

---

OVER 1.5 MILLION COPIES SOLD

---

# A RANDOM WALK DOWN *Wall Street*



==  
*The*  
Time-Tested  
Strategy  
*for*  
Successful  
Investing



**BURTON G. MALKIEL**

COMPLETELY REVISED *and* UPDATED

# A RANDOM WALK DOWN WALL STREET

---

The Time-Tested Strategy for  
Successful Investing

---

**BURTON G. MALKIEL**



W. W. NORTON & COMPANY  
New York • London

**FOR NANCY AND PIPER**

# CONTENTS

---

[\*Preface\*](#)

## [Part One](#)

### [STOCKS AND THEIR VALUE](#)

#### [1. FIRM FOUNDATIONS AND CASTLES IN THE AIR](#)

[What Is a Random Walk?](#)

[Investing as a Way of Life Today](#)

[Investing in Theory](#)

[The Firm-Foundation Theory](#)

[The Castle-in-the-Air Theory](#)

[How the Random Walk Is to Be Conducted](#)

#### [2. THE MADNESS OF CROWDS](#)

[The Tulip-Bulb Craze](#)

[The South Sea Bubble](#)

[Wall Street Lays an Egg](#)

[An Afterword](#)

#### [3. SPECULATIVE BUBBLES FROM THE SIXTIES INTO THE NINETIES](#)

[The Sanity of Institutions](#)

[The Soaring Sixties](#)

[\*The New "New Era": The Growth-Stock/New-Issue Craze\*](#)

[\*Synergy Generates Energy: The Conglomerate Boom\*](#)

[\*Performance Comes to the Market: The Bubble in Concept Stocks\*](#)

[The Nifty Fifty](#)

[The Roaring Eighties](#)

[\*The Return of New Issues\*](#)

[\*Concepts Conquer Again: The Biotechnology Bubble\*](#)

[\*ZZZZ Best Bubble of All\*](#)

[What Does It All Mean?](#)

[\*The Japanese Yen for Land and Stocks\*](#)

#### [4. THE EXPLOSIVE BUBBLES OF THE EARLY 2000s](#)

[The Internet Bubble](#)

[A Broad-Scale High-Tech Bubble](#)

[Yet Another New-Issue Craze](#)

[TheGlobe.com](#)

[Security Analysts Speak Up](#)

[New Valuation Metrics](#)

[The Writes of the Media](#)

[Fraud Slithers In and Strangles the Market](#)

[Should We Have Known the Dangers?](#)

[The U.S. Housing Bubble and Crash of the Early 2000s](#)

[The New System of Banking](#)

[Looser Lending Standards](#)

[The Housing Bubble](#)

[Bubbles and Economic Activity](#)

[Does This Mean That Markets Are Inefficient?](#)

## Part Two

### **HOW THE PROS PLAY THE BIGGEST GAME IN TOWN**

#### **5. TECHNICAL AND FUNDAMENTAL ANALYSIS**

[Technical versus Fundamental Analysis](#)

[What Can Charts Tell You?](#)

[The Rationale for the Charting Method](#)

[Why Might Charting Fail to Work?](#)

[From Chartist to Technician](#)

[The Technique of Fundamental Analysis](#)

[Three Important Caveats](#)

[Why Might Fundamental Analysis Fail to Work?](#)

[Using Fundamental and Technical Analysis Together](#)

#### **6. TECHNICAL ANALYSIS AND THE RANDOM-WALK THEORY**

[Holes in Their Shoes and Ambiguity in Their Forecasts](#)

[Is There Momentum in the Stock Market?](#)

[Just What Exactly Is a Random Walk?](#)

[Some More Elaborate Technical Systems](#)

[The Filter System](#)

[The Dow Theory](#)

[The Relative-Strength System](#)

[Price-Volume Systems](#)

[Reading Chart Patterns](#)

[Randomness Is Hard to Accept](#)

