

Wiley Trading Series

2<sup>ND</sup>  
EDITION

# MIND OVER MARKETS

POWER TRADING with  
 MARKET GENERATED  
INFORMATION

James F. Dalton • Eric T. Jones • Robert B. Dalton

WILEY



# MIND OVER MARKETS

Founded in 1807, John Wiley & Sons is the oldest independent publishing company in the United States. With offices in North America, Europe, Australia, and Asia, Wiley is globally committed to developing and marketing print and electronic products and services for our customers' professional and personal knowledge and understanding.

The Wiley Trading series features books by traders who have survived the market's ever changing temperament and have prospered—some by reinventing systems, others by getting back to basics. Whether a novice trader, professional, or somewhere in-between, these books will provide the advice and strategies needed to prosper today and well into the future.

For a list of available titles, visit our website at [www.WileyFinance.com](http://www.WileyFinance.com).



# **MIND OVER MARKETS**

**UPDATED EDITION**

Power Trading with Market  
Generated Information

**James F. Dalton  
Eric T. Jones  
Robert B. Dalton**

**WILEY**

Cover image: © iStockphoto.com/ULTRA\_GENERIC

Cover design: Wiley

Copyright © 2013 by James F. Dalton, Eric T. Jones, and Robert B. Dalton. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

The first edition was published in 1993 by Traders Press, Inc.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750–8400, fax (978) 646–8600, or on the Web at [www.copyright.com](http://www.copyright.com). Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748–6011, fax (201) 748–6008, or online at [www.wiley.com/go/permissions](http://www.wiley.com/go/permissions).

**Limit of Liability/Disclaimer of Warranty:** While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762–2974, outside the United States at (317) 572–3993, or fax (317) 572–4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit [www.wiley.com](http://www.wiley.com).

***Library of Congress Cataloging-in-Publication Data***

Dalton, James F.

Mind over markets: power trading with market generated information / James F. Dalton, Eric T. Jones & Robert B. Dalton. – 2nd Edition.

pages cm. – (Wiley trading series)

Includes index.

ISBN 978-1-118-53173-0 (cloth) – ISBN 978-1-118-65978-6 (ePDF) –

ISBN 978-1-118-65972-4 (Mobi) – ISBN 978-1-118-65976-2 (ePub)

1. Futures. I. Jones, Eric T. (Eric Thomas) II. Dalton, Robert B. III. Title.

HG6024.A3D35 2013

332.64'5–dc22

2013004403

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

## CONTENTS

Preface	xiii	
Acknowledgments	xvii	
<b>CHAPTER 1</b>	<b>Introduction</b>	<b>1</b>
<b>CHAPTER 2</b>	<b>Novice</b>	<b>7</b>
Laying the Foundation	9	
The Auction	9	
Organizing the Day	10	
Challenging the Rules	15	
The Role of the Marketplace	16	
Going with the Crowd	17	
Introduction to Day Timeframe Structure	19	
Normal Day	19	
Dynamics	19	
Structural Characteristics	21	
Normal Variation of a Normal Day	21	
Dynamics	21	
Structural Characteristics	23	
Trend Day	23	
Dynamics	23	
Structural Characteristics	23	
Double-Distribution Trend Day	25	
Dynamics	25	
Structural Characteristics	25	

Nontrend Day	27
Dynamics	27
Structural Characteristics	27
Neutral Day	27
Dynamics	27
Structural Characteristics	28
Day Type Summary	31
<b>CHAPTER 3 Advanced Beginner</b>	<b>33</b>
Building the Framework	34
The Big Picture: Market Structure, Trading Logic, and Time	34
A Synthesis: Structure, Time, and Logic	35
Ease of Learning	36
Amount of Information	36
Recognition Speed	37
Trade Location	37
Confidence Level	37
Summary	38
Evaluating Other Timeframe Control	38
Other Timeframe Control on the Extremes	40
Tails (or Extremes)	40
Range Extension	40
Other Timeframe Control in the Body of the Profile	40
TPO	41
Initiative versus Responsive Activity	45
Trending versus Bracketed Markets	49
Key Elements—A Brief Discussion	51
Trending Markets	54
Bracketed Markets	54
The Two Big Questions	56
<b>CHAPTER 4 Competent</b>	<b>59</b>
Doing the Trade	59
Section I	60
Day Timeframe Trading	60
Day Timeframe Directional Conviction	61
Opening Call	61
The Open	62

The Open as a Gauge of Market Conviction	63
Open-Drive	63
Open-Test-Drive	65
Open-Rejection-Reverse	68
Open-Auction	69
Open-Auction in Range	70
Open-Auction out of Range	71
Summary	73
Opening's Relationship to Previous Day—Estimating Daily Range Potential	74
Open within Value—Acceptance	75
Rejection (Breakout)	79
Open outside of Value but within Range—Acceptance	80
Rejection (Breakout)	83
Open outside of Range—Acceptance	84
Rejection	85
Summary	85
April 13, 1989	86
Crude Oil	87
S&P 500	87
Gold	90
Japanese Yen	92
Soybeans	92
Treasury Bonds	92
Summary	95
Day Timeframe Auction Rotations	96
Two-Timeframe Markets	97
One-Timeframe Markets	97
Using Auction Rotations to Evaluate Other Timeframe Control	97
Structure	99
Half-Hour Auctions	100
Extremes	100
Range Extension	101
Time	101
Identifying Timeframe Transition	102
December Swiss Franc, October 12, 1987	103
Y to E: One-Timeframe Buying	104
E: Time	104

Y to F: Auction Test	104
G: Transition Confirmation	104
E to H: One-Timeframe Selling	105
H: Auction Test	105
I: Transition Confirmation	105
H-J: One-Timeframe Buying	105
Summary	105
Auction Failures	105
Excess	110
Signs of Excess	111
The Rotation Factor	112
Monitoring the POC or Fairest Price	115
9:30 a.m. Figure 4.30	116
10:00 a.m. Figure 4.31	118
10:30 a.m. Figure 4.32	119
Noon Figure 4.33	119
2:00 p.m. Figure 4.34	119
The Close	120
Day Timeframe Visualization and Pattern	
Recognition	122
Short-Covering Rallies	123
Long-Liquidation Breaks	127
Summary of Short Covering and Long Liquidation	128
Ledges	129
Summary	130
High- and Low-Volume Areas	131
High-Volume Areas	131
Identifying High-Volume Levels	132
High-Volume Examples	134
Low-Volume Areas	138
Low-Volume Examples	140
Summary	144
Summary—Day Timeframe Trading	145
Section II	145
Long-Term Trading	145
Long-Term Directional Conviction	146
Attempted Direction: Which Way Is the Market	
Trying to Go?	146
Auction Rotations	147

Range Extension	147
Long-Term Excess	150
Island Days	152
Long-Term Tails	152
Gaps	155
Summary	155
Buying/Selling Composite Days	155
Summary	157
Directional Performance: Is the Market Doing a Good Job in its Attempts to Get There?	157
Volume	158
Evaluating Changes in Volume	158
Volume as a Measure of Directional Performance	158
Value-Area Placement	159
Evaluating Directional Performance through Combined Volume and Value-Area Placement	160
Value-Area Width	169
Summary: Long-Term Activity Record	171
Long-Term Auction Rotations	183
Brackets	183
Trade Location in a Bracketed Market	188
Rule 1: Monitor Market Direction and Location within the Current Bracket	189
Rule 2: Markets Generally Test the Bracket Extreme More Than Once	190
Rule 3: Markets Fluctuate within Bracketed Regions	190
Rule 4: Monitor Activity Near the Bracket Extremes for Acceptance/Rejection	192
Transition: Bracket to Trend	192
Trends	193
Trade Location in a Trending Market	193
Monitoring Trends for Continuation	196
Transition: Trend to Bracket	197
Detailed Analysis of a Developing Market	201
Bracket Reference Points	201
Region A (Figure 4.87)	203
Region B (Figure 4.88)	205

Region C (Figure 4.89)	207
Region D (Figure 4.90)	208
Long-Term Auction Failures	210
Long-Term Short Covering and Long Liquidation	214
Applications	224
Corrective Action	225
The Function of Corrective Action	226
Summary	228
Long-Term Profiles	228
Using Long-Term Profiles	229
The Long-Term Profile in Action	229
Region A (Figures 4.98 and 4.99)	231
Region B (Figures 4.100 and 4.101)	235
Summary	238
Special Situations	238
3 to I Days	239
Neutral-Extreme Days	241
The Value-Area Rule	244
Summary	246
Spikes	247
Acceptance versus Rejection	247
Openings within the Spike	247
Openings outside the Spike	249
Bullish Openings	249
Bearish Openings	252
Spike Reference Points	252
Balance-Area Breakouts	252
Gaps	260
Day Timeframe Significance of Gaps	260
Summary	265
Markets to Stay Out Of	265
Nontrend Days	266
Nonconviction Days	266
Long-Term Nontrend Markets	267
News-Influenced Markets	269
Summary	269
News	269
Summary	274
Beyond the Competent Trader	275

<b>CHAPTER 5 Proficient</b>	<b>277</b>
Self-Understanding: Becoming a Successful Trader	279
Self-Observation	281
The Whole-Brained Trader	282
The Left Hemisphere	283
The Right Hemisphere	283
Combining the Two Hemispheres	283
Strategy	284
A Business Strategy	285
Capital	285
Location	286
Timing	286
Information	287
Know Your Competition	287
Know Yourself	288
Consistent, Daily Execution	288
Inventory	288
Risk	289
Goals	290
Record Keeping and Performance	290
Dedication	290
Applications	291
Summary	292
<b>CHAPTER 6 The Expert Trader</b>	<b>295</b>
<b>CHAPTER 7 Experience</b>	<b>297</b>
Set Aside Your Expectations	297
Mind over Markets in Profile	298
Market-Understanding and Self-Understanding	300
Perfect Practice Makes Perfect	300
Blinded by Price	300
Be Prepared	301
Perspective	302
Overnight Inventory	305
Gaps Can Be Gold	307
Gaining an Edge	308
The Fairest Price Revealed	309
Thinking Statistically	311

The Trader's Dilemma	311
The Most Important Omission from the First Printing in 1990	312
Emotional Markets	313
A Landscape View of the Market	314
Personal Evolution	315
Hierarchy of Information	316
Timeframe Control—Who Is Dominating the Current Session?	317
Markets Are Visual	318
Destination Trades	319
The Opening	319
Trends	320
Daily Perspective	322
Cognitive Dissonance	322
Imagination	325
False Certainty	326
Anomalies	326
Market Logic	328
We Are All Day Traders	329
<b>APPENDIX 1    Value-Area Calculation</b>	<b>331</b>
Volume Value-Area Calculation	331
TPO Value-Area Calculation	332
<b>APPENDIX II    TPO versus Volume Profiles</b>	<b>335</b>
Single Price Level Distortions	336
End of Day Total Volume versus Ongoing Volume throughout the Day	337
Anomalies	337
Too Focused on Volume	339
Conclusion	339
Suggested Readings	341
About the Authors	343
Index	345



## PREFACE

When *Mind Over Markets* was first published in 1990, the Market Profile was relatively new. I was fascinated by the utility because it provided a new way to structure information, a new way to look at the market through a time-sensitive, evolving database that records the market's continuous two-way auction process.

I had long been skeptical about analysis that treated all prices as equal. After years studying market behavior—with membership on the Chicago Board of Trade and as a founding member of the Chicago Board Options Exchange—I came to the conclusion that fundamental analysis is generally too long term, often appearing out of touch with the market. Auction market theory, on the other hand, seemed to offer the most objective means of allocating the constant flow of bids and offers.

*I embraced the idea that auctions are mechanisms for price discovery.*

*Mind Over Markets* is a practical handbook for developing an understanding of market behavior that will help you trade with the odds in your favor. And in the 20 years since it was first published (and translated into Chinese and French), my co-authors and I have continued to delve deeper into the application of auction theory to trading and investment decisions.

In the first printing, we talked about “buying and selling tails” in Profile structure. We’ll get into the mechanics of this concept later in the book, but we mention them here, in this new introduction, because they represent an example of how our understanding has evolved since the original publication, thanks to the best teacher of all: *experience*. We still believe in the

structural significance of tails, but we have developed a more nuanced appreciation for what *causes* tails, or more tellingly, what causes the *lack* of a tail (an indication that the market has gotten too long or too short).

This understanding—like all understanding—evolved over time. It is the *context* surrounding the indicator that signals a deeper layer of meaning. Factors like volume and tempo provide clues about which timeframe is leading market movement. And as you’ll discover, discerning timeframe influence is one of the most important insights you can develop as an agile-brained trader.

## ■ Does the Profile Still Work, after All These Years?

I’m often asked if the Profile works. Or, more commonly, if it still works. The better question is this: Is the Market Profile a valid scientific way to organize data?

The answer to that question is a definite yes. The Profile is constructed using a constant—*time*—on the horizontal axis, and a variable—*price*—on the vertical axis to form a distribution. Scientists have employed this method to study and observe data for generations. Personally, I would much rather study organized data than unorganized data; the Profile is simply a valuable tool for organizing objective information.

After a lifetime spent observing markets, I choose to give more emphasis to the Market Profile—with its evolving, multidimensional structure—because I believe it provides a more accurate representation of the auction process, *as it unfolds*. It smooths out aberrations, such as high volume at the opening bell, as well as statistical references like the overnight high and low that can mislead you in the heat of the moment.

To be clear, I’m a trader, not a Profile trader. However, the Profile has been invaluable to my analysis, and it has enabled my personal evolution through decades of reading and interpreting data in its ever-changing visualizations. Over time, my knowledge has deepened through practice—and not just practice, but *correct* practice. Choose any sport and you’ll recognize the importance of practicing a correct stroke/shot/swing; practice wrong and you’ll cement bad habits that can take years to unlearn.

One of the most astute [Amazon.com](#) reviews for this book was not intended as a compliment—the reviewer said *Mind over Markets* is “too complicated.” Those two words capture the reason why most traders fail, as

well as the reason why the book in your hands is still relevant, challenging, and insightful after two decades: It was written for serious traders, and it doesn't purport to be a total solution.

Ultimately, you must make your own decisions as you carefully choose which tools you use, and which indicators you follow as you trade. Rest assured that no matter what you decide, there is never a single, simple answer. I suggest you compare volume profiles and Market Profiles side by side, writing down your observations as you see how they mirror and/or contradict each other. Constantly ask yourself, *What does the ambiguity tell you? Can you identify change before your competitors (mostly laggards) transform opportunity into the familiar patterns of consensus?*

## ■ On the Long Road to Expert

In reading this book, you will begin to make progress on your path to becoming a successful trader. Over time, you will transform insights into instincts in the kiln of experience. And those instincts will help you rise above the distracting maelstrom of conflicting information with a broader, more *holistic* market perspective. You will begin to understand the big picture, while also participating in the daily minutia—the hallmark of a professional trader.

Developing this level of market understanding is not an easy process. Most people find it impossible to even begin to parse such an overwhelming amount of ambiguous, conflicting information, let alone transcend it. But armed with *awareness*, you have the ability to separate yourself from your competitors, most of whom are lost in the shallows of price and opinion. You have the opportunity to forge your own path toward expert.

*Good luck on your journey!*



## ACKNOWLEDGMENTS

Our thanks to the individuals and organizations named below extends far beyond the scope of the writing of this book. *Mind Over Markets* is born out of years of teaching, research, and trading. In one way or another, the following individuals and companies have made a significant contribution to this effort:

Second edition acknowledgment is to *Julia Stuart*, my partner at J. Dalton Trading, who has worked with me over the past several years as a student, a fellow trader, writer, and editor.

*J. Peter Steidlmayer*, who pioneered the theories upon which much of our work is based. When I met Pete in 1985, one of the first questions I asked was “If your theories are so good, why share them with anyone else?” Pete’s response was not what one would expect from a successful commodity trader. He said, “The market has been good to me. Like Marshall Field’s contribution to the city of Chicago was the Field Museum, my contribution to the financial world is a better way to trade.”

Peter Steidlmayer has always encouraged his students to take the information he has provided and make it their own. In less than five years, we have witnessed the birth of new types of quotation software, databases, and all forms of expanded market research. Such is the natural process that follows any significant new discovery. Given the magnitude of the contribution that Peter Steidlmayer has made to the financial markets, this information expansion will likely continue for a long time.

*Norman Hovda*, who, as a broker in the Soybean Meal pit at the Chicago Board of Trade, observed Pete Steidlmayer as he came into the pit to trade. It was Norman who first introduced me to Pete, and that meeting has since changed the way we look at markets. One of the equations to which you will be introduced in this book is: *Market Understanding + (Self-Understanding × Strategy) = Results*. Norman's specialty is Self-Understanding. Although he remains a member of both the Chicago Board of Trade and the Chicago Board Options Exchange, his primary focus is consulting businesses, schools, and families on tools for Self-Help. Norman resides in Wilmette, Illinois.

*Donald Jones*, president of CISCO, a Chicago-based research and database firm, has helped us in countless ways over the years. CISCO was the first database to begin providing the Market Profile and Liquidity Data Bank to the public. In addition to providing the data for many of the illustrations presented in these pages, Don has also taken the time on numerous occasions to share his ideas and analytical research.

*Elaine Dalton*, for her unwavering support both as a partner in business and partner at home.

*Barton J. Hanson*, whose literary efforts and market research as Senior Editor of the Profile Report are indirectly woven into portions of this book.

*Cletus Dobbs*, for his vivid explanation of how the auction process works in the real world—at a livestock sale. Cletus is a rancher in Texas.

*Commodity Quote Graphics (CQG)*, for their quality, ongoing technical support over the years. CQG is also responsible for the majority of the charts and data presented in this book.

*CBOT Market Profile<sup>®</sup>*, Market Profile is a registered trademark of the Chicago Board of Trade (CBOT), which holds exclusive copyright to the Market Profile graphics. Nothing herein should be considered as a trading recommendation of the Chicago Board of Trade. The views expressed in this publication are exclusively those of Dalton Capital Management, Inc.

James F. Dalton

Eric T. Jones

Robert B. Dalton

# Introduction

Jim Kelvin was a retired cattle rancher from Texas. He had developed an interest in the futures market during the years when he would hedge his livestock at opportune prices. After he sold his ranching business, he began to experiment with a few small trades as a hobby.

Jim read everything he could find on futures trading. He studied all the technical models, read manual after manual on market analysis, attended seminars, and kept point and figure charts. In time, he felt he had a firm grasp on all the factors that make the market tick and began to look at trading as a serious vocation. He wasn't making money, but he thought he was just paying his dues as he learned the intricacies of his trading system.

One morning, Jim got up at 6:00, as he always did, and went to his study to turn on his quote monitors and prepare for the market's open. He picked up the *Wall Street Journal* to see what the bank traders and brokerage analysts were saying about the foreign exchange market. He had been watching the Japanese yen closely, because he felt the recent depth of coverage in the news would surely reveal some good trade opportunities. The U.S. dollar was expected to record new lows because of a slowing U.S. economy and consistently negative trade balances, forcing the yen and other currencies higher. All the foreign exchange related articles on his quote equipment news service were bullish for the yen.

A good friend and fellow trader called and commented on how the currencies should rally that day. Jim then checked the 24-day channel model and the 16- to 32-day moving average crossover model, two longer term technical indicators on which he frequently based his trading—both had been generating buy signals for some time.

Jim glanced over his charts and volume numbers and chewed on the end of a pencil. At the end of every day, he conducted a personal analysis of the market's structure and wrote down possible trades for the following day. Last night he had written "weakening yen—look for opportunity to sell." The yen had been in an upward trend for some time, but in recent weeks volume was drying up. Price was moving higher, but activity was decreasing and there had been no substantial moves to the up side in over a week.

He knew from his ranching days that less volume was significant. When he would auction off his livestock, the price would continue up until the last buyer had bought. When the auction was nearing its end, the bulk of the buyers would have dropped out because they had fulfilled their inventory requirement or the price was too high. When no one was left to buy, the auction was over.

He read his analysis again. Common market sense told him that the up auction in the yen was over. There were no more buyers. But what about all the fundamental and technical indicators?

"All these professionals can't be wrong," Jim said to himself. "I can't sell the yen."

The market was going to open in less than five minutes. Jim stared at his blank monitor for a moment, thinking about what his friend had said. He put his hand on the phone, but did not pick it up.

The yen opened higher, rose a few ticks, and then stalled. The floor traders were acting on the recent bullish sentiment, but the buyers that had driven the yen up for the past month were nowhere to be found. He just sat and watched his terminal. *It's going to break . . . I should sell*, he thought. The flashing green price on his quote screen began to drop as he sank deeper into his chair and indecision tightened its grip.

What happened? Jim Kelvin's decision-making process was jammed by the conflict between his own intuition and popular opinion. "How can the majority be wrong?"

The majority of people who trade futures don't make money. In fact, over 90 percent aren't successful enough to justify being in the market. If you trade with the majority, then you will fare only as well as the average, and the average market participant does not make money!

He was caught, like the goat that starves to death between two piles of hay, in the conflict of multiple sources of information indicating opposite conditions. Jim's common sense and firm understanding of the market's auction process told him the yen was weak and should have been sold, but he let himself become frozen by the power of the majority. All the fundamental

and technical indicators agreed—everyone was predicting the bull trend to continue.

The difference is relatively simple. Jim was basing his opinion on current market information—he was “listening” to the evolving market—while all the other sources were based on information that was history and no longer relevant to what the market was doing *in the present tense*.

What if a baseball catcher waited to see how fast a man stealing second could run or pondered how often he was successful before he threw the ball? There is no way the throw would be in time. A good catcher operates solely in the present tense. He feels when the steal is on and reacts immediately, just as an experienced trader feels the direction of the market and reacts immediately.

Similarly, if a linebacker waited until he could see what the offense was doing or tried to read the play by watching the scoreboard, he would never make the key tackle. He reads the offense by recognizing patterns learned from experience and by trusting his intuition—sensing the play. To wait is to miss the opportunity. If you wait until a market has committed itself in a direction, you are too late.

In *Mind Over Markets*, our goal is to teach you how to read the plays. In more concrete terms, you will learn how to identify the information generated by the market, understand its implications, and act on your knowledge. However, this is not a book about a trading system that works or does not work. The Market Profile is not a black box that dogmatically tells you when to buy and sell commodities. This is a book on learning. This is a book on observing and understanding the market.

*Mind Over Markets* is organized around the five basic steps in the learning process, roughly corresponding to the five stages of skill acquisition discussed in the book *Mind Over Machine*, by Hubert and Stuart Dreyfus.

To illustrate these stages, imagine a young man named David. He attends a concert at his college given by a well-known contemporary pianist. While listening to Beethoven’s haunting “Moonlight Sonata,” he is moved by the pure emotion expressed in the piece and decides he must learn to play the piano. The next day he arranges for his first lesson.

In the first few weeks, David learns to “recognize objective facts and features relevant to the skill and acquires rules for determining actions based on those facts and features.”<sup>1</sup> In other words, he reaches the first stage of

---

<sup>1</sup> Hubert Dreyfus and Stuart Dreyfus, *Mind Over Machine* (New York: The Free Press, 1986), pp. 21–36.

learning: *the novice*. He learns that the black ellipse with a stem is a note, and that a note placed on the bottom line of the treble staff is an E. He is shown where the E is on the keyboard and can then press the corresponding key to sound the note.

David can look at a sheet of music, and by reducing it into individual parts, he can find the right keys and play the song. Of course, this is a slow, painstaking process that forces listeners to use their imagination when trying to make out any semblance of melody.

After a month of lessons and regular practice, David becomes an *advanced beginner*. By playing a song over and over, he goes beyond the note-by-note struggle and begins to achieve some continuity of melody. Experience improves his performance. He still sees the song as a series of notes on a page, but begins to feel the flow that allows a recognizable song to emerge. David can play “Amazing Grace” so it actually sounds like “Amazing Grace” and not some array of notes in random rhythm.

As the years go by, David reaches the third level and becomes a *competent* pianist. Most musicians never pass this stage to become proficient or expert. He sees each song as a whole, a certain expression to be performed with a definite goal in mind. He still plays by reading the notes, but he achieves some degree of emotion and purpose in his playing.

An important distinction must be made here. David plays with the emotion of the written expression in the piece (crescendos and fortés, etc.), not with individual interpretation. He performs much like a machine that very accurately converts the musical score into a sonata or concerto.

This level of competency can lead to excellent performances, for most written music is thoroughly marked to show the composer’s emotion. These marks have literal meaning, such as quiet (pianissimo), or pronounced and sharp (staccato). David plays Bach’s “Prelude in E Minor” flawlessly at a recital and receives a standing ovation for his technical excellence.

However, David is still a person playing an instrument, much like a computer running a complicated flow chart. To advance to the next level, *proficiency*, he must transcend the physical notes on paper (the rules) and become deeply involved in the music.

To reach the fourth level and become proficient, David must learn the actual notes of a piece so well that he no longer has to think of them. The written work becomes a part of his mind, a holistic image, allowing him to interpret the music. This comes from experience—in life as well as hours of practice at the keyboard. The pianist must rely on his intuitive ability to express emotion through the piano, leaving behind the fact that the piece is

in E flat in 6/8 time. Therefore, if David is proficient, he will feel the emotion that Bach created and, drawing on his own emotions and experience, convey that emotion in his playing.

Music that surpasses the competent level goes beyond the auditory aesthetic and involves the listeners. Hearing a proficient musician is often a deeply moving experience, for passionate music arises from the emotion of the performer and strikes similar chords in the listener. This cannot be explained in rational terms, for one cannot teach the expression of true emotion. Only through experience and involvement can proficiency be reached.

The final stage is labeled by Dreyfus and Dreyfus as *expertise*. David has studied piano for many years and knows the instrument inside and out. When he plays, the piano becomes an extension of his body. It is as if the music comes straight from his mind, which in an important way it does. He no longer thinks of individual notes or any rules when his hands are on the keyboard.

An expert musician feels the melody, and the song lives as an expression of his feeling. The mechanical aspects are fully ingrained, leaving the brain to its wonderful powers of creation. Listening to an expert musician is like peering into his thoughts and feeling the weight of his sadness or the exhilaration of his joy. It is a mode of expression that transcends all rules and calculative rationality to become pure expression. Few people reach the expert level in any field.

This example was meant to introduce you to the basic levels of skill acquisition that we will attempt to take you through in learning to trade the futures market successfully. However, learning is a process that requires a great deal of time and effort, and learning to be an expert trader is no exception. The musician spends many hours of rote memorization and practice to develop experience and skill. Successful trading requires the same discipline and hard work.

Many perceive futures trading to be a glamorous, high-profit venture for those with the nerve to trade and that, through the purchase of mechanical systems and computer software, you can bypass the time and dedication it takes to succeed in other professions.

In reality, there are few glamorous professions. Some, like the music industry, reward the best quite impressively. It is easy for the naive music lover to glamorize performers like Burt Bacharach, Frank Sinatra, and Billy Joel. However, if we dig deep behind the sell-out stadium concerts and multiplatinum albums, the music business is not much different than any

other profession. For every Simon and Garfunkel there are literally millions of aspiring young musicians who spend endless hours of dedication and frustration learning and perfecting their profession. Even the established superstars spent uncounted days perfecting each song and their musical ability to achieve recognition.

Because of the difficulty of making it big, many musicians burn out. The process of becoming good enough to succeed brings with it the potential for failure, and the process of becoming an expert trader is just as difficult. The learning in this book goes beyond technical systems into areas of self-understanding that might reveal weakness in your abilities of self and market observation, discipline, and objectivity. Also, much of the information in this book differs from the accepted models of market analysis. Just as you will learn that the best trades fly in the face of the most recent market activity, the information in this book flies in the face of most current opinions and theories on trading and understanding the market.

Futures trading is not a glamorous or profitable experience for most of the people who attempt to trade. Futures trading is a profession, and it takes as much time and dedication to succeed as any other profession. You will start as a beginner, learning the objective basics about the Profile, then proceed through the stages toward the ultimate goal of any professional in any trade—becoming an expert.

# Novice

**N**ovice is the first stage in any process. No one starts out an expert, or even an advanced beginner. To learn any skill, you must begin by learning the necessary objective facts and features—the tools with which you will build your skill from the ground up. Just as a carpenter learns the function of a saw, hammer, and plane before attempting to make his first basic bird feeder, you must learn the mechanics of the Market Profile before you make your first basic market decisions.

The learning that occurs during the novice stage is largely rote memorization. The carpenter is taught the workings of his tools; the aspiring pianist is taught the definitions that form the base of all music theory. This learning comes from a derivative source, such as a book or a teacher, and does not involve the novice in any active way as he or she sits and listens or reads. Some degree of derivative learning is necessary, especially during the early stages, but in the words of the ancient Greek philosopher Heraclitus, “Much learning does not teach understanding.” Only through experience and extensive practice and application will understanding and expertise arise.

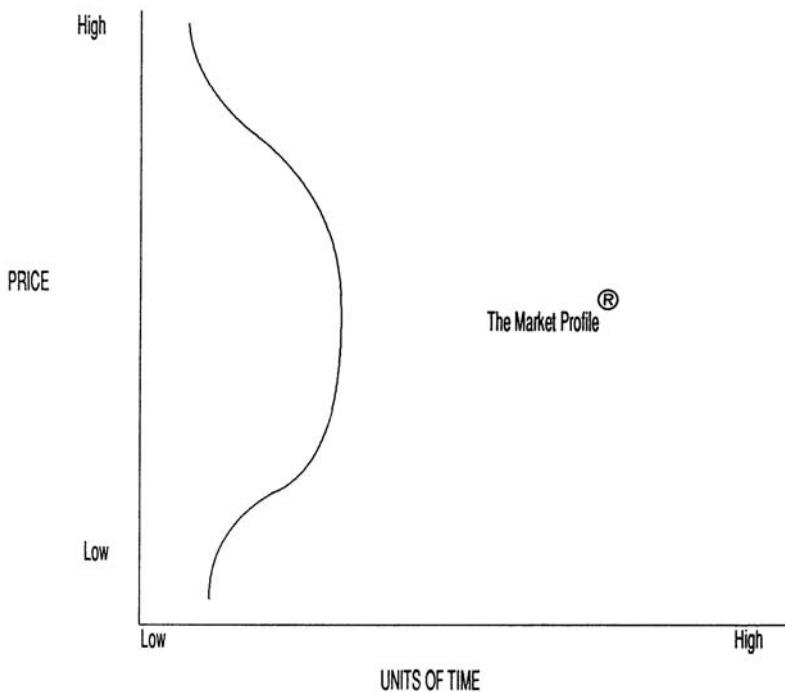
Throughout this book (a derivative source), there are many definitions and patterns to memorize. It is important to remember, however, that the information is only part of a larger whole that will develop as you read and attempt to assimilate what you have learned with your personality, individual trading style, and experience. Keep an open mind and actively apply the new knowledge to your observations of the marketplace.

Perhaps some of your established beliefs have already been thrown into question. In the example at the beginning of the book, Jim the yen trader is torn between the different sources of information: fundamental, technical, and market generated. All the fundamental sources (newspapers, trade

magazines, personal advice) and technical sources (channel models, moving averages, etc.) were predicting a rally in the foreign currencies. The market-generated information, which is the market's price activity recorded in relation to time in a study with statistical curve, was indicating a market that had reached the top of the up movement. This is not to say that all technical gurus, financial writers, and market analysts are useless—there is just no greater indication of what the market is doing than the market itself!

*The Market Profile is a conduit for listening to the market.* It is merely a graph that plots time on one axis and price on the other to give a visual impression of market activity. This representation takes the form of a statistical bell curve, just like your high school teacher used. Most students scored in the middle of the bell curve with Cs, while fewer received As and Fs. Similarly, the majority of a day's transactional volume takes place in a common range of prices, with less trading on the day's extremes (see Figure 2.1).

*The Market Profile is simply a way of organizing market activity as it unfolds.* It is not a system that predicts tops and bottoms or trend continuation any more than the teacher's grade chart is an indicator of overall student intelligence.



**FIGURE 2.1** A Statistical Bell Curve; the Organization of Price over Time

The Market Profile is an evolving gauge that accurately reflects market activity in the present tense, a gauge being defined as a passive device that exists only to measure something. The key to the Market Profile lies in correctly reading this information.

The statistical bell curve is employed to allow us to visualize what a graph might look like that plots time, a constant, on the horizontal axis against price, a variable, on the vertical axis. Scientists have employed this method of analysis for generations. Its utilization in market analysis creates a distribution curve that allows us to organize the data and better understand the continuous two-way auction process. The graph of the Market Profile is seldom bell shaped; there is, more often, a skew to the Profile. However, this fact does not detract from its value as a teaching tool to understand the foundational principle of the Market Profile.

## ■ Laying the Foundation

In this section, we will discuss the definitions and concepts that form the foundation for learning to understand the market through the Market Profile. As has been stated before, this is a challenging task. Everything you learn about the Market Profile is interrelated and integral to a complete understanding of the market. Each concept is like a piece in an intricate puzzle that should be studied to determine its place in the developing picture. If you file each piece away as a separately defined definition, you will be left with a jumble of seemingly unrelated facts. But, if you continually integrate each section of the book with what you have already learned, the picture will slowly emerge.

## The Auction

Jim Kelvin intuitively knew that the bull trend in the yen was over because of his days in the ranching business. At first glance, the futures market seems to have very little to do with cattle ranching. However, they are both markets, and all markets share a common auction process through which trade is conducted.

As Jim Kelvin sat before his quote monitor on that morning, he recalled one of the last days he took his livestock to auction. Price for feeder cattle had been steadily climbing for several months, reaching a high of 86 cents, but the number of steers sold had fallen significantly during the previous week's auction. The meat processors had cut back their purchasing to the

bare minimum at higher prices, buying just enough to keep their processing plants operating and to meet their contract obligations. Jim knew that price would have to auction lower to find renewed buying.

A steer was led into the auction barn. The sale barn manager at one end of the circular corral called out the starting price, “Do I hear 80 cents for this fine feeder steer?” The opening call was too high and did not get a raise from the men standing around the perimeter of the circle. “78? . . . 76? . . . Do I hear 74 cents?” Finally, a buyer entered the auction, starting the bidding at 72 cents. After a small rally as buyers called out their offers, the steer was sold at 76 cents a pound. The up auction over the last few months in the cattle market had ended. Price had to auction lower to attract buyers.

During some auctions there would be an immediate response to the opening bid, and price would move up quickly. “Do I hear 82? I have an offer for 82 . . . Do I hear 84? . . . 85?” as the men around the perimeter of the ring cried out their offers.

Other times, the initial price would be too high, and the auctioneer would quickly lower the bid, “Do I hear 78? . . . 77? . . . 76 for this fine steer?” The price would back off until a buyer entered the auction, then price would begin to move upward, often auctioning beyond the opening price. Once the auction got started, competition and anxiety among buyers sometimes drove the market beyond the prices that were initially rejected as too high. Price would continue up until only one buyer remained. “Ninety-two going once, twice, three times . . . sold,” then the auction was over.

The futures market auctions in a similar manner. If the open is considered below value, price auctions higher in search of sellers. If the open is considered too high by the market’s participants, price auctions lower, searching for buyers. Once a buyer enters the market, price begins to auction upward until the last buyer has bought. Similarly, the market auctions downward until the last seller has sold, constantly searching for information.

As you progress through this book, the importance of the market’s auction process will become evident. And, with the aid of the Market Profile, you will soon see that the futures market’s auction process is by no means a random walk.

## Organizing the Day

The basic building blocks of the Market Profile are called Time Price Opportunities, or TPOs. Each half hour of the trading day is designated by a letter. If a certain price is traded during a given half hour, the corresponding

97-10	A . . . . . . . . . .	O
97-09	A . . . . . . . . . .	O
97-08	A . . . . . . . . . .	O
97-07	A . . . . . . . . . .	O
97-06	A . C . . . . . . . .	AC
97-05	A . C . . . . . . . .	AC
97-04	A B C . . . . . . . .	ABC
97-03	A B C D . . . . . . . .	ABCD
97-02	A B C D . . G . . . . L	ABCDG
97-01	A B C D . . G H . . . L	ABCDGH
97-00	A B C D . . G H . . . L	ABCDGH
96-31	A B . D . F G H I . . L	ABCFGH
96-30	A . . D . F G H I J . L	ADFGHIJ
96-29	A . . D E F G H I J . L	ADEFGHIJ
96-28	. . . D E F . . . J . L	DEFJL
96-27	. . . D E F . . . J . L	DEFJL
96-26	. . . D E F . . . J . L	DEFJL
96-25	. . . D E . . . . J K L	DEJKL
96-24	. . . . E . . . . J K L	EJKL
96-23	. . . . . . . . . K L	KL
96-22	. . . . . . . . . K .	K
96-21	. . . . . . . . . K .	K
96-20	. . . . . . . . . K .	K
96-19	. . . . . . . . . K .	K
96-18	. . . . . . . . . K .	K

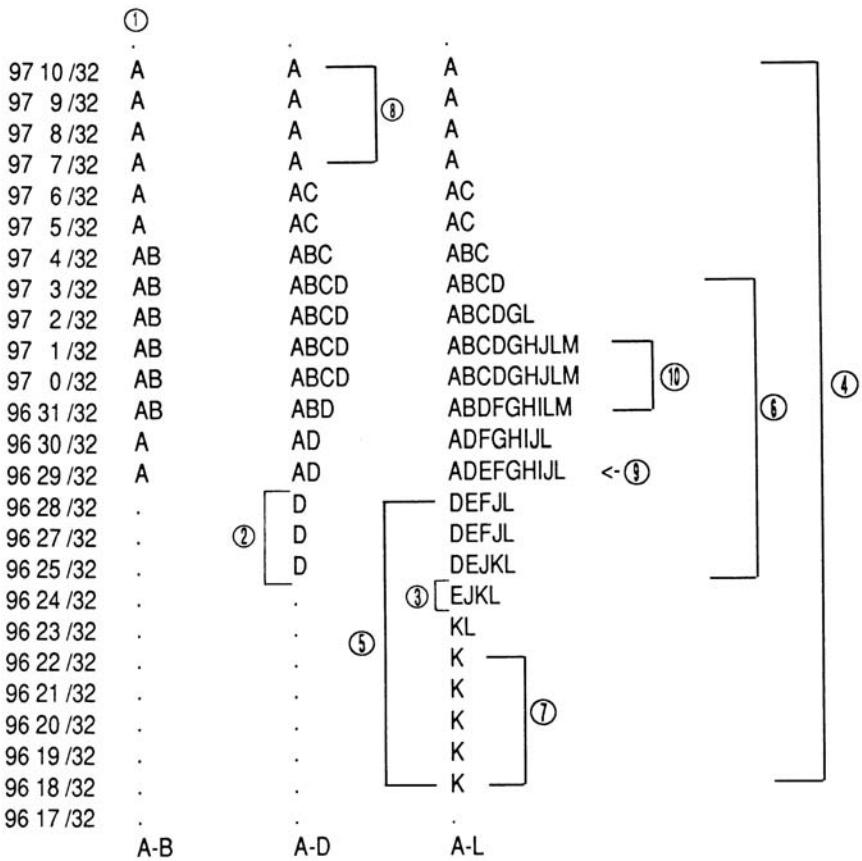
**FIGURE 2.2** Segmented Profile

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

letter, or TPO, is marked next to the price. Figure 2.2 shows each half-hour segment separately alongside the completed profile. On a side note, Treasury bonds trade in 32nds of \$1,000, and one tick is worth \$31.25 (\$1,000 divided by 32). In the bond market on this day, the prices traded during the first 30 minutes (A period) ranged from  $96^{29}/_{32}$  to  $97^{10}/_{32}$ . The next time period (B period) traded from  $96^{31}/_{32}$  to  $97^4/_{32}$ , and so on. The resulting Profile is shown in Figure 2.2.

We will now proceed through the same day in the bonds step-by-step, explaining in detail how to read the basic information generated by the market through the Market Profile “gauge.” The numbers in the following discussion refer to Figure 2.3.

1. The price range resulting from market activity during the first two time periods (the first hour) for most commodities is called the *initial balance*



**FIGURE 2.3** Elements of the Market Profile. *M* designates Closing Activity  
 Important Note: The letters A, B, C, and so on vary between quote services and exchanges. The importance here is not in the letters themselves, but the fact that they represent half-hour periods of time.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

(slightly longer in the S&P). In the Treasury bond example shown in Figure 2.3, the initial balance was established from  $96^{29}/32$  to  $97^{10}/32$  by the floor traders, or locals, during A and B periods. The initial balance represents the period of time in which the locals attempt to find a range where two-sided trade can take place—a range where both the buyer and seller agree to conduct trade. Locals trade mostly in the day timeframe and provide liquidity, not direction, in the market by acting

as middlemen between the off-floor traders. Their purpose is not to make one or two big trades every day, but to make a few ticks on a large volume of trades. The local is typically responsible for over 50 percent of the day's trading volume.

The local's role is like a car dealer—a middleman between the producer and consumer. The dealer's goal is to move his inventory quickly to make a small profit on each sale. He must buy from the producer, like General Motors, at a price he finds fair, then turn around and sell to the consumer at a price that will attract buying while maintaining a degree of profit. The local on the floor of the exchange acts in the same way, buying from long-term sellers and selling to long-term buyers, who only enter the market when they feel price is away from value. We will refer to the long-term market participants as the "other" timeframe, for long term is a highly subjective concept and can represent a trade that spans anywhere from several days (sometimes called a swing trade) to several months. "Other" separates the traders whose participation spans more than one day from the locals, who operate solely in the shortest timeframe. The importance of the other timeframe participants will be discussed at greater length throughout the book, for it is the other timeframe activity that moves and shapes the market, just as General Motors and the consumer shape the automotive market. Understanding what the other timeframe is doing is vital in successfully trading the futures market.

2. In D period, the other timeframe seller enters the market and extends the range down to  $96^{25}/32$ . Any movement in price beyond the initial balance set up by the local in the first hour of trading is called *range extension*, and signifies that something has changed because of other timeframe buyer or seller presence. The local is not responsible for any major moves in the market. It is the other timeframe that can move price substantially.

Again, in D period, it is evident that the other timeframe seller entered the market and extended the range on the down side. Either the other timeframe buyer will respond to these lower prices, or the other timeframe seller will continue to auction price lower in search of buyers.

3. The responsive buyer did enter the market around  $96^{24}/32$ , and price balanced around the lower portion of the day's range until K period. An hour before the market's close, the other timeframe seller probed

downward once again beginning with the K print at  $96^{25}/_{32}$  and extending down to  $96^{17}/_{32}$ , but was met by the buyer responding to lower prices, forcing price back to close in the middle of the range.

4. The *range* refers to the entire height of the Profile—from the high to the low. On this day range was  $96^{17}/_{32}$  to  $97^{10}/_{32}$ .
5. All activity *below* the initial balance is other timeframe seller *range extension* (just as all activity above the initial balance is other timeframe buyer range extension). Any activity above  $97^{10}/_{32}$  or below  $96^{29}/_{32}$  is range extension on this day.
6. The area where 70 percent of the day's business is conducted (roughly one standard deviation) is called the *value area*. This is logical, for the middle part of the bell curve is where most activity occurs and indicates two-sided trade took place in the day timeframe. Similarly, in a teacher's grading curve, most students score in the middle ranges, which is reflected in the wider middle area of the bell curve. If both buyer and seller are actively participating in an area, then that area is accepted as value by both parties. On July 25 in the bonds, value was accepted between  $96^{24}/_{32}$  and  $97^3/_{32}$ . The value area can be easily calculated using TPOs or actual price/volume figures. A sample calculation of the value area is shown in Appendix 1.
7. The single K TPOs at the lower extreme of the Profile are called a *single-print buying tail*. This is an important reference point, for it indicates that the other timeframe buyer responded strongly to price advertised below value, rejecting price out of the lower range in one time period (K). Competition among buyers for contracts causes price to move quickly. Therefore, the longer the tail, the stronger the other timeframe activity. A tail occurring during the last period of the day is not technically a tail, for it cannot be validated by rejection in subsequent time periods. In addition, a tail must be at least two TPOs long to have any real significance.
8. The four single A prints at the top of the day's range are a *single-print selling tail*. This tail shares the same significance as the other timeframe buying tail in K period. The other timeframe seller reacted to higher prices, quickly moving price lower. Attempts to auction beyond the single-print tail by trading up into that price range in subsequent time periods (C and D) met strong resistance, showing seller strength at those prices.
9. The longest line of TPOs closest to the center of the range is called the *point of control*. This is the price where the most activity occurred during

the day, and it is therefore the fairest price in the day timeframe. The greatest amount of time was spent trading at that price, signifying greatest value. This concept will be further developed later, for it is of great importance in monitoring other timeframe activity in the day timeframe.

10. M period denotes the *closing range*, which is the market's last indication of overall sentiment for the day. It is used as a reference point against the following day's open to see if the underlying market sentiment has changed.

## Challenging the Rules

You should now have a feel for reading the basic indicators of the Market Profile. Many concepts were introduced, some undoubtedly foreign to the opinions you were taught and the rules you learned about the futures market. Roger von Oech, author of *A Whack on the Side of the Head*, challenges the power of the rules.

. . . there is a lot of pressure in our culture to *follow the rules*. This value is one of the first things we learn as children. We are told, “Don’t color out-side the lines,” and “No orange elephants.” Our educational system encourages further rule-following. Students are usually better rewarded for regurgitating information than for playing with ideas and thinking of original uses for things. As a consequence, people feel more comfortable following rules than challenging them.

Challenging the rules is a good creative thinking strategy, but that’s not all. Never challenging the rules brings with it . . . potential dangers.<sup>1</sup>

Understanding the Market Profile requires more than the regurgitation of a list of concepts; it requires the ability to challenge the rules and look beyond the restricting confines of popular opinion. Look over the basics we just covered again. David had to know the basics of the music score before he could successfully play “Amazing Grace.”

---

<sup>1</sup> Roger von Oech, *A Whack on the Side of the Head* (New York: Warner Books, 1983), p. 49.

## The Role of the Marketplace

Consider the purpose of the market for a moment. Most traders don't take the time to understand the very foundation of the market they are trying to master. The carpenter could not build a functional birdhouse if he never stopped to ask himself "Just what is the purpose of a birdhouse?" The reason for this basic oversight is directly related to von Oech's challenge of the rules. Most people do not want to know the purpose of the market. They do not want to have to think rationally and objectively about the bigger picture. Most market participants, in fact most people in general, would rather be given a set of rules to blindly follow than to have to use personal insight and innovative thought. Again, the majority of the people who trade futures do not make money.

The purpose of the futures market is similar to any other market. It exists solely to *facilitate trade*, and it does so by auctioning from high to low and low to high, in order to find an area where trade can best be facilitated.

Think of trade facilitation in terms of your corner grocery store. If the price of peanut butter is too high, shoppers will refrain from buying, and the grocer will realize that price is too high. He will then move price lower until the buyer responds by purchasing the product. If the grocer moves price too low, however, his inventory will be quickly depleted as buyers take advantage of price below value. Finally, the price will balance somewhere in between the two extremes, where value is established and two-sided trade can take place. Price must move too high or too low before both the grocer and the shopper know it has gone far enough. The same is true in the futures market. The market auctions up until the buyer will buy no more, and down until the seller will sell no more, in the process establishing extremes of price, shown in the profile as the tapering ends of the bell curve.

Now imagine that Figure 2.3 is a profile of the grocer's peanut butter sales over the period of several months, instead of Treasury bond sales (in theory, not actual price and individual TPOs). Initially, the price was set too high, and there were no buyers to generate sales. The grocer then quickly lowered the price to move his inventory, as shown in the A period single-print selling tail (see point 1 in Figure 2.3). Price went too low in that same period and buyers bought heavily, allowing the grocer to move prices back up in B and C periods. The extremes of price seemed to have been established in A period, and value was accepted somewhere in the middle. In D period, however, another seller entered the market, a supermarket chain two

blocks away. The larger store could afford to charge lower prices, so the local grocer had to cut costs to stay in business. In the following weeks, value was established near the bottom of the previous lower extreme—value was accepted lower because of stronger sellers. Finally, the local grocer decided to do a promotional “peanut butter extravaganza” and substantially lowered price to attract shoppers. The ploy worked, as shown by the strong buying tail in K period. The buyers responded to lower prices, allowing the grocer to raise them to a profitable level once again.

This comparison is intended to bring home the similarity of the trade facilitation process in all markets. The futures market is a constant auction looking for a balance between the two major forces behind market movement: the other timeframe buyer and seller.

Let us look at the role of the other timeframe within the marketplace from another perspective for a moment. Looking at something in a different light often brings valuable insight. If Gutenberg had never looked at a wine press as something entirely different, we might not have the printing press today and you would be reading a manual handwritten by a scrivener (and paid a lot more for it). Imagine the other timeframe seller and the other timeframe buyer as two distinct personalities, two separate entities who stand on opposite sides of a game board in the shape of an exchange pit. They both have their fingers on big buttons; one says “sell” and the other “buy.” In the pit are miniature locals, yelling and gesturing as they do their trades. Other timeframe participants are battling for market control, and they enter the market when they feel price has gotten away from value or some external information convinces them to act. For example, a significant news event might cause the other timeframe buyer to enter the market and drive price upward for the entire day.

