

Contents

	Preface to the Fifth Edition	xv
CHAPTER 1	Introduction	1
	The Expanding Role of Technical Analysis	1
	Convergence of Trading Styles in Stocks and Futures	2
	A Line in the Sand between Fundamentals and Technical Analysis	4
	Professional and Amateur	5
	Random Walk	6
	Deciding on a Trading Style	8
	Measuring Noise	10
	Maturing Markets and Globalization	14
	Background Material	16
	Research Guidelines	18
	Objectives of This Book	19
	Profile of a Trading System	20
	A Word about the Notation Used in This Book	23
	And Finally . . .	23
CHAPTER 2	Basic Concepts and Calculations	25
	About Data and Averaging	26
	On Average	30
	Price Distribution	33
	Moments of the Distribution: Variance, Skewness, and Kurtosis	37
	Standardizing Risk and Return	48
	The Index	54
	Standard Measurements of Performance	58
	Probability	59
	Supply and Demand	66

CHAPTER 3	Charting	79
	Finding Consistent Patterns	80
	What Causes the Major Price Moves and Trends?	82
	The Bar Chart and Its Interpretation by Charles Dow	83
	Chart Formations	92
	Trendlines	94
	One-Day Patterns	102
	Continuation Patterns	113
	Basic Concepts in Chart Trading	117
	Accumulation and Distribution—Bottoms and Tops	118
	Episodic Patterns	132
	Price Objectives for Bar Charting	133
	Implied Strategies in Candlestick Charts	139
	Practical Use of the Bar Chart	144
	Evolution in Price Patterns	148
CHAPTER 4	Charting Systems and Techniques	151
	Dunnigan and the Thrust Method	152
	Nofri's Congestion-Phase System	155
	Outside Days with an Outside Close	157
	Inside Days	158
	Pivot Points	158
	Action and Reaction	159
	Channel Breakout	167
	Moving Channels	170
	Commodity Channel Index	171
	Wyckoff's Combined Techniques	172
	Complex Patterns	173
	A Study of Charting Patterns	176
	Bulkowski's Chart Pattern Rankings	178
CHAPTER 5	Event-Driven Trends	181
	Swing Trading	182
	Constructing a Swing Chart Using a Swing Filter	184
	Point-and-Figure Charting	195
	The <i>N</i> -Day Breakout	222
CHAPTER 6	Regression Analysis	235
	Components of a Time Series	235
	Characteristics of the Price Data	236

	Linear Regression	238
	Linear Correlation	248
	Nonlinear Approximations for	
	Two Variables	252
	Transforming Nonlinear to Linear	256
	Evaluation of Two-Variable Techniques	257
	Multivariate Approximations	259
	ARIMA	267
	Basic Trading Signals Using a Linear	
	Regression Model	273
	Measuring Market Strength	276
CHAPTER 7	Time-Based Trend Calculations	279
	Forecasting and Following	279
	Price Change over Time	284
	The Moving Average	284
	Geometric Moving Average	292
	Accumulative Average	293
	Reset Accumulative Average	293
	Drop-Off Effect	293
	Exponential Smoothing	293
	Plotting Lags and Leads	307
CHAPTER 8	Trend Systems	309
	Why Trend Systems Work	309
	Basic Buy and Sell Signals	314
	Bands and Channels	320
	Applications of a Single Trend	330
	Comparison of Major Trend Systems	336
	Techniques Using Two Trendlines	350
	Multiple Trends and Common Sense	356
	Comprehensive Studies	359
	Selecting the Right Trend Method and	
	Speed	359
	Moving Average Sequences: Signal	
	Progression	363
	Early Exits from a Trend	366
	Moving Average Projected Crossovers	366
CHAPTER 9	Momentum and Oscillators	369
	Momentum	370
	Divergence Index	384
	Oscillators	385

Double-Smoothed Momentum	404
Velocity and Acceleration	412
Hybrid Momentum Techniques	416
Momentum Divergence	418
Some Final Comments on Momentum	426
CHAPTER 10 Seasonality and Calendar Patterns	427
A Consistent Factor	428
The Seasonal Pattern	429
Popular Methods for Calculating Seasonality	430
Seasonal Filters	456
Seasonality and the Stock Market	478
Common Sense and Seasonality	483
CHAPTER 11 Cycle Analysis	485
Cycle Basics	485
Uncovering the Cycle	494
Maximum Entropy	514
Cycle Channel Index	520
Short Cycle Indicator	521
Phasing	523
CHAPTER 12 Volume, Open Interest, and Breadth	527
A Special Case for Futures Volume	527
Variations from the Normal Patterns	529
Standard Interpretation	531
Volume Indicators	535
Breadth Indicators	546
Interpreting Volume and Breadth Systematically	554
An Integrated Probability Model	558
Intraday Volume Patterns	559
Filtering Low Volume	562
Market Facilitation Index	564
CHAPTER 13 Spreads and Arbitrage	565
Dynamics of Futures Intramarket Spreads	566
Carrying Charges	567
Spreads in Stocks	569
Spread and Arbitrage Relationships	570
Risk Reduction in Spreads	571

