or re-create an asset allocation from scratch.* Having a large amount of cash can be a tricky thing for any investor. When should I put the money to work? At the same time, the lack of “baggage,” such as emotional ties to certain investments, tax implications, and a host of other issues that accompany an existing allocation, is ideal. The time to apply the principles learned in this book is at the moment that one has the opportunity to invest only cash or “clean house” on an existing portfolio.
- *A life “trauma” has taken place.* Sometimes investors are faced with a critical investment decision during a traumatic time, such as a divorce, a death in the family, a job loss, or other similar life event. These are the times that this book can add a significant amount of value to this type of situation by using its concepts.
- *A concentrated stock position is held.* When an investor holds a single stock or other concentrated stock position, emotions typically run high. In my practice, I find it incredibly difficult to get people “off the dime” to diversify their holdings in a single stock. The reasons are well known: “I know the company, so I feel comfortable holding the stock”; “I feel disloyal selling the stock”; “My peers will look

down on me if I sell any stock”; “My grandfather owned this stock, so I will not sell it”; the list goes on and on. This is the exact time to employ behavioral finance. Advisors must isolate what biases are being employed by the investor, and then work together with the investor to relieve the stress caused by these biases. This book is essential in these cases.

- *Retirement.* When an investor enters the retirement phase, behavioral finance becomes critically important. This is so because the portfolio structure can mean the difference between living a comfortable retirement and outliving one’s assets. Retirement is typically a time of reassessment, reevaluation, and is a great opportunity for the advisor to strengthen and deepen the relationship to include behavioral finance.
- *Wealth Transfer and Legacy is being considered.* Many wealthy investors want to leave a legacy. Is there any more emotional issue than this one? Having a frank discussion about what is possible and what is not, is difficult and often fraught with emotional cross-currents that the advisor would be well advised to stand clear of. However, by bringing behavioral finance into the discussion and setting an objective outside the councilor’s viewpoint, the investor may well be able to draw his or her own conclusion about what direction to take when leaving a legacy.
- *Trust Creation.* Creating a trust is also a time of emotion, that may bring psychological biases to the surface. Mental accounting comes to mind. If an investor says to him or herself “OK, I will have this pot of trust money over here to invest, and that pot of spending money over there to invest” the investor may well miss the big picture of overall portfolio management. The practical application of behavioral finance can be of great assistance at these times.

Naturally, there are many more situations not listed here that can arise where this book will be helpful.

Plan of the Book

The first part of the book is an introduction to the practical application of behavioral finance. These chapters will include an overview of what behavioral finance is at an individual investor level and an introduction to the behavioral biases that will be used when incorporating investor behavior into the asset allocation process. Parts Two, Three, and Four

include a comprehensive review, complete with a general description, practical application, implications for investors, a bias diagnostic, and advice. Part Five of the book reviews four Behavioral Investor Types, or BITS, and pulls everything together in the form of case studies that will clearly demonstrate how investors can use behavioral finance in real-world portfolio settings. Part Six covers portfolio implementation: Behavioral Finance Aspects of the Active/Passive Debate, Behaviorally Aware Portfolio Construction, and Behavioral Finance and Market Corrections.

Acknowledgments

I would like to acknowledge all my colleagues and clients who have contributed to broadening my knowledge in behavioral finance and wealth management.