This example is obviously only an imaginative idea, but the other timeframe participants often do act as if they were individuals, and it is not always possible to tell why they enter the market. The point is, to successfully trade the futures market, you must understand what the other timeframe is doing and position yourself with them.

## Going with the Crowd

In a classic *Candid Camera* TV show, a man waits for an elevator. When it arrives, everyone on it is facing the back of the elevator, so he gets on and faces backward also. If you blindly follow the majority, you will usually be

going the wrong way. As we said before, the majority of market participants do not make money.

This is a pretty bold statement, but if you stop and think about how many times the big name analysts have been plain wrong, it doesn't seem so far fetched. Nonetheless, when the big movers on the Street talk, most everybody listens—it is much easier to dogmatically rely on an expert than to be a rugged individualist who makes his own decisions. When you rely solely on yourself, you alone take pride in reaping the rewards of success—but there is also no one else to blame for defeat. The tendency to be a follower is not an easy thing to realize or admit. Not surprisingly, one of the primary reasons many traders use a technical (mechanical) trading system is to take themselves out of the decision-making process.

These are but a few thoughts to keep in the back of your mind as we continue through the Novice stage and discuss more labels and terms. Again, the Market Profile is not a technical or mechanical system, and the discussion to follow should not be memorized for later “regurgitation.” Remember, everything is a part of the larger whole, and “a little information is a dangerous thing.”

Organizing the day began with a discussion of initial balance; initial balance represented the period of time where local traders (i.e., floor traders) searched for a range where two-sided trade would take place. Locals traded mostly in the day timeframe and provided liquidity. Floor trader daily volume often averaged over 50 percent of day timeframe activity; the floor trader attempted to get in-between every trade; they attempted to buy from the seller and sell to the buyer. The importance of floors has continually diminished as off-floor, electronic, screen-based trading has evolved.

When floors were more of an integral part of trading I looked at the base that developed during the initial balance for early guidance; the broader the base the more stable the market was likely to be.

Electronic trading has provided far more transparency for traders; traders can now view volume at every price. Off-floor traders still attempt to make markets, which increases liquidity.

Another improvement is the faster dissemination of news; when floors were more dominant and news was slower to reach non-floor traders the locals had another advantage.

Initial balance today is slightly more ambiguous; however, it still represents early morning market activity.

## ■ Introduction to Day Timeframe Structure

When the local grocer priced his peanut butter below value in the “peanut butter extravaganza,” the consumer bought in a frenzy, leaving in its wake a single-print buying tail. Tails are an important piece of information in the anatomy of a Market Profile, for they indicate the presence of the other timeframe buyer or seller. A tail is an identifiable characteristic with definite implications. Whenever you see that particular pattern, you associate it with a specific set of facts, just as a linebacker learns, through experience, that certain formations indicate what the offense is going to do. On a bigger scale, the Market Profile as a whole tends to fall into readable patterns in the day timeframe, determined by the degree of involvement of the other timeframe participant. These patterns, when properly identified, can increase the day trader’s success, as well as provide information regarding what the market is trying to do in the longer term.

The labels we will give these patterns are not as important as understanding how the day evolves in relation to the initial balance and the confidence with which the other timeframe has entered the market. Think of the initial balance as a base for the day’s trading. The purpose of a base is to provide support for something, as the base of a lamp keeps the lamp from tipping over. The narrower the base, the easier it is to knock the lamp over. The same principle holds true for futures trading in the day timeframe. If the initial balance is narrow, the odds are greater that the base will be upset and range extension will occur. Days that establish a wider base provide more support and the initial balance is more likely to maintain the extremes for the day.

If you think of the other timeframe as a single personality, as in the game board analogy, it is possible to judge the activity of all the other timeframe buyers or sellers according to their level of “confidence.” Each day type is the result of varying degrees and forms of other timeframe activity, and this activity tends to fall into certain patterns. Keep these broader concepts of base and confidence in mind as we examine the six day types.

## ■ Normal Day

### Dynamics

The label “Normal day” is misleading, for in reality, “Normal” days are more the exception than the rule. Normal days are generally created by swift early entry of the other timeframe participant, which has the effect of establishing a wide

97 14 /32	A
97 13 /32	A
97 12 /32	A
97 11 /32	A
97 10 /32	A
97 9 /32	A
97 8 /32	A
97 7 /32	A
97 6 /32	A
97 5 /32	A
97 4 /32	AG
97 3 /32	AG
97 2 /32	AG
97 1 /32	AG
97 0 /32	AG
96 31 /32	AGHK
96 30 /32	AFGHKL
96 29 /32	AFGHKL
96 28 /32	AFGHKL
96 27 /32	AFHKL
96 26 /32	AEFHKL
96 25 /32	AEFHKL
96 24 /32	AEFHKL
96 23 /32	ABEFHKL
96 22 /32	ABEFHIKL
96 21 /32	ABCDEFHIJKL
96 20 /32	ABCDEFHIJL
96 19 /32	ABCDEHIJL
96 18 /32	ABCDEHIJL
96 17 /32	ABCDEIJL
96 16 /32	ABCDEIJL
96 15 /32	ABCDEJLM
96 14 /32	ABCDIJL
96 13 /32	ABCDIJL
96 12 /32	ABCDIJ
96 11 /32	ABCDIJ
96 10 /32	ACIJ
96 9 /32	ACIJ
96 8 /32	AC
96 7 /32	AC
96 6 /32	A
96 5 /32	A
96 4 /32	A
96 3 /32	

**FIGURE 2.4** Normal Day

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

initial balance. Thereafter, both the other timeframe buyer and seller auction price back and forth between them, as balanced, two-sided trade ensues.

Normal days are often caused by a news announcement early in the trading session that triggers a strong other timeframe reaction, driving price

quickly in one direction. For example, suppose that a bearish economic indicator released shortly after the open causes the other timeframe seller to aggressively enter the market and drive price lower. Eventually, price moves low enough to attract other timeframe buying, thus cutting off the selling activity. For the remainder of the day, there is little strong directional conviction and price balances between the extremes. An example of a Normal day is shown in Figure 2.4.

## Structural Characteristics

The primary characteristic of a Normal day is the wide initial balance, or base, that is not upset throughout the day. In Treasury bonds in Figure 2.4, the initial balance was established in A and B periods from  $96\frac{4}{32}$  to  $97\frac{14}{32}$ —well over a point wide. Other timeframe sellers entered on the upper extreme because price auctioned too high, creating a strong single-print selling tail, while other timeframe buyers entered on the lower extreme as price auctioned too low, creating a single-print buying tail. Price spent the rest of the day auctioning within the extremes.

On the surface, Normal days might appear easy to trade. However, imagine the anxiety in placing an order to buy just after price has dropped over a point! The bottom appears to be literally dropping out of the market, and you have to pick up that phone and say “buy it.” This is not to say that every time a market drops a point you should step up and buy—that would be financial suicide. But as we proceed through the more common day types and you observe them through your own experience, you will begin to develop an understanding of which day timeframe patterns and logical market situations will give you the confidence to buy against such a break. We bring this up primarily to touch on two key principles that you will no doubt grow tired of by the end of this book. They are:

*The best trades often fly in the face of the most recent market activity, and never lose sight of the bigger picture.*

### ■ Normal Variation of a Normal Day

#### Dynamics

A Normal Variation of a Normal day is characterized by market activity early in the trading session that is less dynamic than that of a Normal day. As the day progresses, however, the other timeframe enters the market and substantially

extends the range. It is as if the other timeframe participant had watched the auctions for a while, then decided price was opportune and entered aggressively. The other timeframe's conviction is more evident, due to range extension on this type of day (compared to a Normal day). In Figure 2.5, the other timeframe seller auctioned price downward in D period until the other timeframe buyer responded to lower prices and cut off the selling.

100 12 /32	A	A	A
100 11 /32	A	A	A
100 10 /32	A	A	A
100 9 /32	A	A	A
100 8 /32	AB	AB	AB
100 7 /32	AB	AB	AB
100 6 /32	AB	AB	AB
100 5 /32	AB	AB	AB
100 4 /32	AB	AB	AB
100 3 /32	AB	② AB	③ AB
100 2 /32	AB	ABC	ABC
100 1 /32	AB	ABC	ABCL
100 0 /32	AB	ABCD	ABCDL
99 31 /32	AB	ABCD	ABCDL
99 30 /32	AB	ABCD	ABCDL
99 29 /32	AB	ABCD	ABCDGKLM
99 28 /32	B	BD	BDFGKLM
99 27 /32	B	BD	BDFGHJKLM
99 26 /32	.	D	DEGHJKLM
99 25 /32	.	D	DEFGHJKLM
99 24 /32	.	D	DEFGHJKLM
99 23 /32	.	D	DEFGHJKLM
99 22 /32	.	D	DEFHIJKL
99 21 /32	.	D	DEFHIJK
99 20 /32	.	D	DEFHIJK
99 19 /32	.	.	FHIJ
99 18 /32	.	.	HI
99 17 /32	.	.	HI
99 16 /32	.	.	.
	A-B	A-D	A-L

**FIGURE 2.5** Normal Variation of a Normal Day

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

For the remainder of the day, trade is two-sided and a new area of balance is established.

## Structural Characteristics

Normal Variations typically do not have quite as wide of an initial balance as Normal days (point 1 in Figure 2.5). The initial balance, or base, is upset on one side by other timeframe range extension, usually early in the day. In Figure 2.5, the other timeframe seller extended the range down in D period, “tipping over” the base to the downside (point 2). For the duration of the day, the market’s auction process involves the other timeframe buyer, other timeframe seller, and the local (referred to as two-timeframe trade). On this day, selling range extension causes value to be established lower (point 3).

### ■ Trend Day

#### Dynamics

There are two types of Trend days: the standard Trend day and the Double-Distribution Trend day. The most important feature of a standard Trend day is the high level of directional confidence that is evident throughout the day. The other timeframe buyer or seller remains in control of the auction process virtually from the day’s open to its close. In addition, as a Trend auctions higher or lower, it continues to draw new business into the market, thus creating unidirectional, sustained price movement fueled by higher volume.

## Structural Characteristics

On a Trend day, the open forms the upper or lower extreme in the large majority of cases (point 1 in Figure 2.6), because the other timeframe is usually in control from the opening bell. In the Trend day example in Figure 2.6, the other timeframe seller extends the range downward during multiple time periods, remaining in control for the entire day (points 2 and 3). Such unidirectional activity is referred to as a “one-timeframe” market. During a one-timeframe buying Trend day, each time period will auction to a higher (or equal) price level without auctioning below the previous time period’s lows. Conversely, in a one-timeframe selling Trend day, each additional time period will equal or extend below previous periods without

99 24 /32	O	O	O
99 23 /32	A	A	A
99 22 /32	A	A	A
99 21 /32	ABD	ABD	ABD
99 20 /32	ABCD	ABCD	ABCD
99 19 /32	① ABCD	② ABCDE	③ ABCDE
99 18 /32	ABCD	ABCDE	ABCDE
99 17 /32	ABCD	ABCDE	ABCDE
99 16 /32	ABC	ABCE	ABCE
99 15 /32	BC	BCE	BCE
99 14 /32	BC	BCEFG	BCEFG
99 13 /32	B	BEFG	BEFG
99 12 /32	B	BEFG	BEFG
99 11 /32	.	EFG	EFG
99 10 /32	.	EFGH	EFGH
99 9 /32	.	EFGH	EFGH
99 8 /32	.	EGH	EGH
99 7 /32	.	EGH	EGH
99 6 /32	.	GH	GH
99 5 /32	.	GH	GH
99 4 /32	.	H	HIJ
99 3 /32	.	H	HIJ
99 2 /32	.	H	HIJ
99 1 /32	.	H	HIJ
99 0 /32	.	H	HJK
98 31 /32	.	H	HJK
98 30 /32	.	H	HJK
98 29 /32	.	H	HJK
98 28 /32	.	H	HJK
98 27 /32	.	H	HJKL
98 26 /32	.	.	JKL
98 25 /32	.	.	JKL
98 24 /32	.	.	JKL
98 23 /32	.	.	KL
98 22 /32	.	.	KL
98 21 /32	.	.	KL
98 20 /32	.	.	KL
98 19 /32	.	.	KL
98 18 /32	.	.	KL
98 17 /32	.	.	L
98 16 /32	.	.	.

A-D

A-H

A-L

**FIGURE 2.6** Trend Day. O designates the Open.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

auctioning above the previous period's highs. For example, in Figure 2.6, E period extended below D on the downside, thus extending the range to begin the trend day. Then G auctioned lower than E (without auctioning above the E period high), H lower than G, J lower than L, and so on.

One-timeframe conditions are a good indication of other timeframe control and a potential Trend day.

A Trend day differs from a Normal Variation day in that the Trend day's Profile is generally thinner and more elongated, usually no more than four or five TPOs wide at any point. Failure to recognize and accept that one is in a Trend day is one of the most costly mistakes a trader can make. Several days of trading profits can be lost in one trading session if you are positioned against the trend. It is important to identify early that either the other timeframe buyer or seller is in clear control and position yourself with them.

## ■ Double-Distribution Trend Day

### Dynamics

The second type of Trend day, the Double-Distribution Trend day, is relatively inactive during the first few hours of the trading session. Market participants possess a low level of conviction, resulting in a narrow base. Later in the session, a change in events causes the other timeframe to perceive price to be unfair at current price levels, enter the market aggressively, and substantially extend the range. This later entry by the other timeframe drives price to a new level, where a second balance region develops. The Double-Distribution Trend day does not possess the steady confidence of a typical Trend day and must stop and reassure itself after a substantial move.

### Structural Characteristics

A very small initial balance is the first indication of a potential Double-Distribution Trend day. Again, the more narrow the base, the easier it is to overwhelm this area and auction quickly to a new level (point 1 in Figure 2.7). In Figure 2.7, the other timeframe seller extends the range down in F and G periods (point 2). Lower prices are accepted as value forms below the original value area in a new distribution, separated by single TPO price prints (point 3). This new trading range generally holds throughout the day, often providing useful reference points and good trading opportunities for day traders.

The single prints separating the two distributions in a Double-Distribution Trend day become an important reference point near the

97 25 /32	A	A	A
97 24 /32	A	A	A
97 23 /32	A	A	A
97 22 /32	A	A	A
97 21 /32	AD	AD	AD
97 20 /32	ACD	ACD	ACD
97 19 /32	ACDE	ACDE	ACDE
97 18 /32	① ACDE	ACDE	ACDE
97 17 /32	ABCDE	ABCDE	ABCDE
97 16 /32	ABCE	ABCEF	ABCEF
97 15 /32	ABE	ABEF	ABEF
97 14 /32	ABE	ABEF	ABEF
97 13 /32	BE	BEF	BEF
97 12 /32	B	BF	BF
97 11 /32	B	BF	BF
97 10 /32	.	F	F
97 9 /32	.	F	F
97 8 /32	.	F	① F
97 7 /32	.	F	F
97 6 /32	.	F	F
97 5 /32	.	F	F
97 4 /32	.	FG	FG
97 3 /32	.	FG	FG
97 2 /32	.	G	GK
97 1 /32	.	G	GKL
97 0 /32	.	G	GHKL
96 31 /32	.	G	GHKL
96 30 /32	.	G	GHKL
96 29 /32	.	G	GHIKL
96 28 /32	.	G	GHJKL
96 27 /32	.	G	GHJKL
96 26 /32	.	G	① GHJKL
96 25 /32	.	.	HJKL
96 24 /32	.	.	HJKL
96 23 /32	.	.	HJLM
96 22 /32	.	.	HJLM
96 21 /32	.	.	HJLM
96 20 /32	.	.	HJL
96 19 /32	.	.	HJ
96 18 /32	.	.	H
96 17 /32	.	.	H
96 16 /32	.	.	

A-E

A-G

A-L

**FIGURE 2.7** Double-Distribution Trend Day

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

end of the day. If price auctions back into the single prints during the latter time periods, in effect making them double prints, something has changed, and the second distribution is no longer accepted as value. For example, in the Double-Distribution Trend in Figure 2.7, a price probe into the F period

single prints (point 4) would indicate that a strong other timeframe buyer had entered, or that the other timeframe seller conviction that caused the initial range extension is no longer present.

## ■ Nontrend Day

### Dynamics

A Nontrend day is characterized by a complete lack of directional conviction. Nontrend days often occur before the release of a big economic number, a news event, or a holiday. Market participants balance their positions in expectation of the market's reaction to the external stimuli—there is simply no activity. Trade is not being facilitated in any direction, for there is little market participation and no confidence.

## Structural Characteristics

A Nontrend day starts out looking as if it might be a Trend day, for the initial range is narrow. However, the other timeframe never surfaces and there is no range extension. The market is waiting for new information before making its next directional move. A typical Nontrend day in Treasury bonds is shown in Figure 2.8.

## ■ Neutral Day

### Dynamics

When a Neutral day occurs, it means that the other timeframe buyer and seller are not far apart in their view of value. When they have similar views of value, the market balances, auctioning back and forth between them. During a Neutral day, both other timeframe participants are present (if only one were active, there would be an imbalance and a Trend or Normal Variation type of day would occur).

It is important to keep in mind that while the other timeframe buyer and seller may be close in their perception of value, they rarely agree on the same price, just as the automobile producer rarely agrees with the long-term car buyers. Therefore, the other timeframe buyer and seller do not trade with each other, they trade with the local—the middleman.

100 4 /32 A  
100 3 /32 A  
100 2 /32 AL  
100 1 /32 AL  
100 0 /32 AL  
99 31 /32 AL  
99 30 /32 AL  
99 29 /32 AL  
99 28 /32 ACGKL  
99 27 /32 ABCGK  
99 26 /32 ABCGHK  
99 25 /32 ABCDEFGHIK  
99 24 /32 ABCDEFGHIJK  
99 23 /32 BCDEFHIJK  
99 22 /32 BCDEHIJ  
99 21 /32 BCDJ  
99 20 /32 BCD  
99 19 /32 BC  
99 18 /32 B  
99 17 /32 B  
99 16 /32 .  
99 15 /32 .

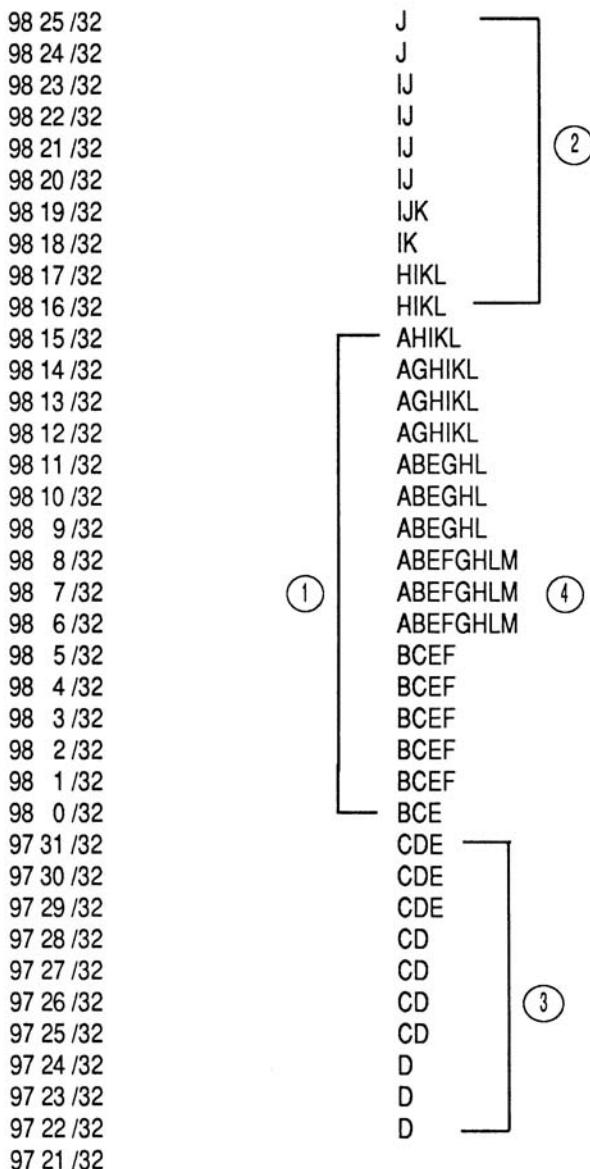
**FIGURE 2.8** Nontrend Day

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## Structural Characteristics

On a Neutral day, the base width is somewhere between a Trend and Normal day. It is not so small as to be easily upset and not wide enough to hold the day's extremes (point 1 in Figure 2.9). The salient feature on a Neutral day is the fact that both the other timeframe buyer and the other timeframe seller are active, as is evidenced by range extension on both sides of the initial balance (points 2 and 3). This indicates a market in balance (point 4), for all timeframes are involved.

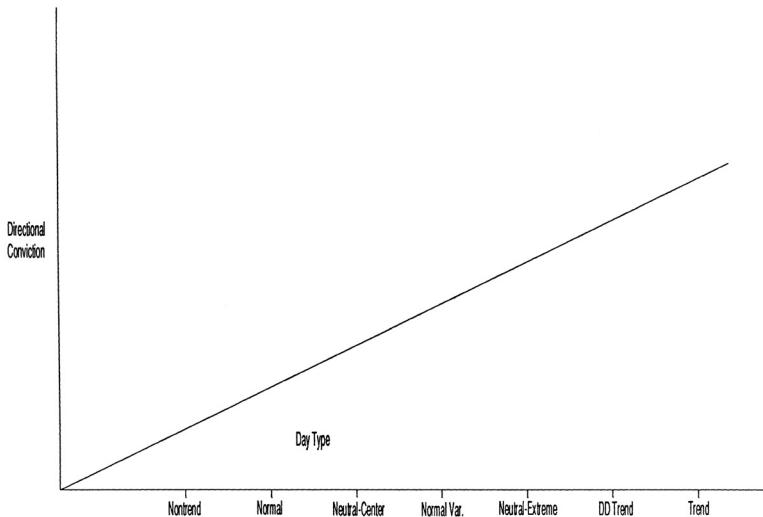
There are two types of Neutral days: Neutral-center and Neutral-extreme. On a Neutral-center day, the day closes with price in the middle of the range,



**FIGURE 2.9** Neutral Day

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

indicating a lack of confidence and a balance between the other timeframe buyer and seller. On a Neutral-extreme day, price closes on either the high or low extreme for the day, indicating a hypothetical “victory” in the day timeframe battle for control between the other timeframe buyer and seller.



**FIGURE 2.10** Directional Conviction According to Day Type

If the day closes on the upper extreme on a Neutral day, then the other timeframe buyer has higher directional conviction. Conversely, if the close is on the lows, the other timeframe seller has exhibited greater confidence.

## ■ Day Type Summary

The chart in Figure 2.10 displays the type of day on the horizontal axis and the level of directional conviction that the day exhibits on the vertical axis. The result is a gradually ascending line from lowest conviction to highest, from a Nontrend day to a Trend day. Again, the labels we have given the day types are not carved in stone, but are used only for learning purposes. What should become clear is that by monitoring a day's conviction very early in the trading session, traders can quickly begin to understand and visualize how the day will develop.

At this point you know the basic “objective facts and features” about the Market Profile. Like David the novice piano player, you have learned the foundation for further learning, but there is a long way to go. In the following sections, the concepts you have learned as a novice will serve as the foundation for understanding the market, like the staff and notes are the foundation for understanding music.

Remember to actively interpret and combine your new knowledge with your experience in the market. Do not put the facts you have learned as a novice away and say, “Okay, what’s next?” The learning process is an ongoing synthesis, each part fitting into the next like a puzzle. Trying to become an expert trader without a continuum between the stages is like trying to put together a puzzle with all the pieces the same color. Look for the big picture.



# Advanced Beginner

When David reached the advanced beginner stage, he could play a few simple songs all the way through. Then his instructor gave him a new song to learn that was in a different key signature, explaining that certain notes are raised and must be played on the black keys. When David tried to play it, he became frustrated and exclaimed, “This song doesn’t work.”

He was playing every note as it was written, the way he had learned as a novice. The instructor calmly explained that in any key signature besides C major, certain notes must be played differently.

David fell victim to tunnel vision, for he was thinking only of the limited rules he had memorized and was not incorporating the new information in his playing. He then blamed the written music to explain his failure and frustration. The musical score is not right or wrong; it is only a passive medium that communicates a certain piece of music.

Tunnel vision is an easy trap to fall into, especially when learning large amounts of new information. It is not uncommon to hear beginning Market Profile traders comment, “The Profile doesn’t work.” There is nothing about the Profile that does or does not work. It is only a passive gauge of market-generated information—a way to organize the data, much like the musical score. What fails to work is the trader’s ability to see the big picture objectively and realize that everything is a series of facts surrounded by other circumstances. Only when all the circumstances are interpreted together and a holistic image develops will successful trading occur.

## ■ Building the Framework

In Advanced Beginner, we will begin to build upon the foundation established in Novice. You will learn many of the broad concepts that will serve as tools for building a framework for understanding the market-place through the Market Profile.

## ■ The Big Picture: Market Structure, Trading Logic, and Time

The big picture is made up of three broad categories of information: market structure, trading logic, and time. As a novice you learned the basics of market structure, the most tangible information offered by the Market Profile in the unique bell curve graphic. Very short-term structure is reflected through time price opportunities (TPOs) and the market's half-hour auctions. As the day progresses, the market begins to form one of the day types through range extension, tails, etc. We can see, measure, and name the physical aspects of the Profile. By the day's end, structure shows not only what happened, but also when it happened and who was involved. In short, market structure provides visible evidence of the actions and behavior of the market's participants. In this section, this structural evidence will be built upon and combined with time and trading logic.

Time is the market's regulator. In its broadest sense, time sets limitations on the day's trading by imposing a certain framework (i.e., the number of hours from the open to the close). Most traders see time only in its function of the closing bell, and do not consider its influence on price and opportunity. Without considering time, there is no way to judge value, and trading becomes a 50/50 gamble on price movement.

In the day timeframe, time validates price. The areas of the Market Profile's bell curve showing the greatest depth indicate the prices where trading spent the most *time*, thus establishing value for that day ( $\text{price} \times \text{time} = \text{value}$ ).<sup>1</sup> Understanding value and value area will become more and more important as we progress through the learning process.

Time also regulates opportunity. Consider an everyday life example. You are in the market to buy a pair of snow skis. You shop around long enough to get a good feel as to how much skis normally cost or what you consider

<sup>1</sup> J. Peter Steidlmayer and Kevin Koy, *Markets and Market Logic* (Chicago: The Porcupine Press, 1986), p. 66.

value. You don't need the skis right away, so you wait for a chance to buy them under value—you are a long-term buyer.

You know that after the ski season ends, most stores will have summer ski clearance sales, when price will temporarily drop below value. You also know that these prices will not last long, for time regulates opportunity. The stores could not afford to sell at such low prices all year and still make a profit. They are merely clearing excess inventory in preparation for new stock. To take advantage of the low price, you must act quickly.

The same principle is true in the futures market. Good opportunities to buy below value or sell above value will not last long, for price will move quickly with increased competition. If price stays below value for a long time, for example, it is no longer a good opportunity. Something has changed, and value is being accepted lower.

The third and most difficult category is trading logic. Trading logic is largely a product of experience, but it is more than just careful observation and practice; it is an understanding of *why* the market behaves the way it does. This understanding is best gained over time and through a conscious effort to understand the forces behind market movement. Certain aspects of trading logic can be taught in relation to structure and time, by derivative learning. For example, you know that a tail is an indicator of strong other timeframe activity on the extremes. If the tail is “taken out” by a price rotation back into the tail and TPOs build over time, trading logic says that something has changed, and the other timeframe buyer or seller that moved price quickly is no longer present or is less willing to respond to the same price levels.

The only way to really understand the market and its logic is to observe, interpret, and trade. Remember, much learning does not teach understanding. We will be integrating trading logic throughout the remainder of the book.

## A Synthesis: Structure, Time, and Logic

Imagine two children, each racing to complete a giant jigsaw puzzle. Both are working on the same puzzle with an equal number of pieces (the same structure), but one child has a picture of the finished puzzle and one does not. Obviously, the child with knowledge of the whole picture will finish first.

The Profile graphic is much like an intricate puzzle. Its structure reveals more and more as the day nears completion. But, like the child with a

picture of the finished puzzle, traders with an understanding of the big picture—those that can see the market develop before it is revealed by structure—are generally the first to put together the pieces of the market. Market time and trading logic are the two big-picture components of a whole-market understanding. Only through a synthesis of all three components will a trader successfully put together the puzzle. We will now discuss market structure, time, and trading logic according to five general criteria:

1. Ease of learning
2. Amount of information
3. Recognition speed
4. Trade location
5. Confidence level

**Ease of Learning** Ironically, the order in which structure, time, and logic are usually learned is opposite from their order of occurrence in the marketplace—not because they are taught incorrectly, but rather because market structure is learned more quickly and easily than the roles of time and logic. Market structure is the finished product, and it is always easier to see the finished product than to identify the stages of its assembly. Mastering market structure is largely a matter of successfully recognizing and interpreting the Profile graphic. Understanding the role of time, however, requires a much deeper understanding of the market's auction process. Trading logic is the hardest to learn, particularly from a book or instructor, for logic is the ultimate outcome of trading practice and experience. Trading logic is the raw human instinct of the marketplace. True trading logic comes only through intensive participation and careful examination of real market situations.

**Amount of Information** While market structure is clearly the most tangible information offered by the Profile, it also contains the greatest amount and variety of information. Why, then, is it so difficult to interpret market structure in real trading situations? It is relatively simple to recognize and interpret the day's final structure. The difficulty lies in recognizing what is transpiring as the structures are building.

The inability to identify a developing structure does not necessarily mean that the information is lacking. It is simply not conveyed in an easily readable format. In addition, it is possible to monitor the wrong information. Market time and trading logic provide very little in terms of visible, tangible information—but the information is in the market. Successful trading

requires the ability to find and interpret the more subtle clues found in time and logic, and integrate them with the developing structure.

**Recognition Speed** It takes time to build structure. Thus, while the Profile structure reveals a lot, the sheer fact that time must transpire suggests that fundamental changes occur in the market before they are revealed by structure. Structure acts as the market's translator, and translated information is second-hand information. The market has already spoken in the form of time and logic. Traders who rely exclusively on structure without integrating time and logic will be late in entering and exiting the market, just as a catcher who holds his throw until he sees how fast a man stealing second base can run will never make the out.

**Trade Location** Later recognition leads to later entry and exit, which in turn leads to less desirable trade location. For example, range extension (structure) confirms that other timeframe buyers have entered the market. But *when* did they enter the market? If we rely solely on structure, we do not realize the other timeframe buyer's point of entry until the point of range extension—that is, when price is on the day's high. Buying the high results in poor day timeframe trade location, at least temporarily. In many cases, it is possible to know that buyers are assuming control before the actual structural confirmation (range extension) through an understanding of market time and trading logic.

**Confidence Level** Trading based on structure provides the greatest level of comfort and confidence, for there is obvious proof on which to base a decision. The more information we have in our favor, the more comfortable we are with a trade. Unfortunately, visible information and opportunity are inversely related. The more structural information present, the less an opportunity still exists. Thus, if a trader waits for too much information, chances are good that the real opportunity has been missed. If all the evidence is present and visible, then you are far from the first to have acted on it and probably have poor trade location.

Market time, followed by trading logic, provides the least amount of visible evidence. To the advanced beginner trader, trades based on time and logic offer a lower level of confidence, for the trader is not yet comfortable outside the realm of structure. Seasoned traders with a whole-market understanding, on the other hand, trade using logic and time and then monitor activity for the additional information (structure) necessary to increase their confidence in the trade.

**Summary** Logic creates the impetus, time generates the signal, and structure provides the confirmation.

The preceding discussion delineates the many differences among structure, time, and logic, but the answer to a practical sense of their synthesis must be developed through time and experience. Such coordination is gained only through observing and acting on market-generated information every day (doing the trade). Although the Market Profile is best known for the Profile graphic, or structure, experience has shown that understanding the influence of time and trading logic is more important to reaching a holistic view of the marketplace. Putting in the extra effort to fully understand the building blocks of structure—market time and trading logic—will better prepare traders to anticipate and take advantage of trading opportunities as they develop, not after they have passed.

## ■ Evaluating Other Timeframe Control

We have stressed in general terms the importance of determining who, if anyone, is in control of the market. Let us now enter into evaluating other timeframe control in a more detailed, conclusive discussion. The elements that signify other timeframe control are perhaps the most deceptive of all market-generated information we will cover. Often, information that we believe we are interpreting objectively is presented in such a way that its actual nature is misinterpreted.

An example of such an illusion often occurs when a market opens exceptionally above the previous day's value area. The other timeframe seller responds to the higher open, enters the market aggressively, and auctions price lower all day. However, at the conclusion of the trading session, the day's value is ultimately higher. In the day timeframe, other timeframe sellers dominated the market's auctions through their attempts to return price to previously accepted value. But the responsive selling was not strong enough to completely overpower the higher opening triggered by a strong other timeframe buyer. Day timeframe structure indicated weakness, while the market was actually very strong in the longer term.

As illusions go, the preceding example is relatively easy to detect and evaluate. Unfortunately, the information generated by the market is not always so clear. In most cases, a more analytical approach is needed to effectively gauge who is winning the battle for control between the other timeframe buyer and seller.

To evaluate other timeframe control, we will examine range extension, tails, activity occurring in the “body” of the Profile, and value area placement in relationship to the previous day. In addition, each of these factors will be studied further, based on whether the participants are acting on their own initiative or are willing to act only in response to an advantageous market movement. Another timeframe participant who acts on his own initiative is usually more determined than one who merely responds to a beneficial opportunity.

This section will deal with evaluating who has control in the day timeframe. The ability to process information through the Profile structures enables a trader to recognize attractive day timeframe trades. Long-term traders must also be able to read and interpret day timeframe structure, for a long-term auction is simply a series of day auctions moving through time. Long-term auction evaluation and value area placement requires far more analysis and will be detailed in Chapter 4. We mention it here to avoid creating the illusion that day timeframe control is all conclusive—it merely reflects activity occurring during one day in the life of a longer-term auction.

Learning to read and interpret day timeframe structure is beneficial to all market participants at one time or another. This understanding most obviously influences the individual who trades only in the day timeframe—in other words, one who begins and ends each day with no position. However, all long-term traders are also day traders on the day that they initiate or exit a trade. The concept of longer timeframe participation in the day timeframe is best expressed through two examples.

Imagine a food company that purchases a large amount of corn for its cereal processing plant. The food processor has an opinion that corn prices will rise but also wants to be appropriately hedged against loss. Thus, as the price of corn rises, the company gradually sells grain futures against its inventory, in effect scaling in a hedge. On one particular morning, corn opens far above the previous day’s value, but early Profile structure indicates weakness. The processor takes advantage of the higher open and expands the size of its hedge (by selling more futures). However, as price auctions lower over the course of the day, the processor may partially close out its shorts, seeking to replace them later at higher prices. The food company’s hedging goals are clearly long term. However, when the market created an opportunity in the day timeframe, the food company elected to trade a portion of the hedge.

In a second example, a futures fund manager with a bullish bias may elect to trade around his long-term positions by taking advantage of day

timeframe structure. If market structure indicates that the market is likely to break, he may sell a percentage of his position, reestablishing it later in the day. In fact, if there is enough volatility in the market, he may reposition a portion of his inventory more than once on the same day.

Putting aside the longer term for a later section, we will now begin the discussion of other timeframe control in the day timeframe.

## ■ Other Timeframe Control on the Extremes

### Tails (or Extremes)

Tails are created when an aggressive buyer or seller enters the market on an extreme and quickly moves price. Generally, the longer the tail, the greater the conviction behind the move (a tail must be at least two TPOs long to be significant). A tail at the upper extreme of a day's profile, for example, indicates a strong other timeframe seller entered the market and drove price to lower levels. In terms of other timeframe control, no tail may also be significant. The absence of aggressive other timeframe activity on an extreme indicates a lack of buyer or seller conviction.

### Range Extension

Range extension is another structural feature that identifies control and helps gauge buyer/seller strength. Multiple period range extension is generally the result of successively higher or lower auctions. The stronger the control, the more frequent and elongated the range extension, resulting in a more elongated Profile (an elongated Profile is an indication of good trade facilitation). In a Trend day, for example, the other timeframe's dominance is clearly evident through continued range extension and price movement throughout the day.

## ■ Other Timeframe Control in the Body of the Profile

The role of the larger institutions and commercial participants in the marketplace is much greater than merely seeking to take advantage of price as it moves away from value (evidenced by tails and range extension). Many of the long-term commercial users of the futures exchange have a certain amount of business they must conduct every day. For example, General Mills must put

boxes of cereal on millions of breakfast tables every morning. Therefore, they are constantly in the market as part of their daily business.

This more subtle, involuntary other timeframe activity generally takes place within the body of the Profile. Nonetheless, it plays an important part in our evaluation of the competition that goes on between the other timeframe participants. The TPO count provides a means of measuring the activity of the other timeframe within the body of the day's Profile.

## TPO

Count the Time Price Opportunity as the smallest unit of market measurement. As mentioned earlier, TPO stands for Time, the market's regulator, and Price, the market's advertiser, together creating the Opportunity to buy or sell at a given price at a particular time. Monitoring the TPO count helps evaluate other timeframe control within the developing value area. Specifically, the TPO count measures the level of imbalance (when such an imbalance exists) between the other timeframe participant and the day timeframe (mostly local) trader.

The key to understanding how an imbalance can occur is to recognize that the other timeframe buyer does not deal directly with the other timeframe seller. Recall that the local, or scalper, acts as a middleman between these two long-term participants. Thus, the other timeframe buyer generally buys from a local, and the other timeframe seller typically sells to a local. Imbalance occurs when there are more other timeframe buyers than sellers or more other timeframe sellers than buyers, leaving the local with an imbalance. Before we can learn how to measure this imbalance, we must first gain a better understanding of how the locals conduct their business.

The locals position themselves between the flow of outside buy orders and outside sell orders (orders placed predominantly by off-floor, other timeframe participants). For example, suppose that a floor broker receives an order to sell 100 contracts at, say, \$5.00 per contract. The locals would buy the contracts from the broker and then turn around and sell them to another floor broker who has an order to *buy* 100 contracts at \$5.02. In this situation, the locals perform their role of facilitating trade and, in return, receive a small margin of profit.

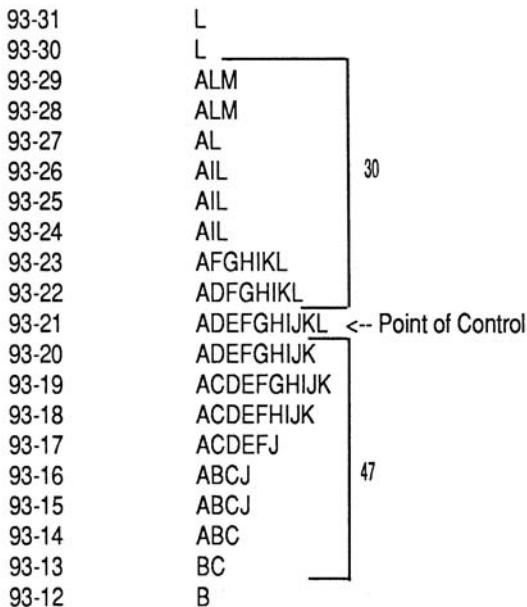
The trade facilitation process is seldom so ideal, however. Often there are more other timeframe buyers than sellers—causing the local's inventory to become overloaded. For example, if an usually large number of sell orders enter the pit, the local's inventory begins to accumulate to a point where he

gets “too long.” In other words, the local has purchased too much from the other timeframe seller. If the other timeframe buyer does not appear relatively quickly, the local must bring his inventory back into balance in some other way. One’s first thought would be that the local simply needs to sell off his excess inventory. However, this is not so easy, for reversing and selling would only serve to accentuate the selling that is already flowing into the market. Therefore, his first priority is to stop the flow of outside sell orders by dropping his bid in hopes that the market will stabilize and he can balance his inventory. If lower prices do not cut off selling, the local may then be forced to “jump on the bandwagon” and sell (liquidate) his longs at a lower price.

Viewed from another perspective, suppose you decided to try to make extra spending money by scalping football tickets. A month before the chosen game, you purchased 20 tickets from the box office at \$10 each. In this case, the box office is the other timeframe seller and you are the day timeframe buyer. Over the ensuing month, your team loses every game and slips from first to fifth place. Not surprisingly, the attendance is dismal on the day of the game at which you intend to sell your tickets. Few other timeframe buyers (fans) show up. In order to get rid of your inventory and recover at least part of your costs, you are forced to sell your tickets at \$8 instead of \$12 or \$15. In this example, there were more other timeframe sellers than buyers. Consequently, price had to move lower to restore balance.

The same concepts apply to the futures marketplace. If we can identify imbalance before it corrects itself, then perhaps we can capitalize on it, too. Tails and range extension are more obvious forms of other timeframe presence, but on a volatile or choppy day, much of the imbalance occurs in more subtle ways within the value area. The TPO count is an excellent method for evaluating day-to-day imbalance that occurs within the developing value area.

The TPO count is found by isolating the point of control (the longest line closest to the center of the range), summing all the TPOs above it and comparing that number to the total number of TPOs below it. Single-print tails are excluded from the count, because their implications are clear and have already been considered when examining activity on the extremes. Remember, the point of control is significant, because it indicates the price where the most activity occurred during the day and is, therefore, the fairest price in the day timeframe ( $\text{price} \times \text{time} = \text{value}$ ). Figure 3.1 illustrates the TPO count.



Total TPO's Above Point of Control:      Total TPO's Below Point of Control:

2 ALM*	9 ADEFGHIJK
2 ALM*	10 ACDEFGHIJK
2 AL	9 ACDEFHIJK
3 AIL	6 ACDEFJ
3 AIL	4 ABCJ
3 AIL	4 ABCJ
+ 7 AFGHIKL	+ 3 ABC
8 ADFGHIKL	2 BC
-----	-----
30	47

**FIGURE 3.1** Calculation of the TPO Count

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

The total TPO figure above the point of control represents other timeframe traders willing to sell and stay short above value, while total TPOs below the point of control represent other timeframe traders willing to buy and stay long below value. The resulting ratio is an estimate for

buyer/seller imbalance in the value area. For example, a ratio of 32/24 breaks down to 32 selling TPOs above the point of control, and 24 buying TPOs below. Note that a value area is not specifically calculated. Rather, the methodology of the TPO count (i.e., single-print rejections are not counted) implies value.

Portrayed in Figure 3.2 are three developing versions of the Treasury bond Profile of January 29, 1988. Profile A displays time periods A–F of the day. The 29th saw an opening substantially higher than the close of the previous day, followed by an early-morning sell-off as price attempted to auction down.

	A-F	A-H	A-Close	
94 0 /32	.	.	.	
93 31 /32	.	.	L	
93 30 /32	.	.	L	
93 29 /32	A	A	ALM	
93 28 /32	A	A	AL	
93 27 /32	A	A	AL	
93 26 /32	A	A	AIL	
93 25 /32	A	A	AIL	
93 24 /32	O	O	OIL	
93 23 /32	AF	AFGH	AFGHIKL	30
93 22 /32	ADF	ADFGH	ADFGHIKL	
93 21 /32	ADEF 13	ADEFGH 21	ADEFGHIJKL <	
93 20 /32	ADEF	ADEFGH	ADEFGHIJK	
93 19 /32	ACDEF <	ACDEFGH <	ACDEFGHIJK	47
93 18 /32	ACDEF	ACDEFH	ACDEFHIJK	
93 17 /32	ACDEF	ACDEF	ACDEFJ	
93 16 /32	ABC 21	ABC 22	ABCJ	
93 15 /32	ABC	ABC	ABCJ	
93 14 /32	ABC	ABC	ABC	
93 13 /32	BC	BC	BC	
93 12 /32	B	B	B	
93 11 /32	.	.	.	
93 10 /32	.	.	.	
93 9 /32	.	.	.	
93 8 /32	.	.	.	
	Profile A	Profile B	Final Profile	

**FIGURE 3.2** TPOs in a Developing Market for Treasury Bonds, January 29, 1988  
*O* designates the open.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

As the trading day proceeds, however, our concern is with discovering exactly who is more aggressive (who is in control) within the developing value area. Occasionally, activity reflected by range extension and tails will give us some clues regarding which participant is more aggressive on the extremes. But the value area battles are more subtle and often much slower to develop. Monitoring the TPO count through time helps us measure how the wins and losses are stacking up and gives some indication of who will be the victor in the battle for control in the body of the Profile.

Examine Profile A again. A to F period registers a 13/21 TPO count, which favors the other timeframe buyers. Consider what this 13/21 TPO count logically means: The fact that the TPO count below the point of control is growing larger indicates that, although price is spending time below the point of control, *price is not going anywhere*.

Had other timeframe sellers been aggressive within the value area, there would have been downside range extension. Range extension would have lowered the point of control (and the perception of value), therefore balancing the TPO count and quite probably shifting it in favor of the sellers. With a TPO count building in the bottom half of the value area (buyers) and no selling range extension, chances are that it is the floor traders, or locals, who are selling to the other timeframe buyers.

Profile B in Figure 3.2 shows the TPO count through H period moving back into balance at 21/22. This temporary return to balance indicates that the locals' inventories became too short—in essence, *they had sold too much*—and were forced to cover (buy back) some of their shorts to bring their inventories back into line. Consequently, price rotated up in G and H periods, as the locals restored balance to their inventories.

Again, in the final Profile, other timeframe sellers were not present as price continued to rotate toward the day's upper extreme. The L period TPO print at 93 21/32 (bonds trade in 32nds of \$1,000), and subsequent L period range extension pulled the point of control higher, confirming a final TPO tally in favor of buyers, 30/47. This end-of-the-day imbalance often provides momentum into the following day.

## ■ Initiative versus Responsive Activity

Knowing whether the other timeframe participants are acting on their own *initiative*, as opposed to *responding* to opportune prices is also important to understanding their influence. Traders can determine if activity is initiative or responsive by comparing the relationship of the day's structure to the

previous day's value area. The previous day's value area acts as the truest, most recent indication of a level where price has been accepted over time. Four types of potential activity may emerge:

1. Initiative buying
2. Initiative selling
3. Responsive buying
4. Responsive selling

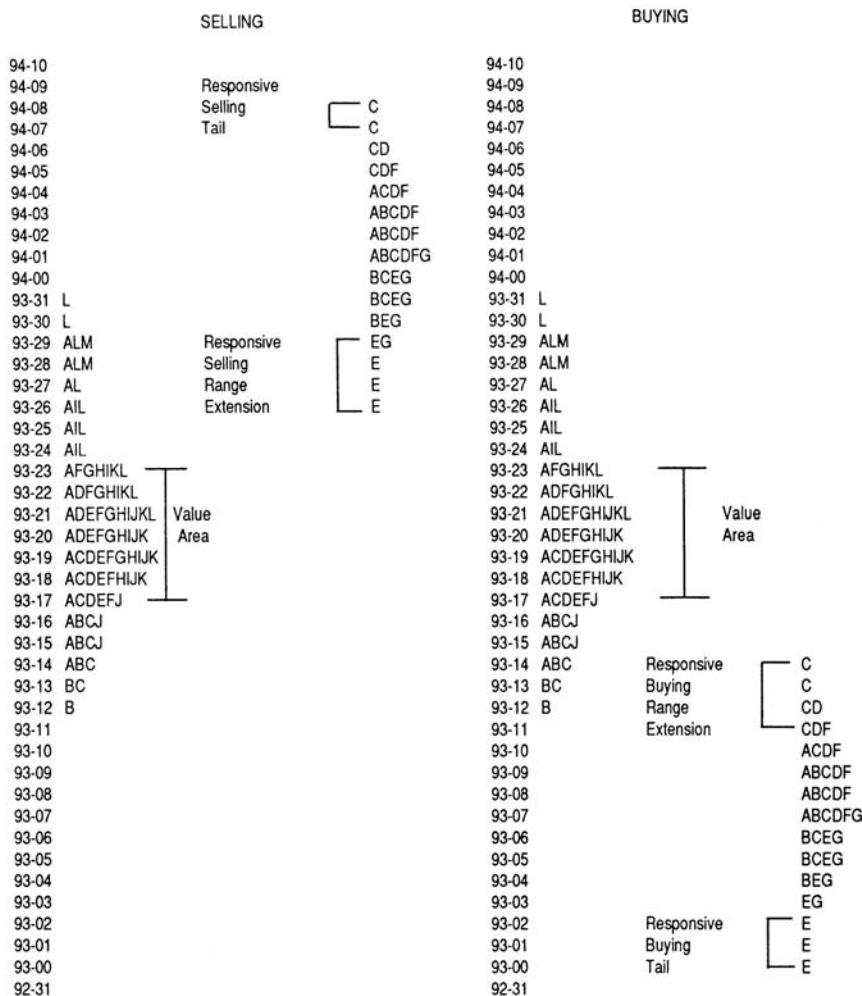
Briefly, initiative buying is any buying activity occurring within or above the previous day's value area. Conversely, initiative selling is any selling activity that takes place within or below the previous day's value area. Initiative activity indicates strong conviction on the part of the other timeframe.

