Preface xvii
Acknowledgments xxi

SECTION I: COMMON MISTAKES AND BASIC BIASES 1

1 Emotion, Neuroscience and Investing: Investors as Dopamine Addicts 3
Spock or McCoy? 5
The Primary of Emotion 5
Emotions: Body or Brain? 6
Emotion: Good, Bad of Both? 7
Self-Control is Like a Muscle 11
Hard-Wired for the Short Term 13
Hard-Wired to Herd 14
Plasticity as Salvation 15

2 Part Man, Part Monkey 17
The Biases We Face 19
Bias #1: I Know Better, Because I Know More 19
The Illusion of Knowledge: More Information Isn’t Better Information 20
Professionals Worse than Chance! 21
The Illusion of Control 22
Bias #2: Big ≠ Important 23
Bias #3: Show Me What I Want to See 23
Bias #4: Heads was Skill, Tails was Bad Luck 24
Bias #5: I Knew it all Along 25
Bias #6: The Irrelevant has Value as Input 25
Bias #7: I Can Make a Judgement Based on What it Looks Like 27
Bias #8: That’s Not the Way I Remember it 28
Bias #9: If you Tell Me it Is So, It Must be True 29
Bias #10: A Loss Isn’t a Loss Until I Take It 30
Conclusions 35
### Contents

#### 3 Take a Walk on the Wild Side
- Impact Bias: 39
- Empathy Gaps: 40
- Combating the Biases: 44

#### 4 Brain Damage, Addicts and Pigeons: 47

#### 5 What Do Secretaries’ Dustbins and the Da Vinci Code have in Common?: 55

#### 6 The Limits to Learning: 63
- Self-Attribution Bias: Heads is Skill, Tails is Bad Luck: 67
- Hindsight Bias: I Knew it All Along: 69
- Skinner’s Pigeons: 71
- Illusion of Control: 72
- Feedback Distortion: 73
- Conclusions: 76

#### SECTION II: THE PROFESSIONALS AND THE BIASES: 77

#### 7 Behaving Badly: 79
- The Test: 81
- The Results: 82
- Overoptimism: 82
- Confirmatory Bias: 83
- Representativeness: 84
- The Cognitive Reflection Task (CRT): 85
- Anchoring: 87
- Framing: 87
- Loss Aversion: 89
- Keynes’s beauty contest: 90
- Monty Hall Problem: 92
- Conclusions: 94

#### SECTION III: THE SEVEN SINS OF FUND MANAGEMENT: 95

#### 8 A Behavioural Critique: 97
- Sin city: 99
  - Sin 1: Forecasting (Pride): 99
  - Sin 2: The Illusion of Knowledge (Gluttony): 100
  - Sin 3: Meeting Companies (Lust): 100
  - Sin 4: Thinking You Can Outsmart Everyone Else (Envy): 100
  - Sin 5: Short Time Horizons and Overtrading (Avarice): 101
  - Sin 6: Believing Everything You Read (Sloth): 101
  - Sin 7: Group-Based Decisions (Wrath): 101
- Alternative Approaches and Future Directions: 102
Contents ix

Sin 1: Forecasting (Pride)

9 The Folly of Forecasting: Ignore all Economists, Strategists, & Analysts 105
   Overconfidence as a Driver of Poor Forecasting 109
   Overconfidence and Experts 110
   Why Forecast When the Evidence Shows You Can’t? 114
      Unskilled and Unaware 115
      Ego Defence Mechanism 115
   Why Use Forecasts? 119
   Debasing 120

10 What Value Analysts? 123

Sin 2: Illusion of Knowledge (Gluttony)

11 The Illusion of Knowledge or Is More Information Better Information? 133

Sin 3: Meeting Companies (Lust)

12 Why Waste Your Time Listening to Company Management? 143
   Managers are Just as Biased as the Rest of Us 145
   Confirmatory Bias and Biased Assimilation 148
   Obedience to Authority 151
   Truth or Lie? 153
   Conclusions 157

Sin 4: Thinking You Can Outsmart Everyone Else (Envy)

13 Who’s a Pretty Boy Then? Or Beauty Contests, Rationality and Greater Fools 161
   Background 163
   The Game 163
   The Solution 164
   The Results 165
   A Simple Model of Our Contest 168
   Comparison with Other Experiments 170
   Learning 173
   Conclusions 174

