

Contents

Preface	ix
Acknowledgments	xi
Chapter 1: Measuring and Assessing Stock-Market Performance	1
An Introduction to Stock-Market History	5
<i>Stock-Market Indexes</i>	6
<i>Using Investor Returns to Assess Stock-Market Performance</i>	9
<i>An Overview of Market Performance: Annual Holding- Period Returns</i>	12
The Equity Risk Premium	18
<i>Definition</i>	18
<i>Importance</i>	19
Using the Historical Data to Estimate Future Stock-Market Performance	20
Uses of the Equity Risk Premium	27
Inflation and Asset Returns	29
Stock Returns and the Risk Premium: Looking Forward	34
Chapter 2: Evaluating the Historical Record	36
Computing the Average Premium: Arithmetic versus Geometric	36
How Accurately Can the Historical Risk Premium Be Measured?	39

Nonstationarity and Historical Estimates of the Equity Risk Premium	45
Attempts to Model Changes in the Risk Premium	49
<i>Models Based on the Variability of Returns</i>	51
<i>Models Based on Dividend and Earnings Yield</i>	52
<i>Does Nonstationarity Really Matter for Estimating the Long-Run Risk Premium?</i>	53
<i>The Impact of Permanent Changes in the Risk Premium on Stock Prices</i>	55
<i>The Bottom Line on Nonstationarity</i>	59
Survival Bias	60
<i>The Impact</i>	60
<i>The Bottom Line</i>	69
Stock and Bond Returns	70
<i>Over the Long Horizon</i>	70
<i>The Impact of Inflation</i>	74
A Final Assessment of the Historical Record	77
Appendix 2.1: Monthly Data for Stocks, Bonds, Bills, and Inflation	79

Chapter 3: Forward-Looking Estimates of the Equity Risk Premium	101
The Discounted Cash Flow Model	102
<i>Forms of the Model</i>	102
Constant-Growth Form	102
Multistage Form	106
<i>Comparison of the Discounted Cash Flow and Historical Estimates of the Risk Premium</i>	113
The Blanchard Extension of the Discounted Cash Flow Approach	114
The Kaplan–Ruback Study	115
The Fama–French Aggregate Internal Rate of Return Analysis	117
An Earnings Yield Approach to Estimating the Market Risk Premium	121
The Welch Survey	122
Summary of the Risk Premium Estimates Produced by Competing Approaches	125

Chapter 4: Risk Aversion and the Risk Premium Puzzle	126
The Economic Theory of Risk Aversion	126
What Types of Risk Are Rewarded: A Brief Review of Portfolio Theory	130
The Market Risk Premium and the Cost of Equity Capital	135
Risk Aversion and the Historical Equity Risk Premium: The Risk Premium Puzzle	137
Explanations for the Risk Premium Puzzle	
<i>The Puzzle Is an Illusion: The Empirical Data Are Wrong</i>	141
<i>High Risk Aversion</i>	142
<i>Nonstandard Utility Functions</i>	145
<i>Autocorrelation in Returns</i>	149
<i>Time Varies Expected Returns</i>	150
<i>Heterogeneous Investors</i>	151
<i>What about a Stew?</i>	154
What Explanations of the Equity Risk Premium Say about the Future	154
Chapter 5: The Risk Premium and the Stock-Market Boom of the 1990s	158
Determining Whether Stock Prices Are High or Low	159
Explanations for the High Level of Stock Prices	164
<i>A Decline in the Discount Rate Due to a Drop in the Equity Risk Premium</i>	165
<i>Changing Stock-Market Risk</i>	168
<i>Changing Investors and Changing Investor Demographics</i>	170
<i>The New Economic Paradigm: Higher Earnings and Dividend Growth</i>	178
<i>Irrational Exuberance: The Market Is Overvalued</i>	183
Summary	194
Appendix 5.1: International Stock Market Indices	196
Chapter 6: The Equity Risk Premium and the Long-Run Outlook for Common Stocks	201
Weighing the Empirical and Theoretical Evidence	202
What Does the Stock Price Run-Up of the 1990s Augur for the Future?	206

<i>The Impact of a Rational Drop in the Equity Risk Premium</i>	206
<i>The Impact of Permanently Higher Growth</i>	210
<i>The Implications of Overvaluation</i>	211
<i>Summary</i>	213
Implications of a Lower Equity Risk Premium in the Future	213
<i>Investment Implications</i>	213
<i>Implications for Corporate Financial Decision Making</i>	215
<i>Implications for Pension and Retirement Planning</i>	216
References	217
Index	223