Responsive activity is the opposite of initiative activity. Buyers respond to price below value, and sellers respond to price above value. Figures 3.3 and 3.4 illustrate these concepts in detail. Looking first at the lower right-hand side of Figure 3.3, the upward range extension in C period and the E period buying tail represent responsive buying. Buyers are responding to price considerably below the area of recent price acceptance. In other words, buyers have responded to the opportunity to buy cheap. *Keep in mind that if price auctions down and finds buyers, that alone is not responsive. It is the fact that price is below value that makes the buying responsive.*

A responsive buying tail is also initiative selling range extension. For example, when the grocer lowered prices in his peanut butter extravaganza, it created initiative selling range extension. Buyers responded to this price below value, returning price to previous levels in a responsive buying tail. *The initiative range extension and the responsive tail were one and the same activity.*

Referring again to Figure 3.3, notice that the flipside of the C period responsive buying range extension is a C period initiative selling tail. Similarly, the E period responsive buying tail was actually the outcome of a harsh rejection of E period initiative selling range extension. In Figure 3.4 we find the same thing: C period initiative buying range extension meets a responsive seller and eventually becomes a responsive selling tail. If range extension occurs in the last period of the day, however, it does not indicate a tail as well. A tail is only valid when confirmed by a rejection of price in at least one additional time period.

Range extension and tails occurring within the previous day's value area are also considered initiative. If people choose to buy or sell within the area of

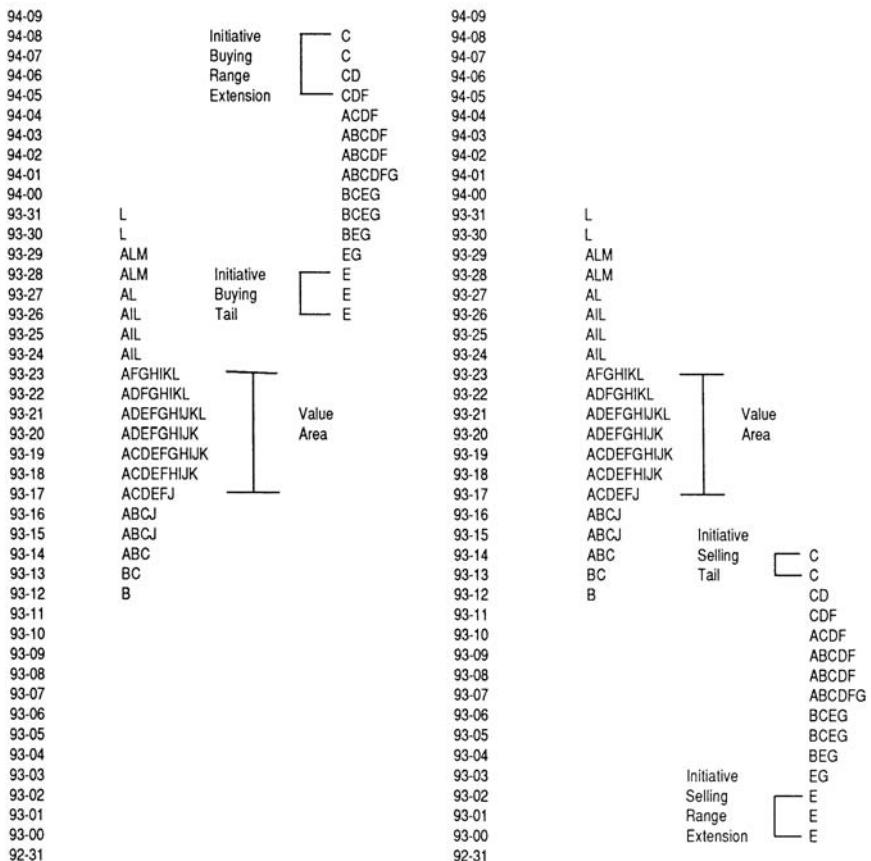
**FIGURE 3.3** Initiative versus Responsive Activity

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

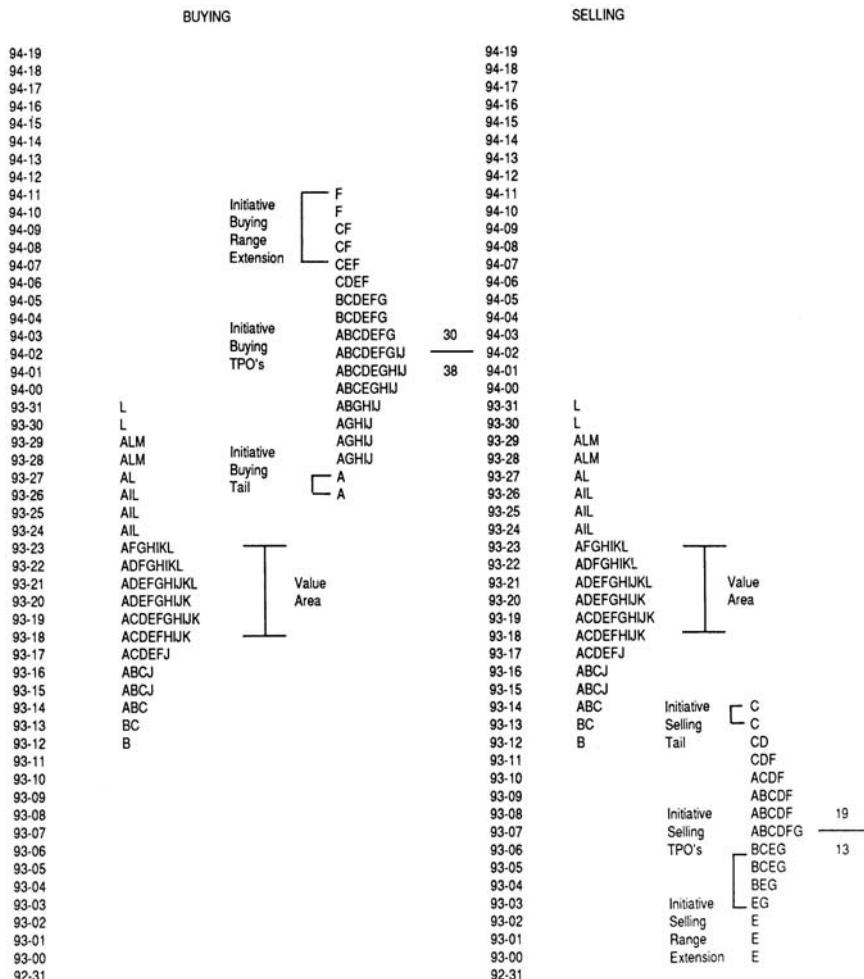
most recently perceived value, their free choice to agree with recent price levels is really an initiative decision in itself, for they are not responding to excess price. Like all the information you are learning, the concept of initiative and responsive action is not just a random designation that should be committed to memory, but rather a logical characterization of price's relationship to value.

## BUYING

## SELLING

**FIGURE 3.4** Initiative versus Responsive Activity

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

**FIGURE 3.5** Initiative versus Responsive TPOs

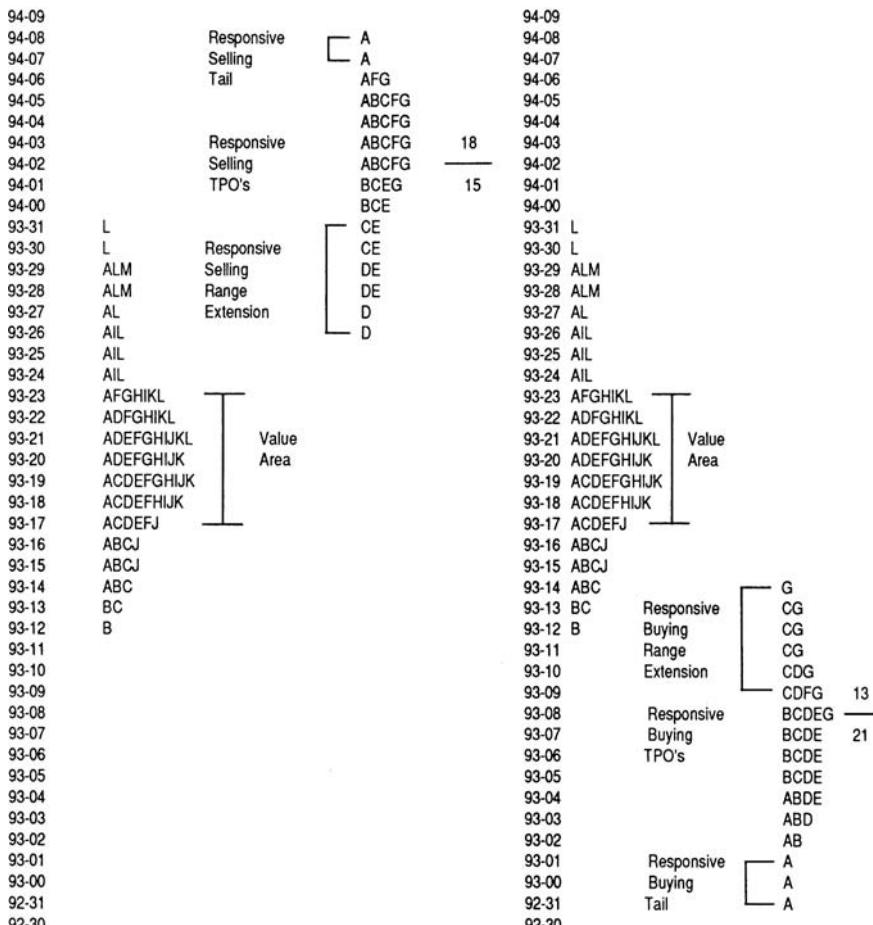
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## Trending versus Bracketed Markets

Understanding the dynamics of trending and bracketed markets, and the transition from one to the other, is one of the most difficult auction market concepts to grasp. In a very real sense, this could be due to the fact that such an understanding requires a firm grasp of overall market behavior, as well as the synthesis of a large part of all Profile knowledge. For this reason, we lay

## SELLING

## BUYING

**FIGURE 3.6** Initiative versus Responsive TPOs

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

the groundwork of trending and bracketed markets here, with a more detailed discussion to follow in the Competent section.

Let us begin with a few common dictionary definitions of a trend and a bracket in order to form a basic mental image of the two. *Webster's New Collegiate Dictionary* defines a trend: (a) "to extend in a general direction: follow a general course . . . to show a tendency," or (b) "the general movement in the course of time of a statistically detectable change; also: a statistical curve reflecting such a change." Unfortunately, there is no *absolute* way to define a trend, for it is a function of the market and your trading

timeframe. A trend, put simply, is a divergence of price away from value. For our purposes, the price divergence in a trend is characterized by a series of day auctions (value areas) moving in a clear direction over a long period of time. An example of such a long-term trend is illustrated between points 1 and 2 in the daily bar chart for Crude Oil in Figure 3.7. Figure 3.8 displays another trend occurring in the S&P 500 (between points 1 and 2) that ends in a bracket.

*Webster's* defines bracket: (a) "to place within or as if within brackets," or (b) "to establish a margin on either side of." A bracketed market is a series of price movements contained "as if within brackets." The market auctions back and forth between two price levels that serve as a margin on either end of the range. Referring to Figure 3.8 again, the S&P market began the bracketing process at point 2, then auctioned back and forth within the bracket enclosed by points 2 through 6.

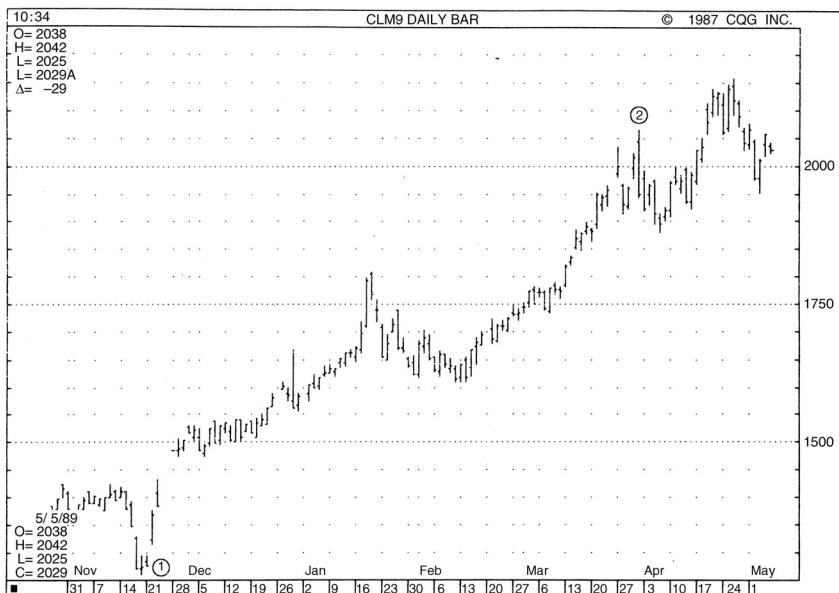
## Key Elements—A Brief Discussion

We have defined a trend as a divergence of price away from value. While the divergence may last for an extended period of time, it will not continue indefinitely—eventually price and value will reach equilibrium.

A trending market ends when price begins to auction back and forth between two known reference points, forming a bracket or trading range. A new trend begins when price leaves the bracketed area and is accepted over time.

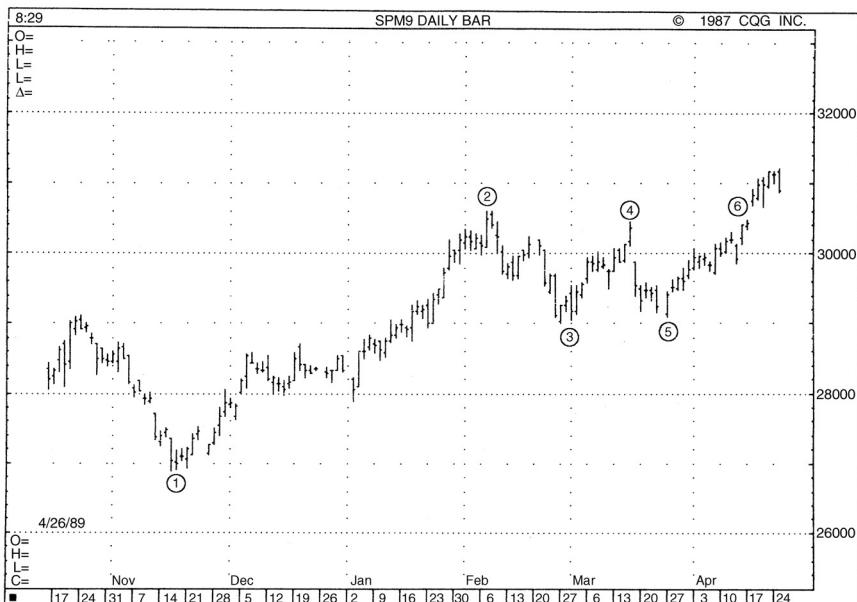
Many knowledgeable professionals estimate that markets trend only 20 to 30 percent of the time. Failure to recognize this fact is one of the main reasons why a large number of traders don't make money. Many of the popular technical systems are trend-following systems that require sustained price movement to be successful. As many traders are painfully aware, bracketed markets often move just fast and far enough to trigger these trend-following systems, then the potential move stalls and the market heads the other way.

It is evident by now that the trader colloquialism "the trend is your friend" is a misleading expression. It is true that during a trending market, a trader can make a substantial profit if positioned with the trend. However, if a trader constantly employs a trend-following system, his chances of success during a bracketing market are greatly reduced. Therefore, as the market evolves from trend to bracket and back to trend again, your trading strategy should change dramatically. Trends require a less active type of strategy;



**FIGURE 3.7** A Trend Occurring in June Crude Oil

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.



**FIGURE 3.8** Trend to bracket in the June S&P 500

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

they need to be left alone. Because of their strong convictional nature, profit expectations are relatively high. In a trending market, you put the trade on and then let the market do the rest of the work. Brackets, however, require a closer, more hands-on approach. The market moves in erratic spurts with no real long-term directional conviction. The prices that form the bracket's extremes provide significant reference points by which to monitor future change (i.e., the start of a new trend, continuation of the bracketing process, and so forth). To successfully trade a bracketed market, you need to learn how to identify the outer reaches of the bracket and then take gains quickly instead of "letting them ride." Monitoring how the market behaves around these points of reference helps you gauge your profit expectations and adjust your trading strategy.

Knowing if a market is in a trend or a bracket is an integral part of a holistic market understanding. It is vital to formulating, developing, and implementing your own trading timeframe and strategy.

**Trending Markets** The key to capitalizing on a trend lies in the trader's ability to determine if the trend is *continuing*—that is, if the divergence of price is being accepted or rejected by the market. A good indication of trend continuation lies in observing value area placement. If a series of value areas is moving in a clear direction through time, then the new price levels are being accepted and the trend is finding acceptance. If value areas begin to overlap or move in the opposite direction of the trend, then chances are good that the trend is slowing and beginning to balance.

A trend is started by initiative action from the other timeframe participant, who perceives price to be away from value in the long term. In an up trend, for example, price is perceived as below value by the other timeframe buyer and unfair to the other timeframe seller. As price auctions higher, the trend draws in market participants from many different timeframes until virtually *everyone* is a buyer. At that point, the whole world believes the trend will go on forever, but there is no one left to buy. The upward trend ends, for there are simply no more buyers, and the responsive seller enters and auctions price downward, beginning the bracketing process. The other timeframe buyer and seller's view of value has narrowed, producing a relatively wide area of buyer/seller equilibrium contained within the bracket margins.

**Bracketed Markets** As mentioned previously, a trend typically ends in a balanced area, otherwise known as a trading range or bracket. Markets do not trend up, then turn on a dime and begin a trend down. An

upward-trending market auctions higher balances, then either continues up or begins to auction downward. Similarly, a down trend ends in a bracketed market, then either continues down or begins a trend to the up side.

In a bracket, both the other timeframe buyer and seller become responsive parties. As price nears the top of the perceived bracket, the seller responds and auctions price downward through the bracket or equilibrium range. In turn, the responsive buyer enters and rotates price back to the upside. This bracketing process indicates that the market is in balance and waiting for more information. Therefore, when price is accepted above or below a known bracket extreme, the market could be accepted above or below a known bracket extreme, the market could be coming out of balance. Monitoring such a breakout for continuation and acceptance can alert the observant trader to the beginning of a new trend.

To better illustrate the concept of balance and the dynamics of price rotation within a bracket, consider an everyday example—the car buyer. Imagine five different people who go to Rawley's car dealership to purchase a car during the same week. They all have the same ultimate goal in mind: the purchase of the new Series Magma 8.9 automobile. However, the similarities end there, for chances are good that each is focusing on different aspects of the same car. One of the five wrecked his car on the day before and needs transportation immediately for business purposes. A wealthy college student likes the style of the Magma and wants all the extras—sunroof, stereo, power windows, and racing stripes. A suburban, middle-income family has been pricing cars for several weeks and has been to the Rawley dealership several times negotiating price. A woman who commutes to a nearby city is interested in the Magma because of its excellent gas mileage. The last of the five is a salesman who simply decides it is time he purchased a new car. All five view the same market from vastly different perspectives, and each has a certain price range in mind that he or she believes is value. The car dealer, too, has a perception of value that acts as a bracket in the negotiating process. His idea of value ranges from the lowest markup that will still clear a profit to the highest price he can get a buyer to pay. When dealing with each customer, price moves back and forth within his bracket until an agreement is reached. The college student would probably pay the most, for he is not worried about price and wants all the added luxuries. The family would probably get the best deal, for they are long-term buyers who have researched and bargained over a period of time. The point is that all five market participants will purchase the same car, but they will each pay a different price. The car dealer fulfills the status of middleman, facilitating

trade at different price levels in his bracket by making the necessary deals to move the cars off his lot.

A bracketed market acts in a similar fashion. When the market is in a balancing mode, participants consider different factors in their perception of value. Price auctions back and forth as they respond to the changing factors that give rise to differing opinions. Technicians, for example, may monitor stochastic indicators, while fundamentalists look at economic figures and news. Still other traders may evaluate open interest, previous highs and lows, yield curves, and activity in other commodities. Because of this segmentation, one group of market participants may rule for a short period of time, accentuating the bracketing process.

A bracket provides less obvious information than a trend, where price movement and market sentiment are relatively easy to understand. In a strong trend, the direction of the trend is clear and all market opinion is generally geared with the trend. Except for entry and exit, a trader does not need the Market Profile to determine which way the market is trying to go. In a bracket, however, there is no clear indication regarding longer-term market sentiment. Because of the varied and often conflicting mixture of opinions that surface in a bracketed market, a trader must look harder to find directional clues. The diversity of these clues brings about the danger of overweighting any one piece of information and thus getting an incomplete (and often incorrect) view of the market. When market-generated information is organized using the Market Profile, otherwise segmented market opinions are brought together in one composite information source. In a sense, the Market Profile is a filter for all market opinions. By observing and understanding the Market Profile, it is possible to differentiate short-term bracketing activity from a potentially strong, sustained price movement. In other words, the Market Profile conduit is a powerful tool in evaluating bracket activity and control.

This concludes the basic concepts of trending and bracketed markets. A more detailed discussion that builds on these concepts will follow in Chapter 4.

## ■ The Two Big Questions

We have covered a large amount of material: Profile structure, day types, other timeframe control, initiative and responsive activity, trending and bracketed markets—and all of the subtleties that accompany each of them. It

is as if we have been rubbing away at a large fogged-over window, each concept revealing a slightly larger view of the whole picture. Learning how markets operate and how to interpret them through the Market Profile is an evolving process that involves learning an enormous number of facts and concepts that are all interrelated. Bringing it all together is a challenge that combines knowledge, dedication, and experience as more of the window is exposed. Let us attempt to look at what we have uncovered so far in a way that will help unify what you have learned in the Novice and Advanced Beginner chapters.

Successful implementation of the Profile depends on being able to answer just two basic, sweeping questions that stem from the market's ultimate purpose in facilitating trade:

*Which way is the market trying to go?*

and

*Is it doing a good job in its attempt to go that way?*

Understanding these two questions together is in essence the equation for determining trade facilitation. As we continue through the more advanced portions of the learning process, these two questions will become the cornerstones for understanding the market through the Market Profile.



# Competent

Let us think back for a moment to David, the aspiring pianist. David reached the third level of learning and became a competent pianist after many months of study and practicing the basics. He began to see each song as a whole, a certain expression to be performed with a definite goal in mind. He still played by reading the notes but achieved continuity in his playing.

In this chapter, we will complete the study of the basic concepts and theories behind evaluating market-generated information through the Market Profile. We will give a thorough discussion of practical applications to day and longer timeframe trading. By the close of Competent, more of the big picture will be revealed as the basics merge together to make you a competent trader.

## ■ Doing the Trade

All reasonings concerning the matter of fact seem to be founded on the relation of *Cause and Effect*. . . . I shall venture to affirm that the knowledge of this relation is not in any instance attained by learning *a priori*, but arises entirely from Experience.

—David Hume

Knowledge arises from experience. Just as a musician practices diligently to become a concert pianist and an athlete spends uncounted hours on the court to become a great tennis player, a trader must gain experience through actual trading to become an expert trader.

Any effective performance is a combination of knowledge, skill, and instinct. With each trade, you put your knowledge, your understanding, and

your *experience* on the line to be judged by the market. Clearly, it is necessary to “do the trade” to learn. Experience provides the confidence to overcome such barriers as fear, hesitancy, and inflexibility.

We introduce the psychological side of trading here for good reason. By the end of the Advanced Beginner stage you should be incorporating what you have learned and will continue to learn into your trading technique. We will continue the discussion of the “you” portion of trading once all the mechanical aspects of the Market Profile have been covered. Remember: Trading is the link to experience and knowledge.

## ■ Section I

### ■ Day Timeframe Trading

Mike Singletary of the Chicago Bears was the National Football League’s Defensive Player of the Year during the 1988 football season. Considered by many to be the finest linebacker to play the game, Singletary’s all-pro ability transcended his physical strength and agility.

As captain of his defensive team, he would attempt to, in effect, read the offense. As simple as this may sound, it is a complex process that involves both long- and short-term analysis. Singletary spent hours preparing for each game, studying play charts, game films, and player statistics. When the game started, he knew exactly which plays the opponent had used in every possible situation, what formations these plays were run from, and who the key players were in each play. In other words, Singletary did his long-term homework and, based on the opponent’s past performances, entered each game with specific defensive plans in mind.

After the opening kickoff, however, Mike Singletary did not actively think about the charts and playbooks—he didn’t have time. It is here that Singletary’s expertise shined. The game films and technical information were, in a sense, a holistic image in his mind. He would act intuitively, recognize patterns, and quickly direct the defense. His expectations coming into the game served as guidelines, but he actively assimilated his play to the evolving offense.

The opposing team’s offensive coach would change his strategy and composition of plays with every game in an attempt to throw players such as Singletary off guard. The ability to recognize such changes in time to stop the play is what makes an expert linebacker.

An experienced day timeframe trader follows the same sort of evaluation process Mike Singletary used to. He or she begins each day with a set of expectations that serve as guidelines, based on the market's past performance. The trader studies factors such as long-term market direction, recent value area placement, and the opening call (all topics to be discussed in this section). Once the market opens, the trader switches to a more intuitive mindset, molding expectations to the developing structure, such as the opening type, the open's relationship to the previous day's value, and the auction rotations. Like Mike Singletary, the experienced trader knows that the market will seldom develop patterns identical to those that have happened in the past. The ability to recognize these subtle changes as they occur in the marketplace is what makes an expert trader.

In this section, we will study important structural reference points in the order that they occur in the unfolding market, beginning with the open and ending with the close.

## ■ Day Timeframe Directional Conviction

Recall for a moment the two big questions introduced at the end of Chapter 3. The first was "Which way is the market trying to go?" The second was "Is it doing a good job in its attempt to go that way?" Both of these questions relate directly to the concept of market confidence and directional conviction. *The sole purpose behind interpreting other timeframe activity is to find out which way the market is trying to go.*

If you know which other timeframe participant is in control in the day timeframe (or that neither is in control) and with what level of confidence they have entered the market, then you can successfully answer the two big questions and position your trade accordingly. We will now discuss how to evaluate market confidence and directional conviction, emphasizing their effect on estimating the day's range. We will start with the first available measure of market sentiment, the opening call.

## Opening Call

During one of our advanced trading seminars, a successful floor trader asked an intriguing question: "If the opening exceeds or fails to make its opening call, can that also be considered recordable initiative or responsive activity, even though the market never actually traded there?" The answer, as you will see, is clearly "yes."

Day timeframe trading strategy begins with the succession of early-morning calls that indicate where the market will open. Opening calls can occur at any time—from two hours before, to just a few minutes prior to the actual opening. Observing the succession of calls as the market nears its open and the call closest to the opening bell is one of the first important pieces of information available to the day timeframe trader.

In the last few minutes before the day's actual open, the largest and most active accounts have direct access to the trading floor through on-floor telephone clerks. The telephone lines to these large accounts are often left open during this period, providing continuous and almost instant communication with the trading pit. As early indications of price ranges are relayed to off-floor accounts around the world, they often attract the attention of the longer timeframe traders, leading them to place orders. As these orders are signaled into the pit, they are seen and communicated to other off-floor accounts, which in turn may stimulate additional orders. In a sense, the auction is actually underway before the market opens. This preopening auction process, although invisible to most, is often as important to evaluating market direction as the day's actual trade, for it is composed almost exclusively of other timeframe participants.

If the early call is perceived as too high or too low, opening call price levels and the eventual opening price can change quickly. What the astute floor trader at the seminar recognized is that the information available before the opening is often as valuable as looking at a tail on the Market Profile graphic. For example, if the first call is an expected opening around 87 to 19, but the actual opening takes place at 87 to 12, there is, in a sense, a seven-tick, hidden selling tail. That tail will be responsive or initiative depending on where it is located in relation to the previous day's value area (just like a visible tail).

## The Open

Experienced day timeframe traders start each trading day with a firm knowledge of recent market activity, much like Mike Singletary would study films and playbooks before each game. They have done their homework and watched the opening call to develop some idea of what to expect during the day's trading.

When the market opens, less experienced traders may wait for the initial balance to develop, thinking that there is little information or little to do prior to the development of structure. Seasoned traders, however, know

that the first half hour of trade establishes one of the day's extremes in the large majority of cases. As accurate as this fact may be, it is of little value unless a trader can identify which extreme will hold throughout the day. The activity occurring during the formation of the initial balance (many times, just the first few minutes) often enables a trader to identify which extreme has the greatest holding potential. This knowledge alone can play a large part in forming a trader's day timeframe strategy.

**The Open as a Gauge of Market Conviction** After the opening call, the first few minutes of the open provide an excellent opportunity to observe and evaluate the market's underlying directional conviction. With an understanding of market conviction, it is possible to estimate very early on where the market is trying to go, which extreme is most likely to hold (if any), and even what type of day will evolve. In other words, the market's open often foreshadows the day's outcome.

Four distinct types of opening activity provide a good indication of the level of directional conviction and which extreme is most likely to hold throughout the day. These labels are not carved in stone, however, and should be used only as a guideline for learning. Like the day types discussed in Chapter 2, the importance is not in the labels but in the level of market directional conviction that is displayed. The four types of opens are:

1. Open-Drive
2. Open-Test-Drive
3. Open-Rejection-Reverse
4. Open-Auction

**Open-Drive** The strongest and most definitive type of open is the *Open-Drive*. An Open-Drive is generally caused by other timeframe participants who have made their market decisions before the opening bell. The market opens and aggressively auctions in one direction. Fueled by strong other timeframe activity, price never returns to trade back through the opening range. Figure 4.1 illustrates the Open-Drive.

On April 10, copper opened above the previous day's value area and promptly trended upward. The strong, driving activity on the part of the buyer indicated a high level of market confidence. Figure 4.1 shows an aggressive 12-tick initiative buying tail in A period that ignited a Double Distribution Buying Trend day. In the majority of cases, the extreme left behind after an Open-Drive will hold for the entire day.

	April 7	April 10
14040	.	IJ
14020	.	IJ
14000	.	IJ
13980	.	IJ
13960	.	I
13940	.	HI
13920	.	HI
13900	.	HI
13880	.	DHI
13860	.	DHI
13840	.	DEFHI
13820	.	CDEFH
13800	.	CDEFGH
13780	.	CDEFGH
13760	.	CEGH
13740	.	CGH
13720	.	CG
13700	.	C
13680	.	C
13660	.	C
13640	.	C
13620	.	C
13600	.	C
13580	.	C
13560	.	C
13540	.	C
13520	.	C
13500	.	AC
13460	.	ABC
13440	.	AB
13420	.	A
13400	.	A
13380	.	A
13360	.	A
13340	.	A
13320	.	A
13300	IJ	A
13280	IJ	A
13260	IJ	A
13240	IJ	A
13220	I	A
13200	I	O
13180	I	.
13160	BI	.
13140	ABCHI	.
13120	ABCEHI	.
13100	ABCDEH	.
13080	ACDEFGH	.
13060	CDEFGH	.
13040	C	.
13020	.	.

**FIGURE 4.1** Open-Drive in Copper, April 7 and 10, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

The market's behavior during an Open-Drive open can be compared to a thoroughbred racehorse just as the bell sounds and the gates swing open. Both the market and the racehorse explode with confidence running high—their goals are obvious and their direction clear. If a trader expects to trade such a market, he must act quickly or be left in the dust.

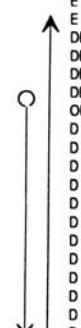
Open-Drive activity sends clear signals to the trader regarding the type of day to expect—a Trend or Normal Variation day. It also enables the trader to enter positions earlier, before confirmation by structure. Examine Figure 4.1 again. Notice the difference between the trade location for longs entered during the A period tail or the B period pullback, versus longs entered with range extension in C period. On this day, both would probably have resulted in profitable trades; however, A and B period longs gained much better trade location. *Understanding Open-Drive activity helps traders stay one step ahead of structure.*

The extreme established by the Open-Drive remains a reliable reference point throughout the day. If the market eventually returns to trade through the open and erase the tail, the trader is alerted to the fact that conditions have changed and trades should be exited.

**Open-Test-Drive** An *Open-Test-Drive* is similar to an Open-Drive, except that the market lacks the initial confidence necessary to drive immediately after the opening bell. During this type of open, the market generally opens and tests beyond a known reference point (previous day's high or low, bracket top or bottom, etc.) to make sure there is no new business to be done in that direction. The market then reverses and auctions swiftly back through the open. This activity, a failed initial test followed by a drive in the opposite direction, often establishes one of the day's extremes. An Open-Test-Drive provides the second most reliable type of extreme after the Open-Drive. Figure 4.2 illustrates an Open-Test-Drive occurring in soybeans.

The Open-Test-Drive is a classic example of how the human elements so often influence market behavior. In Figure 4.2, soybeans had been balancing (as is evidenced by the successive days of narrowing, overlapping value), following a sharp break to the downside on April 3 that established a new long-term low at 708. When a market is in balance, there is little directional conviction among the participants. Traders need confidence if they are to participate in a sustained move in either direction. Thus, in the case of the soybean market on this day, before other timeframe buyers could begin an up auction with any degree of confidence, they needed to test below the 708 longer term low to see if lower prices attracted new activity (new other

	April 3	April 4	April 5	April 6	April 7	April 10
7300	D	.	.	.	.	.
7295	D	.	.	.	.	.
7290	D	.	.	.	.	.
7285	D	.	.	.	.	.
7280	D	.	.	.	.	.
7275	D	.	.	.	.	.
7270	D	.	.	.	.	.
7265	D	.	.	.	.	.
7260	D	.	.	.	.	.
7255	D	.	.	.	.	.
7250	D	.	.	.	.	.
7245	D	.	.	.	J	.
7240	D	.	.	.	J	.
7235	D	.	.	.	J	.
7230	D	.	.	.	FGIJK	.
7225	D	.	.	.	FGIJK	.
7220	D	.	.	.	FGHIJK	.
7215	D	.	.	.	FGHIJK	.
7210	D	.	.	.	FGHIJK	.
7205	D	.	.	.	FGHIK	.
7200	DE	.	.	.	FGHIK	.
7195	DEF	J	I	.	FGK	.
7190	DEF	J	I	.	EFK	.
7185	DEFG	DJ	HI	.	EFK	.
7180	DEFG	DEIJ	DGHJK	G	EFK	.
7175	DEFG	DEIJK	DEGHJK	GH	EF	.
7170	DEFG	DEIJK	DEGHJK	DGH	EF	.
7165	DEFG	DEFGIJK	DEFGHJK	DEGHK	D	EF
7160	DEFG	DEFGIJK	DEFGHJK	DEGHJK	D	EF
7155	DEFG	DEFGHIK	DEFGIJK	DEGHJK	DE	EF
7150	DEFGH	DFGHK	DEFGJK	DEGHJK	DEFHJK	E
7145	DEGH	DFGHK	DEFGJK	DEFGHJK	DEFHJK	E
7140	DEGHI	DFGHK	DEFK	DEFGHIJK	DEFHIJK	E
7135	DEGHI	.	DK	DEFGHJK	EFGHIJK	E
7130	DEGHI	.	DK	EFGHIJK	EFGHIJK	E
7125	DEHI	.	DK	EFGHIJK	EFGHIJK	E
7120	DEHI	.	DK	EFHJ	FGHIK	DE
7115	DEHI	.	D	EFHJ	FGHIK	DE
7110	DEIK	.	D	EFHJ	FGIK	DE
7105	DEIK	.	D	EFH	GI	DE
7100	DEIJK	.	D	EFH	.	OE
7095	DIJK	.	D	EFH	.	O
7090	DIJK	.	D	EF	.	D
7085	DIJK	.	.	F	.	D
7080	DJK	.	.	.	.	D
7075	.	.	.	.	.	D
7070	.	.	.	.	.	D
7065	.	.	.	.	.	D
7060	.	.	.	.	.	D
7055	.	.	.	.	.	D
7050	.	.	.	.	.	D
7045	.	.	.	.	.	D
7044	.	.	.	.	.	D
7043	.	.	.	.	.	D
7042	.	.	.	.	.	D
7041	.	.	.	.	.	D
7040	.	.	.	.	.	D



**FIGURE 4.2** Open-Test-Drive in July Soybeans, April 3 to 10, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

timeframe sellers, in this case). When the test below actually discouraged activity, buyers could then probe to the upside with conviction. The result was an Open-Test-Drive that brought in increased activity as soybeans auctioned higher. As the saying goes, sometimes markets need to “break to rally” and “rally to break.” *Oftentimes, participants need the security of knowing what is below the lows or above the highs before they can move the market with confidence.*

In hindsight, the soybean market activity on April 10 and the ideal trades that should have been entered are relatively easy to see and understand. In reality, however, pulling the trigger and placing a trade was an extremely difficult task. Let us evaluate the situation confronting soybean traders on this day. First, the long-term auction was down. Second, the previous five days had recorded basically overlapping value areas, indicating balance. And third, on the 10th, the initial breakout appeared to be to the downside. When the market opened and swiftly auctioned below the balance area lows, it was easy to assume that price was going to move substantially lower.

When price stalled around 704½, it was difficult to remain objective. The breakout to the downside was initiative activity, which should have brought in new activity and displayed immediate continuation—but there was no follow-through. When the breakout failed and price began to auction higher, longs should have been placed with the knowledge that the price probe below the balance area lows had actually shut off activity (longs should have been entered when price returned to the region of the previous day's value area, if not sooner).

*This trade was extremely difficult to execute because it flew in the face of the most recent market activity.* Even if a trader possesses a sound enough market understanding to recognize such an opportunity, the ability to execute still depends on the power of his or her own self-understanding. The anxiety created by the thought of placing a trade against strong opposing activity often influences a trader's ability to trade rationally. This is where the power of experience takes over. As you begin to personally witness and then experience more and more of these unique opportunities, you will gradually build the self-confidence required to become a player, instead of a spectator.

The strategy for Open-Test-Drive days is similar to that of the Open-Drive, with the understanding that the tested extreme has a slightly lower probability of holding. Again, look for a Normal Variation or Trend day to develop. The odds favor placing trades in the direction of the driving activity, as close as possible to the tested extreme. However, during this type of open (like the Open-Drive), placing the trade early is more important than the immediate trade location. If you wait to buy a pullback or wait to get perfect trade location, you will often miss the opportunity altogether.

Once price has driven in one direction, it should not return to the point where the drive began, because the participants who initially drove price should still be willing to act in that area. A return through the opening range often indicates that conditions have changed and the Open-Test-Drive extreme is no longer a reliable trading reference point.

In the Open-Drive and Open-Test-Drive, the initial extreme is established by the early entry of an aggressive other timeframe buyer or seller. Extremes created by such conditions are useful day timeframe reference points and indicate which way the market is trying to go. Unfortunately, these openings are not nearly as common as the Open-Rejection-Reverse and the Open-Auction, which lack clear-cut conviction. These final two types of openings are, however, equally important to day timeframe strategy.

**Open-Rejection-Reverse** The *Open-Rejection-Reverse* is characterized by a market that opens, trades in one direction, and then meets opposite activity strong enough to reverse price and return it back through the opening range. The initial extreme is established when buying or selling in one direction dies out, the auction stalls, and opposite activity begins to auction price in the other direction. An Open-Rejection-Reverse type of open is less convinced of its direction when compared to the Open-Drive and Open-Test-Drive. Because of the lower level of directional conviction, initial extremes generally hold less than half of the time. This is not to say that opposite activity strong enough to return price back through the opening is insignificant. However, in terms of gauging the strength of an extreme and assessing the day type that will develop, the early entry of the other timeframe in the Open-Drive is stronger than the late entry of the Open-Rejection-Reverse. Figure 4.3 illustrates the Open-Rejection-Reverse.

In this example, the Swiss franc opened below the previous day's value area, traded lower, and eventually found responsive buyers below .6630. Buyers returned the price up and through the opening range in Z period. Such activity provided the trader with three important pieces of information:

1. Lower directional conviction indicates that this will be a two-sided trading day, balancing between the other timeframe buyer and seller. The probability of a Trend day is low.
2. A Normal or Normal Variation type of day should be expected.
3. Since the Y-period initial extreme has a relatively low chance of holding, there is a strong possibility that the market will return to retest the opening range.

The key to trading an Open-Rejection-Reverse type of day is *patience*. As is shown by early trade in Figure 4.3, shortly after the Rejection-Reverse the Swiss franc quickly auctioned higher. This is often the case following Open-Rejection-Reverse type of activity.

6672	.
6670	.
6668	C
6666	CF
6664	CFG
6662	CEFG
6660	CDEFG
6658	BCDEFG
6656	BCDEG
6654	BCDEGHJ
6652	BDEHIJ
6650	BHIJK
6648	BHIJ
6646	ZBHIJ
6644	ZABHIJ
6642	ZABHI
6640	ZABHI
6638	YZAH
6636	OZAH
6634	YZA
6632	YZA
6630	YZA
6628	Y
6626	Y
6624	.

**FIGURE 4.3** Open-Rejection-Reverse in the Swiss Franc, August 29, 1987  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Through C period the market appeared strong and well on its way to a big move to the upside. Less experienced traders often get so caught up in the swift price movement that they jump on board, thinking that a prime buying opportunity might be slipping away. It is important to remember, however, that Open-Rejection-Reverse activity conveys a much lower level of conviction. Understanding this lack of conviction, combined with the patience and discipline to wait for the market to rotate back to you, will come through experience.

**Open-Auction** At first glance, *Open-Auction* activity reflects a market with no apparent conviction at all. The market appears to open and randomly auction above and below the opening range. In reality, the conviction

reflected by an Open-Auction largely depends on where the market opens relative to the previous day. An Open-Auction open that occurs *inside* the previous day's range conveys a different opinion regarding potential day timeframe development than an Open-Auction that occurs *outside* the range. In general, if a market opens and auctions within the previous day's value area and range, then a nonconvictional day will usually develop. If, however, a market opens outside the previous day's range and then auctions around the open, the conditions are markedly different. Here, the market has opened *out-of-balance*. In this case, while early Open-Auction structure may suggest nonconviction, *the fact that the market is out of balance means that there is good potential for a dramatic price move in either direction*. This type of Open-Auction activity often gives rise to Double Distribution Trend days. We follow with a discussion on both types of Open-Auction activity.

**Open-Auction in Range** If a market opens within the region of the previous day's range and auctions, market sentiment has probably not changed. Initial extremes formed by Open-Auction activity are not established by aggressive other timeframe activity. Rather, the market auctions in one direction until activity slows, then auctions in the other direction. The other timeframe is not present with any large degree of confidence. Figure 4.4 illustrates Open-Auction in range activity.

An Open-Auction in range generally sets the stage for a Nontrend, Normal, or Neutral type of day. The low market conviction suggests that any extreme established early on has a low probability of holding throughout the day. Referring to the Treasury bond market for June 30th in Figure 4.4, after opening within June 29th's value area, price auctioned above and below the open with ease in B and C periods. Such seemingly random trade indicated that the bond market was in balance and that its participants held little directional conviction. Without this knowledge, however, a trader could have been fooled into selling with the C period selling range extension, thinking it meant that strong other timeframe sellers were present. The Open-Auction within range made it clear early on that a big day would be unlikely.

Open-Auction in range strategy is straightforward. Patiently wait for the market to establish its extremes and perceived value area, and then look to trade the value area extremes. If a good trading opportunity does not develop and a Nontrend type of day occurs, it is often wise to simply stand aside and wait for new activity.

	June 29	June 30	
88 26 /32	.	.	L
88 25 /32	.	.	L
88 24 /32	.	.	LM
88 23 /32	E	.	L
88 22 /32	DEF	.	L
88 21 /32	CDEF	A	ADL
88 20 /32	CDEF	AB	ABDKL
88 19 /32	CDEFG	AB	ABDEKL
88 18 /32	CDEFG	AB	ABDEHJKL
88 17 /32	CDEFG	AB	ABDEHIJKL
88 16 /32	ACEFG	OBC	OBCDEFGHIJKL
88 15 /32	OCEFG	BC	BCDEFGHIJK
88 14 /32	ACFGI	BC	BCEFGHIJK
88 13 /32	ACFGHI	BC	BCEFGHIJK
88 12 /32	ABCghi	C	CFGHIJ
88 11 /32	ABCghi	C	CFGH
88 10 /32	ABCghi	C	CF
88 9 /32	ABCghi	C	C
88 8 /32	ABHIJ	.	.
88 7 /32	BIJL	.	.
88 6 /32	BIJL	.	.
88 5 /32	BIJL	.	.
88 4 /32	IJLM	.	.
88 3 /32	JL	.	.
88 2 /32	JL	.	.
88 1 /32	JKL	.	.
88 0 /32	JKL	.	.
87 31 /32	JKL	.	.
87 30 /32	JKL	.	.
87 29 /32	JKL	.	.
87 28 /32	JK	.	.
87 27 /32	JK	.	.
87 26 /32	K	.	.
87 25 /32	.	.	.
		A-C	A-Close

**FIGURE 4.4** Open-Auction (in Range) in September Treasury Bonds, June 29 and 30, 1988  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

**Open-Auction out of Range** When a market opens outside of the previous day's range and then auctions around the open, one's first impression is that there is no directional conviction present. In reality, the mere fact that

	March 21	March 22
91 10 /32	.	.
91 9 /32	.	.
91 8 /32	.	B
91 7 /32	.	B
91 6 /32	.	AB
91 5 /32	.	ABC
91 4 /32	.	OBC
91 3 /32	.	ABC
91 2 /32	.	ABC
91 1 /32	.	AC
91 0 /32	.	AC
90 31 /32	.	C
90 30 /32	.	CDE
90 29 /32	.	CDE
90 28 /32	.	CDE
90 27 /32	.	CDE
90 26 /32	.	DEJL
90 25 /32	K	DEFGJKL
90 24 /32	KL	EFGHJKL
90 23 /32	KLM	EFGHJKLM
90 22 /32	JKL	FGHJKL
90 21 /32	AJKL	FGHJKL
90 20 /32	AJKL	GHJKL
90 19 /32	AJKL	HJKL
90 18 /32	OBJKL	HJKL
90 17 /32	ABJKL	HJK
90 16 /32	ABCJL	HJK
90 15 /32	ABCDEJL	HI
90 14 /32	ABCDEFGIJ	HI
90 13 /32	ABCDEFGHIJ	I
90 12 /32	BCDEFGHIJ	I
90 11 /32	BCDEFGHI	.
90 10 /32	BCDEFGHI	.
90 9 /32	BCDFHI	.
90 8 /32	CDHI	.
90 7 /32	CDHI	.
90 6 /32	CDHI	.
90 5 /32	H	.
90 4 /32		.

**FIGURE 4.5** Open-Auction (Out of Range) in June Treasury Bonds, March 21 and 22, 1988

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

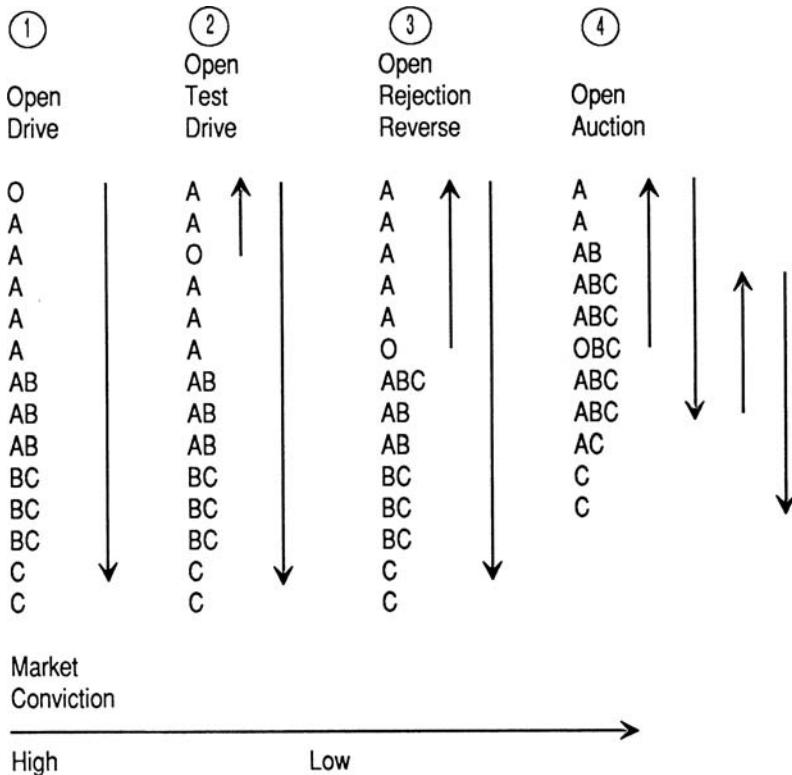
March 30—Figure 4.4	March 22—Figure 4.5
A	B
AB	B
AB	AB
AB	ABC
AB	OBC
OBC	ABC
BC	ABC
BC	AC
BC	AC
C	C
C	C
C	C

O designates the opening.

the opening is beyond the previous day's range suggests that new other timeframe activity has caused price to seek a higher or lower level. Given that the market has opened out of balance, there is a greater chance that directional conviction will develop than if the market had opened and auctioned within the range. On March 22 in Figure 4.5, for example, the Treasury bond market opens and auctions substantially above the value area and range for the previous day. In comparison to the Open-Auction in range example in Figure 4.4, the activity up to the first three time periods in Figure 4.5 (up to the point of range extension) appears very similar.