Arbitrage	572
The Carry Trade	596
Changing Spread Relationships	600
Intermarket Spreads	602
CHAPTER 14 Behavioral Techniques	617
Measuring the News	618
Event Trading	623
Commitment of Traders Report	635
Opinion and Contrary Opinion	641
Fibonacci and Human Behavior	648
Elliott's Wave Principle	651
Price Target Constructions Using the Fibonacci Ratio	660
Fischer's Golden Section Compass System	662
W. D. Gann—Time and Space	666
Financial Astrology	671
CHAPTER 15 Pattern Recognition	685
Projecting Daily Highs and Lows	687
Time of Day	689
Opening Gaps	699
Weekday, Weekend, and Reversal Patterns	711
Computer-Based Pattern Recognition	732
Artificial Intelligence Methods	735
CHAPTER 16 Day Trading	737
Impact of Transaction Costs	738
Key Elements of Day Trading	744
Trading Using Price Patterns	753
Intraday Breakout Systems	759
Intraday Volume Patterns	774
Intraday Price Shocks	775
CHAPTER 17 Adaptive Techniques	779
Adaptive Trend Calculations	779
Adaptive Variations	788
Other Adaptive Momentum Calculations	793
Adaptive Intraday Breakout System	796
An Adaptive Process	797
Considering Adaptive Methods	798

CHAPTER 18	Price Distribution Systems	801
	Measuring Distribution	801
	Use of Price Distributions and Patterns to	
	Anticipate Moves	805
	Distribution of Prices	811
	Steidlmayer's Market Profile	822
	Using Daily Distributions to Identify Support	
	and Resistance	830
CHAPTER 19	Multiple Time Frames	833
	Tuning Two Time Frames to Work	
	Together	833
	Elder's Triple-Screen Trading System	835
	Robert Krausz's Multiple Time Frames	838
	Martin Pring's <i>KST System</i>	842
CHAPTER 20	Advanced Techniques	845
	Measuring Volatility	845
	Using Volatility for Trading	856
	Trade Selection Using Volatility	861
	Liquidity	867
	Trends and Price Noise	868
	Trends and Interest Rate Carry	871
	Expert Systems	871
	Fuzzy Logic	875
	Fractals, Chaos, and Entropy	880
	Neural Networks	886
	Genetic Algorithms	895
	Replication of Hedge Funds	902
CHAPTER 21	System Testing	905
	Expectations	907
	Identifying the Parameters	908
	Selecting the Test Data	910
	Testing Integrity	916
	Searching for the Best Result	919
	Visualizing and Interpreting	
	Test Results	922
	Large-Scale Testing	932
	Refining the Strategy Rules	937
	Arriving at Valid Test Results	938
	Comparing the Results of Two Systems	946
	Profiting from the Worst Results	950

Retesting for Changing Parameters	951
Testing across a Wide Range of Markets	954
Price Shocks	970
Anatomy of an Optimization	972
Summarizing Robustness	976
CHAPTER 22 Practical Considerations	983
Use and Abuse of the Computer	984
Extreme Events	992
Gambling Techniques—The Theory of Runs	1000
Selective Trading	1011
System Trade-Offs	1012
Trading Limits and Disconnected Markets	1018
Silver and NASDAQ—Too Good to Be True	1020
Similarity of Systematic Trading Signals	1021
CHAPTER 23 Risk Control	1027
Mistaking Luck for Skill	1027
Risk Aversion	1028
Liquidity	1033
Measuring Return and Risk	1034
Leverage	1046
Leverage Based on Exposure	1049
Individual Trade Risk	1050
Kaufman on Stops and Profit-Taking	1059
Ranking of Markets for Selection	1062
Probability of Success and Ruin	1072
Entering a Position	1076
Compounding a Position	1080
Equity Trends	1085
Investing and Reinvesting: Optimal f	1088
Comparing Expected and Actual Results	1092
CHAPTER 24 Diversification and Portfolio Allocation	1099
Diversification	1100
Changing Correlations	1105
Types of Portfolio Models	1105
Classic Portfolio Allocation Calculations	1107
Finding Optimal Portfolio Allocation Using Excel's Solver	1109
Kaufman's Genetic Algorithm Solution to Portfolio Allocation (GASP)	1114
Volatility Stabilization	1142

APPENDIX 1	Statistical Tables	1147
APPENDIX 2	Matrix Solution to Linear Equations and Markov Chains	1151
APPENDIX 3	Trigonometric Regression for Finding Cycles	1161
	Bibliography	1175
	About the Companion Website	1191
	Index	1193

<http://www.pbookshop.com>