[A Gaggle of Other Technical Theories to Help You Lose Money](#)

[The Hemline Indicator](#)

[The Super Bowl Indicator](#)

[The Odd-Lot Theory](#)

[Dogs of the Dow](#)

[January Effect](#)

[A Few More Systems](#)

[Technical Market Gurus](#)

[Why Are Technicians Still Hired?](#)

[Appraising the Counterattack](#)

[Implications for Investors](#)

## **7. HOW GOOD IS FUNDAMENTAL ANALYSIS? THE EFFICIENT-MARKET HYPOTHESIS**

[The Views from Wall Street and Academia](#)

[Are Security Analysts Fundamentally Clairvoyant?](#)

[Why the Crystal Ball Is Clouded](#)

[1. The Influence of Random Events](#)

[2. The Production of Dubious Reported Earnings through “Creative” Accounting Procedures](#)

[3. Errors Made by the Analysts Themselves](#)

[4. The Loss of the Best Analysts to the Sales Desk, to Portfolio Management, or to Hedge Funds](#)

[5. The Conflicts of Interest between Research and Investment Banking Departments](#)

[Do Security Analysts Pick Winners? The Performance of the Mutual Funds](#)

[The Semi-Strong and Strong Forms of the Efficient-Market Hypothesis \(EMH\)](#)

[A Note on High-Frequency Trading \(HFT\)](#)

## **Part Three**

### **THE NEW INVESTMENT TECHNOLOGY**

#### **8. A NEW WALKING SHOE: MODERN PORTFOLIO THEORY**

[The Role of Risk](#)

[Defining Risk: The Dispersion of Returns](#)

[Illustration: Expected Return and Variance Measures of Reward and Risk](#)  
[Documenting Risk: A Long-Run Study](#)  
[Reducing Risk: Modern Portfolio Theory \(MPT\)](#)  
[Diversification in Practice](#)

9. REAPING REWARD BY INCREASING RISK

[Beta and Systematic Risk](#)  
[The Capital-Asset Pricing Model \(CAPM\)](#)  
[Let's Look at the Record](#)  
[An Appraisal of the Evidence](#)  
[The Quant Quest for Better Measures of Risk: Arbitrage Pricing Theory](#)  
[The Fama-French Three-Factor Model](#)  
[A Summing Up](#)

10. BEHAVIORAL FINANCE

[The Irrational Behavior of Individual Investors](#)  
[Overconfidence](#)  
[Biased Judgments](#)  
[Herding](#)  
[Loss Aversion](#)  
[Pride and Regret](#)  
[Behavioral Finance and Savings](#)  
[The Limits to Arbitrage](#)  
[What Are the Lessons for Investors from Behavioral Finance?](#)  
[1. Avoid Herd Behavior](#)  
[2. Avoid Overtrading](#)  
[3. If You Do Trade: Sell Losers, Not Winners](#)  
[4. Other Stupid Investor Tricks](#)  
[Does Behavioral Finance Teach Ways to Beat the Market?](#)

11. IS "SMART BETA" REALLY SMART?

[What Is "Smart Beta"?](#)  
[Four Tasty Flavors: Their Pros and Cons](#)  
[1. Value Wins](#)  
[2. Smaller Is Better](#)  
[3. Momentum and Reversion to the Mean](#)  
[4. Low Volatility Can Produce High Returns](#)  
[Blended Flavors and Strategies](#)  
["Smart Beta" Funds Flunk the Risk Test](#)  
[Appraisal of "Smart Beta"](#)

[How Well Have Factor Tilts Worked in Practice?](#)

[Value and Size Tilts](#)

[Blended Hybrid Strategies](#)

[Research Affiliates Fundamental Index™ \(RAFI\)](#)

[Equally Weighted Portfolio Strategies](#)

[Other Factor Tilts](#)

[Low-Beta \(Low-Volatility\) Strategies](#)

[Momentum Strategies](#)

[Implications for Investors](#)