However, it is evident in the two examples that an Open-Auction outside of range has the potential to be a big day, while an Open-Auction within value usually lacks conviction. This is evidenced in the fact that March 22 developed into a Selling Trend day, while June 30 resulted in a narrow Normal Variation day. This concept is discussed at further length in the next section of this chapter.

**Summary** The labels we have given the four types of openings are designed only to make them easier to learn and remember. In reality, two openings will seldom look alike, and textbook examples are rare. What is important about the market's open is the notion that it is possible to evaluate market directional conviction very early in the trading session.



\* "O" designates the open.

**FIGURE 4.6** Opening Type Summary. *O* designates the open.

The analysis of the day's open should not be used in isolation, but as an integral part of understanding the big picture that gradually emerges as you learn and develop experience using the Market Profile. As a refresher, Figure 4.6 is a summary of the four types of opening activity.

## ■ Opening's Relationship to Previous Day—Estimating Daily Range Potential

In the large majority of cases, activity during any given day has direct and measurable implications on the following day. It is only on the relatively rare occasion when a market moves extremely out of balance that there is no correlation between two consecutive days. Understanding these

implications enables a trader to more successfully visualize developing market activity.

The simple fact of whether a new day opens within or outside of the previous day's range helps a trader gauge two key day timeframe elements: (1) trade risk and opportunity, and (2) estimating, or visualizing, the day's potential range development. The salient concept here is market *balance*. The relationship of the open to the previous day's value area and range gives valuable clues to the market's state of balance and what kind of risk/opportunity relationship to expect on a given trading day. In short, the greatest risk and opportunity arise when a market opens outside of the previous day's range. This indicates that the market is out of balance. When a market opens out of balance, the potential for a dynamic move in either direction is high. Conversely, a market that opens and is accepted (auctions for at least one hour) within the previous day's value area embodies lower risk, but also less opportunity. The acceptance of price within the previous day's value area indicates balance, and therefore reduces the potential for a dynamic move.

We will discuss three different opening/previous day relationships, highlighting the potential trade risk, opportunity, and range development for each. The three relationships are:

1. Open within previous day's value area.  
—Acceptance/Rejection
2. Open outside previous day's value, but within range.  
—Acceptance/Rejection
3. Open outside previous day's range.  
—Acceptance/Rejection

## ■ Open within Value—Acceptance

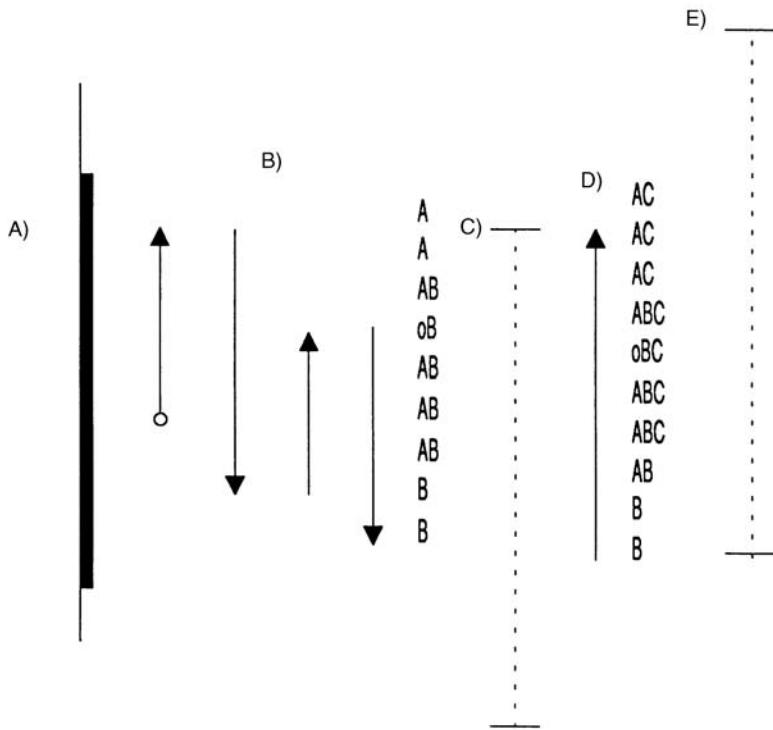
When a market opens within value and is accepted (overlapping TPOs signify value, or acceptance), this generally indicates that the market is in balance and that market sentiment has not changed dramatically from the previous day. Trade risk and opportunity are both relatively low. The day's range usually will be contained within the previous day's range or overlap one of the previous day's extremes slightly to one side. It is a trader's dream to know ahead of time what the day's range will be. When a market opens and builds value within the previous day's value area, it is possible—very early on—to make a rough estimate of the developing day's range potential.

As mentioned before, the mere fact that a market opens and auctions within value indicates market sentiment has not changed significantly. Thus, generally, the developing range will rarely exceed the length of the previous day's range. If you are confident that one of the day's extremes will hold, to estimate the day's range potential you simply superimpose the length of the previous day's range from that extreme. For example, suppose that after several time periods on a day that opened within value, a buying tail supports the lower extreme and appears secure. The tail indicates other timeframe buyer presence and will probably hold throughout the day, thus forming the bottom of the day's Profile. If the previous day's range was 15 ticks, count up 15 ticks from the bottom of the tail to find an approximate limit for the day's high. While this is by no means a foolproof rule, it does provide a consistent approximation and contributes to the visualization needed to successfully trade in the day timeframe.

Before we proceed to an actual example, let us first present a few guidelines for estimating range potential:

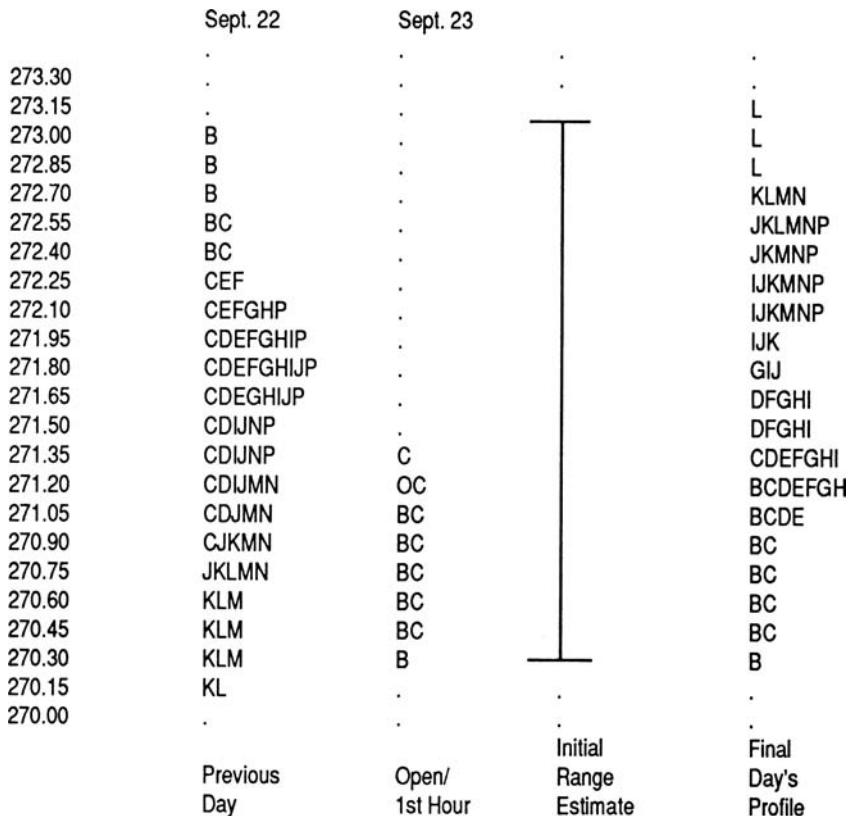
1. Determine the opening's relationship to the previous day's value and range.
2. If an estimate is possible (acceptance in range), identify the initial extreme that has the greatest potential to hold. Then superimpose the length of the previous day's range to arrive at an estimate.
3. Allow roughly 10 percent in either direction, recognizing that this is just an estimate, not a prediction.
4. As the day develops, early extremes are erased or confirmed and buyer or seller directional conviction becomes more evident, adjust the estimate if necessary.

Figure 4.7 illustrates range estimation for markets that open and auction within the previous day's value area. The vertical line denoted by Point A represents a completed day's range, with the black bar in the middle designating the value area. On the following day, the market opens and auctions inside the previous day's value area, as is evidenced by the auction rotations back and forth through the open. (The arrows at Point B represent auction rotations, not necessarily half-hour time periods. The market may rotate several times in any given time period.) What is most important is that the market is indeed establishing acceptance within the previous day's range and value area through time. This indicates that conditions have not changed significantly from the previous day, and the market will probably demonstrate similar range development (not necessarily the same high and low).



**FIGURE 4.7** Open within Value—Acceptance. *O* designates the open.

Point C in Figure 4.7 denotes the initial estimation of the day's potential range. If the extreme left behind after the first auction down eventually forms an A period selling tail, it has the potential to be the day's high. If this is the case, the range is estimated to be the length indicated by the dotted line at Point C. The range potential is determined by superimposing the length of the previous day's range downward, starting from the top of the selling tail. These early estimates, however, should be used only as a general guideline and must be monitored carefully for change. For example, as the day progresses in Figure 4.7, if the market auctions back up above the selling tail, a new range must be calculated. The probe to the upside in C period (denoted by Point D) creates the need to reestimate the range, for it extends above the initial high and leaves behind a B period buying tail on the low. Given the new extreme created by the up auction in C period, the new estimate would be about the length of the dotted line represented by Point E.



**FIGURE 4.8** Open within Value—Acceptance in the December S&P 500, September 22 and 23, 1988. O designates the open.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Let us now look at a real market example. Figure 4.8 shows S&P activity on September 23, 1988. The market opened within value, which suggested that conditions for the S&P had not changed overnight. However, immediately following the open in B period, price “drove out” of value to the downside, indicating a potential change in market sentiment. If early seller conviction had been genuine, the selling auction should have continued below the previous day’s value area, and ultimately the previous day’s low. However, other timeframe sellers did not successfully challenge the low of the 22nd, an important day timeframe reference point. In fact, in C period, the S&P market rotated back up into the value area and *above* the open, thus negating the apparent confidence

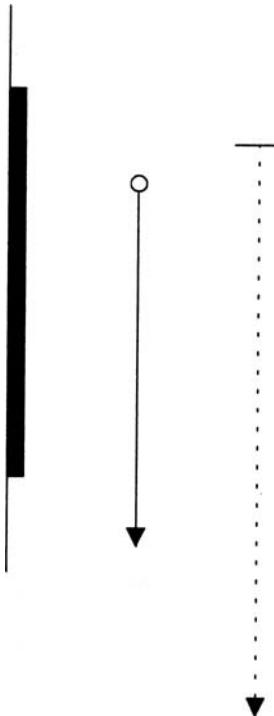
that was reflected by the early Open-Drive selling activity. The fact that the market was spending *time* auctioning within the region of the previous day's value area (building multiple TPO prints) indicated that market sentiment had not changed and that, at best, overlapping value would develop. Moreover, based on the information generated through C period, it was unlikely that the day's trade would bring significant movement in either direction. For, while the seller was unable to sustain the opening drive, the buyer did not have the confidence of knowing what was below the 22nd's lows.

Having already visualized the eventual overlapping value, and given the development of a B period buying tail, the trading opportunities in day timeframe longs should be visible. The rejection of the B period selling probe indicated the probable formation of a day timeframe low at 270.30. By adding the length of the 22nd's range (285 points) to the B period lower extreme, it was possible to estimate that the high on the 23rd would be in the area of 273.15. In this case, the range estimate proved to be exact (not a common occurrence). Longs placed during the slowing of price in D, E, and F periods had good potential to be successful trades.

## Rejection (Breakout)

When a market opens within the previous day's value area and drives out during the first half hour of trade (does not build double TPOs to signify acceptance within value), the market could be breaking out of balance. If the early breakout drives price completely beyond the limits of the previous day's range, then both risk and opportunity are high and range estimation is unlimited in the direction of the initiative drive (Figure 4.9).

A market that opens and is accepted within the previous day's value area is like a rubber ball bouncing along a level sidewalk. As long as the surface remains flat (or the market continues to open in balance) the ball will rebound off the pavement much like it did during the previous bounce. In contrast, if the sidewalk is cracked and broken (not "balanced"), it is impossible to determine how far or in which direction the ball will bounce (Figure 4.10). Similarly, if the market opens out of balance, it is difficult to tell which way the market will auction and with what force it will move. Over the next several pages we briefly discuss the remaining opening/previous day relationships and the potential range development for each.

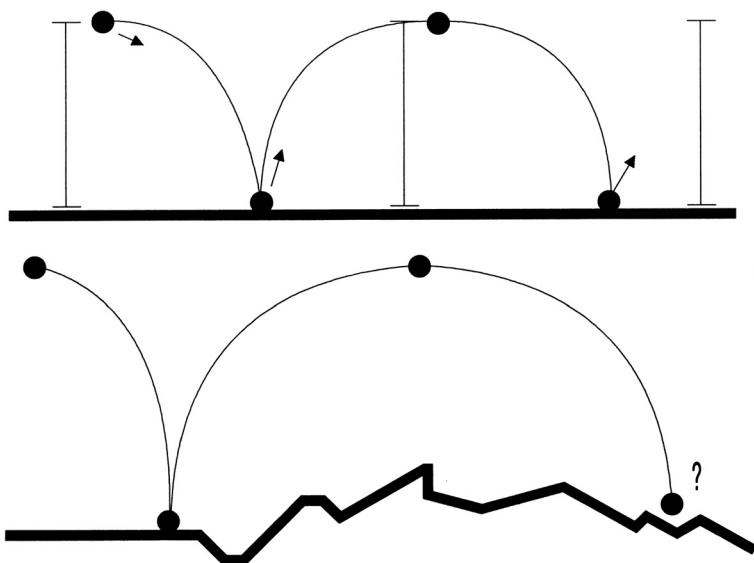


**FIGURE 4.9** Open within Value—Rejection

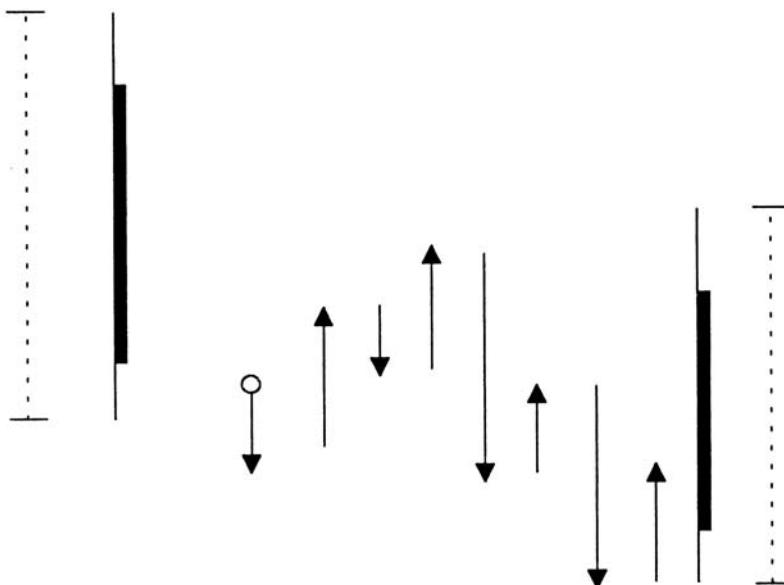
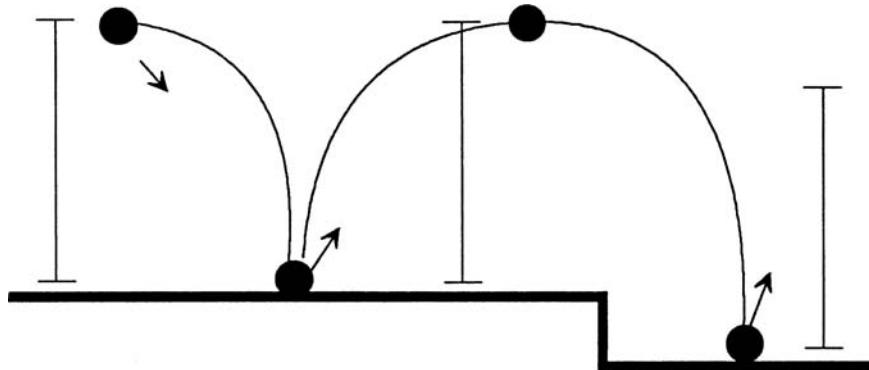
The guidelines introduced earlier for estimating range potential apply to these discussions as well.

## ■ Open outside of Value but within Range—Acceptance

A market that opens outside of the previous day's value area but within range is not as balanced as an open within value, but the market is still bouncing on flat pavement. It is as if the ball simply bounced over a curb to land in the street. The ball will bounce about the same net distance, but the height will be reduced by the distance from the sidewalk to the street (Figure 4.11). Similarly, a day that opens within range but outside of value will generally produce a range that is similar to the previous day, but overlapping to one side. The risk on this type of day is slightly



**FIGURE 4.10** Opening's Relationship to Previous Day—Market Balance



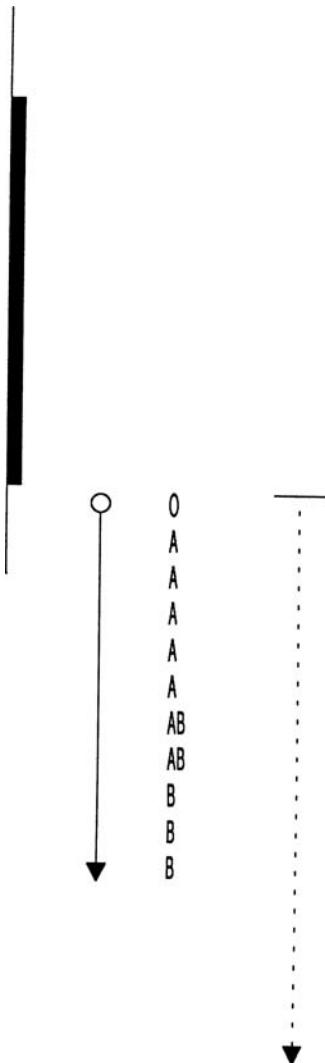
**FIGURE 4.11** Open outside of Value but within Range—Acceptance, Ball off Curb

greater than the previous open relationship, but the opportunity is greater as well. Openings outside of value but within range indicate a market slightly out of balance and usually result in value that overlaps to one side.

The method for range estimation used for Openings within Value applies equally well here. The resulting range development will usually extend beyond the previous day's high or low, for the market opens closer to one of the previous day's extremes.

## Rejection (Breakout)

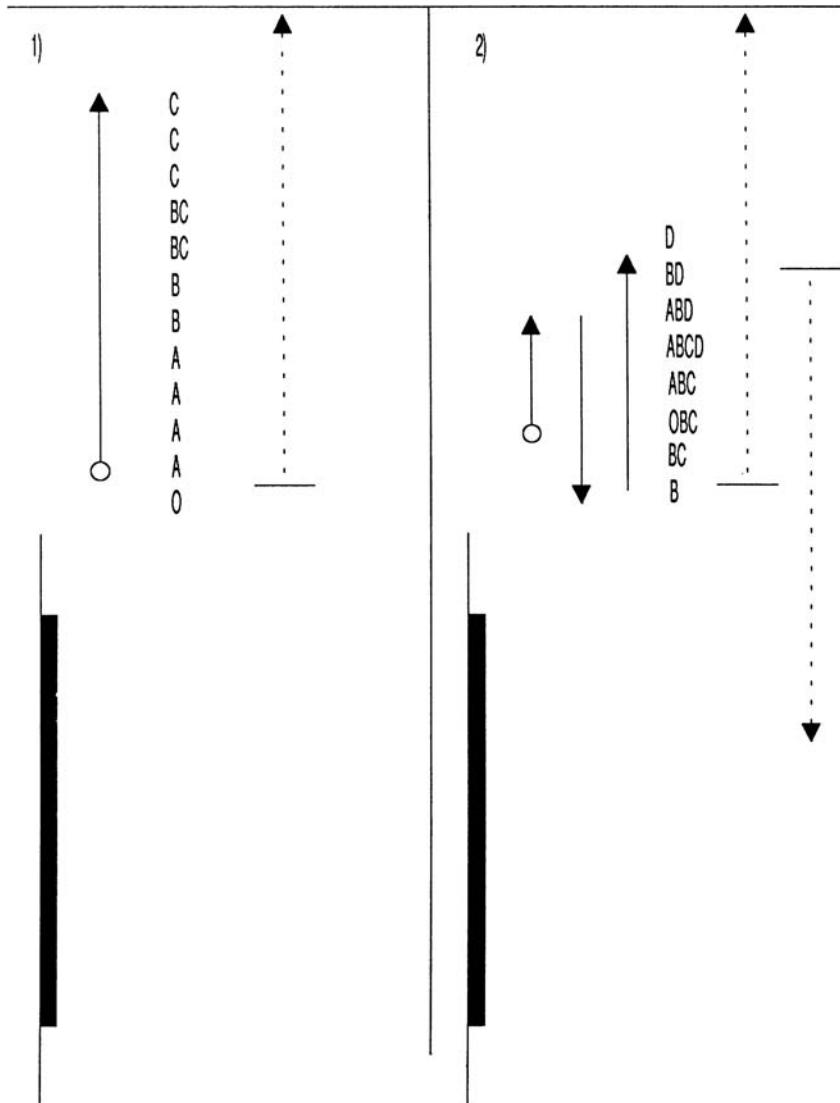
On this type of day, the market opens above or below the previous day's value area but still within the previous day's range. If the market subsequently breaks out beyond the extremes of the previous day's range, then the market is coming out of balance and range potential is unlimited in the direction of the breakout (Figure 4.12).



**FIGURE 4.12** Open outside of Value but within Range—Rejection

## ■ Open outside of Range—Acceptance

When a market opens outside of the previous day's range and is accepted, conditions have changed and the market is out of balance. At this point, one of two scenarios is possible: (1) the market will continue to drive in the direction of the breakout; or (2) the market will begin to auction back and forth at the new price levels (Figure 4.13 illustrates these two relationships).



**FIGURE 4.13** Open outside of Range—Acceptance

In both cases, as long as price does not return to the previous day's range, the market has accepted the breakout.

The greatest imbalance occurs in the first scenario, when a market opens beyond the previous day's range and continues in the direction of the breakout (Figure 4.13). The movement away from value is initiative and the other timeframe often moves price with great speed and conviction. Range potential is unlimited in the direction of the breakout, and a Trend day is usually the result.

This type of open offers the greatest potential to the trader who recognizes the opportunity early and positions him or herself with the breakout. However, it also poses the greatest risk to the trader who attempts to trade against the driving initiative auction.

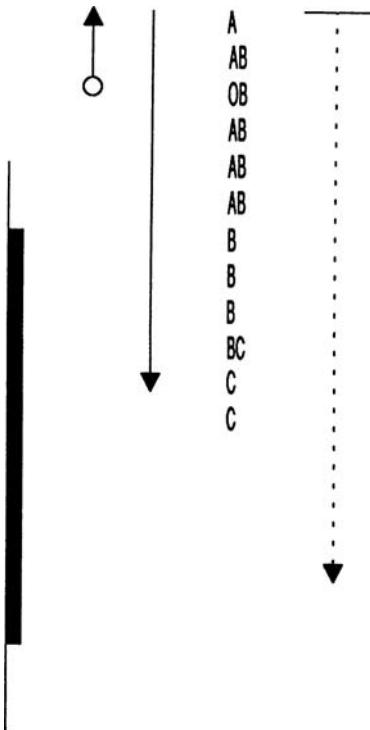
A market out of balance is like a ball that ricochets off a piece of jagged concrete—there is no way to estimate how far it will bounce. Potential range development is unlimited and risk is extremely high for the trader who is positioned the wrong way. Accompanying increased risk, however, is also the potential for greater opportunity. An open outside of range offers the potential for a highly successful and profitable trade if market direction is detected early.

## Rejection

When a market opens beyond the previous day's range and is rejected *back into the range*, the potential for a dynamic price move in the direction opposite to the opening breakout is set into motion. A typical example would be a market that opens too far above the previous day's high, fails to follow through, and is quickly corrected by responsive sellers who return price to previously accepted value. The day's range potential is still unlimited, for the market opened out of balance and could move significantly in the opposite direction. Figure 4.14 illustrates the range estimation for a market whose opening breakout is rejected.

## Summary

Simply keeping track of where the market opens in relation to the previous day's range and value area is valuable market-generated information. A market that opens within value is generally in balance and awaiting new information. A market that opens outside of value is out of balance, and carries with it greater opportunity and risk. By synthesizing the opening's



**FIGURE 4.14** Open outside of Range—Rejection

relationship to the previous day with other market-generated elements, such as the opening type and initiative/responsive activity, it is possible to trade with a more objective understanding of the big picture.

While writing this segment of the book, a day developed in the market that exhibited many of the opening/value relationships we have just covered. April 13, 1989, will serve as a review and summation of the concepts introduced in this section.

## ■ April 13, 1989

Before the market opened on Thursday, April 13, traders knew that the Retail Sales number would be announced at 7:30. In addition, five major figures were to be released on the following day: Merchandise Trade, Producer Price Index, Business Inventories, Capacity Utilization, and Industrial Production. And, as usual, a variety of predictions and contradicting speculations arose from all sides of the market. The anxiety

among market participants was understandably high. To further complicate matters, Switzerland unexpectedly raised its interest rates soon after the foreign currency futures opened on the International Monetary Market (IMM). With all these external elements playing havoc in the market, it was difficult to remain calm and objective. However, traders with a firm understanding of the dynamics of opening/value relationships saw many good trading opportunities unfold on April 13. The following discussion focuses on the development of six markets: crude oil, S&P 500, gold, Japanese yen, soybeans, and Treasury bonds.

## Crude Oil

In Figure 4.15, crude oil opened substantially above the previous day's high. Any such opening that is clearly above or below the previous day's range is known as a *gap*. A gap is the result of initiative other timeframe activity and indicates that the market is out of balance. In this example, however, the other timeframe buyer who caused the gap higher opening was unable to take control and continue the buying auction. In addition, the development of a narrow initial balance (Point A in Figure 4.15) alerted traders to the potential for a Double Distribution Trend day in either direction.

Given that crude oil was out of balance and carried the potential for a Double Distribution Trend day, traders should have been ready to enter trades with range extension on either side of the initial balance. Buying range extension would signal a potentially big day to the upside. Selling range extension would indicate that the market had opened too far out of balance and that responsive sellers had entered to return price to value. The day's range potential was unlimited in both directions because of the open out of balance.

Responsive sellers did, in fact, enter and extend the range down. Traders placing shorts with the selling range extension were well positioned to take advantage of a dynamic downside move that ultimately retraced the previous day's range and closed on its lows.

## S&P 500

In Figure 4.16, the S&P gapped open below the 12th's range (out of balance), indicating the potential for a big move to the downside or an "outside day" if price should return up to trade through the gap and retrace

	April 12	April 13
2096	.	.
2094	.	.
2092	.	.
2090	.	.
2088	.	.
2086	.	B
2084	.	OC
2082	.	BC
2080	.	BCD
2078	.	BCD
2076	.	BCD
2074	.	BCD
2072	.	DE
2070	.	DE
2068	.	DE
2066	.	DEI
2064	L	EHI
2062	L	EHIJ
2060	CHIL	EHIJ
2058	CGHIL	EFGHIJ
2056	CGHIKL	EFGHIJ
2054	BCGHijkl	EFGHIJ
2052	BCFGHIJKL	EGJ
2050	BCFGHIJKL	GJK
2048	BCFGHJK	JK
2046	BCDEFGHJK	JK
2044	BCDEFJK	KL
2042	BCDEF	KL
2040	DE	KL
2038	DE	KL
2036	.	KL
2034	.	KL
2032	.	KL
2030	.	L
2028	.	L
2026	.	L
2024	.	.
2022	.	.
2020	.	.

**FIGURE 4.15** Crude Oil, April 12 and 13, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	April 12	April 13
303.20	C	.
303.10	C	.
303.00	C	.
302.90	CL	.
302.80	CDKL	.
302.70	BCDKL	.
302.60	BCDJKL	.
302.50	BDJKL	.
302.40	BDGIJKLMNOP	.
302.30	BDGHJKLMNOP	.
302.20	BDFGHIJMNP	.
302.10	BDEFGHIJMNP	.
302.00	BEFGHIJMNP	.
301.90	BEFMNP	.
301.80	EN	.
301.70	E	.
301.60	E	.
301.50	.	.
301.40	.	C
301.30	.	CD
301.20	.	OCDE
301.10	.	BCDEF
301.00	.	BCDEF
300.90	.	BCDEFG
300.80	.	BCDEFG
300.70	.	BCDEFGH
300.60	.	BDEGHI
300.50	.	HI
300.40	.	HJ
300.30	.	HJK
300.20	.	HJK
300.10	.	IJK
300.00	.	IJK
299.90	.	IJK
299.80	.	K
299.70	.	K
299.60	.	K
299.50	.	K
299.40	.	K
299.30	.	K
299.20	.	KM
299.10	.	KLMN
299.00	.	KLMN
298.90	.	KLMN
298.80	.	KLMN
298.70	.	KLN
298.60	.	K
298.50	.	.

**FIGURE 4.16** June S&P 500, April 12 and 13, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

the previous day's range. In either case, the potential range development could be very large. After C and D periods failed to trade back into the previous day's range, it became evident that the market was indeed out of balance. The day's range expectations became unlimited to the downside, and optimal trade location could have been gained in the auction rotations of E, F, and G periods before the market broke swiftly in what resulted in a Double Distribution Selling Trend day.

The previous four days in the S&P had recorded successively higher highs. On the 13th, many traders had this fact so firmly implanted in their minds that they responded emotionally to the price break, thinking it was a prime opportunity to buy a strong market below value. Over weighting or focusing on just one or two facts can lead to tunnel vision and inhibit one's ability to see the bigger, developing picture. On the other hand, traders who understood day timeframe structure could have recognized the imbalance indicated by the opening out of range and entered the short side of the market.

## Gold

Gold on the 13th provided an excellent example of the value of range estimation. In Figure 4.17, the market opened and drove out of the previous day's value area and range, suggesting a potentially big day on the upside. However, in Z period gold auctioned back down to build double TPO prints in the 12th's value area, thus establishing value and limiting the day's expectations. When Z period was unable to extend below the open, thus confirming the Open-Drive structure and Y period buying tail, it was possible to estimate the range for the 13th by adding the length of the 12th's range to the Y period low. The range potential for the 13th, then, was roughly 392.60 to 397.20, give or take 10 percent. Using this range, longs placed in the Z period pull-back could have been successfully exited near the day's highs.

The area around 393.00 in the gold market had been a support level in the past, and many traders were waiting for a breakout. The Open-Drive activity and quick buying auctions in Z and A periods might have suggested that a big move to the upside was developing, leading many traders to buy all the way up the range. However, traders who recognized that the day's range potential was limited due to acceptance within the 12th's value area could have curbed any high expectations and identified areas providing good trade location.

	April 12	April 13
3968	.	A
3966	.	A
3964	.	zA
3962	.	zA
3960	.	zA
3958	.	zA
3956	.	zAB
3954	.	zAB
3952	.	zABI
3950	.	yzBI
3948	.	yzBGHIJ
3946	.	yzBCGHJK
3944	.	yzBCEGHIJK
3942	.	yzCDEFGHJK
3940	.	yzCDEFGJK
3938	.	yzCDEF
3936	.	yzCDEF
3934	B	yzC
3932	BC	yz
3930	BC	yz
3928	BC	O
3926	BC	y
3924	BCDEFHI	.
3922	BCDEFGHIJK	.
3920	BCDEFGHIJK	.
3918	BEFGHIJK	.
3916	BE	.
3914	B	.
3912	B	.
3910	B	.
3908	B	.
3906	B	.
3904	zAB	.
3902	zAB	.
3900	zAB	.
3898	zA	.
3896	z	.
3894	z	.
3892	yz	.
3890	y	.
3888	y	.
3886	.	.
3884	.	.
3882	.	.
3880	.	.

**FIGURE 4.17** June Gold, April 12 and 13, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## Japanese Yen

The activity in the Japanese yen on the 13th displays the significance of acceptance (or nonacceptance) within the previous day's range and value area. In Figure 4.18 the yen opened and auctioned just outside of the range of the 12th. In Z period, a selling auction into the previous day's range was flatly rejected, forming a buying tail. Despite the Z period price probe down, the base (initial balance) for the 13th remained relatively narrow. This fact, combined with the open out of value and the rejected attempt to auction down into the previous day's range, confirmed that the yen was out of balance and that buyers were in control. Because value was not established in the 12th's range (except for one tick), the expectations for the day were unlimited to the upside. Longs placed after the Z period rejection or with the A period range extension resulted in excellent day timeframe trade location.

## Soybeans

In soybeans on the 13th, the market opened in balance, immediately alerting the trader that sentiment had not changed significantly from the 12th. Figure 4.19 shows that in D period, soybeans were unable to auction price above the previous day's highs and subsequently returned down to trade through the open in E period. However, without the confidence provided by knowing what was beyond the 12th's highs, sellers could not be expected to auction price significantly lower. By superimposing the length of the 12th's range from the top of the D period selling tail, it was possible to estimate the developing range to be from roughly  $723\frac{1}{2}$  to  $729\frac{1}{2}$ . Traders acting without this knowledge might have sold with the initiative range extensions in G and H periods. Shorts placed at these levels resulted in poor day timeframe trade location (near the day's lows), as was indicated early by the range estimate.

## Treasury Bonds

Treasury bonds opened in range and were accepted within the previous day's value area in Z period (Figure 4.20). While just two ticks of double TPO prints within the 12th's value area might seem insignificant because of the narrow range on the 12th, two ticks actually accounted for a third of the value area. This day developed into a trading day with no real conviction. Due to the open within value, it was apparent early on that this day would be

	April 12	April 13
7664	.	.
7662	.	.
7660	.	C
7658	.	C
7656	.	C
7654	.	CJ
7652	.	CDJK
7650	.	CDJK
7648	.	BCDJKL
7646	.	BCDJKL
7644	.	BCDEIJKL
7642	.	BCDEFIJ
7640	.	BCDEFGI
7638	.	BDEFGHI
7636	.	ABDEFGHI
7634	.	ABEFGHI
7632	.	ABEFHII
7630	.	ABE
7628	.	A
7626	.	A
7624	.	A
7622	.	yzA
7620	.	yzA
7618	.	OzA
7616	.	yz
7614	D	yz
7612	CD	z
7610	CD	z
7608	zABCD	z
7606	yzABCDE	.
7604	yBCDE	.
7602	yEIJK	.
7600	EFGIJK	.
7598	EFGHIJKL	.
7596	EFGHIJKL	.
7594	EGHIKL	.
7592	EGHKL	.
7590	HKL	.
7588	.	.
7586	.	.
7584	.	.
7582	.	.
7580	.	.

**FIGURE 4.18** June Japanese Yen, April 12 and 13, 1989  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	April 12	April 13
730.50	.	.
730.25	.	.
730.00	J	.
729.75	J	.
729.50	FIJ	D
729.25	FIJ	D
729.00	FGIJ	D
728.75	FGIJ	D
728.50	FGHIJK	DK
728.25	FGHIJK	DK
728.00	FGHIJK	DEJK
727.75	FGHJK	DEJK
727.50	EFGHJK	DEJK
727.25	EFK	DEJK
727.00	DEFK	DEFJK
726.75	DEK	DEFJK
726.50	DEK	OEFIJK
726.25	DEK	DEFIJK
726.00	DEK	DEFGIJK
725.75	DE	DGIJ
725.50	DE	DGIJ
725.25	DE	GI
725.00	DE	GHI
724.75	DE	GHI
724.50	DE	GHI
724.25	D	GHI
724.00	D	GHI
723.75	.	GHI
723.50	.	GHI
723.25	.	GHI
723.00	.	HI
722.75	.	HI
722.50	.	HI
722.25	.	H
722.00	.	.
721.75	.	.

**FIGURE 4.19** May Soybeans, April 12 and 13, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	April 12	April 13
88 14 /32	.	.
88 13 /32	.	.
88 12 /32	y	.
88 11 /32	yKL	.
88 10 /32	yBCKL	.
88 9 /32	yzABCJKL	y
88 8 /32	yzABCDJKL	O
88 7 /32	yzACDHIJ	y
88 6 /32	zDEFGHIJ	yz
88 5 /32	DEFGHIJ	yz
88 4 /32	DEFGHI	yzEFG
88 3 /32	FGHI	zDEFGHJ
88 2 /32	HI	zACDEFGHIJ
88 1 /32	.	zABCDEHIJK
88 0 /32	.	ABCDJKL
87 31 /32	.	ABKL
87 30 /32	.	ABKL
87 29 /32	.	ABL
87 28 /32	.	L
87 27 /32	.	.

**FIGURE 4.20** June Treasury Bonds, April 12 and 13, 1989  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

similar to the 12th—a day in which it would have been best to stand aside and wait for directional conviction to develop.

## Summary

We have now completed our discussion of the market's open: from the opening call to the actual open and its relationship to the previous day. As we proceed farther into the day, remember to consider each new piece of learning in relation to the whole. The big picture continues to unfold and more of the fogged window is becoming clear as you move closer to becoming a competent trader.

## ■ Day Timeframe Auction Rotations

Based on information we have covered thus far, let us review the process a trader might go through in developing his or her day timeframe strategy. The first signs of underlying market sentiment are formed during the succession of opening calls, which alerts the trader to possible directional conviction before the markets opens. He or she then monitors the conviction demonstrated by the opening, as well as the opening's relationship to the previous day's value area and range. At this point, which is generally within the first hour of trade, the trader should have a good feel for the confidence behind the market's initial activity and the likelihood of its continuation. The next step in the day's analysis develops as the market's auction rotations reveal other timeframe activity and control.

Think of the marketplace as a game in which the other timeframe buyer and seller are vying for control. In the simplest sense, when the buyer is in control, prices tend to rise. When the seller is in control, prices generally fall, like a vertical tug-of-war. When only one participant (usually either the other timeframe buyer or seller) is in control, the market is referred to as *a one-timeframe market*. A one-timeframe market is characteristic of a Trend day. Interestingly, a Nontrend day is also a one-timeframe market. During a Nontrend day, control is also in the hands of just one participant—the local.

If neither party is in complete control, price fluctuates up and down as one side pulls and tires, then the other, and so on. When both the other timeframe and the day timeframe participants are sharing control, the market is in a *two-timeframe mode*. Two-timeframe market conditions are common during Normal, Normal Variation, or Neutral days. During a two-timeframe market, the trader must exercise greater patience, for more time is required before other timeframe control becomes evident (if at all).

Consistent off-floor trading results are most often achieved by trading with the control of the other timeframe participant. Obviously, this requires that one be able to determine *who* (if anyone) is in control, and second, *when* that control may be wavering or reversing altogether. Monitoring the development of the day's half-hour auction rotations helps identify which participant is in control of price at a given moment in time. Before examining how day timeframe auction rotations help discern other timeframe control, let us first discuss the two basic forms of other timeframe market control in greater detail.

## Two-Timeframe Markets

In a two-timeframe market, either the other timeframe buyer or seller (or both) share control with the day timeframe participant. Price rotates up and down without clear directional conviction, like a balanced tug-of-war. The resulting activity is similar to the formation of a day timeframe bracket. The Profile graphic in Figure 4.21 provides a good example of two-timeframe activity.

During two-timeframe market conditions, examination of the individual half-hour auctions (each time period viewed separately) does not generally reveal a dominance by either party. Notice from Figure 4.21 how successive time periods tend to rotate upon each other and fail to generate sustained price movement (B overlaps A on the low side, D overlaps C on the high side, etc.). *Neither other timeframe participant is in control.*

## One-Timeframe Markets

In contrast, occasionally one participant gains the upper hand, causing price to auction (or trend) in one direction for a sustained period of time. The market is controlled almost entirely by either the other timeframe buyer or other timeframe seller. Such unilateral control is referred to as a one-timeframe market (a day timeframe *trending* market). A one-timeframe market is like an uneven tug-of-war in which one side is clearly stronger and steadily gains ground. The thin, elongated Trend day Profile, shown in Figure 4.22, is a good example of a one-timeframe market.

Trend days signify a high level of other timeframe conviction and are characterized by range extension occurring in one direction during several time periods. Referring to Figure 4.22, notice that the downward rotations (Z, C, D, F, G, H, and I) are generally stronger than the rotations up (A, B, and E). One-timeframe seller control is evidenced by the inability of the buyer to successfully rotate price upward beyond the previous time period's auction high during two or more successive time periods. Successively lower rotations translate into repeated selling range extension.

### ■ Using Auction Rotations to Evaluate Other Timeframe Control

Determining which other timeframe participant is in control within the half-hour auctions, once again, falls into the two familiar categories: market

6620	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6618	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	D
6616	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6614	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6612	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6610	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6608	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6606	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6604	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	DE
6602	.	.	.	A	.	B	.	C	C	C	.	D	.	.	.	.	.	J	
6600	.	Z	A	A	B	.	.	.	.	.	.	D	D	D	F	F	.	ACDEFIJ	
6598	Y	Z	Z	A	B	.	C	C	C	C	.	.	E	E	E	E	.	YZABCEFHIJ	
6596	Y	Z	A	B	.	.	.	.	.	.	.	.	F	F	.	.	.	YZABCFGHIJK	
6594	Y	Z	Z	A	B	.	.	.	.	.	.	.	.	.	G	H	I	YZABCGLI	
6592	O	Z	Z	.	B	.	.	.	.	.	.	.	.	.	G	H	.	OZBGH	
6590	Y	Z	.	.	B	.	.	.	.	.	.	.	.	.	G	H	.	YZBGH	
6588	.	.	.	.	.	.	.	.	.	.	.	.	.	.	G	.	.	G	
6586	.	.	.	.	.	.	.	.	.	.	.	.	.	.	G	.	.	G	
6584	.	.	.	.	.	.	.	.	.	.	.	.	.	.	G	.	.	G	
6582	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
6580	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

**FIGURE 4.21** A Two-Timeframe Market  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

6728	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6726	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6724	Y	.	Z	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y
6722	Y	Z	.	.	B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZ
6720	O	Z	.	.	B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	OZB
6718	Y	Z	.	.	B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZB
6716	Y	Z	.	.	B	C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZAB
6714	Y	Z	A	B	C	C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZABC
6712	Y	Z	A	B	C	C	.	.	.	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZABC
6710	.	Z	A	B	C	C	.	.	.	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	ZABC
6708	.	Z	A	.	C	C	.	.	.	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	ZACE
6706	.	Z	.	.	C	C	.	.	.	D	D	E	E	.	.	.	.	.	.	.	.	.	.	.	.	ZCE
6704	.	.	.	.	C	C	.	.	.	D	D	E	E	.	.	.	.	.	.	.	.	.	.	.	.	CE
6702	.	.	.	.	C	C	.	.	.	D	D	E	E	.	.	.	.	.	.	.	.	.	.	.	.	CDE
6700	.	.	.	.	C	C	.	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDE
6698	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDE
6696	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDE
6694	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDE
6692	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDEF
6690	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDF
6688	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDF
6686	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDF
6684	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	CDFG
6682	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	DFG
6680	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	FGH
6678	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	FGH
6676	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	FGH
6674	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	FGH
6672	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	GH
6670	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	GH
6668	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	GHJ
6666	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	GHJ
6664	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6662	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6660	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6658	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6656	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6654	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6652	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6650	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	HJ
6648	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	IJK
6646	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	IJ
6644	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	J
6642	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	.
6640	.	.	.	.	C	C	D	.	.	D	D	E	E	F	.	.	.	.	.	.	.	.	.	.	.	.

**FIGURE 4.22** A One-Timeframe Market

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

structure and market time. Both play an important role in understanding and evaluating other timeframe control.

## Structure

In the Advanced Beginner chapter, we discussed how to monitor other timeframe control using structural features such as the TPO count, tails,

range extension, and initiative and responsive activity. In this section we take a closer look at evaluating other timeframe control through the market's half-hour auctions and their offspring—tails and range extension. Our goal is not to simply identify control, but also to determine when it may be changing *intraday*. This concept, called *timeframe transition*, will be illustrated following a brief discussion of time.

## Half-Hour Auctions

By now, it should be clear that the half-hour auctions provide a vivid picture of the market's composure at any point in time. The half-hour auctions are illustrated in Figure 4.22.

Not only does the relationship of one auction (time period) to another reflect the ongoing status of control, but the auction is often one of the first structural features to signal when control may be shifting. Subtle changes occurring within the auctions are often the precursor to dramatic changes that do not appear until much later in the form of tails and range extension. As we noted earlier, if you wait to enter a trade until after the market commits itself, you generally will not gain the favorable trade location that is so important to making objective, rational trading decisions. Tails and range extension are strong indicators, but if you rely solely on them to judge timeframe transition, you will often be too late, for they are *by-products of the market's auctions*. Later, in the section entitled "Identifying Timeframe Transition," we detail one approach to evaluating subtle changes in the day timeframe auctions.

## Extremes

The extremes, or tails, often provide the most obvious evidence of other timeframe control. Tails are created when the other timeframe buyer or seller enters the market aggressively when they feel that price is away from value. Generally, the longer the tail, the greater the conviction behind the move.

In terms of other timeframe control, no tail on the extreme is also significant. The absence of aggressive other timeframe activity on an extreme indicates a lack of buyer or seller conviction. In terms of practical trading applications, consider a rising market that shows no tail on the day's low. Such a scenario suggests that it may be wise to take gains earlier than one might if a tail were present, for the market is subject to a possible reversal.

## Range Extension

Range extension is another structural feature generated by the market's auctions that identifies other timeframe control and helps gauge buyer/seller strength. Multiple-period range extension is the result of successively higher or lower auctions. The stronger the control, the more elongated the range extension. If the range is extended in multiple time periods to the upside, for instance, it is apparent that the market is trying to auction higher and the other timeframe buyer is exerting a relatively high degree of control. It is important to monitor this attempted direction for continuation to determine the success of the market's attempts to go that way. Like all structural features, range extension is most useful when taken into consideration with the rest of the big picture, such as the auction rotations and tails.

## Time

The second and perhaps most important ingredient in evaluating timeframe control is *time*. As we have noted before, time is the market's regulator and is responsible for creating the structures we later identify and interpret. Simply stated, the less time a market spends trading at a particular price level, the lower its acceptance of those prices. If the market moves very quickly through a particular price region, then there is strong other timeframe presence at those prices that they will generally serve as support or resistance in the future. For example, a selling tail is the result of swift rejection by the other timeframe seller at prices perceived to be above value. The quicker the rejection, the stronger the other timeframe presence at that price level.

Conversely, the more time spent at a particular price level, the greater the acceptance of that price. Greater time indicates that two-sided trade is occurring, and that both the other timeframe buyer and seller are probably active. It is important to note, however, that time can be a two-edged sword. If a market is not successful auctioning in one direction over time, control may reverse as the market seeks to facilitate trade in the opposite direction. If the market spends *too much time* at a given level, price will ultimately be rejected.

The ability to identify the difference between *enough time* and *too much time* is the key to anticipating a change in control. Understanding and interpreting market activity according to time—instead of relying solely on structure—improves one's recognition and execution speed. *Time provides the signal, structure provides the confirmation.* An understanding of time allows the trader

to enter the market when control first begins to change, rather than waiting until it is confirmed by structure.

Time, however, is an intangible concept and is therefore very difficult to learn through a derivative source. Not until you personally observe the effect of time in the marketplace and gain experience through trading will you come to realize and respect the overwhelming power of time.

## Identifying Timeframe Transition

Most trading days do not develop into a pure one-timeframe or two-timeframe market, just as most tug-of-wars are neither perfectly balanced nor a total upset. Day timeframe development generally involves a degree of give and take—one side rallies for a substantial gain, then the opponent responds with greater effort in order to balance the contest, followed by another rally, and so on. In a tug-of-war, it is possible to anticipate a change in control by listening to the participants on either team psyching themselves up for a new attack.

While varying noise levels on the exchange floor often signify change, it is not of much help to the off-floor trader. However, *the Market Profile is a conduit for listening to the floor*. By observing the developing structure of the Profile, it is possible to identify timeframe transitions as they occur. The off-floor trader might even have an advantage over the floor traders who are right there in the action and apparent chaos, for the Profile reflects *composite* market activity. In a crowded pit, traders may have access to only a portion of the total activity.

Although each day develops differently, there are a few general categories of timeframe transition that we can identify:

1. No transition; either one-timeframe or two-timeframe all day.

*Example:* A Trend day (one timeframe) or most Normal days (two timeframe).

2. One-timeframe to two-timeframe trade.

*Example:* A price probe beyond a known reference point (such as a previous day's high or a weekly high, etc.) does not attract new activity, causing the market to return to two-timeframe trade.