Sin 5: Short Time Horizons and Overtrading (Avarice)

14 ADHD, Time Horizons and Underperformance 179

Sin 6: Believing Everything You Read (Sloth)

15 The Story is The Thing (or The Allure of Growth) 189

16 Scepticism is Rare or (Descartes vs Spinoza) 197
   Cartesian Systems 199
   Spinozan Systems 199
   Libraries 200
   A Testing Structure 200
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Are Two Heads Better Than One?</td>
<td>209</td>
</tr>
<tr>
<td>18</td>
<td>The Tao of Investing</td>
<td>219</td>
</tr>
<tr>
<td>19</td>
<td>Come Out of the Closet (or, Show Me the Alpha)</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>The Alpha</td>
<td>228</td>
</tr>
<tr>
<td></td>
<td>The Evolution of the Mutual Fund Industry</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td>Characteristics of the Funds</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>The Average and Aggregate Active Share</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>Persistence and Performance</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
<td>233</td>
</tr>
<tr>
<td>20</td>
<td>Strange Brew</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>The Long Run</td>
<td>237</td>
</tr>
<tr>
<td></td>
<td>Death of Indexing</td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>Getting the Long Run Right</td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>The Short Run</td>
<td>239</td>
</tr>
<tr>
<td></td>
<td>Tactical Asset Allocation</td>
<td>239</td>
</tr>
<tr>
<td></td>
<td>Equity Managers</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>Break the Long-Only Constraint</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>Add Breadth</td>
<td>244</td>
</tr>
<tr>
<td></td>
<td>Not Just an Excuse for Hedge Funds</td>
<td>245</td>
</tr>
<tr>
<td></td>
<td>Truly Alternative Investments</td>
<td>245</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
<td>246</td>
</tr>
<tr>
<td>21</td>
<td>Contrarian or Conformist?</td>
<td>247</td>
</tr>
<tr>
<td>22</td>
<td>Painting by Numbers: An Ode to Quant</td>
<td>259</td>
</tr>
<tr>
<td></td>
<td>Neurosis or Psychosis?</td>
<td>261</td>
</tr>
<tr>
<td></td>
<td>Brain Damage Detection</td>
<td>262</td>
</tr>
<tr>
<td></td>
<td>University Admissions</td>
<td>263</td>
</tr>
<tr>
<td></td>
<td>Criminal Recidivism</td>
<td>263</td>
</tr>
<tr>
<td></td>
<td>Bordeaux Wine</td>
<td>263</td>
</tr>
<tr>
<td></td>
<td>Purchasing Managers</td>
<td>264</td>
</tr>
<tr>
<td></td>
<td>Meta-Analysis</td>
<td>264</td>
</tr>
<tr>
<td></td>
<td>The Good News</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>So Why Not Quant?</td>
<td>268</td>
</tr>
</tbody>
</table>
23 The Perfect Value Investor 271
Trait I: High Concentration In Portfolios 273
Trait II: They Don’t Need to Know Everything, and Don’t Get Caught in the Noise 276
Trait III: A Willingness to Hold Cash 276
Trait IV: Long Time Horizons 277
Trait V: An Acceptance of Bad Years 278
Trait VI: Prepared to Close Funds 278

24 A Blast from the Past 279
The Unheeded Words of Keynes and Graham 281
On the Separation of Speculation and Investment 281
On the Nature of Excess Volatility 282
On the Folly of Forecasting 283
On the Role of Governance and Agency Problems 284
On the Importance (and Pain) of Being a Contrarian 285
On the Flaws of Professional Investors 286
On the Limits to Arbitrage 286
On the Importance of the Long Time Horizon 287
On the Difficulty of Defining Value 288
On the Need to Understand Price Relative to Value 288
On Why Behavioural Errors don’t Cancel Out 289
On Diversification 289
On the Current Juncture 289
On the Margin of Safety 290
On Beta 291
On the Dangers of Overcomplicating 291
On the Use of History 291

25 Why Not Value? The Behavioural Stumbling Blocks 293
Knowledge ≠ Behaviour 295
Loss Aversion 296
Delayed Gratification and Hard-Wiring for the Short Term 297
Social Pain and the Herding Habit 300
Poor Stories 301
Overconfidence 301
Fun 303
No, Honestly I Will Be Good 303

