

**ADVANCES IN  
ACTIVE  
PORTFOLIO  
MANAGEMENT**

New Developments in  
Quantitative Investing

**RICHARD C. GRINOLD  
RONALD N. KAHN**



New York Chicago San Francisco Athens London Madrid  
Mexico City Milan New Delhi Singapore Sydney Toronto

# Contents

Acknowledgments ix

Preface xi

1 Introduction: Advances in Active Portfolio Management 1

## SECTION 1

### **Recap of Active Portfolio Management**

2 Introduction to the Recap of  
*Active Portfolio Management* Section 7

3 Seven Insights into Active Management 11

4 A Retrospective Look at the  
Fundamental Law of Active Management 45

5 Breadth, Skill, and Time 60

## SECTION 2

### **Advances in Active Portfolio Management**

#### SECTION 2.1 **Dynamic Portfolio Management**

6 Introduction to the Dynamic Portfolio Management Section 103

7 Implementation Efficiency 124

8 Dynamic Portfolio Analysis 139

9 Signal Weighting 170

10 Linear Trading Rules for Portfolio Management 202

11 Nonlinear Trading Rules for Portfolio Management 240

## SECTION 2.2 Portfolio Analysis and Attribution

12	Introduction to the Portfolio Analysis and Attribution Section	267
13	Attribution	288
14	The Description of Portfolios	312

## SECTION 3

# Applications of Active Portfolio Management

### SECTION 3.1 Expected Return: The Equity Risk Premium and Market Efficiency

15	Introduction to “A Supply Model of the Equity Premium”	343
16	A Supply Model of the Equity Premium	344
17	Introduction to “Is Beta Dead Again?”	362
18	Is Beta Dead Again?	365
19	Introduction to “Are Benchmark Portfolios Efficient?”	380
20	Are Benchmark Portfolios Efficient?	385

### SECTION 3.2 Expected Return: Smart Beta

21	Introduction to the Smart Beta Section	399
22	Who Should Buy Smart Beta?	407
23	Smart Beta: The Owner’s Manual	419
24	Smart Beta Illustrated	436
25	The Asset Manager’s Dilemma	449

### SECTION 3.3 Risk

26	Introduction to the Risk Section	461
27	Heat, Light, and Downside Risk	464

## SECTION 3.4 **Portfolio Construction**

28	Introduction to the Portfolio Construction Section	487
29	Optimal Gearing	493
30	The Dangers of Diversification	510
31	The Surprisingly Small Impact of Asset Growth on Expected Alpha	532
32	Mean-Variance and Scenario-Based Approaches to Portfolio Selection	549
33	Five Myths About Fees	573

## SECTION 4

### **Extras**

34	Introduction to the Extras Section	591
35	Presentations upon Receiving the James R. Vertin Award	594
36	What Investors Can Learn from a <i>Very</i> Alternative Market	604
37	UCLA Master of Financial Engineering Commencement Address	610

## SECTION 5

### **Conclusion**

38	Advances in Active Portfolio Management Conclusions	619
----	-----------------------------------------------------	-----

Index	625
-------	-----