3. Two-timeframe to one-timeframe trade.

*Example:* A market that is in a trading range near a known reference point that provides resistance or support, then price breaks through and a trend situation results.

	Y - E	Y - F	E - H	E - I	H - J	Entire Day
6732	.	.	.	.	.	.
6730	.	.	.	.	J	J
6728	.	.	.	.	J	J
6726	.	.	.	.	J	J
6724	.	.	.	.	J	J
6722	.	.	.	.	J	J
6720	.	.	.	.	J	J
6718	.	.	.	.	J	J
6716	DE	DE	E	E	JK	DEJK
6714	DE	DE	E	EI	IJ	DEIJ
6712	BCDE	BCDE	E	EI	IJ	BCDEIJ
6710	BCDE	BCDEF	EFH	EFHI	HIJ	BCDEFHIJ
6708	BC	BCF	FH	FHI	HI	BCFHII
6706	ABC	ABCF	FH	FHI	HI	ABCFI
6704	A	AF	FH	FHI	HI	AFHI
6702	YZA	YZAF	FGH	FGHI	HI	YZAFGHI
6700	OZA	OZAF	FGH	FGHI	HI	OZAFGHI
6698	YZ	YZ	GH	GH	H	YZGH
6696	Y	Y	GH	GH	H	YGH
6694	.	.	H	H	H	H
6692	.	.	H	H	H	H
6690	.	.	H	H	H	H
6688	.	.	H	H	H	H
6686	.	.	H	H	H	H
6684	.	.	.	.	.	.
6682	.	.	.	.	.	.

**FIGURE 4.23** Timeframe Transition. Segmented Profile in the Swiss Franc, October 12, 1987.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

4. One-timeframe in one direction to one-timeframe in the opposite direction.

*Example:* A Neutral day.

Not only do structure and time help determine who is in control, but they are also useful in identifying when control may be shifting. To demonstrate the interplay between time and structure when evaluating timeframe transition, refer to Figure 4.23 as we walk through the activity occurring in the Swiss franc on October 12, 1987.

## ■ December Swiss Franc, October 12, 1987

Activity on this day was characterized by early-morning one-timeframe buying, a midmorning transition to one-timeframe selling, followed by a late

return to one-timeframe buying. Using a running Profile helps traders visualize and monitor timeframe transition. A running Profile separates the day into selected time periods, starting with evidence of a change in control. The following points of discussion use Figure 4.23 to illustrate the changes in control that developed in the Swiss franc on October 12.

## Y to E: One-Timeframe Buying

One-timeframe buying control prevails during Y through E periods. Notice the successively higher (or equal) half-hour auction periods. Buyer control translated into buying range extension in A, B, and D periods. The lack of significant downward rotation shows a conspicuous absence of the other timeframe seller.

**E: Time** In E period, price slows. Buyers spent better than a full period near the high and were unable to extend the range further. Time, in this case too much time, provides the first indication that control may be shifting.

**Y to F: Auction Test** F period sees the seller enter and rotate price down below the E period .6710 auction low. This deliberate opposite rotation is viewed as a test of buyer control. Markets, being controlled by people, often behave like people. Within any trend, markets need to pause, reflect on where they are, test in the opposite direction, and so on—all in an effort to determine if they have traveled too far, or have yet to probe farther. Temporary pauses amid strong price and value trends are a natural, logical part of the market auction process.

The question to be answered in succeeding time periods is: Does this initial rotation against the one-timeframe activity reflect a loss of buyer control, or is the buyer merely taking a breather?

**G: Transition Confirmation** *Double prints* (two time period TPO prints) against a one-timeframe auction often confirm that the one-timeframe activity has ended. Double TPO prints indicate that the market has spent sufficient time rotating in one direction to justify a potential timeframe transition.

The FG double prints at .6702—double prints below the .6710 E period low—suggest that buyers were not just resting, but had relinquished control. The transition, in this case, is either to two-timeframe trade or one-timeframe selling. It is too early to tell, structurally, which will result.

Note, however, that even though timeframe control has apparently shifted, the seller was not aggressive enough to generate a selling tail on the high. The DE double TPO print on the day's high represents a high made by time, not aggressive opposite activity. This indicates a general lack of conviction on the part of the seller, and suggests that traders looking for an opportunity to sell this market should exercise caution.

**E to H: One-Timeframe Selling** A running Profile starting with E period (when the one-timeframe upward rotation first slowed) indicates one-timeframe selling extending from E period to midway through H period.

**H: Auction Test** In H period, buyers rotated price above the G period auction high, this time testing the seller's strength. The strong H period buying tail reflects staunch rejection of lower prices, and stands as an indication of aggressive other timeframe buying.

**I: Transition Confirmation** Double HI prints at .6704 confirm yet another timeframe transition, this time from selling to buying.

**H-J: One-Timeframe Buying** Following the double HI period prints, buyers tested and extended the range on the upside once again. Notice also that buyers had little difficulty extending the range beyond the .6716 DE previous high, an extreme established earlier by a nonconviction seller.

**Summary** Two-timeframe trades did occur during the periods of transition (F and H periods); however, the speed of the transition indicates a virtual immediate transfer of control, rather than a tug-of-war scenario.

## ■ Auction Failures

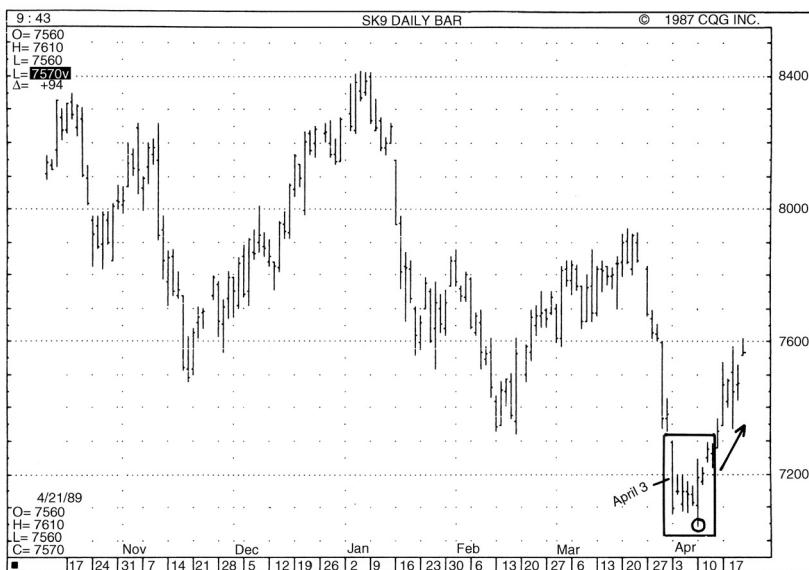
We have mentioned the term follow-through quite frequently—in our discussions of trends, breakouts, initiative activity, during the open, and so on. In fact, follow-through is essentially the answer to the question “How good of a job is the market doing in its attempts to auction in a certain direction?” Without follow-through to the upside during a bull trend, the market, in effect, fails to auction higher. Without follow-through in a golf swing, the golfer fails to successfully hit the ball. And without follow-through in a business negotiation, even the most promising deal will likely

fail. The point is that failure to follow through is just as significant as successful follow-through when monitoring market activity.

When a market auctions above or below a known reference point, one of two scenarios will develop: (1) new initiative activity will fuel continuation beyond the reference point; or (2) the auction will fail to follow through. After an auction failure, price is often rejected in the opposite direction with speed and conviction. The magnitude of this movement depends on the significance of the tested reference point. Known reference points exist in many forms: daily high/low, weekly high/low, monthly high/low, a break or rally point caused by an important news announcement, bracket top/bottom, and so forth. The greater the variety of other timeframe participants who are present at the tested reference point, the greater the potential magnitude of the auction failure. For example, if a selling auction fails to continue below a bracket low that has held for several months, day, swing, and other timeframe buyers will be brought into the market *en masse*, causing a high level of volatility. The resulting rejection of such a long-term bracket extreme could trigger a substantial rally and have a significant impact on the direction of the long-term auction.

Let us consider this example in greater detail. When price nears a bracket bottom, many traders wait to see if the previous support level will hold before entering the market. If the market should fail to breakout below the bracket bottom, these traders often respond quickly, causing the market to rally. Conversely, if price auctions through the bracket low and is accepted, the same traders may enter the market on the sell side, driving price lower, and adding fuel to a strong initiative selling auction. Such long-term auction failures are as important to the day trader as they are to the long-term participant. If a day trader is aware of long-term support levels and reference points, he or she is better prepared to capitalize on (or protect him or herself from) the dramatic day timeframe price movement common during a long-term auction failure. In fact, the longer the timeframe that the failure represents, the greater the profit potential (and risk) that is often present in the market.

Figure 4.24 illustrates a long-term auction failure in soybeans. On April 3, 1989, soybeans recorded a new long-term low at 708. The soybean market then came into balance, as is evidenced by the four consecutive days of overlapping value that followed. Figure 4.25, on April 10th, shows the activity that occurred shortly thereafter. Soybeans opened in balance at  $710\frac{1}{2}$ , then quickly drove below the low created on the 3rd (708). However, the selling auction *failed to generate new selling*. Two events generally happen after such a significant failure: (1) the participants who



**FIGURE 4.24** Long-Term Auction Failure Occurring in May Soybeans

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	April 7	April 10	April 11
725.00	.	.	.
724.50	.	J	.
724.00	.	J	.
723.50	.	J	.
723.00	.	FGIJK	.
722.50	.	FGIJK	.
722.00	.	FHGIJK	K
721.50	.	FHGIJK	DK
721.00	.	FHGIJK	DFJK
720.50	.	FHGIK	OEFIJK
720.00	.	FHGIK	DEFGIJK
719.50	.	FGK	DEFGHIJK
719.00	.	EFK	DEGHijk
718.50	.	EFK	DEHIjk
718.00	.	EFK	DHIJ
717.50	.	EF	H
717.00	.	EF	H
716.50	D	EF	.
716.00	D	EF	.
715.50	DE	E	.
715.00	DEFHJK	E	.
714.50	DEFHIJK	E	.
714.00	DEFHIJK	E	.
713.50	EFGHIJK	E	.
713.00	EFGHIJK	E	.
712.50	EFGHIJK	E	.
712.00	FHGIK	DE	.
711.50	FHGIK	DE	.
711.00	FGIK	DE	.
710.50	GI	OE	.
710.00	.	DE	.
709.50	.	D	.
709.00	.	D	.
708.50	.	D	.
708.00	.	D	.
707.50	.	D	.
707.00	.	D	.
706.50	.	D	.
706.00	.	D	.
705.50	.	D	.
705.00	.	D	.
704.50	.	D	.
704.00	.	.	.

**FIGURE 4.25** Auction Failure Occurring in May Soybeans, April 7 to 11, 1989. O designates the open.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

auctioned price lower (generally the short timeframe or local) cover their shorts and reverse their position; and (2) other traders become aware of the lack of selling below a known reference point and enter the market with confidence (the opposite applies to a probe *above* a significant reference point). On April 10, after the auction below the balance area lows stalled, buyers responded and drove the soybean market higher. The result was a Double Distribution Buying Trend day. Traders who monitored the balance-area lows and the long-term reference point at 708 could have used the auction failure to secure excellent day timeframe trade location.

Auction failures at shorter timeframe reference points are generally more subtle and result in smaller price movements when compared to auction failures at longer timeframe reference points. However, the price rejection that follows a short-term auction failure can still be swift and substantial relative to normal day timeframe structure. Figure 4.26 shows a

	May 15	May 16
91 9 /32	.	.
91 8 /32	.	.
91 7 /32	.	.
91 6 /32	yA	N
91 5 /32	yA	N
91 4 /32	yA	MN
91 3 /32	yzAEFG	MN
91 2 /32	yzBDEFG	LM
91 1 /32	zBCDEG	LM
91 0 /32	zBCDG	yLM
90 31 /32	zCDGHI	yHL
90 30 /32	zHIJKLMN	yGHJL
90 29 /32	zHIJKLMN	yGHJL
90 28 /32	zJKL	yDFGHJK
90 27 /32	zJK	yCDEFJK
90 26 /32	z	yCDEJK
90 25 /32	z	yzABC
90 24 /32	z	OzAB
90 23 /32	z	yzAB
90 22 /32	z	yzA
90 21 /32	.	y
90 20 /32	.	.

**FIGURE 4.26** Day Timeframe Auction Failure Occurring in September Treasury Bonds, May 15 and 16, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

typical day timeframe auction failure occurring in the Treasury bond market. On May 16, 1989, bonds auctioned below the previous day's low (90.22) in Y period, but failed to follow through to the downside. The market auctioned lower looking for more selling business, but there were no sell stops or new activity to sustain the downward price movement. Armed with the knowledge that there was no new selling below the short-term lows, bonds traded higher for the remainder of the day and eventually closed on the highs.

Placing a trade after an auction failure is an incredibly challenging task. In the previous example, the most recent Treasury bond activity had been down, and the crowd was selling. When price slowed, indicating potential failure, it was not easy to enter the market as a responsive buyer. Again, the best trades often fly in the face of the most recent market activity.

## Excess

To achieve its primary goal of trade facilitation, the market auctions lower to find buyers and higher to attract sellers. Ideally, the market finds a value range where both the other timeframe buyer and seller perceive price to be fair so that two-sided trade can take place. However, the market is effective, not efficient.<sup>1</sup> Consequently, in its attempt to generate trade with all participants, the market occasionally creates excess by auctioning too far in a given direction.

Suppose that a local baker produces 1,000 loaves of bread daily, which he sells for 50 cents each. Business is good at this price, and he consistently sells every loaf he bakes. Because the demand for his homemade bread seems to have been on the rise, one morning the baker raises his price to 55 cents a loaf and still sells every one. Pleased with the results, he decides to charge 60 cents the next week, but finds he sells just 800 loaves—*higher prices began to discourage buying*. The baker quickly lowers the price back to 55 cents a loaf due to decreasing sales volume and shrinking profits. The point is, he had to raise prices *too far* above value to be sure that he had found a price that both he and the consumer perceived to be fair. The baker's pricing method created an excess of 5 cents, the difference between the 60-cent extreme and 55-cent value.

---

<sup>1</sup> J. Peter Steidlmayer and Kevin Koy, *Markets & Market Logic* (Chicago: The Free Press, 1986).

Similarly, the market must auction too high to know when prices are perceived to be above value and too low to know which prices are considered to be below value. The potential for market excess occurs any time price trends significantly out of balance, or away from value. *Excess is created when the other timeframe recognizes an opportunity and aggressively enters the market, returning price to the perceived area of value.* Evidence of the resulting excess, in both the day and longer timeframe, can be identified through market structure.

## Signs of Excess

By definition, excess is useful only in hindsight analysis, for it is not identifiable until it has already formed. While this is, in fact, true, many of the structural characteristics reflected by the Profile help identify excess quickly. Tails, for example, are simply day timeframe auction excess. Day timeframe excess is illustrated in Figure 4.27.

In Figure 4.27, the other timeframe was active on both ends of the range, entering aggressively and creating day timeframe excess on both extremes. Price auctioned lower in A period and was met by a strong other timeframe

7882	.	.	.	.	.	.	.	.	.	.	.	.	.
7880	.	.	.	.	.	.	.	.	.	.	.	.	.
7878	.	.	.	.	.	E	.	.	.	.	.	.	E
7876	.	.	.	.	.	E	.	.	.	.	.	.	E
7874	.	.	.	.	.	E	.	.	.	.	.	.	E
7872	.	.	.	C	.	E	.	.	.	.	.	.	CE
7870	.	.	.	C	D	E	.	.	.	.	J	.	CDEJ
7868	.	.	.	C	D	E	F	.	.	I	J	.	CDEFIJK
7866	Y	.	.	C	D	E	F	G	.	I	J	.	YCDEFGIJ
7864	Y	.	.	C	D	E	F	G	.	I	J	.	YCDEFGIJ
7862	Y	Z	.	C	.	.	F	G	H	I	J	.	YZCFGHIJ
7860	Y	Z	.	B	C	.	.	G	H	I	.	.	YZBCGHI
7858	Y	Z	.	B	C	.	.	G	H	I	.	.	YZBCGHI
7856	O	Z	.	B	.	.	.	G	H	I	.	.	OZBGHI
7854	.	Z	A	B	.	.	.	G	H	I	.	.	ZABGHI
7852	.	Z	A	B	.	.	.	.	H	.	.	.	ZABH
7850	.	Z	A	B	.	.	.	.	.	.	.	.	ZAB
7848	.	.	A	.	.	.	.	.	.	.	.	.	A
7846	.	.	A	.	.	.	.	.	.	.	.	.	A
7844	.	.	A	.	.	.	.	.	.	.	.	.	A
7842	.	.	.	.	.	.	.	.	.	.	.	.	.
7840	.	.	.	.	.	.	.	.	.	.	.	.	.

**FIGURE 4.27** Day Timeframe Excess. Japanese Yen, March 8, 1988.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

buyer, establishing a buying tail. Conversely, an E period buying price probe was rejected by the other timeframe seller, creating a selling tail. Tails are perhaps the most common manifestation of excess, and they occur in a similar way in the long-term auction process. Long-term excess is covered later in “Long-Term Trading.”

Let’s take a moment to look at excess from another, more conceptual, perspective. Any time a given price level is rejected quickly by the market, excess is formed. The single prints separating the two areas of a Double Distribution Trend day are a variety of excess. Just like a tail, they represent prices perceived as away from value by the other timeframe. A gap is also a form of market excess, for it is, in effect, an invisible tail.

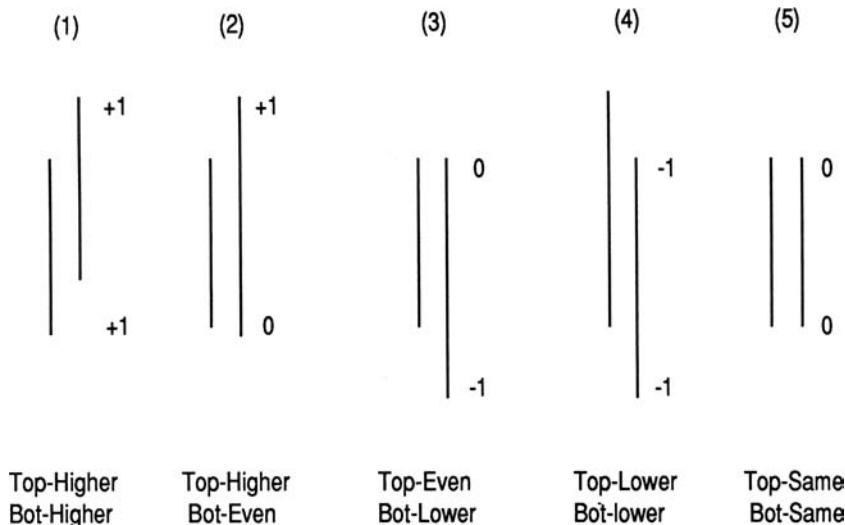
The importance of any type of excess is that it represents an area that should serve as support or resistance to price in the future. As long as conditions have not changed markedly, the other timeframe participant that drove price so vehemently should react similarly at those same price levels. This is why a tail can be used to estimate range potential, for it is a reliable benchmark by which to gauge future activity.

## The Rotation Factor

As we near the end of Day Timeframe Auction Rotations, we again address the question “Which way is the market trying to go?” Thus far, we have discussed concepts such as directional conviction, initiative and responsive activity, and other timeframe control—all of which provide bits and pieces of the answer to the first of the two Big Questions. In the day timeframe, however, we have yet to provide a finite, objective answer to the question of market direction. We present here a simple, objective means for evaluating day timeframe attempted direction based on the market’s half-hour auction rotations. It is called the Rotation Factor.

At any point in time within the day, segmenting the Profile into half-hour auctions helps determine which other timeframe participant is *currently* in control (or that neither is in control). However, it is not always easy to determine which participant is exerting greater overall influence. The Rotation Factor objectively evaluates a day’s attempted direction. Each auction rotation is measured step-by-step, allowing the trader to discern overall daily directional attempts. Figure 4.28 provides reference for the following discussion on how to calculate the Rotation Factor.

The method for assigning a value to each time period’s auction rotation is relatively simple. If the high of the current time period is higher than the



**FIGURE 4.28** The Rotation Factor

previous period's high, then the rotation is given a +1. If the high is lower than the previous period's high, then it is assigned a -1. Similarly, if a time period's low is higher than the previous period's low, then a value of +1 is added. An auction bottom that is lower than the previous period's low receives a -1. And if both periods' highs or lows come out even, then no value, or 0, is assigned. The same process is performed for each subsequent time period, ultimately resulting in a number that can provide a good indication of day timeframe sentiment. Figure 4.29, for instance, shows the Rotation Factor for a day in Treasury bonds. The cumulative rotation numbers across the time period tops totaled +3, as did the figures across the auction bottoms. The net total for this day is +6, which exhibits consistent buyer attempts throughout the day.

It is important to keep in mind, however, that the Rotation Factor only answers one of the two Big Questions—that is, which way the market is trying to go. Before any conclusions can be drawn, you must also determine if the market is doing a good job in its attempts to auction in that direction. The answer to this second Big Question requires a much more sweeping analysis than that which can be provided by a simple measure of the auction rotations. As we proceed through this chapter, we will thoroughly detail the methods necessary for determining a market's directional success.

90-20					L +1
90-19					L
90-18					L
90-17		F +1			L
90-16		F	H +1		K +1 L
90-15		F	H		K L
90-14		F	H	I -1	K L
90-13		F	H	I	K L +1
90-12	E +1	F	G -1 H	I	J -1 K
90-11	E	F	G H	I	J K
90-10	D +1	E	F +1 G H	I	J K
90-09	D	E	G H	I	J K
90-08	D	E	G -1 H 0	I 0	J K
90-07	D	E			J K +1
90-06	D	E			J
90-05	D	E +1			J
90-04	D				J -1
90-03	B +1	D			
90-02	B	C -1	D		
90-01	B	C	D		
90-00	A	B	C	D +1	
89-31	A	B	C		
89-30	A	B	C		
89-29	A	B +1	C		
89-28	A		C -1		
89-27	O				
89-26	A				
89-25	A				
89-24	A				
89-23	A				

Top Total = +1-1+1+1+1-1+1-1+1 = +3

Bot Total = +1-1+1+1+1-1+0+0-1+1+1 = +3

Overall RF = (Top + Bot) = +6

**FIGURE 4.29** The Rotation Factor. Application in Treasury Bonds.

## ■ Monitoring the POC or Fairest Price

In the first edition of *Mind over Markets* the point of control (POC) was described as the longest line, reading from left to right, closest to the center of the range; this is the price that attracted the greatest amount of time. Price advertises opportunities and time regulates all opportunities; because this price was accepted over the greatest amount of time it can also be viewed as the fairest price at which business was being conducted during the session. Monitoring the fairest price is the best way to visualize what timeframe is exerting control of the market. On a day in which there is little influence from the other or long timeframes the fairest price is less likely to migrate very far from the center of the range. When the other timeframe becomes more aggressive we will likely begin to see the fairest price migrate either higher or lower.

Occasionally, a market will start the day in a two-timeframe mode but then develop into a one-timeframe market. The Profile structure might appear to be rotational when, in fact, either the other timeframe buyer or seller has taken control. This is often a difficult situation to identify quickly. Thus the trader must learn to recognize the underlying conditions that often precede such activity, and then monitor those conditions closely. A change of control often occurs when price auctions near or beyond the day's extremes and fails to follow through, causing the auction to reverse and auction aggressively (one timeframe) in the opposite direction. A running Profile starting with the time period of potential change (a tail or breakout) is an effective means for monitoring intraday transition. You should start a new Profile by splitting the current period away from the earlier periods.

The purpose in splitting the Profile is so that you can monitor the migration of the fairest price level. The most important aspect of monitoring the POC or fairest price level is the ability to visualize the potential change or no change in the fairest price level. A chess champion can visualize the huge complexity of potential moves to be made by both him and his opponent far in advance. Similarly, a successful day trader can visualize how different market activity will affect the migration of the fairest price level.

Using Figures 4.30 through 4.34, let us closely examine a day in Treasury bonds, discussing the visualization process that occurs as the trading session progresses.

9:30

99 15 /32	.
99 14 /32	.
99 13 /32	.
99 12 /32	.
99 11 /32	.
99 10 /32	.
99 9 /32	.
99 8 /32	.
99 7 /32	A
99 6 /32	A
99 5 /32	AC
99 4 /32	AC
99 3 /32	AC
99 2 /32	AC
99 1 /32	AC
99 0 /32	ABC <
98 31 /32	ABC
98 30 /32	ABC
98 29 /32	ABC
98 28 /32	ABC
98 27 /32	AB
98 26 /32	AB
98 25 /32	A
98 24 /32	A

TPO'S      13/16

**FIGURE 4.30** 9:30 a.m. (The Point of Control, Shown Here to Be at 99 to 00, Is Actually between 98 to 31 and 99 to 00.)

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## 9:30 a.m. Figure 4.30

The fairest price or POC is actually between 99 00 and 98 31, for both prices have equal length and the center of the range is between them. Range extension to either side will change the POC (the longest line closest to the

	9:30	10:00
99 15 /32	.	.
99 14 /32	.	.
99 13 /32	.	.
99 12 /32	.	.
99 11 /32	.	.
99 10 /32	.	.
99 9 /32	.	.
99 8 /32	.	D
99 7 /32	A	AD
99 6 /32	A	AD
99 5 /32	AC	ACD
99 4 /32	AC	ACD
99 3 /32	AC	ACD
99 2 /32	AC	ACD
99 1 /32	AC	AC
99 0 /32	ABC <	ABC <
98 31 /32	ABC	ABC
98 30 /32	ABC	ABC
98 29 /32	ABC	ABC
98 28 /32	ABC	ABC
98 27 /32	AB	AB
98 26 /32	AB	AB
98 25 /32	A	A
98 24 /32	A	A

TPO'S    13/16    18/16

**FIGURE 4.31** Trading in Treasury Bonds—10:00 a.m.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

center of the range). Following range extension take the total range for the day and divide by 2 to find the center of the range. As you begin to watch the markets you will begin to visualize what effect, if any, range extension will have; if the market has spent too much time at a single level range extension it will not change the fairest price level; however, a combination of time and range extension can change fairest price level.

	9:30	10:00	10:30
TPO'S	13/16	18/16	16/24
99 15 /32	.	.	.
99 14 /32	.	.	.
99 13 /32	.	.	.
99 12 /32	.	.	.
99 11 /32	.	.	.
99 10 /32	.	.	.
99 9 /32	.	.	E
99 8 /32	.	D	DE
99 7 /32	A	AD	ADE
99 6 /32	A	AD	ADE
99 5 /32	AC	ACD	ACDE
99 4 /32	AC	ACD	ACDE
99 3 /32	AC	ACD	ACDE <
99 2 /32	AC	ACD	ACD
99 1 /32	AC	AC	AC
99 0 /32	ABC <	ABC <	ABC
98 31 /32	ABC	ABC	ABC
98 30 /32	ABC	ABC	ABC
98 29 /32	ABC	ABC	ABC
98 28 /32	ABC	ABC	ABC
98 27 /32	AB	AB	AB
98 26 /32	AB	AB	AB
98 25 /32	A	A	A
98 24 /32	A	A	A

**FIGURE 4.32** Trading in Treasury Bonds—10:30 a.m.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## 10:00 a.m. Figure 4.31

At the end of D period, the POC moves to 99 00, due to the single tick of buying range extension. A continual rise in the fairest price level indicates consistent other timeframe buying. Caution: Everything has to be continually viewed within context; the same developing market structure that occurs within the previous day's range is potentially less important than if it

were taking place when the market was out of balance relative to the previous day's structure.

### **10:30 a.m. Figure 4.32**

The POC moves higher in E period; it may seem improbable that the POC can move so quickly and cause such dramatic swings in implications; however, long or short inventory can be acquired or liquidated in a minimal amount of time, creating control shifts within a single time period.

After E Period, it is possible to start visualizing potential auction rotations. If F period trades at the POC (99 03) and auctions lower the fairest price to conduct business will decline. If F period begins to trade higher followed by G and H the fairest price will rise, indicating that timeframes beyond the day timeframe are continuing to push the market higher.

### **Noon Figure 4.33**

Auctions in F, G, and H period raise the POC or fairest price at which business is being conducted; buyers beyond the day timeframe continue to press the market higher.

Price advertises all market opportunities, while time is the regulator of all those opportunities. In our current example, while price continues to press higher, time is restricting the advance. Notice how the POC or fairest price level to conduct business continues to become more prominent than the surrounding prices. A healthier market would see a more elongated Market Profile. The Market Profile gives the market a readable two-dimensional structure.

### **2:00 p.m. Figure 4.34**

Notice that the fairest price level has not changed since noon, Figure 4.33. The POC and fairest price to conduct business are one and the same; it is easier to appreciate what is occurring in the market if you think in terms of the fairest price; for example, in the last two figures any buying that took place above the fairest price level saw buyers buying price above the fairest price. When this is occurring traders are taking above-average risk; when we trade we like to constantly think in terms of odds. Any selling, relative to the

	9:30	10:00	10:30	12:00
99 15 /32	.	.	.	.
99 14 /32	.	.	.	.
99 13 /32	.	.	.	.
99 12 /32	.	.	.	.
99 11 /32	.	.	.	.
99 10 /32	.	.	.	F
99 9 /32	.	E	EFG	
99 8 /32	D	DE	DEFG	
99 7 /32	A	AD	ADE	ADEFG
99 6 /32	A	AD	ADE	ADEFG
99 5 /32	AC	ACD	ACDE	ACDEFGH <
99 4 /32	AC	ACD	ACDE	ACDEGH
99 3 /32	AC	ACD	ACDE <ACDEH	
99 2 /32	AC	ACD	ACD	ACDH
99 1 /32	AC	AC	AC	ACH
99 0 /32	ABC <	ABC <	ABC	ABCH
98 31 /32	ABC	ABC	ABC	ABC
98 30 /32	ABC	ABC	ABC	ABC
98 29 /32	ABC	ABC	ABC	ABC
98 28 /32	ABC	ABC	ABC	ABC
98 27 /32	AB	AB	AB	AB
98 26 /32	AB	AB	AB	AB
98 25 /32	A	A	A	A
98 24 /32	A	A	A	A

**FIGURE 4.33** Trading in Treasury Bonds—Noon  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

fairest price level, would be considered selling short-in-the-hole or selling price below value.

## The Close

The last indication of day timeframe market sentiment is embodied in the day's close; far too much emphasis is often placed upon the close and what

	9:30	10:00	10:30	12:00	2:00
99 15 /32	.	.	.	.	L
99 14 /32	.	.	.	.	L
99 13 /32	.	.	.	.	JL
99 12 /32	.	.	.	.	JL
99 11 /32	.	.	.	.	JKL
99 10 /32	.	.	.	F	FJKL
99 9 /32	.	E	EFG	EFGJKL	
99 8 /32	D	DE	DEFG	DEFGIJKL	
99 7 /32	A	AD	ADE	ADEFG	ADEFGIJKL
99 6 /32	A	AD	ADE	ADEFG	ADEFGIJKL
99 5 /32	AC	ACD	ACDE	ACDEFGH <	ACDEFGHIKL <
99 4 /32	AC	ACD	ACDE	ACDEGH	ACDEGHIKL
99 3 /32	AC	ACD	ACDE <	ACDEH	ACDEHIKL
99 2 /32	AC	ACD	ACD	ACDH	ACDHL
99 1 /32	AC	AC	AC	ACH	ACH
99 0 /32	ABC <	ABC <	ABC	ABCH	ABCH
98 31 /32	ABC	ABC	ABC	ABC	ABC
98 30 /32	ABC	ABC	ABC	ABC	ABC
98 29 /32	ABC	ABC	ABC	ABC	ABC
98 28 /32	ABC	ABC	ABC	ABC	ABC
98 27 /32	AB	AB	AB	AB	AB
98 26 /32	AB	AB	AB	AB	AB
98 25 /32	A	A	A	A	A
98 24 /32	A	A	A	A	A
TPO'S	13/16	18/16	16/24	17/38	43/45

**FIGURE 4.34** Trading in Treasury Bonds—2:00 p.m.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

the close portends for the following day. The close does, however, often greatly influence overnight traders who continue to trade in the direction of the close. Overnight inventory will be covered in the final chapter, entitled “Expert.”

## ■ Day Timeframe Visualization and Pattern Recognition

Garry Kasparov, the world chess champion, once challenged 59 schoolchildren in separate games of chess—*all at once*. The competition took place in a Bronx gymnasium with the chess tables set up in the form of a large square. The expert strolled from board to board, selecting his moves. He spent very little time making decisions, while each of his opponents had all the time they needed. While a child is no match for the skilled Kasparov, taking on 59 children at once is a challenge to any one individual, regardless of skill level. Yet, he handily beat 57 of the students, while two proud young chess players managed to take him to a draw. How did Kasparov do it, particularly in such a short amount of time? Playing—not to mention winning—57 matches simultaneously requires something more than skill alone.

Over the course of his chess career, Kasparov has probably experienced nearly every conceivable arrangement of the game's playing pieces. There are a variety of known and recognizable chess strategies, openings, and so on. Quite possibly, Kasparov was relying on *pattern recognition*. He was speed-reading, or *visualizing*, the board, recognizing patterns and making decisions based on past experience in similar situations. Pattern recognition, or visualization, begins to materialize after extensive practice and experience in practically any endeavor, whether it be playing chess, predicting the weather, diagnosing a patient, or trading.

As a trader gains more and more experience observing and trading using the Market Profile, a number of recognizable patterns begin to surface in day timeframe structure. Virtually every structural feature of the Profile involves pattern recognition in one form or another, and most play a part in visualizing the developing day timeframe structure. For example, an Open-Drive outside of the previous day's range is a pattern that allows a trader to immediately visualize a Trend day scenario and sustained price movement throughout the day. Conversely, an Open-Auction in value is usually a good indication of a more balanced, trading type of day. This information enables a trader to visualize and estimate the potential extremes of the day's range.

Successful trading is assisted by successful visualization. Monitoring the opening call and open activity allows a trader to visualize the formation of the day's auction rotations. In turn, observing the evolving auctions makes it possible to visualize the type of day pattern that might emerge. Recognizing

certain day types and structural patterns allows the visualization of trade facilitation and attempted market direction. All these factors contribute to the ongoing visualization process and make up the big picture for the day timeframe.

We will discuss here three distinctive patterns that have particularly interesting implications for day timeframe visualization: short covering rallies, long liquidation breaks, and ledges.

## Short-Covering Rallies

Probably one of the market's most deceptive and misunderstood behaviors is known as short covering. Almost all rallies start with "old business" covering their short positions, which at least temporarily causes price to auction higher. If this rally is not accompanied by new buying, it is usually due solely to short covering.

Short covering often follows a day (or several days) of strong selling activity. As the market moves farther out of balance, participants simply become "too short." A sharp rally, generally occurring on or soon after the open, follows as participants enter to cover (buy back) their short positions. The need to cover may be a result of: (1) locals simply selling so much that their inventories become too short; (2) profit-taking after an extended down move; or (3) other timeframe participants with short positions who are forced to exit. Like a kettle that whistles when too much steam has built up inside, a short-covering rally is a short-term event that relieves temporary market pressure.

After recent strong selling activity, the swift rally that is characteristic of short covering can be easily misinterpreted as aggressive other timeframe buying. However, if the rally is truly caused by short covering and not new buying interest, the market will often resume its prior course once the selling imbalance has been neutralized. Unfortunately, such quick and erratic activity can easily heighten market anxiety and cause traders to exit a trade far too early, or even exit shorts and enter longs. When identified and interpreted properly, however, short covering often generates a market-created opportunity to sell.

As illustrated in Figure 4.35, a short covering rally (that is not accompanied by new buying) resembles the letter *P*, or a half-completed Profile. Once the covering diminishes, price usually recedes and corrects itself, in effect, filling in the lower half of the range. The trader's first alert to potential short covering is the swift, excited rally that is immediately

	February 24	February 19	February 18			
	Y-C	D-K	A-F	G-K	Y-D	E-J
4400	.	94 0 /32	.	.	7740	.
4398	.	93 31 /32	.	.	7738	.
4396	YA	93 30 /32	.	.	7736	.
4394	YZAB	D	93 29 /32	.	7734	.
4392	YZABC	D	93 28 /32	D	7732	.
4390	YZABC	D	93 27 /32	DE	7730	.
4388	YZABC	DE	93 26 /32	BDE	7728	A
4386	YZAB	DEF	93 25 /32	BCDE	7726	ABC
4384	YZ	DEFG	93 24 /32	BCDEF	7724	ABCD
4382	YZ	EFGH	93 23 /32	BCEF	7722	ZABCD
4380	YZ	EFGH	93 22 /32	BCEF	7720	ZABCD
4378	YZ	EFH	93 21 /32	BEF	7718	ZABD
4376	YZ	EFH	93 20 /32	BE	7716	YZBD
4374	Y	EH	93 19 /32	B	7714	YZB
4372	Y	HI	93 18 /32	AB	7712	YZB
4370	O	HI	93 17 /32	AB	7710	YZ
4368	.	I	93 16 /32	AB	7708	Y
4366	.	IJ	93 15 /32	A	7706	Y
4364	.	IJ	93 14 /32	A	7704	O
4362	.	IJ	93 13 /32	A	7702	EFGH
4360	.	IJ	93 12 /32	O	7700	EFGH
4358	.	IJ	93 11 /32	.	7698	EFGH
4356	.	IJK	93 10 /32	.	7696	FGHIJ
4354	.	IJK	93 9 /32	.	7694	FGHIJ
4352	.	IJK	93 8 /32	.	7692	FGHIJK
4350	.	JKL	93 7 /32	.	7690	FGHIJ
4348	.	K	93 6 /32	.	7688	FJ
4346	.	.	93 5 /32	.	7686	.
4344	.	.	93 4 /32	.	7684	.
4342	.	.	93 3 /32	.	7682	.
4340	.	.	93 2 /32	.	7680	.

April COMEX Gold

March Treasury Bonds

March Japanese Yen

**FIGURE 4.35** Day Timeframe Short Covering Occurring in Three Markets: Gold, February 24, 1988; Treasury Bonds, February 19, 1988; Japanese Yen, February 18, 1988  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

followed by the virtual disappearance of the buyer. The rally stalls almost as quickly as it got started. *Short covering is caused by old business, not by new participants entering the market.*

This is not to say that every time a market rallies quickly and stalls it is the result of short covering. There are situations in which the market will rally, stall, then rally further. For example, the top of a bracket can offer sufficient resistance to slow price after a strong rally. Once price breaks through the bracket, however, the rally will generally resume with renewed force. Figure 4.36 demonstrates this scenario. How, then, can a trader tell the two apart? Let us refer to Figure 4.37 for illustration.

7840	.	.
7838	.	.
7836	.	.
7834	.	J
7832	.	JK
7830	.	J
7828	.	IJ
7826	.	IJ
7824	.	HIJ
7822	.	HIJ
7820	.	HI
7818	.	H
7816	.	GH
7814	.	EFGH
7812	.	EFGH
7810	.	EFG
7808	.	DEF
7806	.	DEF
7804	ZAC	D
7802	ZABC	D
7800	ZABC	D
7798	ZABC	.
7796	YZABC	.
7794	YZ	.
7792	YZ	.
7790	YZ	.
7788	Y	.
7786	Y	.
7784	Y	.
7782	Y	.
7780	O	.
	Y-C	D-J

**FIGURE 4.36** Exception to Short Covering Occurring in the Japanese Yen, March 7, 1988

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	B-E Auctions	B-E	B-H	B-P
250.00	.	.	.	.
249.80	.	.	.	.
249.60	.	.	.	.
249.40	C	.	C	C
249.20	C	C	CD	CD
249.00	C	D	CD	CD
248.80	D	.	CD	CD
248.60	B	C	BCDE	BCDE
248.40	B	C	BDE	BDEG
248.20	B	C	BCDE	BCDEFG
248.00	B	D	BCDE	BCDEFGH
247.80	C	E	BCDE	BCDEFGH
247.60	B	.	B	BFGH
247.40	B	.	B	BFGH
247.20	B	.	B	BFGH
247.00	O	.	O	OI
246.80	B	.	B	BI
246.60	B	.	B	BI
246.40	.	.	.	—
246.20	.	.	.	—
246.00	.	.	.	—
245.80	.	.	.	—
245.60	.	.	.	—
245.40	.	.	.	—
245.20	.	.	.	—
245.00	.	.	.	—
244.80	.	.	.	—
244.60	.	.	.	—
244.40	.	.	.	IN
244.20	.	.	.	IMN
244.00	.	.	.	IMN
243.80	.	.	.	ILMN
243.60	.	.	.	ILMNPQ
243.40	.	.	.	IJLMNP
243.20	.	.	.	IJKLMNP
243.00	.	.	.	IJKLMNP
242.80	.	.	.	IJKLMNP
242.60	.	.	.	IJKLMNP
242.40	.	.	.	IJKLMNP
242.20	.	.	.	IJKLMP
242.00	.	.	.	IJKLMP
241.80	.	.	.	IKL
241.60	.	.	.	IKL
241.40	.	.	.	K
241.20	.	.	.	K
241.00	.	.	.	K
240.80	.	.	.	—

**FIGURE 4.37** Short Covering Occurring in the March S&P 500, January 20, 1988  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

In Figure 4.36, the P formation is evident through E period in the S&P market. The individual half-hour auctions for B through E periods are separated to show the short covering rotations, followed by the Profile for the same period, the B to H Profile, and finally the completed day. It is evident that after the initial rally in B period, each subsequent half-hour auction did a worse job of facilitating trade with the buyer. Nearly every successive higher auction was *lower* than the previous auction high. Compare

this formation closely to the formation in Figure 4.36. In Figure 4.36, the buyer successfully managed to hold his ground, while in Figure 4.37 the buyer gradually *lost* ground.

Figure 4.37 projects the waning buyer strength. Through E period, the half-completed Profile is apparent, looking as if the market needs to rotate downward and fill in the other half. By F period, the short covering begins to dissipate, sellers reenter and the day's structure begins to close in on itself. In addition, Figure 4.37 illustrates a unique phenomenon not uncommon during short covering rallies. After the initial rally, the S&P actually switched to a one-timeframe selling mode beginning with the formation of the high during C period (each successive auction was equal to or lower than the previous half-hour auction without extending beyond the high).

## Long-Liquidation Breaks

The opposite side of a short-covering rally is the long-liquidation break. The market forces that cause long liquidation are the opposite of those that trigger short covering. Due to locals who have gotten too long (bought too much) or a large number of other timeframe participants exiting their long positions after an extended up trend, the quick sale drives price swiftly downward. Again, this selling break is primarily caused by the liquidation of old long positions, not placing of new shorts. Thus, the liquidating break generally lasts as long as there are longs to cover (unless the selling break brings new business into the market and exhibits follow-through). Once the "sale" is over, the market begins to correct itself. The resulting pattern often takes the shape of a *b* (the inverse of the short covering P formation). Figure 4.38 illustrates a long-liquidation break.

In the S&P market on this day, the market opened and drove sharply lower through C period. As is characteristic of a long-liquidation break, subsequent time periods showed a lack of seller continuation and a transition to one-timeframe buying (in this case, through H period). This particular example is not nearly as perfect as the short-covering scenario highlighted on the preceding pages—and few are. Notice that in I period the S&P auctioned down near the C period lows once again. However, the seller's inability to auction *below* the C period lows reaffirmed the lack of seller follow-through and the continued buyer strength. Once the I period auction failed to attract new selling, buyers reemerged and completed the Profile.

The liquidation occurring on this day is a vivid illustration of the importance of visualization and pattern recognition. If you become too

258.00	.	.	.	.	.	.	.	.	.	.	.	.	.
257.80	.	.	.	.	.	.	.	.	.	.	.	.	.
257.60	.	.	.	.	.	.	.	.	.	.	.	.	.
257.40	.	.	.	.	.	.	.	.	.	.	.	.	.
257.20	.	.	.	.	.	.	.	.	.	.	.	L	.
257.00	.	.	.	.	.	.	.	.	.	.	.	LN	.
256.80	.	.	.	.	.	.	.	.	.	.	.	KLN	.
256.60	.	.	.	.	.	.	.	.	.	.	.	KLN	.
256.40	.	.	.	.	.	.	.	.	.	.	.	KLN	.
256.20	O	.	.	.	.	.	.	.	.	.	O	KLNP	.
256.00	B	.	.	.	.	.	.	.	.	.	B	KLMNP	.
255.80	B	.	.	.	.	.	.	.	.	.	B	KLMNPQ	.
255.60	B	.	.	.	.	.	.	.	.	.	B	KLMNP	.
255.40	B	.	.	.	.	.	.	.	.	.	B	KLMN	.
255.20	B	.	.	.	.	.	.	.	.	.	B	KLMN	.
255.00	B	C	.	.	.	G	.	.	.	.	BCG	BCGKM	.
254.80	B	C	.	.	.	G	H	.	J	.	BCGHJ	BCGHJKM	.
254.60	B	C	.	.	F	G	H	.	J	.	BCFGHJ	BCDFGHJ	.
254.40	B	C	.	.	F	G	H	I	J	.	BCFGHIJ	BCDFGHI	.
254.20	B	C	.	.	F	H	I	I	J	.	BCFHIJ	BCFHJ	.
254.00	B	C	.	E	F	.	H	I	J	.	BCEFHIJ	BCEFHIJ	.
253.80	B	C	.	E	F	.	.	I	J	.	BCEFIJ	BCEFIJ	.
253.60	.	C	D	E	F	.	.	I	J	.	CDEFIJ	CDEFIJ	.
253.40	.	C	D	E	.	.	.	I	J	.	CDEIJ	CDEIJ	.
253.20	.	C	D	E	.	.	.	I	.	.	CDEI	CDEI	.
253.00	.	C	D	.	.	.	.	I	.	.	CD	CD	.
252.80	.	C	.	.	.	.	.	.	.	C	C	.	.
252.60	.	.	.	.	.	.	.	.	.	.	.	.	.
252.40	.	.	.	.	.	.	.	.	.	.	.	.	.
252.20	.	.	.	.	.	.	.	.	.	.	.	.	.
252.00	.	.	.	.	.	.	.	.	.	.	.	.	.
	B-J Auctions										B-J	B-P	

**FIGURE 4.38** Day Timeframe Long Liquidation Occurring in the March S&P 500, February 2, 1988  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

involved in the minute-to minute price movements, it is easy to fall victim to tunnel vision. The ability to visualize promotes the objectivity that is so necessary for developing a holistic view of the marketplace.

## Summary of Short Covering and Long Liquidation

A Profile beginning to develop the shape of a *P* or a *b* does not imply that short covering or long liquidation is occurring. Remember, all facts are

surrounded by other circumstances. Properly evaluating short-covering or long-liquidation patterns requires that the trader make careful note of the underlying conditions prevailing in the market and the requisite characteristics that signify each pattern. The main considerations are: (1) the recent market direction compared to the formation, (2) the open—near the low for a short covering and near the high for long liquidation, (3) the subsequent non-continuation after a drive away from the open, and (4) gradually retracing auctions as the short-term buying or selling releases temporary pressure.

## ■ Ledges

A ledge is a rather strange, awkward-looking formation. In effect, ledges resemble one half of a normal distribution—as though someone chopped the Profile in two. Ledges form when a market repeatedly attracts the responsive participant in its attempt to auction in a given direction. Consequently, the market stalls again and again at one particular price level.

The half-completed structure of a ledge tends to make a trader feel uneasy. It seems as though something is bound to happen, that the day's Profile is still evolving. Logically and intuitively, the market is almost *expected* to spill over the ledge and fill in the day's Profile. However, if it does not and the ledge holds, the market may move significantly in the opposite direction. The key to successfully trading a ledge lies in monitoring the activity around the ledge for clues regarding which scenario will come to pass.

A ledge is often the result of short covering or long liquidation. The market moves in one direction with short-term conviction, then suddenly stalls. There is no follow-through to sustain the auction. The market auctions up, for example, and stalls once the participants who were long have covered their positions. As time goes on, one of two events can occur: (1) the lack of continuation to the upside gives sellers confidence to auction price below the ledge; or (2) the ledge offers support, and buyers enter to resume the up trend. A typical ledge pattern is shown in Figure 4.39.

The dynamics governing a day timeframe ledge are similar to those underlying a long-term breakout from a balanced area. Several days of overlapping value generally indicate that a market is in balance. A breakout in either direction is a sign that the market is coming out of balance, and trades should be placed in the direction of the breakout. Similarly, a ledge is an indication of day timeframe balance, and a breakout from the ledge indicates a departure from balance. In terms of trading applications, if price

4490	.	.
4488	.	.
4486	C	C
4484	ZBC	ZBC
4482	ZBCD	ZBCD
4480	YZABCDEG	YZABCDEG
4478	YZABDEFG	YZABDEFGH
4476	YADEFG	YADEFGH
4474	Y	YH
4472	Y	YH
4470	Y	YHI
4468	Y	YHI
4466	O	OHIJ
4464	Y	YIJ
4462	.	IJ
4460	.	JK
4458	.	JK
4456	.	JK
4454	.	JK
4452	.	K
4450	.	KL
4448	.	.
4446	.	.
	Y-G	Y-K

**FIGURE 4.39** A Ledge Pattern in June Gold, May 3, 1988

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

auctions more than a few ticks “off the ledge,” trades should be placed in the direction of the breakout (unless there are extraneous market conditions present—news events, etc.). In Figure 4.39, for example, shorts should have been placed at 4472 when gold dropped off the 4476 ledge in H period.

