Contents

Acknowledgments xi

Chapter 1 What This Book Is and Why You Should Read It 1
Risk, Danger, and Opportunity 2
Red-Blooded Risk Management 4
Risk and Life 7
Play and Money 9
Frequentism 11
Rationality 13
Bets 15
Exponentials and Culture 18
Payoff 20

Chapter 2 Red Blood and Blue Blood 23

Chapter 3 Pascal’s Wager and the Seven Principles of Risk Management 29
Principle I: Risk Duality 32
Principle II: Valuable Boundary 33
Principle III: Risk Ignition 35
Principle IV: Money 38
Outside the VaR Boundary 40
Principle V: Evolution 45
Principle VI: Superposition 48
Principle VII: Game Theory 49
## Contents

### Chapter 4  The Secret History of Wall Street: 1654–1982  57
- Pascal and Fermat  58
- Poker  61
- Advantage Gamblers  62
- Sports Betting  63
- Quants to Wall Street  66
- Finance People  68
- Real Finance  69

### Chapter 5  When Harry Met Kelly  73
- Kelly  74
- Harry  76
- Commodity Futures  79
- If Harry Knew Kelly  84
- Investment Growth Theory  88
- eRaider.com  92
- MPT Out in the World  96

### Chapter 6  Exponentials, Vampires, Zombies, and Tulips  101
- Types of Growth  102
- The Negative Side  105
- Tulips  106
- Tulip Propaganda  108
- Quantitative Tulip Modeling  111
- Money  112

### Chapter 7  Money  117

### Chapter 8  The Story of Money: The Past  125
- Property, Exchange, and Money  126
- Paleconomics  128
- Transition  131
- What Money Does  134
- Risk  135
- Government and Paper  138
- Paper versus Metal  142
- 1776 and All That  145
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Efficient Markets</td>
</tr>
<tr>
<td></td>
<td>Anomalies</td>
</tr>
<tr>
<td></td>
<td>The Price Is Right . . . Not!</td>
</tr>
<tr>
<td></td>
<td>Efficiency versus Equilibrium</td>
</tr>
<tr>
<td></td>
<td>Beating the Market</td>
</tr>
<tr>
<td></td>
<td>Paths</td>
</tr>
<tr>
<td></td>
<td>Sharpe Ratios and Wealth</td>
</tr>
<tr>
<td></td>
<td>1987</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 10</th>
<th>The Story of Money: The Future</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Farmers and Millers</td>
</tr>
<tr>
<td></td>
<td>Money, New and Improved</td>
</tr>
<tr>
<td></td>
<td>A General Theory of Money</td>
</tr>
<tr>
<td></td>
<td>Value and Money</td>
</tr>
<tr>
<td></td>
<td>Numeraire</td>
</tr>
<tr>
<td></td>
<td>Clearinghouses</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
</tr>
<tr>
<td></td>
<td>Derivative Money</td>
</tr>
<tr>
<td></td>
<td>The End of Paper</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 11</th>
<th>Cold Blood</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chapter 12</th>
<th>What Does a Risk Manager Do?—Inside VaR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional Standards</td>
</tr>
<tr>
<td></td>
<td>Front Office</td>
</tr>
<tr>
<td></td>
<td>Trading Risk</td>
</tr>
<tr>
<td></td>
<td>Quants on the Job</td>
</tr>
<tr>
<td></td>
<td>Middle Office</td>
</tr>
<tr>
<td></td>
<td>Back Office</td>
</tr>
<tr>
<td></td>
<td>Middle Office Again</td>
</tr>
<tr>
<td></td>
<td>Looking Backward</td>
</tr>
<tr>
<td></td>
<td>Risk Control</td>
</tr>
<tr>
<td></td>
<td>Beyond Profit and Loss</td>
</tr>
</tbody>
</table>

Andrew Dexter

A Short Digression into Politics and Religion

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>147</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>155</td>
</tr>
<tr>
<td>157</td>
</tr>
<tr>
<td>159</td>
</tr>
<tr>
<td>161</td>
</tr>
<tr>
<td>162</td>
</tr>
<tr>
<td>165</td>
</tr>
<tr>
<td>170</td>
</tr>
<tr>
<td>174</td>
</tr>
<tr>
<td>177</td>
</tr>
<tr>
<td>179</td>
</tr>
<tr>
<td>180</td>
</tr>
<tr>
<td>183</td>
</tr>
<tr>
<td>185</td>
</tr>
<tr>
<td>189</td>
</tr>
<tr>
<td>191</td>
</tr>
<tr>
<td>196</td>
</tr>
<tr>
<td>197</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>203</td>
</tr>
<tr>
<td>207</td>
</tr>
<tr>
<td>213</td>
</tr>
<tr>
<td>213</td>
</tr>
<tr>
<td>215</td>
</tr>
<tr>
<td>217</td>
</tr>
<tr>
<td>218</td>
</tr>
<tr>
<td>222</td>
</tr>
<tr>
<td>225</td>
</tr>
<tr>
<td>227</td>
</tr>
<tr>
<td>228</td>
</tr>
<tr>
<td>230</td>
</tr>
<tr>
<td>232</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Chapter 20</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>