[Implications for Believers in Efficient Markets](#)

[Capitalization-Weighted Indexing Remains at the Top of the Class](#)

## Part Four

### A PRACTICAL GUIDE FOR RANDOM WALKERS AND OTHER INVESTORS

#### 12. A FITNESS MANUAL FOR RANDOM WALKERS AND OTHER INVESTORS

[Exercise 1: Gather the Necessary Supplies](#)

[Exercise 2: Don't Be Caught Empty-Handed: Cover Yourself with Cash](#)

[Reserves and Insurance](#)

[Cash Reserves](#)

[Insurance](#)

[Deferred Variable Annuities](#)

[Exercise 3: Be Competitive—Let the Yield on Your Cash Reserve Keep](#)

[Pace with Inflation](#)

[Money-Market Mutual Funds \(Money Funds\)](#)

[Bank Certificates of Deposit \(CDs\)](#)

[Internet Banks](#)

[Treasury Bills](#)

[Tax-Exempt Money-Market Funds](#)

[Exercise 4: Learn How to Dodge the Tax Collector](#)

[Individual Retirement Accounts](#)

[Roth IRAs](#)

[Pension Plans](#)

[Saving for College: As Easy as 529](#)

[Exercise 5: Make Sure the Shoe Fits: Understand Your Investment](#)

[Objectives](#)

[Exercise 6: Begin Your Walk at Your Own Home—Renting Leads to](#)

[Flabby Investment Muscles](#)



[Exercise 7: How to Investigate a Promenade through Bond Country](#)  
[Zero-Coupon Bonds Can Be Useful to Fund Future Liabilities](#)  
[No-Load Bond Funds Can Be Appropriate Vehicles for Individual Investors](#)  
[Tax-Exempt Bonds Are Useful for High-Bracket Investors](#)  
[Hot TIPS: Inflation-Indexed Bonds](#)  
[Should You Be a Bond-Market Junkie?](#)  
[Foreign Bonds](#)  
[Exercise 7A: Use Bond Substitutes for Part of the Aggregate Bond Portfolio during Eras of Financial Repression](#)  
[Exercise 8: Tiptoe through the Fields of Gold, Collectibles, and Other Investments](#)  
[Exercise 9: Remember That Investment Costs Are Not Random; Some Are Lower Than Others](#)  
[Exercise 10: Avoid Sinkholes and Stumbling Blocks: Diversify Your Investment Steps](#)  
[A Final Checkup](#)

**13. HANDICAPPING THE FINANCIAL RACE: A PRIMER IN UNDERSTANDING AND PROJECTING RETURNS FROM STOCKS AND BONDS**

[What Determines the Returns from Stocks and Bonds?](#)  
[Four Historical Eras of Financial Market Returns](#)  
[Era I: The Age of Comfort](#)  
[Era II: The Age of Angst](#)  
[Era III: The Age of Exuberance](#)  
[Era IV: The Age of Disenchantment](#)  
[The Markets from 2009 through 2014](#)  
[Handicapping Future Returns](#)

**14. A LIFE-CYCLE GUIDE TO INVESTING**

[Five Asset-Allocation Principles](#)  
[1. Risk and Reward Are Related](#)  
[2. Your Actual Risk in Stock and Bond Investing Depends on the Length of Time You Hold Your Investment](#)  
[3. Dollar-Cost Averaging Can Reduce the Risks of Investing in Stocks and Bonds](#)  
[4. Rebalancing Can Reduce Investment Risk and Possibly Increase Returns](#)  
[5. Distinguishing between Your Attitude toward and Your Capacity for Risk](#)  
[Three Guidelines to Tailoring a Life-Cycle Investment Plan](#)  
[1. Specific Needs Require Dedicated Specific Assets](#)  
[2. Recognize Your Tolerance for Risk](#)