PART B: THE EMPIRICAL EVIDENCE: VALUE IN ALL ITS FORMS 305

26 Bargain Hunter (or It Offers Me Protection) 307
Written with Rui Antunes 308
The Methodology 308
Does Value Work? 309
The Anatomy of Value 310
The Siren of Growth 311
Growth Doesn’t Mean Ignoring Valuation 311
The Disappointing Reality of Growth 313
Analyst Accuracy? 314
Value versus Growth 316
Key points 317
Regional Tables 318
    Global 318
    USA 320
    Europe 323
    Japan 325

27 Better Value (or The Dean Was Right!) 329
    Written with Rui Antunes

28 The Little Note that Beats the Market 337
    Written with Sebastian Lancetti
    The Methodology and the Data 339
    The Results 340
        The Little Book Works 340
        Value Works 341
        EBIT/EV Better than Simple PE 341
    Quality Matters for Value 341
    Career Defence as an Investment Strategy 342
    What About the Long/Short View? 343
    The Future for the Little Book 344
    Tables and Figures 345
    Regional Results 345

29 Improving Returns Using Inside Information 355
    Patience is a Virtue 357
    Using Inside Information 357
    A Hedge Perspective 359
    Risk or Mispricing? 359
    Evidence for Behavioural Errors 360
    Evidence Against the Risk View 361
    European Evidence 363
    Conclusions 365

30 Just a Little Patience: Part I 367

31 Just a Little Patience: Part II 375
    Written with Sebastian Lancetti
    Value Perspective 377
    Growth Perspective 380
    Growth and Momentum 381
    Value for Growth Investors 382
    Value and Momentum 383
    Implications 383
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Sectors, Value and Momentum</td>
<td>387</td>
</tr>
<tr>
<td></td>
<td>Value</td>
<td>389</td>
</tr>
<tr>
<td></td>
<td>Momentum</td>
<td>389</td>
</tr>
<tr>
<td></td>
<td>Sectors: Value or Growth</td>
<td>390</td>
</tr>
<tr>
<td></td>
<td>Stocks or Sectors</td>
<td>391</td>
</tr>
<tr>
<td>33</td>
<td>Sector-Relative Factors Works Best</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td>Written with Andrew Lapthorne</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methodology</td>
<td>398</td>
</tr>
<tr>
<td></td>
<td>The Results</td>
<td>398</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>403</td>
</tr>
<tr>
<td>34</td>
<td>Cheap Countries Outperform</td>
<td>405</td>
</tr>
<tr>
<td></td>
<td>Strategy by Strategy Information</td>
<td>409</td>
</tr>
<tr>
<td>PART C:</td>
<td>RISK, BUT NOT AS WE KNOW IT</td>
<td>423</td>
</tr>
<tr>
<td>35</td>
<td>CAPM is CRAP (or, The Dead Parrot Lives!)</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td>A Brief History of Time</td>
<td>427</td>
</tr>
<tr>
<td></td>
<td>CAPM in Practice</td>
<td>427</td>
</tr>
<tr>
<td></td>
<td>Why Does CAPM Fail?</td>
<td>431</td>
</tr>
<tr>
<td></td>
<td>CAPM Today and Implications</td>
<td>432</td>
</tr>
<tr>
<td>36</td>
<td>Risk Managers or Risk Maniacs?</td>
<td>437</td>
</tr>
<tr>
<td>37</td>
<td>Risk: Finance’s Favourite Four-Letter Word</td>
<td>445</td>
</tr>
<tr>
<td></td>
<td>The Psychology of Risk</td>
<td>447</td>
</tr>
<tr>
<td></td>
<td>Risk in Performance Measurement</td>
<td>447</td>
</tr>
<tr>
<td></td>
<td>Risk from an Investment Perspective</td>
<td>448</td>
</tr>
<tr>
<td>SECTION V:</td>
<td>BUBBLES AND BEHAVIOUR</td>
<td>453</td>
</tr>
<tr>
<td>38</td>
<td>The Anatomy of a Bubble</td>
<td>455</td>
</tr>
<tr>
<td></td>
<td>Displacement</td>
<td>457</td>
</tr>
<tr>
<td></td>
<td>Credit Creation</td>
<td>457</td>
</tr>
<tr>
<td></td>
<td>Euphoria</td>
<td>459</td>
</tr>
<tr>
<td></td>
<td>Critical Stage/Financial Distress</td>
<td>459</td>
</tr>
<tr>
<td></td>
<td>Revulsion</td>
<td>463</td>
</tr>
<tr>
<td>39</td>
<td>De-bubbling: Alpha Generation</td>
<td>469</td>
</tr>
<tr>
<td></td>
<td>Bubbles in the Laboratory</td>
<td>471</td>
</tr>
<tr>
<td></td>
<td>Bubbles in the Field</td>
<td>472</td>
</tr>
<tr>
<td></td>
<td>Displacement: The Birth of a Boom</td>
<td>473</td>
</tr>
<tr>
<td></td>
<td>Credit Creation: Nurturing the Boom</td>
<td>473</td>
</tr>
<tr>
<td></td>
<td>Euphoria</td>
<td>476</td>
</tr>
<tr>
<td></td>
<td>Critical Stage/Financial Distress</td>
<td>477</td>
</tr>
<tr>
<td></td>
<td>Revulsion</td>
<td>483</td>
</tr>
</tbody>
</table>
Contents