## Summary

The three-day timeframe patterns introduced here are but a small fraction of the total number of patterns that exist in the marketplace. The different opening types each form their own identifiable pattern. As the market’s half-

hour auctions unfold, the patterns characteristic of the different day types begin to emerge. Almost every aspect of the market's auction process can be categorized as some sort of pattern, although not all of them are as specific as short covering, long liquidation, and ledge formations.

The importance of pattern recognition is not in the act of labeling different market structures. Rather, pattern recognition is essential for understanding current market activity, and more important, learning to visualize future market development.

## ■ **High- and Low-Volume Areas**

To conclude our discussion of Day Timeframe Trading, we will examine high- and low-volume areas and their use in identifying changes in market sentiment. Market change is accompanied by both risk and opportunity. The key to securing optimal trade location is the ability to identify market change as it is developing, before the change is confirmed by structure. By monitoring significant volume-generated reference points, a trader can anticipate market behavior and maximize trade location in the early stages of change.

### **High-Volume Areas**

High-volume concentrations develop when the market spends a relatively large amount of time trading within a narrow range of prices. Both the buyer and seller are active, forming a short-term balance region in which price slows to accommodate two-sided trade. In other words, the market perceives that area to be fair, and volume builds over a period of time.

In the shorter timeframes, high-volume areas represent the market's most recent perception of value and, therefore, have a tendency to *attract* price. Naturally, all markets eventually undergo change and leave the high-volume area in search of new value. Should the market subsequently return to those price levels, the high volume region should once again attract (slow) price.

We caution that the market's memory is primarily short term. The longer price remains away from a specific region of acceptance, the less significance the high volume will have on the market as it reenters that region. However, with regard to day and swing traders, an area of previously established high volume should slow price movement long enough to provide sufficient time to enter or exit a trade.

For example, suppose the swing auction in Treasury bonds is up, but the market probes downward into an area of previous high volume. The slowing of price should provide time to enter a responsive long and then monitor it for the reemergence of the buyer. Similarly, when seeking to exit an existing long, a trader can be relatively sure that when a market moves up into a high-volume area, price will slow enough to allow time to liquidate the long position.

## Identifying High-Volume Levels

Depending on the data vendor, day timeframe traders have three potential sources for high-volume price information:

1. The Liquidity Data Bank (LDB). Shown in Figure 4.40, the LDB displays individual price volume information (as discussed earlier). With respect to isolating areas of high volume, the most significant figure is found in the %Vol column. These figures represent the percentage of total volume occurring at each price traded during the day. In Figure 4.40, the area marked near the center of the range—89 to 05 through 89 to 08—represents the four prices showing the greatest volume during trade on the 25th. In other words, 9.7 percent of the day's trade took place at 89 to 08, while 10.4 percent occurred at 89 to 07, and so forth. These four prices add up to 40.3 percent of the day's trade and represent an area where the following trading session's auction rotations should slow, allowing time to position or exit a trade (if an opportunity is presented at all).
2. The Market Profile Graphic. For those markets without the benefit of LDB information, the Market Profile graphic provides solid structural clues regarding the day's high-volume levels. In the absence of real volume figures, the second best measure of high-volume concentrations are the high TPO prices surrounding the point of control. The thick, middle portion of the Profile usually closely parallels the LDB high-volume prices. Price should slow as it enters the “fat” region of the previous trading session’s Profile.
3. Tick Volume. Tick volume is available through several quote services, some of which now provide a tick-volume graphic representing the relative “tick” volume for each price traded as the day's structure evolves. Readers should note that tick volume measures the number of trades that take place; it does not reflect the actual contract volume in each trade. Thus, one tick may equal two contracts or 2,000 contracts—

## Volume Summary

Price	Volume	%Vol	%Ct1	%Ct2	%Ct3	%Ct4	Brackets
8916	358	0.1	47.5	15.4	9.2	27.9	A
8915	6588	1.6	61.7	9.1	3.4	25.7	A
8914	9048	2.2	58.7	9.2	4.6	27.6	ABC
8913	19398	4.8	56.8	11.3	11.4	20.4	ABC
8912	35200	8.7	59.5	11.0	11.8	17.7	ABCL
8911	17470	4.3	57.7	10.3	6.3	25.7	ABCKL
8910	21494	5.3	55.9	13.4	7.9	22.9	CKL
8909	17212	4.3	61.1	8.3	3.8	26.8	CJJKLM
8908	39224	*	9.7	56.0	15.7	3.8	CDJKLM
8907	41934	*	10.4	58.7	14.6	3.3	CDJKLM
8906	42232	*	10.4	59.0	10.2	8.1	22.7
8905	39852	*	9.8	58.3	13.2	8.8	CDEGHJKL
8904	28830	7.1	54.7	15.1	3.9	26.3	CDEGHJU
8903	21572	5.3	59.2	14.7	4.9	21.2	CEFGHJU
8902	19286	4.8	63.2	10.4	3.6	22.8	EFGHI
8901	25774	6.4	58.3	10.8	6.4	24.5	EF
8900	14448	3.6	58.5	15.2	6.6	19.7	EF
8831	4712	1.2	60.0	8.1	2.9	29.0	F
70%	8909	290364	71.8	58.4	13.0	5.5	23.2
V-A	8900						CDEFGHIJKL
			%CT1	%CT2	%CT3	%CT4	
Volume for U S BONDS DAY DEC 88	404632	58.3	12.5	6.4	22.9		
Volume for all U S BONDS DAY	414442	57.7	12.5	6.7	23.1		

**FIGURE 4.40** High-Volume Areas. December Treasury Bonds, October, 25, 1988.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

quite a difference from a trading logic standpoint. Moreover, on low-volume days (like holidays) tick volume can register quite high because of heavy local activity, while in reality, actual volume is low. Still, high tick-volume prices generally coincide closely with the high TPO prices and, therefore, may be a useful estimate of the high-volume prices (Figure 4.41). When using tick volume, traders simply need to be more aware of the underlying liquidity of the market in which they are trading.

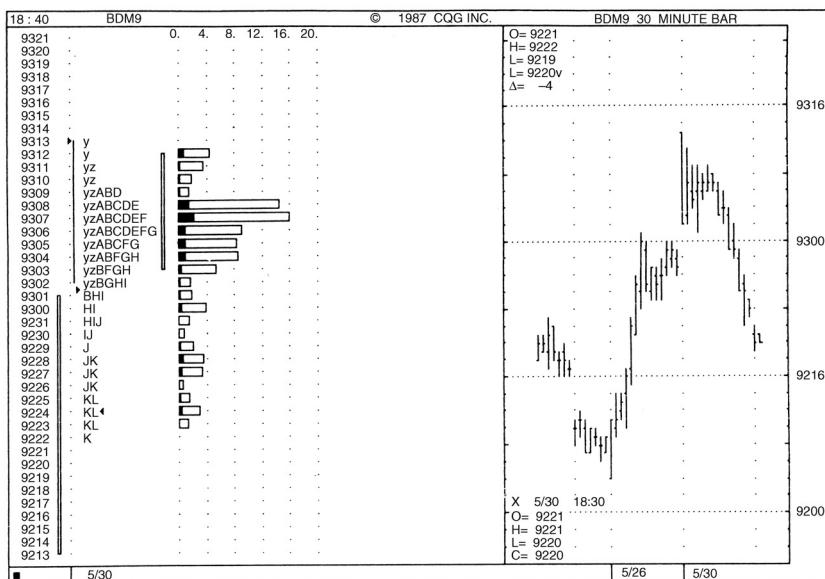
## High-Volume Examples

### Example 1: Up Auction; Probe down into High-Volume Area

During late October, Treasury bonds were in the midst of a long-term buying auction. As is demonstrated by Figure 4.42, October 25 recorded high-volume prices in the 89 to 05 to 89 to 08 region. After a higher opening on the 26th, responsive sellers attempted to auction price lower during A and B periods. The selling auctions eventually slowed near the area of the highest volume concentrations of the previous day. Buyers then entered the market and returned price above the 25th's value area.

Given that the long-term direction was up and that the bond market had opened higher, traders looking for a good location to place a long could expect price to slow if it auctioned down near the high-volume area of the 25th. If the buying auction was exceptionally strong, however, price would not have returned to the high-volume area at all. It is important to stress that traders should not expect the market to stop precisely at the high-volume levels—remember, high volume *attracts* price, but it is not a rigid floor or ceiling. It is logical for the market to trade *around* a high-volume area. Thus, the market could just as easily find support or resistance before the high-volume region as beyond it. The key to taking advantage of high volume is: (1) do not try to be perfect—first execute the trade; and then (2) place your confidence in the slowing properties of volume. If price had subsequently been accepted below the high-volume area, traders would have been alerted that market perceptions of value had changed. Long positions should have been exited immediately.

While October 26 did not evolve into a big day, it did show general continuation to the upside through higher value placement. Moreover, when the Treasury bond market attempted to auction lower in C period, price slowed and found support at the high-volume levels. Day traders could



**FIGURE 4.41** Tick Volume Profile in June Treasury Bonds, May 30, 1989

Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

October 25, 1988

October 26, 1988

Price	Volume	%Vol	Brackets	Volume	%Vol	Brackets
8922	.	.	.	1734	0.5	A
8921	.	.	.	9512	2.7	A
8920	.	.	.	5760	1.7	A
8919	.	.	.	15274	4.4	AHK
8918	.	.	.	32180	9.2	AHIK
8917	.	.	.	32782	9.4	ABHIKLM
8916	358	0.1	A	39916	11.4	ABDFGHijklm
8915	6588	1.6	A	69704	20.0	ABCDEFghijklm
8914	9048	2.2	ABC	64580	18.5	ABCDEFghijl
8913	19398	4.8	ABC	40570	11.6	ABCDEFgj
8912	35200	8.7	ABCL	14502	4.2	BCE
8911	17470	4.3	ABCKL	10026	2.9	BC
8910	21494	5.3	CKL	12088	3.5	BC
8909	17212	4.3	CJKLM	272	0.1	B
8908	39224 *	9.7	CDJKLM	.	.	.
8907	41934 *	10.4	CDJKLM	.	.	.
8906	42232 *	10.4	CDEGHJKLM	.	.	.
8905	39852 *	9.8	CDEGHIJ	.	.	.
8904	28830	7.1	CEFGHIJ	.	.	.
8903	21572	5.3	EFGHI	.	.	.
8902	19286	4.8	EFHI	.	.	.
8901	25774	6.4	EF	.	.	.
8900	14448	3.6	EF	.	.	.
8831	4712	1.2	F	.	.	.
VA	290364	71.8	VA 8900-8909	247552	71.0	VA 8913-8917

**FIGURE 4.42** High-Volume Areas. December Treasury Bonds, October 25 and 26, 1988.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

observe the downward testing to 89 to 10, place longs against that level, and rely on the slowing properties of volume should price probe lower.

Example 2: Down Auction; Probe up into High-Volume Area

Figure 4.43 shows Treasury bonds at the start of a potential short-term down auction. September 14 demonstrates a Normal Variation selling day, characterized by a strong responsive selling tail and late selling range extension in K period, resulting in a close in the lower half of the range. The unusually large selling tail alerted traders to potential buying excess on the high. Figure 4.43 shows the Profiles for September 14 and 15, along with the %Vol figures for both. The 14th's high-volume prices spanned from roughly 88 to 20 to 88 to 25, accounting for 53.7 percent of the day's

September 14, 1988		September 15, 1988				
Price	Volume	%Vol	Brackets	Volume	%Vol	Brackets
8909	410	0.1	A	.	.	.
8908	4506	0.8	A	.	.	.
8907	7150	1.3	A	.	.	.
8906	2932	0.5	A	.	.	.
8905	1202	0.2	A	.	.	.
8904	1368	0.2	A	.	.	.
8903	916	0.2	A	.	.	.
8902	4440	0.8	A	.	.	.
8901	14450	2.5	A	.	.	.
8831	9554	1.7	A	.	.	.
8830	13804	2.4	A	.	.	.
8829	11240	2.0	AB	.	.	.
8828	11276	2.0	ABC	.	.	.
8827	13176	2.3	ABC	.	.	.
8826	28366	5.0	ABCF	72	0.0	C
8825	53476	9.4	ABCFGI	4540	1.0	BC
8824	44194	7.8	ABCDEFGHJ	15212	3.2	ABC
8823	36506	6.4	ABCDEFGHIJK	14932	3.1	ABC
8822	55690	9.8	ABCDEFGHIJK	30170	6.3	ABCDEF
8821	6496	11.4	ABCDEFGHIJK	42492	8.9	ABCDEF
8820	50842	8.9	ABCDEFGHIJK	57832	12.1	ABCDEF
8819	35982	6.3	ABCDEFGHIJKLM	32976	6.9	ABCDEG
8818	35898	6.3	DEFKLM	34598	7.3	ABCDG
8817	19336	3.4	DEKL	22588	4.7	ACDFGH
8816	10964	1.9	DKL	15084	3.2	CDGH
8815	7878	1.4	KL	4268	0.9	DH
8814	5824	1.0	KL	12250	2.6	H
8813	3434	0.6	K	14038	2.9	HI
8812	178	0.0	K	14090	3.0	HI
8811	.	.	.	18452	3.9	HJKL
8810	.	.	.	42360	8.9	HJKL
8809	.	.	.	26878	5.6	IJKL
8808	.	.	.	31524	6.6	IJKLM
8807	.	.	.	22528	4.7	JKLM
8806	.	.	.	15062	3.2	JLM
8805	.	.	.	4382	0.9	L
VA	425254	74.8	VA 8817-8826	371342	78.0	VA 8810-8824

**FIGURE 4.43** High-Volume Areas. December Treasury Bonds, September 14 and 15, 1988.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

volume. On September 15, bonds opened and auctioned within the area of the 14th's high-volume concentrations. The A, B, and C period rotations within this high-volume region demonstrated the time offered by high volume—time to enter or exit a trade. Traders may have chosen to use this particular opportunity in one of two ways, depending on their level of confidence in the start of the down auction:

1. No trade until more information was furnished by the market. The morning's auction rotations within the previous day's high-volume areas

- indicated balance. Traders may have elected to enter shorts on a breakout of this balance, which occurred in H period.
2. Those with more faith in the strength of seller conviction may have used the time offered early in the morning to enter shorts with good trade location. When a C period buying probe beyond the initial balance (A and B periods in Treasury bonds) met with rejection just above the high-volume area (a form of auction failure), traders recognizing the continued strength of the seller could have confidently entered short trades (or exited longs). On the other hand, had price auctioned higher, above 88 to 26 and into the *low volume price levels*, traders would have been alerted that conditions had changed. September 15 eventually developed Double Distribution Selling Trend structure, generating overlapping to lower values in the direction of the short-term auction.

## Low-Volume Areas

Low volume typically represents other timeframe directional conviction. Therefore, it is more likely to see low-volume areas occurring in unbalanced, trending markets. Low-volume prices are caused by the same forces that create excess and usually exhibit the same characteristics: gaps, single TPO prints, and tails (short and long term).

When the rejection demonstrated by a low-volume area develops, short-term strategy is to place trades using the area of price rejection for support or resistance. The low-volume area, like excess, should hold against future auction rotations. For example, single TPO prints separating a Double Distribution Selling Trend day indicate swift rejection of the initial distribution in search of a new, lower-value area. Shorts placed just below the single-print, low-volume area should offer good day timeframe trade location. However, if price auctions back up through the single prints, then market sentiment has changed and shorts should be exited. When price auctions through an area of previous low volume, the other timeframe conviction that initially influenced price has changed. Traders should heed the market's warning and exit any opposing trades.

Imagine a low-volume area as a balloon. The surface of the balloon offers resistance to the probing of the tip of a pencil. Once the pencil pierces the balloon, however, there is nothing to stop its motion in the direction of the initial probe. If a price probe penetrates the extreme of a low-volume region, then the subsequent price movement is often swift through the remainder of the low-volume area. However, like the balloon, the low-volume area "gives"

before it breaks. Price must often trade substantially through the low-volume area before it no longer offers support or resistance.

The means to identify low-volume areas are similar to those previously covered in the high-volume discussion. The most significant measure is again found in the %Vol column of the LDB, followed by structural indicators, such as tails and single TPO prints, and tick volume. As an example of using real volume levels, let us examine the September 15 LDB, shown in Figure 4.44.

### September 15, 1988

Price	Volume	%Vol	Brackets
8826	72 *	0.0	C
8825	4540 *	1.0	BC
8824	15212	3.2	OBC
8823	14932	3.1	ABC
8822	30170	6.3	ABCDEF
8821	42492	8.9	ABCDEF
8820	57832	12.1	ABCDEFG
8819	32976	6.9	ABCDEFG
8818	34598	7.3	ABCDG
8817	22588	4.7	ACDFGH
8816	15084 *	3.2	CDGH
8815	4268 *	0.9	DH
8814	12250 *	2.6	H
8813	14038 *	2.9	HI
8812	14090 *	3.0	HI
8811	18452	3.9	HIJKL
8810	42360	8.9	HIJKL
8809	26878	5.6	IJKLM
8808	31524	6.6	IJKLM
8807	22528	4.7	JKLM
8806	15062	3.2	JLM
8805	4382	0.9	L
371342	78.0	VA 8810-8824	

**FIGURE 4.44** Low-Volume Areas. December Treasury Bonds, September 15, 1988.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Two obvious low-volume price areas that came into play on this day span from 88 to 25 to 88 to 26, and from 88 to 12 to 88 to 16. The low volume at the upper extreme of the day's range represents rejection of the 88 to 26 high. The lower volumes in the center of the range suggest that aggressive other timeframe sellers drove price lower with conviction. These five prices add up to only 12.6 percent of the day's trade and represent a region where future auction rotations will probably be rejected rather than slowed. This rejection can assume one of two forms: (1) a dramatic reversal if the low-volume area holds, visually represented by a tail, or (2) swift continuation back through the low-volume area, commonly represented by single TPO prints.

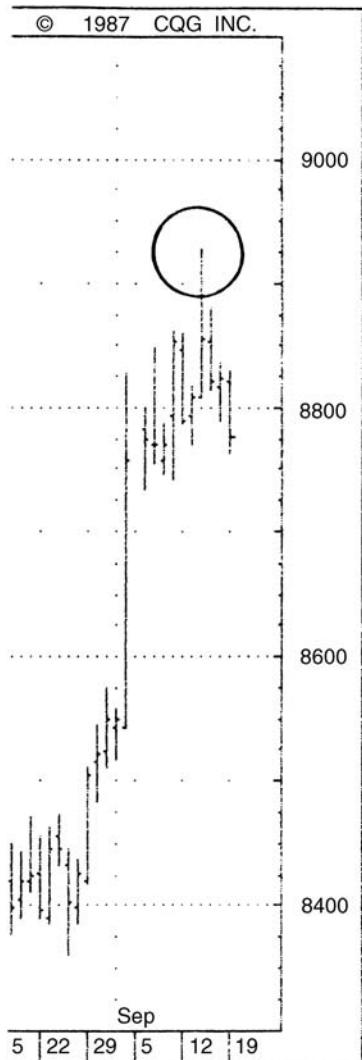
## Low-Volume Examples

### Example 1: Low Volume as Resistance

At the time of this example, Treasury bonds had formed short-term buying excess at 89 to 09 on September 14 (circled in Figure 4.45) and were starting a down auction. September 15 developed a late-forming Double Distribution Selling Trend day (Figure 4.46), confirming the buying excess. Figure 4.46 displays the Profiles for the 15th and 16th, and their accompanying price/volume figures. Again, the low-volume area from 88 to 12 to 88 to 16 on the 15th represents swift continuation and other timeframe seller conviction. This territory should offer resistance during subsequent buying attempts, at least over the short term.

Two scenarios may confront a trader looking to sell on the 16th. First, assuming an unchanged to lower opening, good trade location would be gained just below the 88 to 12 to 88 to 16 low-volume region. Ideally, price would test higher and be rejected, providing an opportunity to place shorts near the 16th's highs. If the market is extremely weak, however, price may never auction that high. This brings us to the second scenario, again assuming an unchanged to lower open. If bonds show early selling via an Open-Drive type of opening, there will be no ideal opportunity for short placement. In such a high conviction situation, it is best to position shorts early and then monitor subsequent activity for continuation. Here, the low-volume area acts as a form of excess, giving credence to the developing down auction.

As Figure 4.46 illustrates, on September 16 bonds gapped open below the 15th's lows, indicating potential seller continuation. The lower opening



**FIGURE 4.45** Low-Volume Areas. December Treasury Bond—Excess  
Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of  
Chicago 1984. All Rights Reserved.

proved to be too low, however, and responsive buyers entered the market to take advantage of price perceived to be below value. Subsequent time periods showed buyers struggling to auction price higher. Eventually, the buying attempts met with rejection at the 88 to 12 level—the bottom of the low-volume area separating the two distributions from September 15.

September 15, 1988

September 16, 1988

Price	Volume	%Vol	Brackets	Volume	%Vol	Brackets
8826	72	.0.0	C	.	.	.
8825	4540	1.0	BC	.	.	.
8824	15212	3.2	OABC	.	.	.
8823	14932	3.1	ABC	.	.	.
8822	30170	6.3	ABCDEF	.	.	.
8821	42492	8.9	ABCDEF	.	.	.
8820	57832	12.1	ABCDEFG	.	.	.
8819	32976	6.9	ABCDEFG	.	.	.
8818	34598	7.3	ABCDG	.	.	.
8817	22588	4.7	ACDFGH	.	.	.
8816	15084	3.2	CDGH	.	.	.
8815	4268	0.9	DH	.	.	.
8814	12250	2.6	H	.	.	.
8813	14038	2.9	HI	.	.	.
8812	14090	3.0	HI	2506	0.9	K
8811	18452	3.9	HJKL	9538	3.5	K
8810	42360	8.9	HJKL	15648	5.7	KL
8809	26878	5.6	IJKL	17472	6.4	FKLM
8808	31524	6.6	IJKLM	19612	7.2	FIJKLM
8807	22528	4.7	JKLM	25620	9.4	DEFGHIJL
8806	15062	3.2	JLM	37704	13.8	DEFGHIJL
8805	4382	0.9	L	21448	7.9	DEFGHIJL
8804	.	.	.	13574	5.0	DEFI
8803	.	.	.	2070	0.8	BDEF
8802	.	.	.	11162	4.1	ABCD
8801	.	.	.	28476	10.4	ABCD
8800	.	.	.	26722	9.8	ABC
8731	.	.	.	126284	9.6	OB
8730	.	.	.	12950	4.7	A
8729	.	.	.	2398	0.9	A
	371342	78.0	VA 8810-8824	192786	70.6	VA 8801-8810

**FIGURE 4.46** Low-Volume Areas. December Treasury Bonds, September 15 and 16, 1988.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

The failure to auction back into the low-volume region offered traders an excellent opportunity to place short positions.

Ultimately, day timeframe resistance was found just below the low-volume area and the single print from the previous day's selling Trend structure. As with anticipating price slowing near high-volume areas, it is equally important that traders avoid trying to achieve perfect trade location near the region of low volume. The keys to taking advantage of low-volume areas are: (1) keep accurate notes of where they are; (2) know in which

direction you expect to see rejection and monitor for signs of that rejection; (3) place orders ahead of time at price levels representing good trade location to insure execution; and (4) abandon low-volume strategies if price builds acceptance beyond previous low-volume regions (a price probe pierces the “balloon”).

Despite the obvious structural buying preference throughout the day's activity, September 16 resulted in lower values. This fact, along with the buyer's inability to auction price beyond the low-volume area from the 15th, suggested that other timeframe control remained in the hands of the seller.

#### Example 2: High and Low Volume Used Together

Activity on the following day, September 19, shows an integration of the logical workings of both high- and low-volume areas. In Figure 4.47, the Treasury bond market opened at 88 to 09 and found early rejection just below the 88 to 11 and 88 to 12 low-volume prices that formed the highs of

September 16, 1988			September 19, 1988			
Price	Volume	%Vol	Brackets	Volume	%Vol	Brackets
8812	2506 *	0.9	K	.	.	.
8811	9538 *	3.5	K	.	.	.
8810	15648	5.7	KL	3388	0.9	A
8809	17472	6.4	FKLM	7842	2.2	O
8808	19612	7.2	FJKLM	10970	3.0	A
8807	25620	9.4	DEFGHIJL	3318	0.9	AB
8806	37704	13.8	DEFGHIJL	4390	1.2	ABC
8805	21448	7.9	DEFGHIJL	12346	3.4	ABC
8804	13574	5.0	DEFI	25236	7.0	ABCD
8803	2070 *	0.8	BDEF	17266	4.8	ABCD
8802	11162	4.1	ABCD	4498	4.0	ABD
8801	28476	10.4	ABCD	6870	4.7	ABD
8800	26722	9.8	ABC	2400	3.4	BDE
8731	26284	9.6	OB	20256	5.6	BDE
8730	12950	4.7	A	22240	6.1	DEF
8729	2398	0.9	A	1518	3.2	DEFGHJ
8728	.	.	.	28784	7.9	EFGHIJ
8727	.	.	.	27444	7.6	EFGHIJ
8726	.	.	.	25776	7.1	EFGHIJK
8725	.	.	.	32100	8.9	EFGHIJKLM
8724	.	.	.	34696	9.6	EJKLM
8723	.	.	.	18488	5.1	KL
8722	.	.	.	11764	3.2	KL
8721	.	.	.	972	0.3	L
192786		70.6	VA 8801 - 8810	263848	72.8	VA 8724 - 8803

**FIGURE 4.47** Low-Volume Areas. December Treasury Bonds, September 16 and 19, 1988.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

September 16. Sellers easily auctioned through the 88 to 03 level, despite its low-volume percentage (0.8 percent), increasing confidence in short trades. The fact that price auctioned through 88 to 03 on the 19th confirmed that this area that had supported the previous afternoon's buying auctions was no longer valid.

From a Profile standpoint, note that activity on September 19 generated an initiative selling tail directly below the low-volume region of the 16th. In addition, the *high-volume levels* of the 16th (around 88 to 06 and 88 to 07) slowed price enough to allow traders time to place shorts with initiative selling activity.

## Summary

The following is a brief listing of the salient concepts involved in understanding high- and low-volume areas:

1. Both high- and low-volume regions may be present on the same day if a transition takes place—if a market evolves from a balanced, two-timeframe market to one-timeframe trade, or vice versa.
2. Low volume represents rejection, but if the market should return to auction beyond the low-volume area and build value, then directional conviction has changed, and the region is no longer a valid reference point.
3. Both high- and low-volume areas represent support or resistance, but in vastly different ways.
4. Traders can expect to be able to place or exit trades within high-volume areas in anticipation of their slowing effect on price. Low volume, on the other hand, represents swift rejection. Therefore, trades should be placed or exited *in front* of that region, for the other timeframe participant that initially drove price should reject any auction attempts near the low-volume area.

High- and low-volume areas do not represent “mechanical” trades. They do, however, provide useful reference points that enable traders to visualize potential future activity. The importance of such reference points lies in the detection of market change. By monitoring activity around high- and low-volume areas, a trader can determine whether or not directional conviction has changed since the area was formed. Through the detection of fundamental change, traders can better manage their risk and identify areas offering favorable trade location.

## **Summary—Day Timeframe Trading**

Let's pause for a moment and imagine a vast desert with nothing but sand in all directions. A man walks along, his throat dry and his lips cracked. Suddenly, he sees before him a shimmering pool of water just over the next dune. He runs toward it, relief finally in sight. He reaches the top of the sand hill and jumps—only to land in more sand. The water was a mirage created by the sun and his overwhelming desire to find water.

It is important to keep in mind at all times that the market can easily create a day timeframe mirage regarding long-term market direction. When a trader is looking too hard for certain market conditions and the market exhibits some characteristics of what he seeks, the result is often a mirage that can leave a trader high and dry. For example, when a market opens substantially above the previous day's range and attempts to auction down all day, it appears as if the seller is in control. A trader with a strong bearish bias might jump into a trade, thinking his or her convictions were correct. However, if value is still established higher, then the *buyer* may actually be in control in the longer term. In this section we discussed day timeframe control—which way the market is trying to go in the day timeframe. In the previous example, the seller was in control *in the day timeframe*. In Section II, “Long-Term Trading,” we delve into an understanding of the long term that can prevent a trader from being fooled by day timeframe mirages—an understanding that will help a trader develop the ability to take advantage of long-term opportunity.

## **■ Section II**

### **■ Long-Term Trading**

In Section I, we compared Mike Singletary to a day timeframe futures trader. He studied charts and game films to prepare for each game, but operated solely in the present tense when he was on the football field. Similarly, the day timeframe trader studies recent market activity, but when the trading session begins, he or she acts purely on the day's evolving information. The academic knowledge becomes synthesized in the trader's mind to form a holistic picture, allowing for objective, intuitive decision making.

The long-term trader, on the other hand, is more like Singletary's coach. A good coach knows that winning games, or even division titles, does not

insure long-term success. A football team may go undefeated one year but could easily suffer a losing season the following year if the coach does not consider the long-term effects of aging players, the upcoming draft, and the changing abilities of his competitors. The coach builds the strength of his team over time, bringing in new talent and constantly evaluating the long-term factors necessary to compile a winning record.

The futures market exhibits similar characteristics. The strength and duration of a trend is largely subject to the aging of its original participants, as well as the talent and conviction of any new business that is brought in. And, like a successful coaching career, successful long-term trading not only requires winning consistently in the day timeframe, but also a careful analysis of all the factors that affect the market's long-term performance. The discussions in this section are designed to help traders move from focusing on each individual day timeframe situation to a more holistic, long-term evaluation. Only through a synthesis of both can one compile a winning record.

## Long-Term Directional Conviction

In "Day Timeframe Trading" (Section I), we studied the progression of the information generated by the market in the day timeframe. More important, we examined how a variety of structural and logical relationships produced by the day timeframe auction process help to convey the directional conviction of the other timeframe. Because each day auction is a contributing element to the long-term auction process, these same concepts apply equally well to long-term market analysis. Not surprisingly, our analysis of the long-term returns us to the same two all-encompassing questions: "Which way is the market trying to go?" and "Is it doing a good job in its attempts to go that way?" We will first discuss a series of facts that help us gauge attempted direction. Later, we examine the methods for evaluating directional performance. Finally, we unveil an easy, simple Long-Term Activity Record designed to assist a trader in forming a holistic image of the Big Picture.

### ■ Attempted Direction: Which Way Is the Market Trying to Go?

When either the other timeframe buyer or seller exerts a greater influence on price, a variety of observable, long-term directional changes are

generated by the market. Each is listed below and then discussed in detail on the following pages. They are:

1. Auction rotations
2. Range extension
3. Long-term excess
4. Buying/selling composite days

It is important to remember that these are merely *attempted* direction indicators. A complete understanding must incorporate long-term directional performance, which will be covered in the latter portion of Section II.

## Auction Rotations

In Day Timeframe Trading, we detailed a quick method for evaluating the cumulative directional attempts of a day's auction rotations. This method, the Rotation Factor, enables a trader to measure attempted market direction by producing a value that represents the sum of each day's half-hour auction rotations. The theory behind the Rotation Factor is simple. If a greater number of time periods auction higher than lower, then the buyer is exerting greater control over price in the day timeframe—the market is trying to move higher.

The Rotation Factor is by no means an all-conclusive indication of future market direction. It is, however, a useful tool in determining which way the market is trying to go in the day timeframe. Since a long-term auction is composed of a series of day timeframe auctions, recording and comparing the daily Rotation Factor can help traders gauge the strength and relative change in a market's long-term directional conviction.

## Range Extension

Range extension signals the entrance of the other timeframe participant beyond the initial balance. Persistent range extension in several time periods indicates that trade is being facilitated better in the direction of the range extension. Observing and recording continual range extension on successive days reveals a long-term tendency in the market. In Figure 4.48, for example, five consecutive days in the Swiss franc saw strong initiative buying range extension, which alerted traders to the presence of strong other timeframe buyers fueling the bull trend.

	Oct 22	Oct 23	Oct 26	Oct 27	Oct 28
7046					
7044					
7042				J	
7040				J	
7038				U	
7036				HU	
7034				HU	
7032				HU	
7030				HU	
7028				HU	
7026				HJK	
7024				HJ	
7022				HJ	
7020				HJ	
7018				H	
7016				H	
7014				H	
7012				H	
7010				H	
7008				H	
7006				H	
7004				H	
7002				GH	
7000				GH	
6998				GH	
6996				GH	
6994				G	
6992				G	
6990				G	
6988				CG	
6986				CG	
6984				CDG	
6982				CDG	
6980				CDG	
6978				CDG	
6976				ZCDG	
6974				YZCDG	
6972				YZBCDG	
6970				YZBCDG	
6968				YZABCDG	
6966				YZABCDEG	
6964				YZABCDEFG	
6963				YZABCDEFG	
6962				YZABDEFG	
6960				YZABEFG	
6958				YZABEFG	
6956				GH	
6954				YAEF	
6952				GH	OAE
6950				GH	YE
6948				GH	E
6946				GH	E
6944				GH	
6942				GH	
6940				GH	
6938				GH	
6936				FGH	
6934				FGH	
6932				FJ	
6930				FJ	
6928				FJK	
6926				EFL	
6924				EFL	
6922				EFL	
6920				EFL	
6918				EFL	
6916				EFJ	
6914				EF	
6912				EF	
6910				E	
6908				E	
6906				DE	
6904				DE	
6902				DE	
6900				D	
6898				D	
6896			G	D	
6894			G	D	
6892			CG	CD	
6890			CG	CD	
6888			CG	C	
6886			CG	C	
6884			ZCDFGHI	C	
6882			ZACDFGH	BC	
6880			ZACDFHI	BC	
6878			ZACDFHI	BC	
6876			OZACDFHU	YZBC	
6874			YZACOFHU	YZBC	
6872			YZACDEFHU	YZB	
6870			YZABDEFHJK	YZAB	
6868			YZABDEFHU	YZAB	
6866			YZABDEFJ	YZAB	
6864			YZABDEF	OAB	
6862			YZBDE	A	
6860			YZDE		
6858			YDE		
6856			YD		
6854	H		Y		
6852	H				

**FIGURE 4.48** Range Extension Occurring in the Swiss Franc, October 22 to 28, 1987  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

6860	H
6848	H
6845	HI
6844	HI
6842	HI
6840	HI
6838	HI
6836	HI
6834	HJ
6832	HJ
6830	HJ
6828	HJ
6826	HJ
6824	GHJ
6822	GHJK
6820	GHJ
6818	GH
6816	GH
6814	FGH
6812	FGH
6810	EFG
6808	EFG
6806	EFG
6804	EFG
6802	EFG
6800	EFG
6798	EFG
6796	EFG
6794	EFG
6792	EFG
6790	EFG
6788	EFG
6786	EF
6784	EF
6782	EF
6780	EF
6778	EF
6776	EF
6774	EF
6772	E
6770	E
6768	E
6766	E
6764	E
6762	E
6760	E
6758	E
6756	DE
6754	D
6752	D
6750	D
6748	D
6746	D
6744	D
6742	D
6740	D
6738	D
6736	CD
6734	CD
6732	ACD
6730	ACD
6728	ACD
6726	ACD
6724	AB
6722	AB
6720	AB
6718	AB
6716	AB
6714	AB
6712	AB
6710	AB
6708	ABC
6706	ABC
6704	ZAC
6702	ZAC
6700	ZC
6698	ZC
6696	ZCD
6694	ZCDE
6692	ZCDEM
6690	ZCDEGH
6688	ZCDEGH
6686	ZCDEGH
6684	ZEGH
6682	ZEGHJU
6680	YZEFGU
6678	OZEFJK
6676	YEFJ
6674	YEFJ
6672	YF
6670	YF
6668	F
6666	

**FIGURE 4.48** (Continued)

## Long-Term Excess

Earlier, we defined short-term excess as the aggressive entry of the other timeframe participant as price moves away from value, creating a tail in the day timeframe. An example of short-term excess is evident in gold on May 2, 1989 (Figure 4.49). The six-tick buying tail in I period was generated by strong responsive buyers who quickly took advantage of a selling price probe (range extension) below value. Day timeframe excess not only provides continual, recordable clues regarding other timeframe directional conviction, but it also often stands as the pivot point marking a long-term

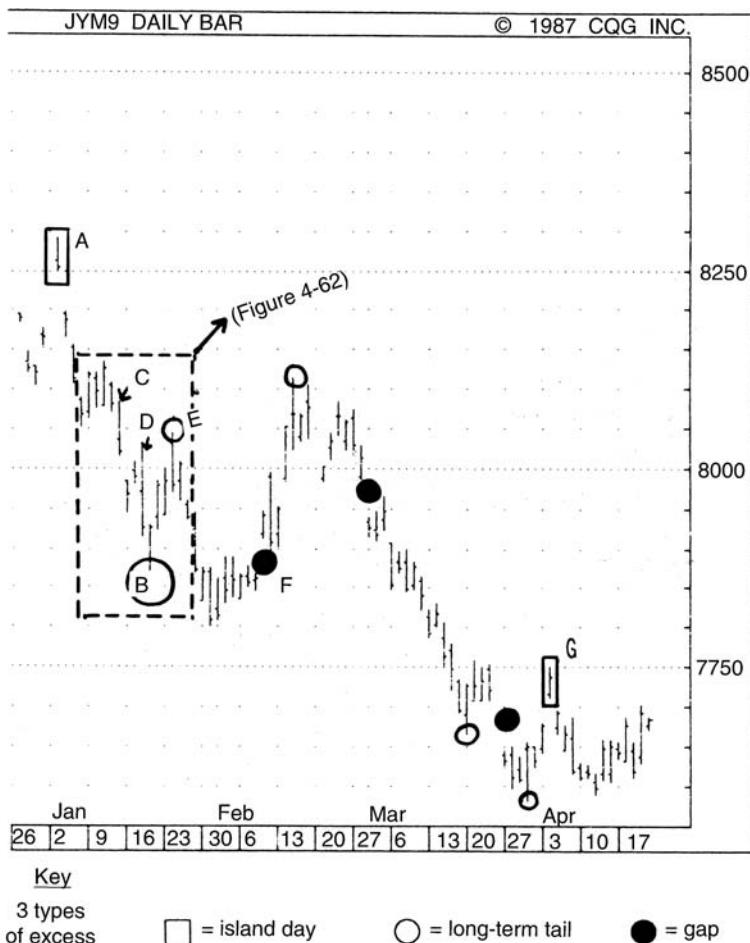
3813	.
3812	z
3811	z
3810	z
3809	zF
3808	yzAF
3807	yzAFJ
3806	yzADEFJK
3805	yzABDEFJK
3804	yzABDEFGJK
3803	yBCDEFGHJK
3802	BCDEFGHJK
3801	BCDGHIJK
3800	BCDHIJK
3799	BCDIJ
3798	BDIJ
3797	IJ
3796	I
3795	I
3794	I
3793	I
3792	I
3791	I
3790	.

**FIGURE 4.49** Long-Term Excess—Day Timeframe Tail Occurring in June Gold, May 2, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

directional move. The strong buying tail in gold, for instance, supported the market during subsequent trading sessions.

Long-term excess is caused by the same forces that create day timeframe excess. When a price level is perceived to be too low in the longer term, for instance, the other timeframe buyer will enter the market aggressively, forcing price to quickly auction higher. Prices that are deemed below long-term value generally form one of three types of excess: an island day, a long-term tail, or a gap. Refer to the daily bar chart in Figure 4.50 for the following discussion of the three types of long-term excess.



**FIGURE 4.50** Long-Term Excess in the Japanese Yen

Data courtesy of Commodity Quote Graphics.

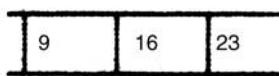
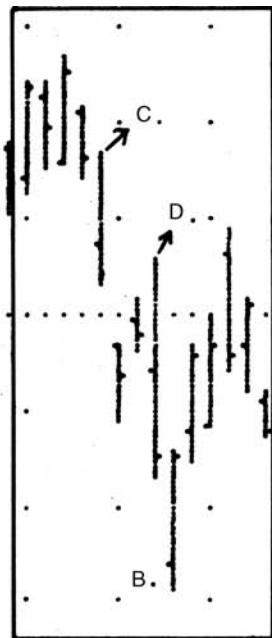
**Island Days** January 3, 1989 (point A), displays the first of the three types of long-term excess, the *island day*. Island days are formed by aggressive initiative activity that causes price to gap above or below the previous day's range. The market spends the entire session trading at these higher or lower levels (attempting to validate price), but returns to previously established value on the following day, leaving behind an "island" of trade.

On the 3rd, the yen market opened 84 ticks above the high of December 30. After the gap higher open, the yen continued auctioning significantly higher, only to meet responsive sellers that were aggressive enough to reverse the day timeframe auction and close the yen on its lows. Because of the weak close on a day that had opened so far out of balance, the possibility was relatively high that long-term buying excess had formed. Buying excess was confirmed when the yen gapped some 50 ticks lower on the open of the following day, creating long-term excess in the form of an island. Island days are the most extreme form of excess and often provide lasting resistance against future auction attempts. Figure 4.50 displays another island day occurring in the yen on April 4 (point G).

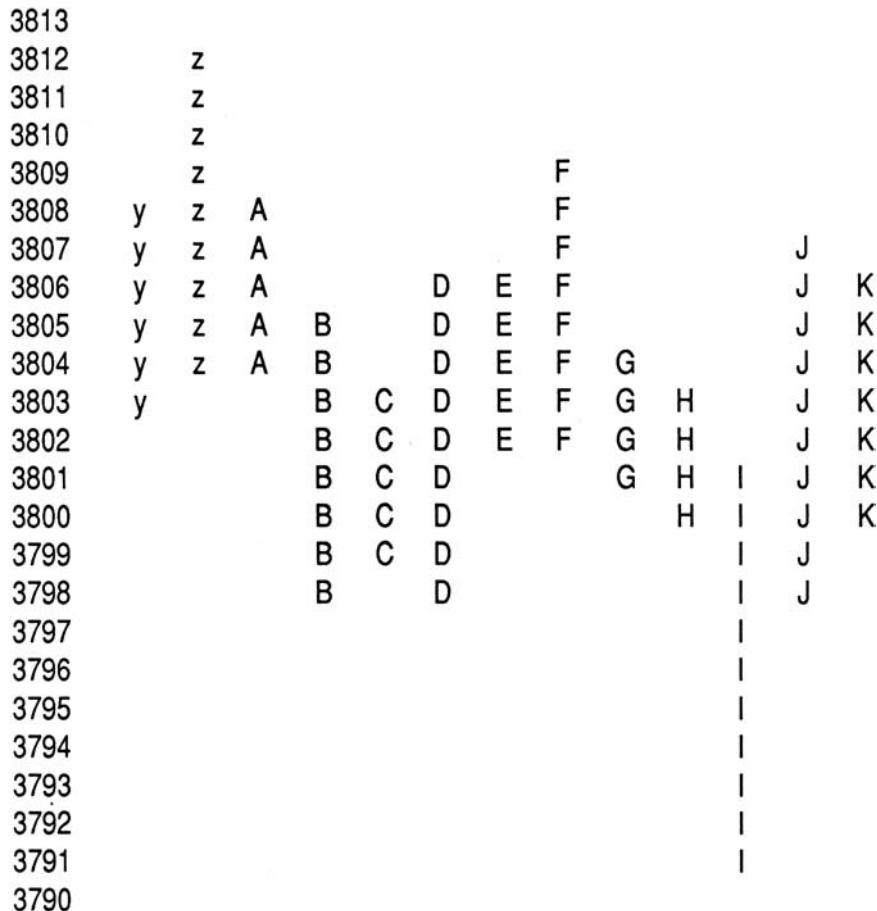
**Long-Term Tails** The second form of excess does not exhibit the violent gap activity that makes an island day so easy to identify. On a daily bar chart, this lesser form of price rejection looks more like a day timeframe tail at the end of a long-term trend. One such long-term tail is evident in the Japanese yen on January 19 in Figure 4.50 (point B). Compare the enlarged bar chart in Figure 4.51 to the segmented Profile of the day timeframe tail we described earlier in gold (Figure 4.52). The half-hour auction rotations are strikingly similar to the daily auction rotations. This is an excellent example of how the auction process applies to all timeframes. Day and long-term excess is created by the same activity occurring over varying lengths of time.

Referring again to Figure 4.50, the yen had been in a downtrend since the island day on January 3. On the 19th, the yen opened substantially below the 18th's lows. The gap lower suggested that the downtrend was continuing. However, the responsive buyer perceived price to be below value and entered the market aggressively, creating an unusually strong long-term buying tail. The close on the highs signified staunch rejection and that intermediate to long-term excess may have formed.

When using a standard bar chart, every new low or high, it seems, has the potential to be long-term excess. How does one know which is excess and which is actually a developing probe to new value? Much like the formation of a potential day timeframe tail that is not confirmed until the following



**FIGURE 4.51** Close-Up of Excess in the Japanese Yen  
Data Courtesy of Commodity Quote Graphics.



**FIGURE 4.52** Segmented Profile of Excess in Gold, May 2, 1989

half-hour time period, a long-term tail cannot be positively confirmed until the following day. However, as in the day timeframe, the market does provide reliable early clues regarding the formation of long-term tails. For example, examine the activity of January 13 and 18 (points C and D), two days with similar ranges. Both trading sessions recorded new lows, but they also closed near their lower extremes, indicating continual seller presence. In contrast, on the 19th the yen gapped lower on the open, but closed on the *upper* extreme. The yen had overextended itself to the downside, at least temporarily. The responsive other timeframe buyer entered and quickly auctioned price higher, establishing potential intermediate to long-term excess.

Another long-term tail occurred three trading days later on the 24th (point E in Figure 4.50), as the seller reentered the market after a substantially higher open and closed the yen on the lows. This price reversal, occurring so soon after the relatively strong rejection on the 19th, reasserted the strength of the downward trend.

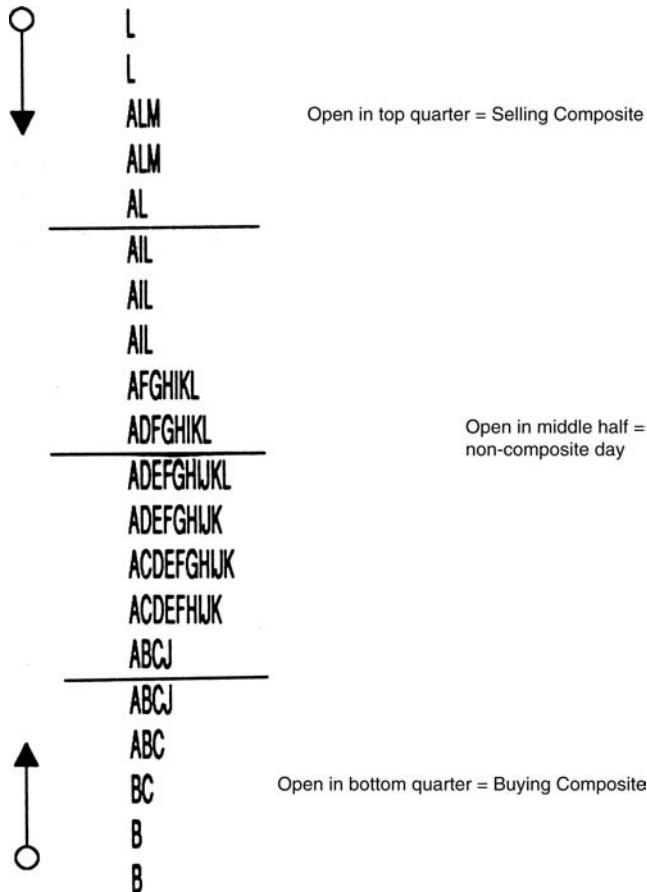
**Gaps** The final type of long-term excess is a gap. A gap is caused by initiative other timeframe participants who, between the market's close and the following day's open, change their perceptions of value. Price rejection, in effect, occurs overnight, as the market gaps above or below the previous day's extremes on the following day.

On February 9 (point F in Figure 4.50), for example, the yen gapped above the 8th's highs, igniting a buying auction away from the balance region that had formed from January 30 through February 8. During a gap, a market does not create the typical tail formation that so often signifies excess. Rather, the gap itself indicates swift price rejection (an "invisible tail"). In comparison to tails, gaps are actually a stronger, albeit less obvious form of excess. Note that island days are always confirmed by gaps.

**Summary** Both short- and long-term excess, when properly identified, provide reliable indications of a market's directional conviction. The price levels at which the other timeframe participant enters the market and creates excess are valuable reference points for the long-term trader. Excess is most often used as support or resistance for long-term trade location. In addition, if the market returns and trades through the point of excess, a trader knows that the opposite activity is fueled by a high level of confidence and will most likely display continuation.