[3. Persistent Saving in Regular Amounts, No Matter How Small, Pays Off](#)  
[The Life-Cycle Investment Guide](#)  
[Life-Cycle Funds](#)  
[Investment Management Once You Have Retired](#)  
[Inadequate Preparation for Retirement](#)  
[Investing a Retirement Nest Egg](#)  
[Annuities](#)  
[The Do-It-Yourself Method](#)

**15. THREE GIANT STEPS DOWN WALL STREET**

[The No-Brainer Step: Investing in Index Funds](#)  
[The Index-Fund Solution: A Summary](#)  
[A Broader Definition of Indexing](#)  
[A Specific Index-Fund Portfolio](#)  
[ETFs and Taxes](#)  
[The Do-It-Yourself Step: Potentially Useful Stock-Picking Rules](#)  
[Rule 1: Confine stock purchases to companies that appear able to sustain above-average earnings growth for at least five years](#)  
[Rule 2: Never pay more for a stock than can reasonably be justified by a firm foundation of value](#)  
[Rule 3: It helps to buy stocks with the kinds of stories of anticipated growth on which investors can build castles in the air](#)  
[Rule 4: Trade as little as possible](#)  
[The Substitute-Player Step: Hiring a Professional Wall Street Walker](#)  
[The Morningstar Mutual-Fund Information Service](#)  
[The Malkiel Step](#)  
[A Paradox](#)  
[Investment Advisers](#)  
[Some Last Reflections on Our Walk](#)  
[A Final Word](#)

[A Random Walker's Address Book and Reference Guide to Mutual Funds and ETFs](#)

[Acknowledgments from Earlier Editions](#)

[Index](#)

## PREFACE

IT HAS NOW been over forty years since the first edition of *A Random Walk Down Wall Street*. The message of the original edition was a very simple one: Investors would be far better off buying and holding an index fund than attempting to buy and sell individual securities or actively managed mutual funds. I boldly stated that buying and holding all the stocks in a broad stock-market average was likely to outperform professionally managed funds whose high expense charges and large trading costs detract substantially from investment returns.

Now, over forty years later, I believe even more strongly in that original thesis, and there's more than a six-figure gain to prove it. I can make the case with great simplicity. An investor with \$10,000 at the start of 1969 who invested in a Standard & Poor's 500-Stock Index Fund would have had a portfolio worth \$736,196 by June 2014, assuming that all dividends were reinvested. A second investor who instead purchased shares in the average actively managed fund would have seen his investment grow to \$501,470. The difference is dramatic. Through June 1, 2014, the index investor was ahead by \$234,726, an amount almost 50 percent greater than the final stake of the average investor in a managed fund.

Why, then, an eleventh edition of this book? If the basic message hasn't changed, what has? The answer is that there have been enormous changes in the financial instruments available to the public. A book meant to provide a comprehensive investment guide for individual investors needs to be updated to cover the full range of investment products available. In addition, investors can benefit from a critical analysis of the wealth of new information provided by academic researchers and market professionals—made comprehensible in prose accessible to everyone with an interest in investing. There have been so many bewildering claims about the stock market that it's important to have a book that sets the record straight.

Over the past forty years, we have become accustomed to accepting the rapid pace of technological change in our physical environment. Innovations such as e-mail, the Internet, smartphones, iPads, Kindles, videoconferencing, social networks, and new medical advances ranging from organ transplants and laser surgery to nonsurgical methods of treating kidney stones and unclogging arteries have materially affected the way we live. Financial innovation over the same

have materially affected the way we live. Financial innovation over the same period has been equally rapid. In 1973, when the first edition of this book appeared, we did not have money-market funds, ATMs, index mutual funds, ETFs, tax-exempt funds, emerging-market funds, target-date funds, floating-rate notes, volatility derivatives, inflation protection securities, equity REITs, asset-backed securities, “smart beta” strategies, Roth IRAs, 529 college savings plans, zero-coupon bonds, financial and commodity futures and options, and new trading techniques such as “portfolio insurance” and “high-frequency trading,” to mention just a few of the changes that have occurred in the financial environment. Much of the new material in this book has been included to explain these financial innovations and to show how you as a consumer can benefit from them.