About the Author

Michael M. Pompian, CFA, CFP, CAIA, is the Founder and Chief Investment Officer of Sunpointe Investments, a multi-family office investment firm in St. Louis, Missouri. He was formerly a Partner at Mercer Investment Consulting for 10 years and was the National Segment Leader for the private wealth business where he consulted to the firm's largest family office clients, overseeing \$8 billion. Prior to joining Mercer, Michael was a Wealth Management Advisor with Merrill Lynch and a private banker with PNC Private Bank. Prior to these positions, Michael was on the investment staff of a family office. Michael earned his MBA in Finance from Tulane University and graduated from the University of New Hampshire with a BS degree in Management. Michael has written four books: *Advising Ultra-Affluent Clients and Family Offices* (Wiley 2009), *Behavioral Finance and Wealth Management* (Wiley 2006), *Behavioral Finance and Wealth Management, 2nd Edition* (Wiley 2012) and *Behavioral Investor Types* (Wiley 2015). He writes a monthly column for *Morningstar Advisor* and has been quoted in *Money Magazine*, *The New York Times*, *Bloomberg*, and *CNBC*, among other media outlets. Michael holds the Chartered Financial Analyst (CFA) designation, Chartered Alternative Investment Analyst (CAIA), Certified Financial Planner (CFP®), and Certified Trust Financial Advisor (CTFA). He is a member of the CFA Institute, the New York Society of Securities Analysts (NYSSA), and the CFA Society of St. Louis. He is a regular speaker at family office conferences globally.

PART I

INTRODUCTION

TO BEHAVIORAL FINANCE

In Chapters 1 and 2, Part One of the book, readers will get an introduction to behavioral finance. This will set up Chapters 3 through 22, which review 20 behavioral biases, both cognitive and emotional. Two types of cognitive bias are reviewed in Chapters 3 through 15: Belief Perseverance cognitive biases are covered in Chapters 3 through 8, and Information Processing cognitive biases are covered in Chapters 9 through 15. Emotional biases are then covered in Chapters 16 through 22. After these chapters, the book introduces four Behavioral Investor Types (BITs) and then the BITs are applied in four case studies.

1

What Is Behavioral Finance and Why Does It Matter?

People in standard finance are rational. People in behavioral finance are normal.

—**Meir Statman, PhD, Santa Clara University**

If you are reading this book, you have decided that building the best portfolio for you, your family or your organization requires a solid understanding of human behavior. And the most important human behavior to understand is your own! After all, you need to make the best financial decisions possible and this requires understanding how you behave when money is involved. After advising individuals and families for over 25 years on their investment portfolios, and now running my own investment firm, I have found that understanding and applying behavioral finance to the investment process is the absolutely best way to manage portfolios for long term financial success. It may be counter-intuitive, but unless one has super-human capabilities to know which direction the markets are going all the time, the best strategy for managing a portfolio is to choose a comfortable level of risk and stick

with that strategy. The less tinkering the better! Does this mean you don't pay attention to it? Of course not! Investors need to pay attention to the value of assets they own, the structural changes in companies or industries that occur, portfolio rebalancing points, etc.—but the core asset allocation framework should remain the same unless personal circumstances have changed. So why is it so hard for investors to stay invested during periods of market volatility? Put simply, many people don't understand how emotions and irrational behaviors creep into the investment process. This book is all about understanding and diagnosing your own behavior so that you can create the best portfolios and have long-term investment success!

At its core, behavioral finance attempts to understand and explain actual investor and market behaviors versus theories of investor behavior. This idea differs from traditional (or standard) finance, which is based on assumptions of how investors and markets should behave. Investors from around the world who want to create better portfolios have begun to realize that they cannot rely solely on theories or mathematical models to explain individual investor and market behavior. As Professor Statman's quote puts it, standard finance people are modeled as "rational," whereas behavioral finance people are modeled as "normal." This can be interpreted to mean that "normal" people may behave irrationally—but the reality is that almost no one behaves perfectly rationally when it comes to finances and dealing with normal people is what this book is all about. We will delve into the topic of the irrational market behavior; however, the focus of the book is on individual investor behavior and how to create portfolios that investors can stick with for the long haul.

Fundamentally, behavioral finance is about understanding how people make decisions, both individually and collectively. By understanding how investors and markets behave, it may be possible to modify or adapt to these behaviors in order to improve economic outcomes. In many instances, knowledge of and integration of behavioral finance may lead to superior results for investors.

We will begin this chapter with a review of the prominent researchers in the field of behavioral finance. We will then review the debate between standard finance and behavioral finance. By doing so, we can establish a common understanding of what we mean when we say *behavioral finance*, which will in turn permit us to understand the use of this term as it applies directly to the practice of creating YOUR best portfolio.