## ■ Buying/Selling Composite Days

A quick way to assess a market's attempted direction is known as composite analysis. Composite analysis simply evaluates where the majority of the day's trade took place relative to the day's open; it is performed by dividing the range into four equal parts. If the open is in the top or bottom one fourth, it is designated a "composite" day. A composite buying day occurs when the open resides in the bottom fourth of the day's range. Conversely, a composite selling day is characterized by an open within the top fourth of the range. An open in the center half indicates low directional conviction



**FIGURE 4.53** Composite Days

in either direction. Point B in Figure 4.50 shows a buying composite day in the yen. Figure 4.53 illustrates the composite methodology.

The logic behind this theory is relatively simple. If a market spends most of the day auctioning above the open, then the market is attempting to go higher. If the market trades below the open for most of the day, then it is trying to auction lower. Keep in mind that composite analysis does not consider the question “How good a job is it doing in its attempts to auction in that direction?” Remember the illusion that can arise from a market that gaps higher and auctions down all day, but develops *higher* value. Like all other directional measures, composite analysis must be evaluated in conjunction with value area relationships and the level of trade facilitation generated by the market’s attempt to auction in a given direction.

## Summary

Any combination of directional measures may be present on a given day. For instance, a particular trading session might exhibit composite buying structure, a positive Rotation Factor, initiative buying tails and range extension, and higher value—unanimous indications of a market that is trying to auction higher. On some days, however, the indicators will contradict themselves. When directional measures conflict, they cancel each other out, indicating a market less confident in its directional course.

Yet, the answers to the question “Which way is the market trying to go?” cannot stand alone. They must be considered in conjunction with the second Big Question, “Is the market doing a good job?”

### ■ **Directional Performance: Is the Market Doing a Good Job in Its Attempts to Get There?**

Let us return to our local grocer for a moment. Suppose that the grocer decides to expand his business by moving into a bigger building, in hopes of increasing his market share. In trading terms, his attempted direction is “up.” Once the move is made, the question then becomes “Will the expansion facilitate more trade?”

Over the ensuing weeks, the grocer finds that increased shelf space does not attract new customers. His business (and expense) has moved up, but transactional volume has not. Disappointed, the grocer realizes that the small community cannot support a larger store. Faced with rising overhead and dwindling profits, he moves back into his old building.

The futures market acts in a similar fashion. Relying solely on which way a market is trying to go can lead to financial disaster, unless you can also gauge the effectiveness of the market’s attempts to go that way. Monitoring attempted direction for directional performance—determining how good of a job it is doing—is the key to a complete market understanding and long-term trading results. Once attempted direction is known, three comparative factors are useful in evaluating a market’s directional performance:

1. Volume
2. Value-area placement
3. Value-area width

## Volume

As we get deeper into the long-term forces behind directional conviction, one element stands high above the rest when it comes to evaluating directional performance—volume. Not surprisingly, volume is also the best measure of a market's ability to facilitate trade. Once attempted direction is known, volume should be used as the primary means of determining directional performance.

Put simply, the greater the volume of transactions, the better trade is being facilitated. In our grocery store example, a larger store did not generate additional volume and consequently failed. Similarly, in the futures market, a price movement that fails to generate a fair amount of volume as it auctions through time will likely not continue for very long in the same direction.

## Evaluating Changes in Volume

To determine whether or not volume is increasing, it is necessary to compare each day to previous volume figures. However, there is no standard number of day timeframe transactions in any market, for volume evolves with a market's changing activity. The key to recognizing change is to think of volume more in terms of market share than in the actual number of transactions occurring (except, of course, when the number of transactions drops below that which signifies a liquid market). Therefore, a trader must keep a running record of volume to be able to detect any significant departures from the current average. This average will vary depending on your trading timeframe.

## Volume as a Measure of Directional Performance

Suppose that a movie theater raises the price of admission. In the subsequent weeks, ticket sales drop substantially. At higher ticket prices, the theater is not facilitating trade for the moviegoer. If the theater is going to stay in business, it will have to lower price. Decreased volume indicates a rejection of higher prices.

Volume plays the same role in evaluating the futures market's directional performance. For illustration, imagine that the market's attempted direction on a given day is up, based on a positive Rotation Factor and buying range

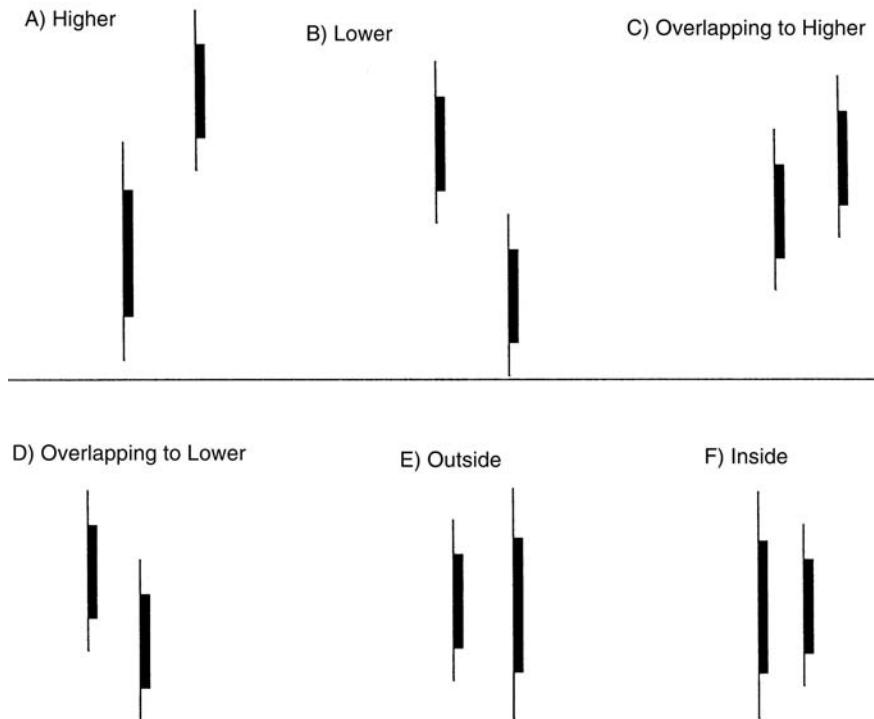
extension. If the buying auctions are generating healthy or increased volume (relative to your determined norm), then the market is successfully facilitating trade with the buyer. Conversely, *lower* volume on a day attempting to move higher suggests that the market is not accepting the buying attempts.

## Value-Area Placement

A structural indicator that helps us better refine the level of directional performance is value-area placement. Through an evaluation of the relationship of one day's value area to the next, we can move beyond simply determining if the market is doing a good job, to *how* good of a job it is doing. In other words, if attempted direction is up and volume is healthy, what impact does that have on value? Were buyers successful in placing value higher? How successful were they? Was value unchanged, overlapping-to-higher, or completely higher?

Let us briefly describe the different relationships that can exist between two trading sessions' value areas. First, value can form clearly higher or clearly lower, exhibiting obvious directional performance. Second, value can overlap to one side or the other, indicating a lesser degree of change. Third, when the value area is contained entirely within the previous day's value area, it is known as an *inside day*. The market is in balance and is not facilitating trade with either participant. Finally, an *outside day* occurs when a day's value area overlaps the previous day's value area on both extremes, and represents greater trade facilitation. Much like a Neutral day, if an outside day closes in the middle of the range, the market is in balance. If it closes on an extreme, however, there is a victor in the day timeframe battle for control. A close on the highs, for example, would indicate directional performance favoring the buyer. Figure 4.54 illustrates these common value-area relationships.

Value-area placement often generates signals contrary to day timeframe attempted direction. Figure 4.55 demonstrates such a scenario occurring in the Treasury bond market. On September 12, bonds opened unchanged to higher and spent the entire day auctioning down. The result was a negative Rotation Factor, selling composite structure, and continued selling range extension—clearly a market trying to move lower in the day timeframe. However, higher value was still maintained. While day timeframe structure indicated seller dominance, value-area placement suggested that the buyer was still in control in the long timeframe.



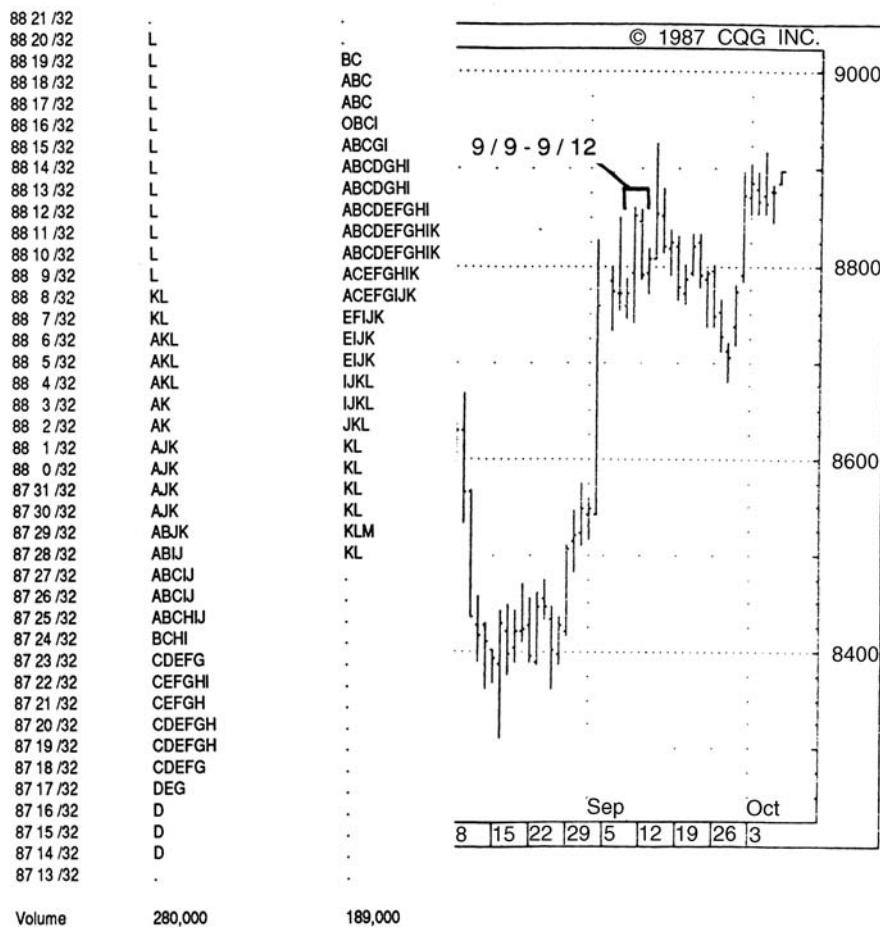
**FIGURE 4.54** Value-Area Relationships

## Evaluating Directional Performance through Combined Volume and Value-Area Placement

Arriving at a final evaluation of directional performance is like baking a cake—layer by layer. First, we must define attempted direction. Second, we evaluate trade facilitation according to volume. And finally, we must determine the relative success of that trade facilitation according to its impact on value-area placement.

In general, if attempted direction is up, volume is above average (or at least average) and value is higher, then the market is successfully facilitating trade at higher prices. However, if attempted direction is up and volume is *lower*, then higher prices are cutting off activity—the buying auctions are resulting in poor trade facilitation. If the buying attempts also result in lower value, then the other timeframe seller is still in control of the market, despite day timeframe buyer dominance. The market must then move lower to resume balanced trade, much like the aforementioned movie theater.

Att Dir	<u>Relationship</u>	<u>Directional Performance</u>
Down		Lower Volume, Strong Higher Value



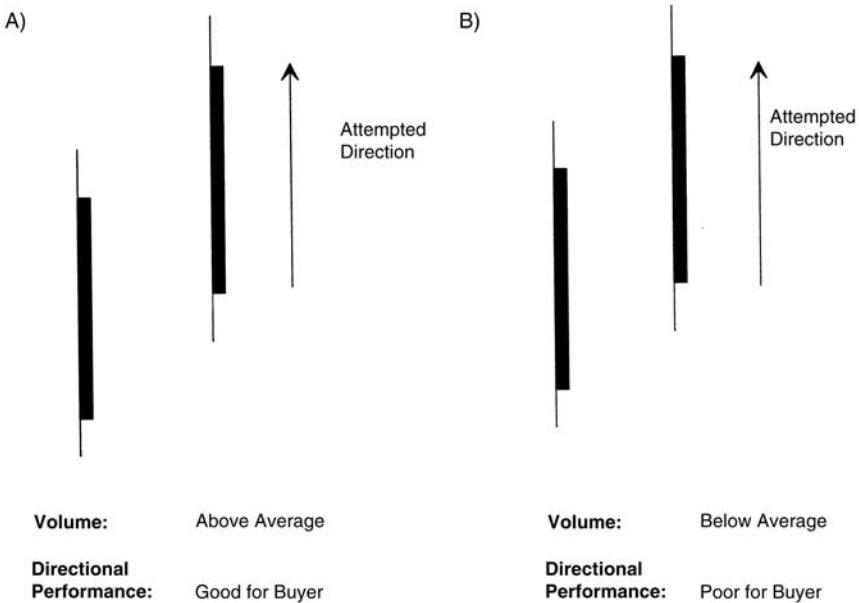
Volume 280,000 189,000

**FIGURE 4.55** Directional Performance, December Treasury Bonds, September 9 and 12, 1988.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Figure 4.56 illustrates the combined effect of volume and value area in determining directional performance for the above two scenarios.

Listed in Table 4.1 are 30 different relationships based on volume, value-area placement, and attempted direction. Six of them are briefly detailed in the following discussion. Figures 4.57 to 4.61 include an inset bar chart to



**FIGURE 4.56** Volume/Value-Area Relationships

show the activity following the day highlighted by each example. In addition, note that the volume comparisons in these examples are relative to the previous day, not a predefined average.

Treasury bonds gapped open above the previous day's range and drove sharply higher. Attempted direction was clearly up, as witnessed by an initiative buying tail, initiative buying range extension, a positive Rotation Factor and buying composite structure. Substantially higher volume and the resulting higher value confirmed that the directional performance of the buyer was strong.

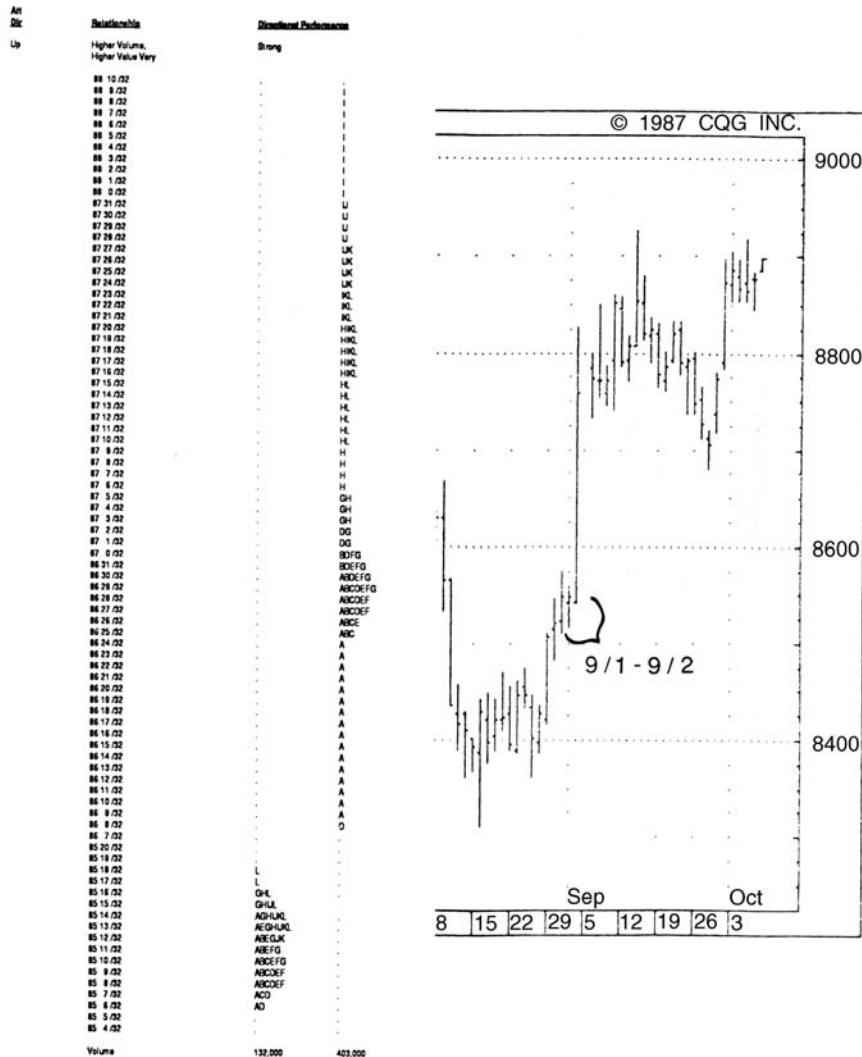
The gold market on July 29th was clearly attempting to auction higher. And, although the buying auctions managed to build higher value, volume declined, indicating poor directional performance. Underlying market conditions were weakening. The inset bar chart shows the subsequent return to seller control.

After a lower opening on April 15th, bonds spent most of the day attempting to auction higher. Long-term traders relying solely on attempted direction might have bought, perceiving day timeframe buyer control and an opportunity to acquire relatively good intermediate-term trade location. However, the upward auction attempts actually discouraged trade and were

**TABLE 4.1** Directional Performance Relationships

Attempted Direction	Relationship	Directional Performance
1. Up	Higher volume, higher value (see Figure 4.68)	Very strong
2. Up	Lower volume, higher value (see Figure 4.69)	Slowing
3. Up	Unchanged volume, higher value	Strong, continuing
4. Up	Higher volume, OL/higher value	Moderately strong
5. Up	Lower volume, OL/higher value	Slowing, balancing
6. Up	Unchanged volume, OL/higher value	Moderately strong, balancing
7. Up	Higher volume, unchanged value	Balancing
8. Up	Lower volume, unchanged value	Balancing, weakening
9. Up	Unchanged volume, unchanged value	Balancing
10. Up	Higher volume, lower value	Unclear
11. Up	Lower volume, lower value	Weak
12. Up	Unchanged volume, lower value	Weak, balancing
13. Up	Higher volume, OL/lower value	Weakening
14. Up	Lower volume, OL/lower value (see Figure 4.70)	Moderately weak
15. Up	Unchanged volume, OL/lower value	Weakening, balancing
16. Down	Higher volume, lower value	Very weak
17. Down	Lower volume, lower value	Slowing
18. Down	Unchanged volume, lower value	Weak, continuing
19. Down	Higher volume, OL/lower value	Moderately weak
20. Down	Lower volume, OL/lower value	Slowing, balancing
21. Down	Unchanged volume, OL/lower value (see Figure 4.72)	Moderately weak, balancing
22. Down	Higher volume, unchanged value	Balancing
23. Down	Lower volume, unchanged value	Balancing, strengthening
24. Down	Unchanged volume, unchanged value	Balancing
25. Down	Higher volume, higher value	Unclear
26. Down	Lower volume, higher value (see Figure 4.66)	Strong
27. Down	Unchanged volume, higher value	Strong, balancing
28. Down	Higher volume, OL/higher value	Strengthening
29. Down	Lower volume, OL/higher value	Moderately strong
30. Down	Unchanged volume, OL/higher value	Strengthening, balancing

OL = overlapping

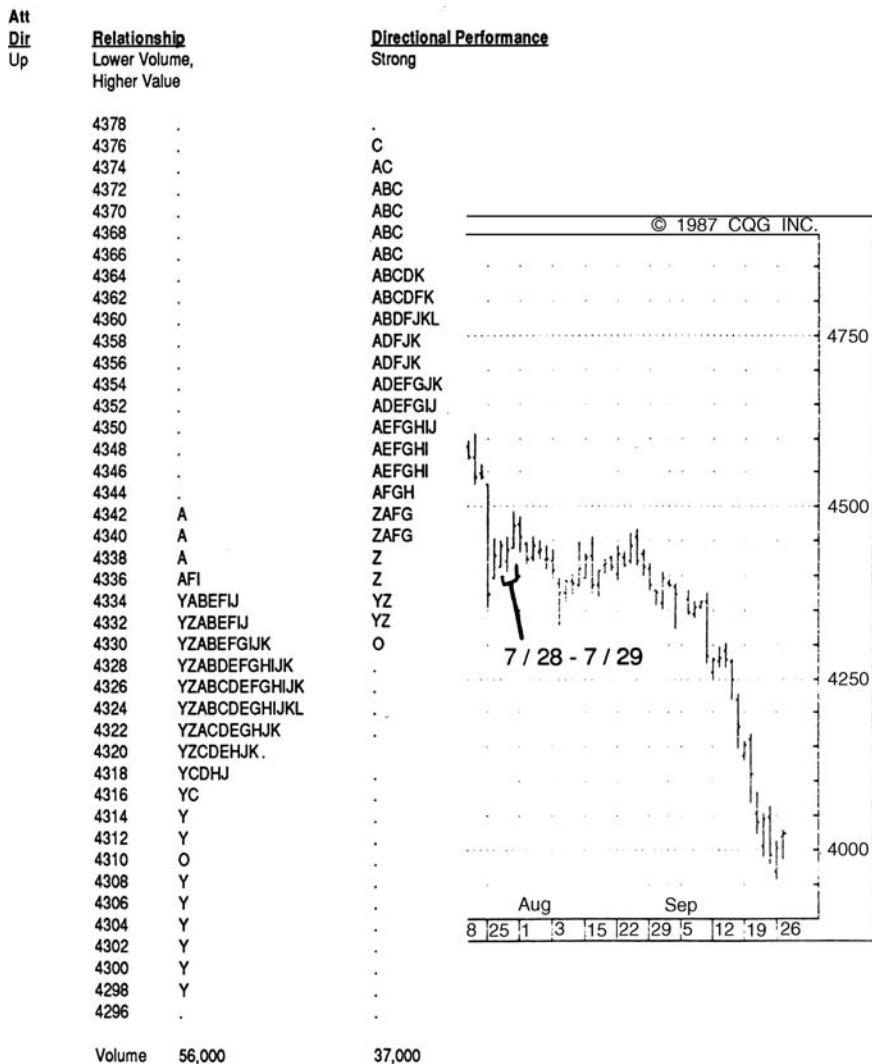


**FIGURE 4.57** Directional Performance, December Treasury Bonds, September 1 and 2, 1988.

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

unable to return value to the levels of the previous day. The buyer's directional performance on this day was very poor and indicated long-term control was in the hands of the other timeframe seller.

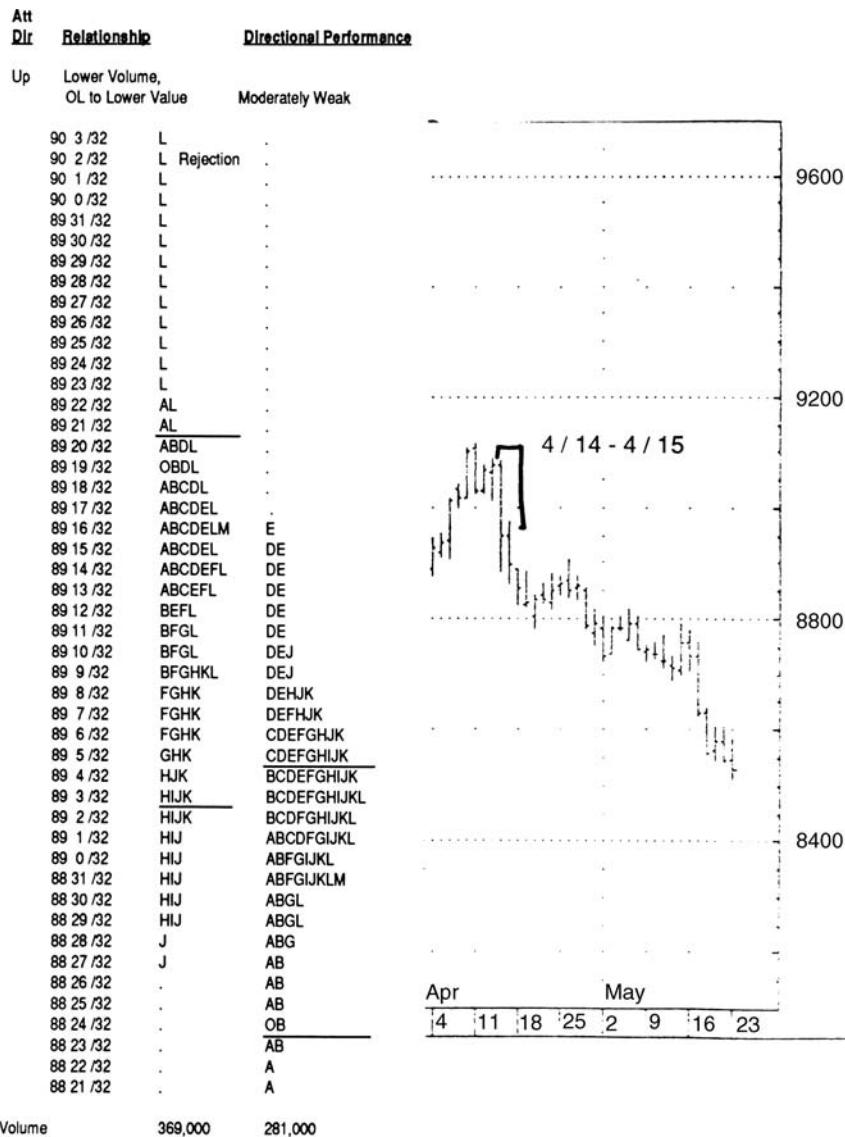
On September 20, gold opened and tested above the previous day's highs. When no continuation developed, other timeframe sellers entered the



**FIGURE 4.58** Directional Performance. August Gold, July 28 and 29, 1988.  
Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

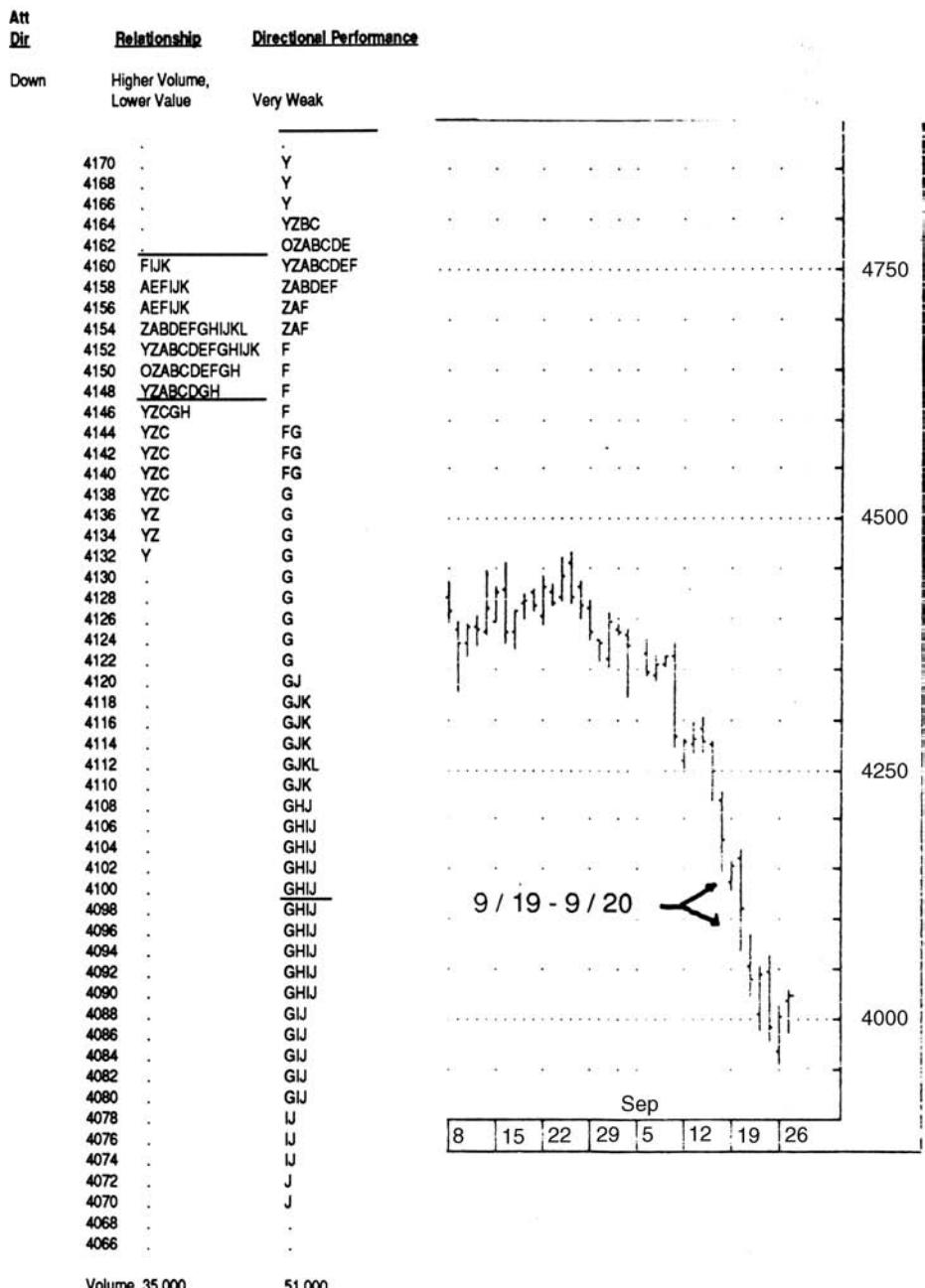
market and auctioned price lower all day. Attempted direction was down, accompanied by lower value and higher volume. Directional performance on this day clearly favored the seller.

Attempted direction was obviously down on this Open-Drive selling day. However, the day's selling attempts only managed overlapping to lower

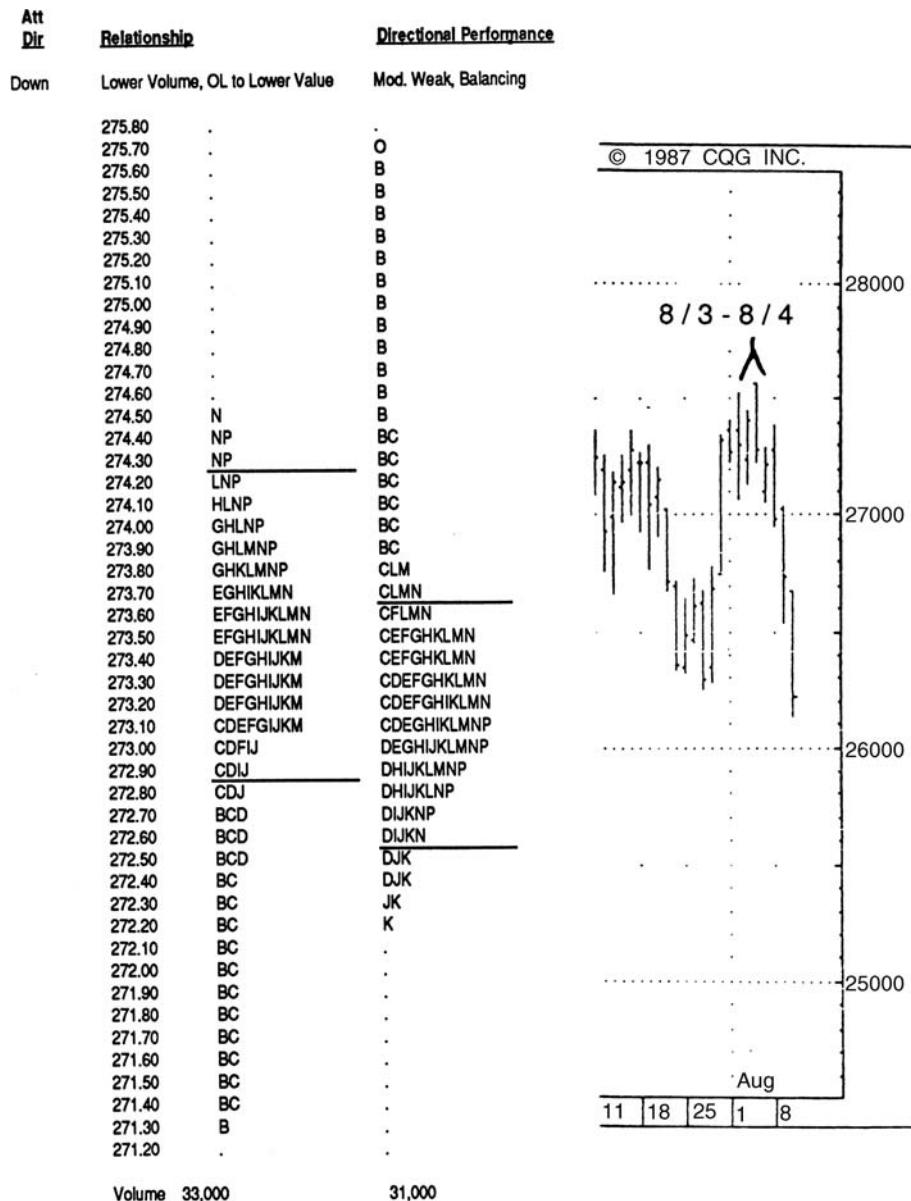


**FIGURE 4.59** Directional Performance. June Treasury Bonds, April 14 and 15, 1988.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

value and basically unchanged volume. This scenario generally indicates a market that is continuing but slowing and coming into balance or a market that is in the midst of gradual transition. Subsequent trading sessions should be monitored carefully for signs of directional conviction.



**FIGURE 4.60** Directional Performance. December Gold, September 19 and 20, 1988.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.



**FIGURE 4.61** Directional Performance. September S&P 500, August 3 and 4, 1988. Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## VOLUME/FUTURES SUMMARY REPORT FOR 04 17 89

COMMODITY -- T-BOND (CBOT) DAY JUN 89

### Volume Summary

Price	Volume	% Vol	Brackets
8828	774	0.7	CD
8827	12866	10.9	Z\$ABCDK
8826	46552	39.6	Z\$ABCDEFIJKL
8825	42452	36.1	Z\$ABCDEFGHIJKLM
8824	15050	12.8	Z\$BCFGHJLM

70% 8826 89004 75.6 55.5 15.5 5.7 23.3 ABCDEFGHIJKLMZ\$

V-A 8825

Volume for T-BOND (CBOT) DAY JUN 89 117694

Volume for all T-BOND (CBOT) DAY 120250 -- LOW VOLUME

**FIGURE 4.62** Narrow Value Area. Treasury Bonds, April 17, 1989.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

### Value-Area Width

One drawback to day trading is that exact volume figures are usually not available until after the trading session is over. However, one practical way to gauge the level of volume as the day develops is through the value-area width. On days where volume is relatively low, the value area and the length of the range tend to be narrow. For example, in Treasury bonds on April 17, 1989 (Figure 4.62), the value area was only two ticks wide. Volume was at a scarce 120 thousand contracts. In this particular case, the lack of facilitation was due to the fact that traders had balanced their positions in anticipation of the Producer Price Index figure to be released on the following day. Conversely, value areas tend to widen on days exhibiting higher volume (Figure 4.63). On April 27, the value area was a

## VOLUME/FUTURES SUMMARY REPORT FOR 04 27 89

COMMODITY -- T-BOND (CBOT) DAY JUN 89

## Volume Summary

Price	Volume	%Vol	Brackets
9011	1660	0.3	H
9010	6538	1.1	FH
9009	21786	3.8	FH
9008	21462	3.7	FGH
9007	19646	3.4	EFGH
9006	38296	6.6	EFGHIJKL
9005	49836	8.6	EFGHIJKL
9004	53246	9.2	EFGHIJKL
9003	64348	11.1	DEFGIJKL
9002	36050	6.2	DEFIJKL
9001	14354	2.5	DEFJL
9000	9616	1.7	DLM
8931	12282	2.1	DLM
8930	21772	3.8	DL
8929	18898	3.3	DL
8928	3542	0.6	D
8927	3576	0.6	D
8926	12284	2.1	\$CD
8925	25928	4.5	\$CD
8924	21430	3.7	Z\$CD
8923	21782	3.8	Z\$c
8922	26662	4.6	Z\$ABC
8921	27352	4.7	Z\$ABC
8920	38648	6.7	ZABC
8919	4298	0.7	ZABC
8918	1472	0.3	AC
8917	560	0.1	C
70%	9011	409192	70.9
V-A	8926		CDEFGHIJKLM\$
			%CTI1 %CTI2 %CTI3 %CTI4
Volume for T-BOND (CBOT) DAY JUN 89		577324	56.9 16.1 5.8 21.2
Volume for all T-BOND (CBOT) DAY		598492	56.5 16.1 6.1 21.2

**FIGURE 4.63** Wide Value Area. Treasury Bonds, April 27, 1989.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

healthy 16 ticks wide. Volume on this day was just short of 600,000 contracts.

The logic used is that the wider the value area, the greater the range of prices at which trade is being conducted (see Table 4.2). This results in

**TABLE 4.2** Results for Six-Month Period in Treasury Bonds

Value-Area Width	Average Volume
1 to 5	127,000
6 to 10	188,000
11 to 15	284,000
16 to 20	310,000
21 to 25	313,000
26 to 30	417,000*
31 to 35	417,000*

\*Small sample size

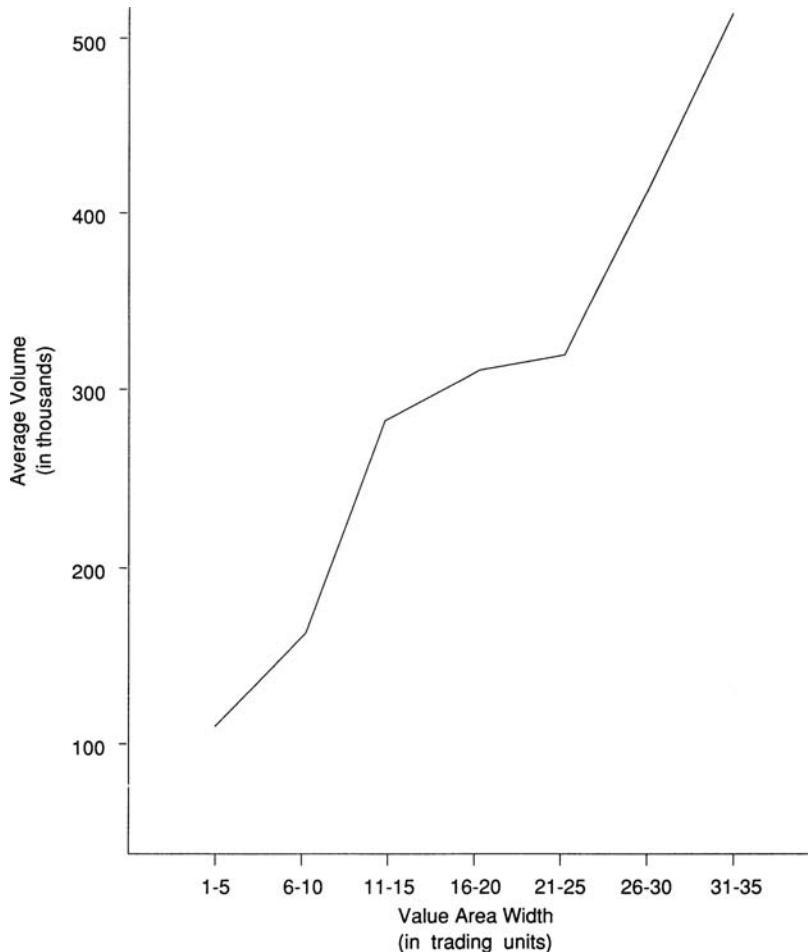
increased participation, for as price auctions higher and lower, different timeframes are brought in to the market as they perceive price to be away from value. The farther price travels, the better the possibility that new activity will enter the market, thus creating greater trade facilitation (and higher volume).

We conducted a limited study comparing total volume with average value-area width for Treasury bonds from December 14, 1988, through June 22, 1989 (Figure 4.64). As one would expect, the data clearly showed a marked increase in volume on days with larger value areas. For example, the average volume on days with a value area 1 to 5 ticks wide was 127,000 contracts. Days with value areas of 11 to 15 ticks, however, averaged roughly 284,000 contracts, while value areas of 21 to 25 ticks were regularly around 313,00 contracts.

## Summary: Long-Term Activity Record

We have now covered a variety of ways to measure attempted market direction and directional performance. Keep in mind, however, that focusing on just one method can lead to tunnel vision and an incomplete understanding of true market conditions. It is necessary to synthesize all the elements of direction and performance to arrive at a holistic market understanding.

Figure 4.65 contains a simplified long-term activity record (LTAR) designed to help traders organize the answers to the two Big Questions addressed in this section. Figure 4.65 is left blank for you to pull out and copy if you wish. However, we encourage you to create your own long-



**FIGURE 4.64** Value Area Width Relative to Volume. Treasury Bonds, December 14, 1988 to June 22, 1989

Date courtesy of CISCO and Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

term activity record that better fits your needs and trading timeframe. To illustrate the use of the LTAR, we have isolated a brief period in the soybean market, and recorded the attempted direction and directional performance for each day. Figures 4.66 through 4.74 show soybean activity from May 16 to 22, 1989, and the completed LTARs that correspond to each day.

*Market:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Attempted Direction:*

*Buyer*      *Seller*

1. Rotation Factor ( )
2. Range Extension
3. Tails
4. Buying/Selling Composite

*Overall Attempted Direction:*      *Higher*    *Lower*    *Neutral*

*Comments:*

*Directional Performance:*

1. Volume:

Daily: ( )      Higher    Lower    Unchanged  
Auction Average: ( )      Higher    Lower    Unchanged

2. Value-Area Placement:

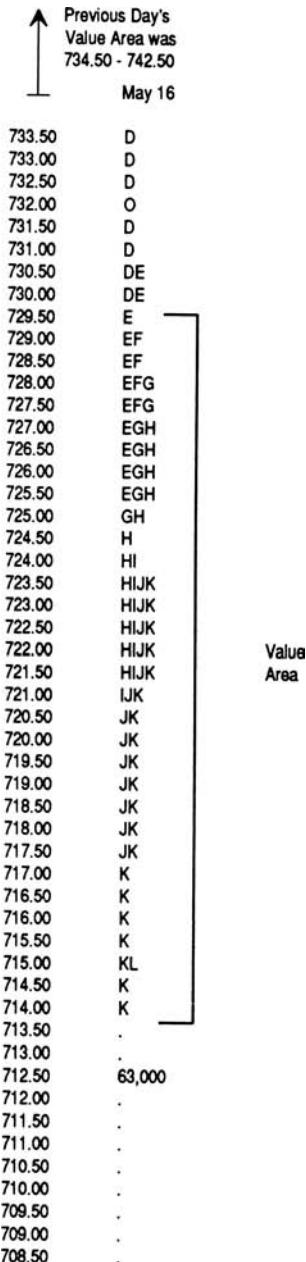
Higher OL/High Lower OL/Low Unchg'd.

3. Value-Area Width:      Wider    Average    Narrower

*Comments:*

*Expected Results:*

**FIGURE 4.65** Long-Term Activity Record



**FIGURE 4.66** July Soybeans, May 16, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Market: Soybeans Date: 5-16-89

Attempted Direction:	Buyer	Seller
1. Rotation Factor (-11)		X
2. Range Extension (Selling Trend day)		X
3. Tails		X
4. Buying/Selling Composite		X

Overall Attempted Direction: Higher Lower Neutral

Comments: Strong Selling Trend day structure.

Directional Performance:

1. Volume:  
Daily: (63,000) Higher Lower Unchanged  
Auction Average: (40,000) Higher Lower Unchanged
2. Value-Area Placement:  
Higher OL/High Lower OL/Low Unchgd.
3. Value-Area Width: Wider Average Narrower

Comments:

Extremely high volume - trade facilitated with seller all day.

Expected Results:

- Weak markets may balance after such an extreme selling day — should develop lower value Tomorrow.
- Longer term sellers should hold short.

FIGURE 4.67 Long-Term Activity Record for July Soybeans, May 16, 1989

	May 16	May 17
733.50	D	.
733.00	D	.
732.50	D	.
732.00	D	.
731.50	D	.
731.00	D	.
730.50	DE	.
730.00	DE	.
729.50	E	.
729.00	EF	.
728.50	EF	.
728.00	EFG	.
727.50	EFG	.
727.00	EGH	.
726.50	EGH	.
726.00	EGH	.
725.50	EGH	.
725.00	GH	.
724.50	H	.
724.00	HI	.
723.50	HJK	.
723.00	HJK	.
722.50	HJK	.
722.00	HJK	.
721.50	HJK	.
721.00	IJK	.
720.50	JK	.
720.00	JK	.
719.50	JK	.
719.00	JK	J
718.50	JK	J
718.00	JK	J
717.50	JK	JK
717.00	K	JK
716.50	K	JK
716.00	K	OJK
715.50	K	DJK
715.00	K	DJK
714.50	K	DJK
714.00	K	DIJK
713.50	.	DIK
713.00	.	DHIK
712.50	.	DHIKL
712.00	.	DHIK
711.50	.	DFHIK
711.00	.	DEFHK
710.50	.	DEFGH
710.00	.	DEFGH
709.50	.	DEFG
709.00	.	EG
708.50	.	EG
708.00	.	E
707.50	.	E
707.00	.	E
706.50	.	.
	63,000	53,000

**FIGURE 4.68** July Soybeans, May 16 to 17, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Market: Soybeans Date: 5-17-89

Attempted Direction:	Buyer	Seller
1. Rotation Factor (+2)	X	
2. Range Extension	X	
3. Tails	X	X
4. Buying/Selling Composite		X

Overall Attempted Direction: Higher Lower Neutral

Comments:

Balancing day — expected.

Directional Performance:

1. Volume:

Daily: (53,000) Higher Lower Unchanged  
Auction Average: (42,600) Higher Lower Unchanged

177

2. Value-Area Placement:

Higher OL/High Lower OL/Low Unchgd.

3. Value-Area Width: Wider Average Narrower

Comments:

Volume is still healthy, though no clear directional conviction. Weak close.

Expected Results:

- Monitor for developing conviction Tomorrow.
- Longer term sellers should hold short.
- Shorter term sellers should be flat.

COMPETENT

FIGURE 4.69 Long-Term Activity Record for July Soybeans, May 17, 1989

		May 16	May 17	May 18
733.50		D	.	.
733.00		D	.	.
732.50		D	.	.
732.00		D	.	.
731.50		D	.	.
731.00		D	.	.
730.50		DE	.	.
730.00		DE	.	.
729.50		E	.	.
729.00		EF	.	.
728.50		EF	.	.
728.00		EFG	.	.
727.50		EFG	.	.
727.00		EGH	.	.
726.50		EGH	.	.
726.00		EGH	.	.
725.50		EGH	.	.
725.00		GH	.	.
724.50		H	.	.
724.00		HI	.	.
723.50		HJK	.	.
723.00		HJK	.	.
722.50		HJK	.	.
722.00		HJK	.	K
721.50		HJK	.	K
721.00		IJK	.	KL
720.50		JK	.	K
720.00		JK	.	K
719.50		JK	.	K
719.00		JK	J	K
718.50		JK	J	EFGJK
718.00		JK	J	DEFGJK
717.50		JK	JK	DEFGHJK
717.00		K	JK	DEFGHIJK
716.50		K	JK	DEGHJK
716.00		K	DJK	DEHIJK
715.50		K	DJK	DHK
715.00		K	DJK	D
714.50		K	DJK	D
714.00		K	DIJK	D
713.50		.	DIK	D
713.00		.	DHIK	D
712.50		.	DHIK	O
712.00		.	DHIK	D
711.50		.	DFHIK	D
711.00		.	DEFHK	.
710.50		.	DEFGH	.
710.00		.	DEFGH	.
709.50		.	DEFG	.
709.00		.	EG	.
708.50		.	EG	.
708.00		.	E	.
707.50		.	E	.
707.00		.	E	.
706.50		.	.	.
			53,000	24,000

**FIGURE 4.70** July Soybeans, May 16 to 18, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Market: Soybeans Date: 5-18-89

Attempted Direction:      Buyer      Seller

- |                             |  |
|-----------------------------|--|
| 1. Rotation Factor (+1)     | X  |
| 2. Range Extension          | X  |
| 3. Tails                    | X (K period is final period -<br>does not count) |
| 4. Buying/Selling Composite | X  |

Overall Attempted Direction:      Higher      Lower      Neutral

Comments:

Clearly attempting to auction higher. Early development of "P" formation looks like short covering (up to K period) — poor buyer facilitation.

Directional Performance:

1. Volume:

Daily:	(24,000)	Higher	Lower	Unchanged
Auction Average:	(43,100)	Higher	Lower	Unchanged

2. Value-Area Placement:

Higher	OL/High	Lower	OL/Low	Unchgd.
--------	---------	-------	--------	---------

3. Value-Area Width:

Wider	Average	Narrower
-------	---------	----------

Comments:

Drastically lower volume accompanying the attempted higher auction indicates underlying weakness.

Expected Results:

Higher prices will probably continue to cut off activity, seller should soon resume control. "K" period buying price probe is suspect. Watch for buyer continuation.