Applications 487
  Asset Allocation 487
Alpha Generation 488
  Balance Sheets 489
  Earnings Quality 489
  Capital Expenditure 490
Long-Only Funds 491
Summary 491

40 Running with the Devil: A Cynical Bubble 493
  The Main Types of Bubble 496
    Rational/Near Rational Bubbles 496
    Intrinsic Bubbles 498
    Fads 499
    Informational Bubbles 499
  Psychology of Bubbles 500
  Composite Bubbles and the De-Bubbling Process 500
  Experimental Evidence: Bubble Echoes 503
  Market Dynamics and the Investment Dangers of Near Rational Bubbles 503
  Conclusions 505

41 Bubble Echoes: The Empirical Evidence 507
  Conclusions 516

SECTION VI: INVESTMENT MYTH BUSTERS 519

42 Belief Bias and the Zen Investing 521
  Belief Bias and the X-System 524
  Confidence Isn’t a Proxy for Accuracy 528
  Belief Bias and the Zen of Investing 528

43 Dividends Do Matter 529
  Conclusions 540

44 Dividends, Repurchases, Earnings and the Coming Slowdown 541

45 Return of the Robber Barons 549

46 The Purgatory of Low Returns 563

47 How Important is the Cycle? 573

48 Have We Really Learnt So Little? 581

49 Some Random Musings on Alternative Assets 587
  Hedge Funds 589
Contents

Commodities 590
Which Index? 590
Composition of Commodity Futures Returns 591
The Times They are A-Changin’ 591
Conclusions 595

SECTION VII: CORPORATE GOVERNANCE AND ETHICS 597

50 Abu Ghraib: Lesson from Behavioural Finance and for Corporate Governance 599
Fundamental Attribution Error 601
Zimbardo’s Prison Experiment 602
Milgram: The Man that Shocked the World 604
Conditions that Turn Good People Bad 608
Conclusions 609

51 Doing the Right Thing or the Psychology of Ethics 611
The Ethical Blindspot 613
The Origins of Moral Judgements 614
Examples of Bounded Ethicality and Unconscious Biases 617
Implicit Attitudes (Unconscious Prejudices) 617
In-Group Bias (Bias that Favours Your Own Group) 619
Overclaiming Credit (Bias that Favours You) 620
Conflicts of Interest (Bias that Favours Those Who Can Pay You) 621
Mechanisms Driving Poor Ethical Behaviour 627
Language Euphemisms 628
Slippery Slope 628
Errors in Perceptual Causation 628
Constraints Induced by Representations of the Self 629
Combating Unethical Behaviour 629

52 Unintended Consequences and Choking under Pressure: The Psychology of Incentives 631
Evidence from the Laboratory 635
Evidence from the Field 638
Child Care Centres 638
Blood Donations 638
Football Penalty Kicks 639
Basketball Players 640
Back to the Laboratory 640
Who is Likely to Crack Under Pressure? 641
Conclusions 643

SECTION VIII: HAPPINESS 645

53 If It Makes You Happy 647
Top 10 653