This eleventh edition also provides a clear and easily accessible description of the academic advances in investment theory and practice. [Chapter 10](#) describes the exciting new field of behavioral finance and underscores the important lessons investors should learn from the insights of the behavioralists. [Chapter 11](#) asks whether “smart beta” investment strategies are really smart. In addition, a new section has been added to present practical investment strategies for investors who have retired or are about to retire. So much new material has been added over the years that readers who may have read an earlier edition of this book in college or business school will find this new edition rewarding reading.

This edition takes a hard look at the basic thesis of earlier editions of *Random Walk*—that the market prices stocks so efficiently that a blindfolded chimpanzee throwing darts at the stock listings can select a portfolio that performs as well as those managed by the experts. Through the past forty years, that thesis has held up remarkably well. More than two-thirds of professional portfolio managers have been outperformed by unmanaged broad-based index funds. Nevertheless, there are still both academics and practitioners who doubt the validity of the theory. And the stock-market crash of October 1987, the Internet bubble, and the financial crisis of 2008–09 raised further questions concerning the vaunted efficiency of the market. This edition explains the recent controversy and reexamines the claim that it’s possible to “beat the market.” I conclude that reports of the death of the efficient-market hypothesis are vastly exaggerated. I will, however, review the evidence on a number of techniques of stock selection that are believed to tilt the odds of success in favor of the individual investor.

The book remains fundamentally a readable investment guide for individual investors. As I have counseled individuals and families about financial strategy, it has become increasingly clear to me that one’s capacity for risk-bearing depends importantly upon one’s age and ability to earn income from

noninvestment sources. It is also the case that the risk involved in many investments decreases with the length of time the investment can be held. For these reasons, optimal investment strategies must be age-related. [Chapter 14](#), entitled “A Life-Cycle Guide to Investing,” should prove very helpful to people of all ages. This chapter alone is worth the cost of a high-priced appointment with a personal financial adviser.

My debts of gratitude to those mentioned in earlier editions continue. In addition, I must mention the names of a number of people who were particularly helpful in making special contributions to the eleventh edition. I am especially indebted to Michael Nolan of the Bogle Research Institute, to my Princeton colleagues Harrison Hong and Yacine Aït-Sahalia, and to my research assistants, David Hou, Derek Jun, Michael Lachanski, and Paul Noh. I am also grateful to John Devereaux, Francis Kinniry, Ravi Tolani, and Sarah Hammer of the Vanguard Group for important assistance in providing data.

Karen Neukirchen made an extraordinary contribution to this edition. She was somehow able to decipher my impenetrable scribbles and turn them into readable text. She also provided research assistance and was responsible for many of the graphic presentations in the book. Sharon Hill added invaluable assistance in the final preparation of the manuscript. My association with W. W. Norton remains a superb collaboration, and I thank Drake McFeely, Otto Sonntag, and Jeff Shreve for their indispensable assistance in bringing this edition to publication. Patricia Taylor continued her association with the project and made extremely valuable editorial contributions to the eleventh edition.

My wife, Nancy Weiss Malkiel, has made by far the most important contributions to the successful completion of the past seven editions. In addition to providing the most loving encouragement and support, she read carefully through various drafts of the manuscript and made innumerable suggestions that clarified and vastly improved the writing. She continues to be able to find errors that have eluded me and a variety of proofreaders and editors. Most important, she has brought incredible joy to my life. No one more deserved the dedication of a book than she and her second-best friend, Piper.

Burton G. Malkiel  
Princeton University  
August 2014

Part One

---

**STOCKS AND  
THEIR VALUE**



**- Lituz.com**

**Elektron kitoblar**

**To'liq qismini Shu tugmani  
bosish orqali sotib oling!**