FIGURE 4.71 Long-Term Activity Record for July Soybeans, May 18, 1989

	May 16	May 17	May 18	May 19
733.50	D	.	.	.
733.00	D	.	.	.
732.50	D	.	.	.
732.00	D	.	.	.
731.50	D	.	.	.
731.00	D	.	.	.
730.50	DE	.	.	.
730.00	DE	.	.	.
729.50	E	.	.	.
729.00	EF	.	.	.
728.50	EF	.	.	.
728.00	EFG	.	.	.
727.50	EFG	.	.	.
727.00	EGH	.	.	.
726.50	EGH	.	.	.
726.00	EGH	.	.	.
725.50	EGH	.	.	.
725.00	GH	.	.	.
724.50	H	.	.	.
724.00	HI	.	.	GI
723.50	HJK	.	.	FGI
723.00	HJK	.	.	EFGHJK
722.50	HJK	.	.	EFGHIJK
722.00	HJK	.	K	DEFGHIJK
721.50	HJK	.	K	DEFHIJK
721.00	IJK	.	K	DEJKL
720.50	JK	.	K	DEJK
720.00	JK	.	K	OJK
719.50	JK	.	K	DJK
719.00	JK	J	K	DJ
718.50	JK	J	EFGJK	D
718.00	JK	J	DEFGJK	D
717.50	JK	JK	DEFGHJK	D
717.00	K	JK	DEFGHIJK	D
716.50	K	JK	DEGHJK	.
716.00	K	DJK	DEHJK	.
715.50	K	DJK	DHJK	.
715.00	K	DJK	D	.
714.50	K	DJK	D	.
714.00	K	DJK	D	.
713.50	.	DIK	D	.
713.00	.	DHIK	D	.
712.50	.	DHIK	D	.
712.00	.	DHIK	D	.
711.50	.	DFHIK	D	.
711.00	.	DEFHK	.	.
710.50	.	DEFGH	.	.
710.00	.	DEFGH	.	.
709.50	.	DEFG	.	.
709.00	.	EG	.	.
708.50	.	EG	.	.
708.00	.	E	.	.
707.50	.	E	.	.
707.00	.	E	.	.
706.50	.	.	.	.
			24,000	27,000

**FIGURE 4.72** July Soybeans, May 16 to 19, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Market: SoybeansDate: 5-19-89*Attempted Direction:**Buyer**Seller*

1. Rotation Factor (+3)
2. Range Extension
3. Tails
4. Buying/Selling Composite       N/A

*Overall Attempted Direction:* Higher

Lower

Neutral

*Comments:*

The market is still trying to auction higher,  
but the buyer looks weak - no continuation.

*Directional Performance:*

## 1. Volume:

Daily:	(27,000)	Higher	Lower	<input checked="" type="radio"/> Unchanged
Auction Average:	(41,400)	Higher	Lower	Unchanged

## 2. Value-Area Placement:

<input checked="" type="radio"/> Higher	OL/High	Lower	OL/Low	Unchg'd.
---	---------	-------	--------	----------

## 3. Value-Area Width:

Wider	Average	<input checked="" type="radio"/> Narrower
-------	---------	---

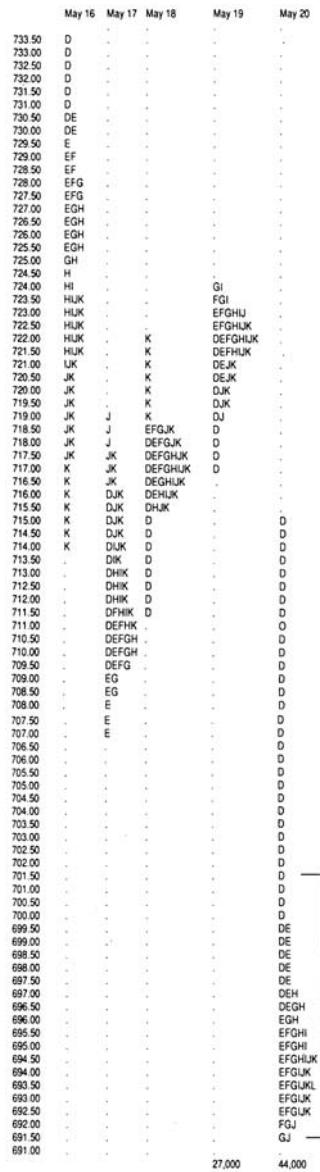
*Comments:*

Higher prices continue to cut off activity - low volume indicates the market is not facilitating trade at higher prices.

*Expected Results:*

The market needs to go lower to facilitate trade - the buyer has failed to take control of activity - look for an opportunity to short while monitoring seller entry

**FIGURE 4.73** Long-Term Activity Record for July Soybeans, May 19, 1989

**FIGURE 4.74** July Soybeans, May 16 to 20, 1984

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## ■ Long-Term Auction Rotations

The auction process is akin to a vertical tug-of-war, with price moving higher when buyers are in control and lower when sellers are in control. The auction rotations are, in a sense, the structural footprints of the rotational struggle between the other timeframe participants. In the day timeframe, the auctions take the form of either one-timeframe or two-timeframe market conditions. Long-term auction rotations are composed of the same form of activity. However, the “footprints” are recorded over a longer period of time. A bracket, for example, is a long-term two-timeframe market, while a trend is a long-term one-timeframe market.

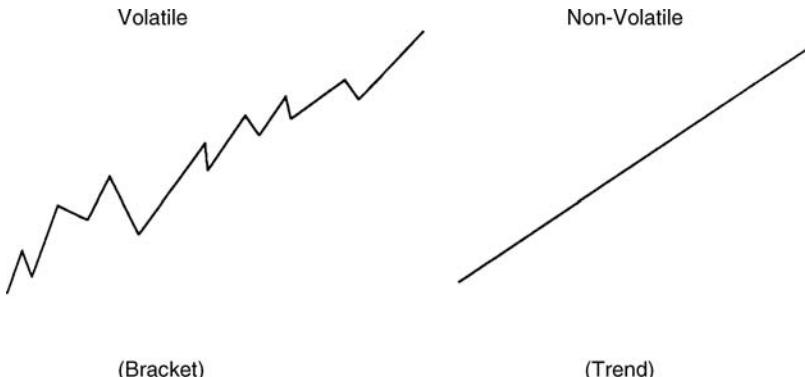
Just as a day trader must be aware of timeframe control, it is crucial for a long-term trader to know whether the market is trending or in a bracket. The following discussion details the long-term trade applications of bracketed and trending markets. Our goal is to arrive at methods to objectively assess long-term market movement.

## Brackets

In review, markets spend approximately 70 percent of the time in a trading range, or bracket, in which the other timeframe buyer and seller become *responsive parties*. When a market is bracketing, the other timeframe participants have similar views of value, and the prices at which they are willing to do business grow much closer together. As price nears the top of the perceived bracket, the seller responds and auctions price downward. In turn, the responsive buyer enters at the lower bracket extreme and rotates price back to the upside. As the market attempts to facilitate trade between the buyer and seller, price movements tend to be volatile, auctioning back and forth with no real long-term directional conviction (Figure 4.75).

It is difficult to define a bracket in absolute terms. As with a trend, seldom do two traders have the same definition of a bracket, for all traders operate with a different timeframe in mind. The daily bar chart for Treasury bonds in Figure 4.76 can be broken down into myriad individual brackets. For example, the entire bar chart could be considered a bracket by a long-term trader, spanning some six months (point 1 in Figure 4.76). The long-term participant might seek to buy below 87:00 and sell above 91:00.

A short-term swing trader, on the other hand, might break the bond market down into a smaller bracket, as shown by point 2 in Figure 4.77. This



**FIGURE 4.75** Volatility

balanced region encompasses roughly a month. The swing trader would attempt to place longs around 88 to 00, then exit and go short above 89 to 16.

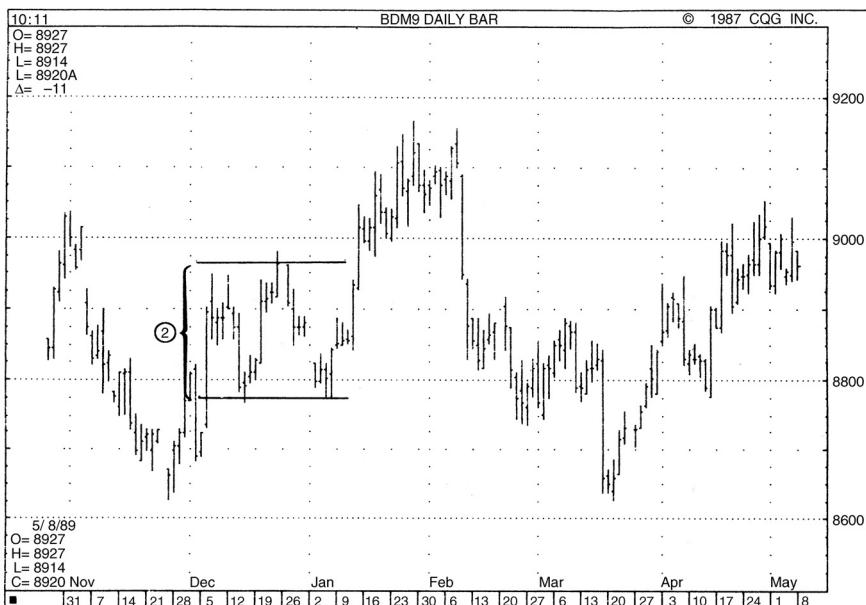
Figure 4.78 illustrates some of the many possible brackets contained within the bond market over this particular six-month period. There are brackets within brackets . . . within brackets, depending on your trading timeframe. At point 5 in Figure 4.78, a short-term trader might consider six days of overlapping value to be a bracket. A long-term trader, however, would consider that region to be a part of the long-term bracket at point 4.

Even if two traders agree on a balance area, they still may differ on the actual extremes of the bracket. In Figure 4.79, one swing trader might consider the bracket extremes to be created by recurring value-area tops and bottoms. Another swing trader might use price extremes (excess) to define the bracket, as in Figure 4.80. The point is, bracket definition is largely a product of time. There is no perfect bracket, just as there is no perfect trend. *The important concept to remember is that to successfully trade in a bracketed market, it is necessary to clearly define the bracket in which you are trading according to your timeframe.*

It is helpful to literally “draw in” the bracket extremes as you perceive them. This allows you to visualize future auction rotations and ideal trade location. When you clearly define a bracket, you are, in effect, testing your market understanding. Brackets do evolve, however, and it is important to constantly monitor for fundamental changes. By observing and continually reevaluating your view of the bigger picture, you will gain experience and further the learning process that is necessary to becoming an expert trader.

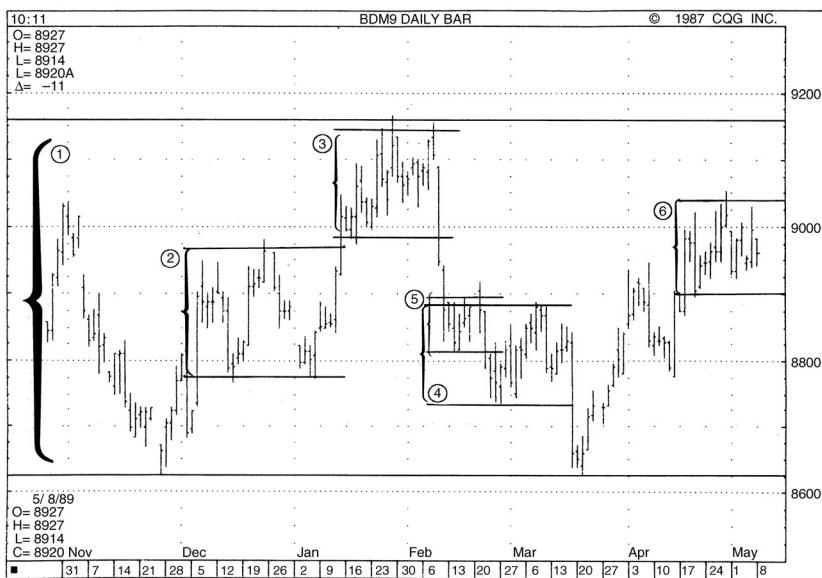
**FIGURE 4.76** A Six-Month Bracket in Treasury Bonds

Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.



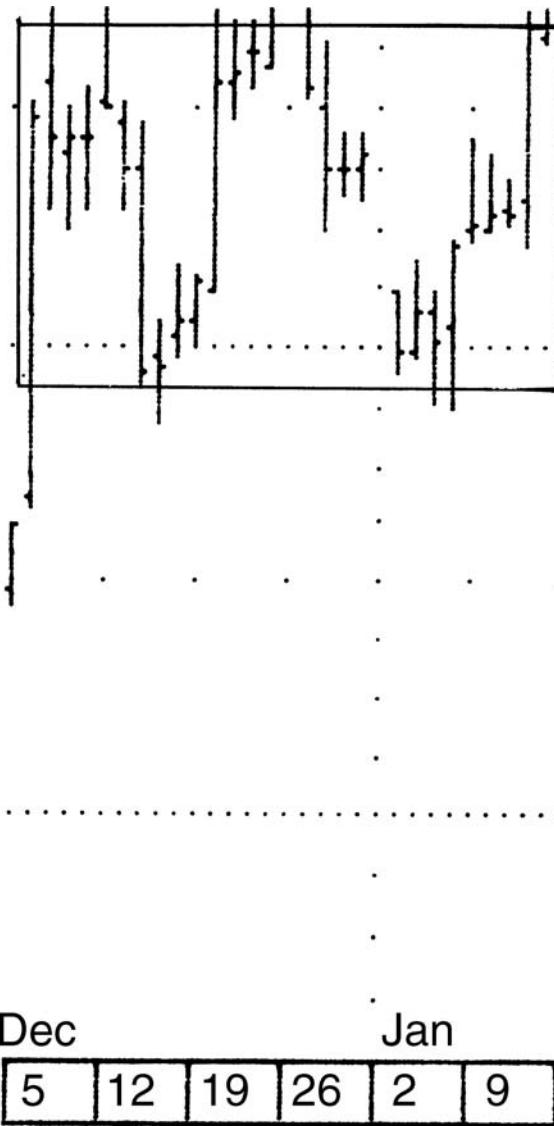
**FIGURE 4.77** A One-Month Bracket in Treasury Bonds

Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.



**FIGURE 4.78** Multiple Brackets in Treasury Bonds

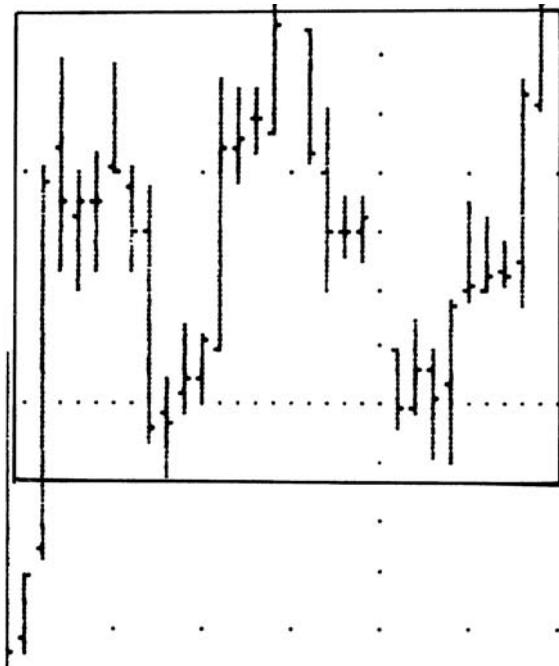
Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.



**FIGURE 4.79** Bracket Extremes in Treasury Bonds  
Data courtesy of Commodity Quote Graphics.

## Trade Location in a Bracketed Market

Once you realize that you are in a bracketed market and have defined the bracket extremes, several guidelines can help you secure proper trade location, improve your trading performance, and manage your trade risk.



Dec	Jan
5	12

19	26	2	9
----	----	---	---

**FIGURE 4.80** Bracket Extremes in Treasury Bonds  
Data courtesy of Commodity Quote Graphics.

**Rule 1: Monitor Market Direction and Location within the Current Bracket** All trades in a bracketed market should be placed *responsively*. We use the term *responsive* here in a more generic sense than has been previously discussed. Consider it this way: The distance from the top of the

bracket to the bottom, regardless of the bracket's size, is similar to a day's range. Therefore, the value area is contained within the middle of the bracket. Longs placed below the bracket value area are considered responsive, as are shorts placed above. Any trade positioned in the middle of the balance area is initiative and offers poor bracket trade location.

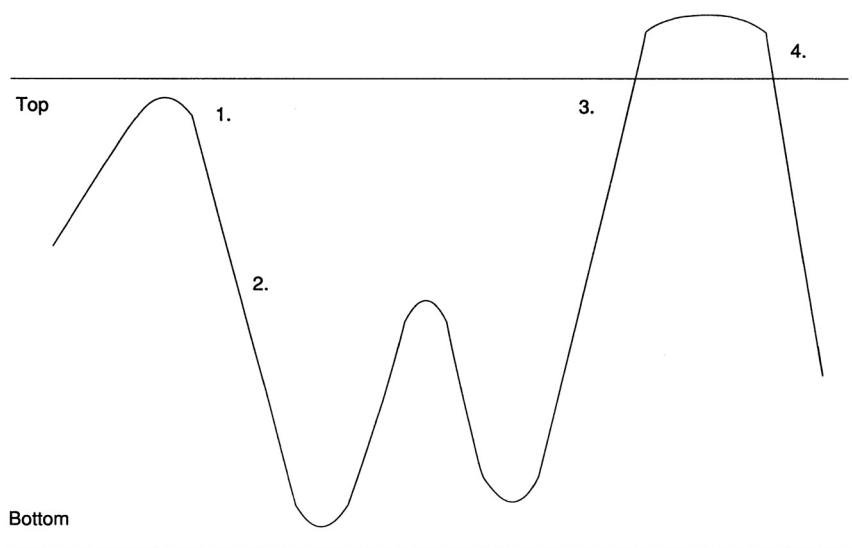
At point 1 in Figure 4.81, for example, the responsive seller responds to price approaching the top of a bracket. Shorts entered at this point result in minimum upside exposure relative to downside profit potential. If the market continues up, movement to the upside should be slowed by resistance at the top of the bracket. This would allow a trader time to evaluate the trade and, if necessary, exit the short at minimal loss.

At point 2, however, activity is initiative and trade location is poor for short positions. Immediate upside exposure is equal to downside profit potential. A long placed here embodies even greater risk, for the current medium-term auction is down.

The market eventually auctions back to the top of the bracket at point 3. Longs placed here with the initiative buyer offer little upside potential with the risk of price returning to bracket lows. Shorts should be entered at the upper extreme with the expectation that long-term sellers will respond to price above value. If price auctions above the bracket top, however (point 4), the market may be poised to breakout of the balanced area. If price is accepted above the bracket, shorts should be exited and longs placed with the breakout activity. Conversely, if the upper extreme offers resistance and price is returned within the bracket, shorts offer excellent trade location. In both cases, trades should be monitored carefully, for movement is often swift coming off a bracket.

**Rule 2: Markets Generally Test the Bracket Extreme More Than Once** If you miss an opportunity to sell a bracket top (or buy a bracket bottom), do not scramble to enter a trade for fear that you will not get another chance. Chasing a bracketed market only results in poor trade location. Over a large sample size, the market will return to test the bracket extreme on the average of three to five times before moving to new levels with confidence.

**Rule 3: Markets Fluctuate within Bracketed Regions** A market generally will not auction from one extreme of a bracket to the other in a beeline. Rather, price fluctuates within the balanced area: from top to middle, middle to top, middle to bottom, and so on. Due to the price fluctuations, swing trades placed in the middle of a bracket offer poor trade location.



**FIGURE 4.81** Simulated Movements within a Bracket

#### **Rule 4: Monitor Activity Near the Bracket Extremes for Acceptance/Rejection**

**Rejection** When price auctions near a bracket low, it is easy to let objectivity slip and begin to anticipate that the market will travel through the bracket. After all, recent activity has been to the downside—why should it stop now? However, it is extremely dangerous to place a short at the bracket low before the market has exhibited acceptance and follow-through below the bracket. If you are wrong, you have positioned yourself with the worst possible trade location, in a market that will most likely auction back to the bracket's upper extreme.

Remember, in a bracketed market, both the other timeframe buyer and seller are *responsive participants*. Responsive activity is generally much slower and more gradual to develop. A trader usually has time to monitor the bracket extremes for rejection or follow-through.

### ■ Transition: Bracket to Trend

All brackets eventually evolve into some form of a trend, just as all trends end in a balancing area, or bracket. It is an ongoing cycle. Because of the vast difference in trading techniques during a trend and a bracket, it is necessary to be able to identify when such a transition is occurring. Again, because every trader operates within a different timeframe, it is impossible to positively define a perfect transition rule. Traders with exceptionally long timeframes might consider a yearlong trend to be part of a larger bracket. Conversely, a swing trader might consider a week of consecutively higher value areas to be a trend. Identifying the transition from a bracket to a trend is a product of your personal timeframe.

In Day Timeframe Trading, we discussed transition in terms of one-timeframe and two-timeframe conditions. The same concept can be applied to the long-term auctions. When a market is in a bracket, both the other timeframe buyer and seller are present and active (over a longer period of time). There is no clear long-term directional conviction. A transition occurs when the initiative participants exert more control over price than the responsive participants.

In the long-term, transition is marked by the formation of excess confirmed by sustained follow-through in the opposite direction. The beginning of an up trend, for example, is usually marked by the aggressive entry of the other timeframe buyer, creating excess in the form of a long-term buying tail or a buying gap. The responsive buyer overwhelms the seller, and

the market begins to trend upward, turning initiative as it passes through previously established value. In Figure 4.82, the buyer entered responsively at point 1 within a balanced area. The subsequent initiative buying gaps at points 2, 3, and 4 established strong long-term excess and confirmed the conviction of the initiative other timeframe buyer. This gapping activity began an upward trend that spanned some four months.

In the intermediate term, a transition might take the form of a balance-area breakout. In Figure 4.83, for instance, the S&P had developed three days of overlapping value (February 1 to 3). On February 7, the S&P broke out of the balance area, indicating a transition to a trending scenario. The result was a Double Distribution Buying Trend day. Similarly, Treasury bonds exhibited an intermediate-term transition from bracket to trend on April 9 (Figure 4.84). After eight days of overlapping value, a multiple-distribution Trend day signaled the reentry of an initiative other timeframe seller with strong directional conviction.

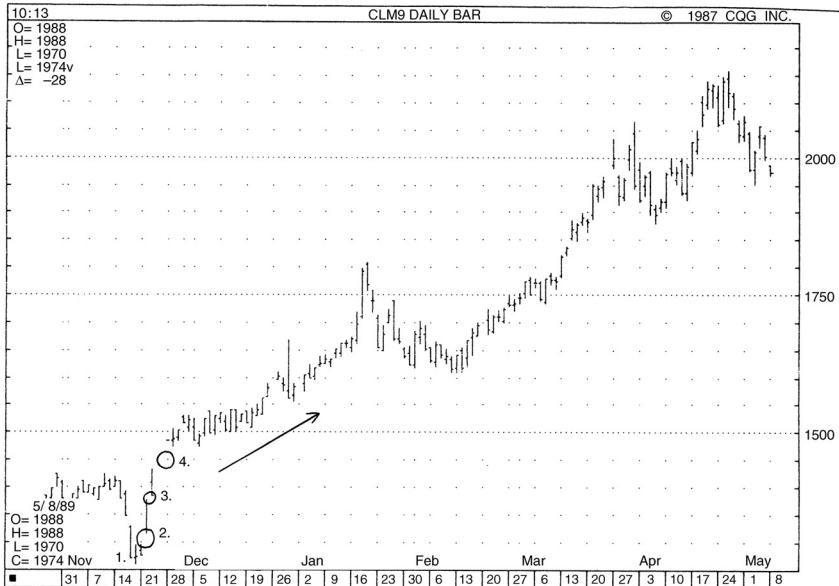
## Trends

A trend is the result of clear control and directional conviction by either the other timeframe buyer or seller. The stronger the conviction underpinning the trend, the greater the excess that usually sparks the trend's beginning. In other words, a trend of great magnitude will typically have an elongated long-term tail and/or a large gap (invisible tail) that creates a firm base from which the trend begins (Figure 4.85). It follows that early trend activity will tend to be more dramatic and pronounced, witnessed by more range extensions, elongated Profiles, and substantial tails.

## Trade Location in a Trending Market

There is no such thing as good trade location during the early stages of a trend. If the market is truly trending, price will continually lead value. The key to trade location is simply to get on board early and then monitor the market for continuation. If a trend is strong, your position should soon be rewarded with follow-through and your trade location should improve. If not, then the trend is suspect and trades should be exited.

Early entry in a trending market is more difficult than it sounds, for it means that a trader must buy considerably *above* recent perceptions of value. Picking up the phone and saying "buy it" when price is quickly auctioning above the last several days' value areas can be a nerve-wracking experience,



**FIGURE 4.82** Transition from Bracket to Trend in Crude Oil

Data courtesy of Commodity Quote Graphics.

	January 31	February 1	February 2	February 3	February 6	February 7
302.70	.	.	.	.	.	.
302.60	.	.	.	.	.	M
302.50	.	.	.	.	.	LM
302.40	.	.	.	.	.	LM
302.30	.	.	.	.	.	LM
302.20	.	.	.	.	.	LM
302.10	.	.	.	.	.	LM
302.00	.	.	.	.	.	LM
301.90	.	.	.	.	.	KLM
301.80	.	.	.	.	.	KLMN
301.70	.	.	.	.	.	KLMN
301.60	.	.	.	.	.	JKLMN
301.50	.	.	.	.	.	JKLNP
301.40	.	.	.	.	.	JKLNP
301.30	.	.	.	.	.	JKNP
301.20	.	.	.	.	.	HJKP
301.10	.	.	.	.	.	HJK
301.00	.	.	.	.	.	HJK
300.90	.	.	.	.	.	HJK
300.80	.	.	.	.	.	HJK
300.70	.	.	.	.	.	HJ
300.60	.	.	.	.	.	HI
300.50	.	.	.	.	.	H
300.40	.	.	.	.	.	H
300.30	.	C	.	.	.	FH
300.20	.	CD	.	.	.	FGH
300.10	.	CD	.	.	.	FGH
300.00	.	CD	.	.	.	FGH
299.90	.	CD	K	.	.	FGH
299.80	.	CD	K	.	.	FG
299.70	N	CD	K	.	.	CFG
299.60	N	CD	JK	.	.	CDFG
299.50	N	CDM	JK	C	.	CDFG
299.40	N	CDM	BJK	C	.	CDF
299.30	NP	CDEM	BJK	BC	.	CDEF
299.20	NP	CELMN	BJKL	BC	B	CDEF
299.10	NP	CELMNP	BJKL	BCDN	BC	CDEF
299.00	NP	CELMNP	BJKL	BCDMN	BC	CDE

**FIGURE 4.83** Balance Area Breakout Occurring in the June S&P 500, January 31 to February 7, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

even for the trader who is usually calm and objective. When a trend emerges after a prolonged balance area, a trader must quickly reverse his or her trading perspective. It is very difficult to change from a responsive mode to the go-with, trail-blazing mentality of the initiative trader.

Later in the life of a trend, however, trades should be placed responsively, or when the market temporarily breaks during an up trend (or rallies in a down trend). Regardless of where you are within a long-term trend, *it is safest to trade with the trend*. You will save the cost of this book ten times over if you simply do not trade against a trend.

298.90	NP	CEFULMNP	BCJL	BCDMN	BC	CDE
298.80	MNP	CEFJLMNP	BCJL	BCDEMNP	BC	CDE
298.70	MNP	BCEFHIJLMNP	BCJLM	BDEHLMNP	BC	BCD
298.60	MNP	BCEFHIJLMNP	BCJLM	BDEGHLNP	BC	BC
298.50	M	BCEFHIJLMN	IJLMN	BDEFGHIJLMNP	BC	BC
298.40	LM	BCEFGHIJKL	CHIJMNP	BEGFGHIJLN	BCI	BC
298.30	LM	BEFGHIJKL	CFHIMNP	BEGFGHIJKL	BCHI	BC
298.20	LM	BEFGHIJKL	CFGHIMNP	BEGFGHIJKL	BCHI	B
298.10	LM	BEGHIJKL	CFGHMN	BFGHIJK	BCHIM	B
298.00	LM	BEGJK	CEFGHMN	BFIK	BCDHIM	B
297.90	KL	BEGK	CDEFGM	BFIK	BDHJLMP	B
297.80	KL	BGK	CDEFM	BF	BDHJLMNP	B
297.70	KL	BGK	DEFM	B	BDGHJLMNP	B
297.60	HKL	GK	DEM	B	BDGHJLMNP	B
297.50	HKJL	G	DE	B	DGHJKLMNP	B
297.40	BHJK	G	DE	B	DFGJKLMNP	B
297.30	BHJK	.	D	.	DEFGJKLMN	B
297.20	BCHJK	.	D	.	DEFGJKLMN	.
297.10	BCHJK	.	.	.	DEFGKLMN	.
297.00	BCHJK	.	.	.	DEFGKMN	.
296.90	BCGHJ	.	.	.	DEFGMN	.
296.80	BCGHJ	.	.	.	DEGM	.
296.70	BCGHJ	.	.	.	DEM	.
296.60	CGHI	.	.	.	EM	.
296.50	CGI	.	.	.	E	.
296.40	CFGI	.	.	.	E	.
296.30	CFGI	.	.	.	.	.
296.20	CFGI	.	.	.	.	.
296.10	CEFG	.	.	.	.	.
296.00	CEFG	.	.	.	.	.
295.90	CEFG	.	.	.	.	.
295.80	CEG	.	.	.	.	.
295.70	CDE	.	.	.	.	.
295.60	CDE	.	.	.	.	.
295.50	CDE	.	.	.	.	.
295.40	DE	.	.	.	.	.
295.30	D	.	.	.	.	.
295.20	D	.	.	.	.	.
295.10	.	.	.	.	.	.
295.00	.	.	.	.	.	.

**FIGURE 4.83** (Continued)

## Monitoring Trends for Continuation

One useful way to monitor a trend for signs of continuation and/or slowing by comparing activity on up days against activity occurring on down days. While in an up trend, for example, determine which way each individual trading session is attempting to go. Then, compare the volume generated on down days versus the up days. If a trend is strong, up days should exhibit greater trade facilitation by generating higher volume than down days. When volume begins to increase on days against the trend, then the trend is aging and may soon begin to balance, or enter a bracket.

	March 30	March 31	April 1	April 2	April 3	April 6	April 7	April 8	Apr. 9
99 0/32	.	.	.	.	.	.	.	.	.
98 31/32	.	.	.	.	.	.	.	.	.
98 30/32	.	.	.	.	.	.	.	.	.
98 29/32	.	.	.	.	.	.	.	.	.
98 28/32	.	.	.	.	.	.	.	.	.
98 27/32	.	.	.	.	.	.	.	.	.
98 26/32	A	.	.	.	.	.	.	.	.
98 25/32	A	.	.	.	.	.	.	.	.
98 24/32	A	.	.	.	.	.	.	.	.
98 23/32	A	.	.	.	.	.	.	.	.
98 22/32	A	.	.	.	.	.	.	.	.
98 21/32	A	.	.	.	.	.	.	.	.
98 20/32	A	.	.	.	.	.	.	.	.
98 19/32	A	.	.	.	.	.	.	.	.
98 18/32	A	.	.	.	.	.	.	.	.
98 17/32	A	.	.	.	.	.	.	.	.
98 16/32	A	L	.	.	.	.	B	.	.
98 15/32	A	LM	.	.	.	.	BCH	.	.
98 14/32	A	L	.	AB	.	.	ABCHI	.	.
98 13/32	AB	AL	.	AB	.	.	ABCDGHU	.	.
98 12/32	AB	AL	.	AB	.	.	ABCDGHU	.	.
98 11/32	ABD	ABIL	.	AB	.	.	ABCDEGHU	.	.
98 10/32	ABDE	ABUL	.	ABD	.	.	ABCDGEHJU	.	.
98 9/32	ABCDEFG	ABUL	.	ABD	.	.	ABEGU	.	.
98 8/32	ABCDEFG	ABULK	.	ABCD	H	.	AEGLJK	.	.
98 7/32	ABCDEFG	ABULK	.	ABCD	H	.	AEGJIK	.	.
98 6/32	ABCDEFG	ABCULK	.	BCD	H	.	EJJK	.	.
98 5/32	ABCDEFGI	ABCUL	.	BOD	GH	EFL	.	.	.
98 4/32	BCGEJU	ABCUL	.	CE	GH	EKL	D	.	.
98 3/32	BCHGU	ACLUK	E	CE	GHJK	EKL	CD	.	.
98 2/32	CDEHJU	ACIJ	E	E	GHJK	KL	CD	.	.
98 1/32	CGHJUK	CI	E	E	FGHJK	NL	CDE	.	.
97 0/32	CGHJUK	CI	EF	EF	FGHJK	L	CDE	.	.
97 31/32	CGHJUK	CDI	EFL	EFL	FGHJK	L	CDE	.	.
97 30/32	CHJK	CDI	EFL	EFL	FGJK	L	CDE	A	.
97 29/32	HJK	CDI	EFGJ	EFL	FJK	L	CE	A	.
97 28/32	HJKL	CDHI	CDEFGJL	FGJK	EFL	JKL	BCEFG	A	.
97 27/32	HKL	CDHEH	CDEFGJKL	FGJK	EFL	JKL	ABCEFG	AB	.
97 26/32	HKL	CDHEH	CDEGJKL	FGJK	DEFKL	JKL	ABCEFG	AB	.
97 25/32	KL	DEIH	BCDEGHJKL	FGJK	DEFKL	JKL	ABCEFG	AB	.
97 24/32	KLM	DEGH	ABCDEGHJKL	FGHK	DEFKL	JKL	ABCEFGH	ABJ	.
97 23/32	KL	DEGH	ABCDGHJKL	GHKLM	ADFL	JKL	ABCEFGHK	ABDJK	.
97 22/32	KL	DEG	ABCDHKL	GHKLM	ADFL	JKL	ABCEHJKL	ABDK	.
97 21/32	KL	DEFG	ABCDHKL	GHKLM	ADFL	JKL	CHLM	BDEHJKL	.
97 20/32	KL	DEFGH	GHKL	GHKL	ADL	JKL	DCDEHJKL	ABDK	.
97 19/32	KL	DFG	ABDHK	HKL	ADL	JKL	HJKL	BCDEHJKL	.
97 18/32	KL	DFG	ABD	HKL	AD	JKL	HJKL	BCDEGHJKL	.
97 17/32	KL	FG	AB	HL	ABD	JKL	CDEGHJUL	A	.
97 16/32	F	AB	HL	ABD	JKL	IL	CDEFGHJUL	A	.
97 15/32	F	AB	HL	ABCD	JKL	IL	CEFGHIL	AB	.
97 14/32	F	A	L	BCD	JKL	IL	CEFGHIL	AB	.
97 13/32	.	.	L	BCD	JKL	IL	CEFGHLM	AB	.
97 12/32	.	.	L	BCD	JKL	IL	EFGL	AB	.
97 11/32	.	.	L	BC	JKL	IL	EFGL	AB	.
97 10/32	.	.	L	C	JKL	IL	F	AB	.
97 9/32	.	.	L	BC	JKL	IL	F	ABC	.
97 8/32	.	.	L	BC	JKL	LM	.	BC	.
97 7/32	.	.	L	BC	JKL	L	.	BC	.
97 6/32	.	.	.	BC	JKL	.	.	BC	.
97 5/32	.	.	.	BC	JKL	.	.	BC	.
97 4/32	.	.	.	B	JKL	.	.	BC	.
97 3/32	.	.	.	B	JKL	.	.	C	.
97 2/32	.	.	.	B	JKL	.	.	C	.
97 1/32	.	.	.	B	JKL	.	.	C	.
97 0/32	.	.	.	B	JKL	.	.	C	.
96 31/32	.	.	.	B	JKL	.	.	C	.
96 29/32	.	.	.	B	JKL	.	.	CD	.

**FIGURE 4.84** Balance Area Breakout Occurring in June Treasury Bonds, March 30 to April 9, 1987  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## Transition: Trend to Bracket

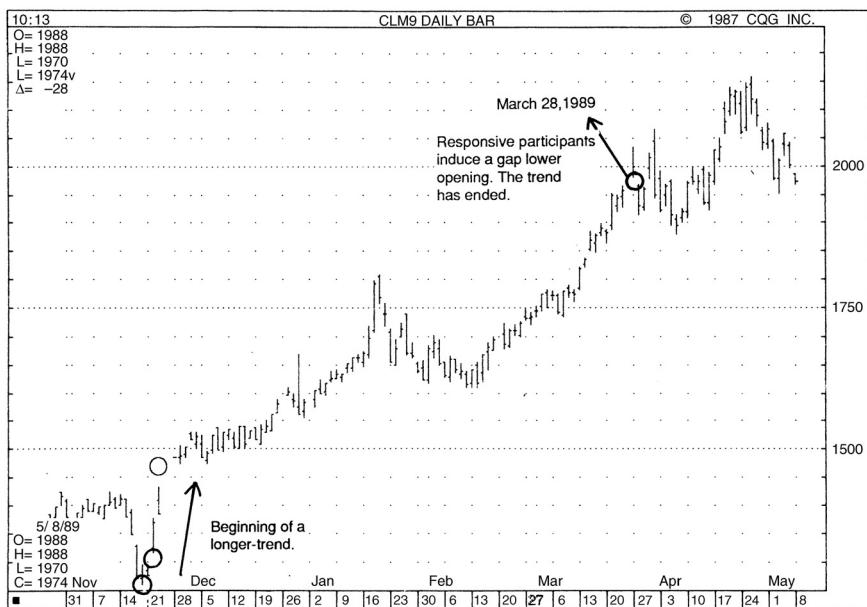
A trend is officially over when the responsive participant is able to exert as much influence on price as the initiator. An up trend has ended, for instance, when the responsive other timeframe seller is able to create significant excess at the top of the trend. Once the trend is over, the market will begin to balance. As a market begins the bracketing process, traders should revert to a responsive mode, seeking to sell the top of the bracket and buy the bottom.

96 28/02	CD
96 27/02	CD
96 26/02	CD
96 25/02	D
96 24/02	DE
96 23/02	DE
96 22/02	DE
96 21/02	DE
96 20/02	DEF
96 19/02	DEF
96 18/02	DEF
96 17/02	DEFH
96 16/02	EFGH
96 15/02	EFGH
96 14/02	EFGH
96 13/02	FOM
96 12/02	FOHI
96 11/02	FOHL
96 10/02	FOHL
96 9/02	GHLI
96 8/02	GHLI
96 7/02	HJL
96 6/02	HJL
96 5/02	J
96 4/02	J
96 3/02	J
96 2/02	J
96 1/02	J
95 0/02	J
95 31/02	J
95 30/02	J
95 29/02	J
95 28/02	J
95 27/02	J
95 26/02	JKL
95 25/02	JKL
95 24/02	JKL
95 23/02	JKLM
95 22/02	JKL
95 21/02	JKL
95 20/02	JKL
95 19/02	JKL
95 18/02	JKL
95 17/02	JKL
95 16/02	JKL
95 15/02	KL
95 14/02	KL
95 13/02	KL
95 12/02	KL
95 11/02	KL
95 10/02	KL
95 9/02	KL
95 8/02	KL
95 7/02	KL
95 6/02	KL
95 5/02	KL
95 4/02	KL
95 3/02	KL
95 2/02	KL
95 1/02	KL
94 31/02	K
94 30/02	K
94 29/02	K
94 28/02	K
94 27/02	K
94 26/02	K
94 25/02	K
94 24/02	K
94 23/02	K
94 22/02	K
94 21/02	K

**FIGURE 4.84** (Continued)

Examine Figure 4.85, containing the daily bar chart for crude oil. The long-term trend that began in late November 1988 began to balance when the responsive seller was strong enough to induce a gap lower opening on March 28, 1989. Although the resulting excess did not last for long, it indicated that the initiative buyer was weakening and a trading range was developing.

Figure 4.86 provides a second example of a transition from trend to bracket, although over a much shorter period of time. After two strong buying days on January 19 and 20, the Japanese yen began to balance.



**FIGURE 4.85** The Beginning of a Trend Occurring in Crude Oil

Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	January 19	January 20	January 21	January 22	January 25	January 26	January 27	January 28	January 29
7920	-	-	-	-	-	-	-	-	-
7918	-	-	-	-	-	-	-	-	-
7916	-	-	-	-	-	-	-	-	-
7914	-	-	-	-	-	-	-	-	-
7912	-	-	-	-	-	-	-	-	-
7910	-	-	-	-	-	-	-	-	-
7908	-	Z	-	-	-	-	-	-	-
7906	-	-	YZ	-	-	-	-	-	-
7904	-	-	YZJ	-	-	-	H	-	-
7902	-	-	YZJK	I	-	-	H	-	-
7900	-	-	YZFJ	U	-	-	H	-	-
7898	-	-	YZFU	U	-	-	H	-	-
7896	-	-	YZFGU	U	-	-	GH	-	-
7894	-	J	YZFGHU	U	-	-	GHI	-	-
7892	-	JK	YZFGHU	GU	-	-	GHU	OZFGHU	-
7890	-	J	YZFH	GU	-	-	GHU	YZAFGHI	-
7888	-	J	OZFGHI	GU	-	-	GHU	ZACEFGH	-
7886	-	J	YZDEFGHI	GU	-	-	GHU	ZABCDDEF	-
7884	-	OEJ	YZDEFGHI	GHJK	-	-	GU	ZABCD	-
7882	-	YEJ	YZDEFGHI	GHJK	-	-	GU	AB	-
7880	-	YEJ	ZACDEGH	GH	-	-	GI	AB	-
7878	-	YEJ	ZACDEGH	GH	-	-	DG	B	-
7876	-	YAEFU	ZACDEH	G	-	-	-	-	-
7874	-	YAEFU	ZAGD	G	-	Y	-	ABDG	-
7872	-	YAEFU	ZABCD	G	-	O	-	ABDEF	-
7870	-	YADEFU	ZABCD	BG	-	-	-	YABDEF	-
7868	-	YADEFU	ZABCD	YGD	O	Y	-	YABDEF	-
7866	-	YADEFU	ZABC	YBCDF	Y	YBC	-	YZARCD	-
7864	-	YADEFU	ZABC	OBCDFG	ZYA	YABCD	-	YZABCD	-
7862	-	YADEFU	ZABC	YBZCDFG	YZAF	YABCDGFJ	-	YZABCD	-
7860	-	YABCDDEHI	AB	YZABDDEFG	YZABFH	YABCDGFHJU	YZAC	-	-
7858	-	ZACDEFGH	AB	YZABDDE	YZABCFGHJU	YZACDEFGHJU	YZA	-	C
7856	-	ZACDEFGH	A	ZADDEF	YZBZCEFGHJU	YZACDEFGHJU	YA	-	BCEJ
7854	-	ZACDEFGH	A	ZADDEF	YZBZCEFGHJU	YZACDEFGHJU	Y	-	BDCEJ
7852	-	ZACDEFGH	A	ZADDEF	YZCEFGHJU	YZCEFGHJU	Y	-	ARCEFGJ
7850	-	ZCDEGH	A	ZDE	YZCEFGHJU	YZCEFGHJU	Y	-	ZABCDEFGL
7848	-	CGH	A	ZDE	YZCEFGHJU	YZCEFGHJU	Y	-	ZABCDEGJ
7846	-	CGH	-	DE	YZEF	YZEF	Y	-	ZABDEGHJ
7844	-	CGH	-	D	DE	-	Y	-	YZAGHU
7842	-	C	-	D	DE	-	Y	-	OZAHU
7840	-	C	-	D	DE	-	Y	-	YZHUK
7838	-	HJ	-	-	-	-	Y	-	Y
7836	I	C	-	-	-	-	Y	-	Y
7834	U	C	-	-	-	-	Y	-	Y
7832	U	C	-	-	-	-	Y	-	Y
7830	HJ	-	-	-	-	-	Y	-	-
7828	HJ	-	-	-	-	-	Y	-	-
7826	HU	-	-	-	-	-	Y	-	-
7824	HU	-	-	-	-	-	Y	-	-
7822	FHU	-	-	-	-	-	Y	-	-
7820	FHU	-	-	-	-	-	Y	-	-
7818	FHU	-	-	-	-	-	Y	-	-
7816	EFHU	-	-	-	-	-	Y	-	-
7814	EFGHUK	-	-	-	-	-	Y	-	-
7812	EGHU	-	-	-	-	-	Y	-	-
7810	EGHU	-	-	-	-	-	Y	-	-
7808	EG	-	-	-	-	-	-	-	-
7806	EG	-	-	-	-	-	-	-	-
7804	E	-	-	-	-	-	-	-	-
7802	E	-	-	-	-	-	-	-	-
7798	E	-	-	-	-	-	-	-	-
7796	E	-	-	-	-	-	-	-	-
7794	DE	-	-	-	-	-	-	-	-
7792	DE	-	-	-	-	-	-	-	-
7790	DE	-	-	-	-	-	-	-	-
7788	DE	-	-	-	-	-	-	-	-
7786	DS	-	-	-	-	-	-	-	-
7784	BD	-	-	-	-	-	-	-	-
7782	BCD	-	-	-	-	-	-	-	-
7780	BCD	-	-	-	-	-	-	-	-
7778	BCD	-	-	-	-	-	-	-	-
7776	BCD	-	-	-	-	-	-	-	-
7774	BDC	-	-	-	-	-	-	-	-
7772	BDC	-	-	-	-	-	-	-	-
7770	ABCD	-	-	-	-	-	-	-	-
7768	ZACD	-	-	-	-	-	-	-	-
7766	ZACD	-	-	-	-	-	-	-	-
7764	ZA	-	-	-	-	-	-	-	-
7762	ZA	-	-	-	-	-	-	-	-
7760	ZA	-	-	-	-	-	-	-	-
7758	ZA	-	-	-	-	-	-	-	-
7756	ZA	-	-	-	-	-	-	-	-
7754	ZA	-	-	-	-	-	-	-	-
7752	YA	-	-	-	-	-	-	-	-
7750	O	-	-	-	-	-	-	-	-
7748	Y	-	-	-	-	-	-	-	-
7746	Y	-	-	-	-	-	-	-	-
7744	Y	-	-	-	-	-	-	-	-
7742	Y	-	-	-	-	-	-	-	-
7740	Y	-	-	-	-	-	-	-	-
7738	Y	-	-	-	-	-	-	-	-
7736	Y	-	-	-	-	-	-	-	-
7734	-	-	-	-	-	-	-	-	-
7732	-	-	-	-	-	-	-	-	-
7730	-	-	-	-	-	-	-	-	-

**FIGURE 4.86** Coming into Balance. March Japanese Yen, January 19 to 29, 1988  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

The inability of the buyer to establish continually higher value indicated the presence of the responsive seller. The yen had entered a short-term bracketing period as evidenced by responsive activity on both extremes of the bracket (see circled areas).

## Detailed Analysis of a Developing Market

To bring the concepts of a bracketed market to life, we will now take a detailed look at the developing Treasury bond market from late October 1988 to early May 1989. We have specifically chosen this time period for its volatility. A volatile, bracketing market is a complex and emotionally difficult market to trade. In a trend, trade location is simply a matter of “Am I too late?” and “Can I buy above or sell below value?” Trading in a bracketed market, however, is much more challenging. To be successful, traders must mentally change gears quickly—literally trade from several different states of mind. Since markets generally spend between 70 and 80 percent of the time bracketing, such a challenge is the norm—not the exception—in futures trading.

In a bracketed market, the other timeframe buyer and seller are much closer together in their perception of value (see “Bracketed Markets” in Chapter 3). Both are actively probing to determine the condition of the marketplace. As an illustration, consider the development of the computer chip industry. Early on, when microchips were suddenly in great demand but only produced by a few suppliers, prices trended steadily higher. However, as new producers entered the marketplace and existing suppliers increased their output, the computer chip market entered a bracketing phase. Price began to auction back and forth between the long-term participants as their perceptions of value started to narrow. Buyers and sellers, in effect, were testing each other to determine the condition of the market. Attempts by producers to raise price were sometimes rejected as buyers found alternative, less expensive sources. Conversely, sometimes, higher prices were accepted due to a temporary flux of buyers.

## Bracket Reference Points

To successfully trade a bracketed market, you must first recognize that the market lacks long-term directional conviction and, consequently, become more *selective* in your trading. In other words, it is essential that you develop both a hands-on strategy and a minds-on approach to evaluating the market’s auctions. Because of the closeness of timeframes, the market’s probes for acceptance of value appear to be extremely disorganized, often to the point of random rotation. We will show that in some cases this is actually true. However, there are many other times when the footprints of the market’s auctions provide valuable information regarding short-term conviction, enabling alert traders to identify change in its early stages.

The key to selective trading lies in the understanding, recognizing, and recording of a few very basic reference points. Not surprisingly, these reference points are generated by many of the market forces we have already discussed—forces such as market balance, Nontrend days, balance breakouts, and auction failures. Before we delve into our detailed Treasury bond example, let us first recap a few of the forces that shape a bracketed market.

A market that lacks directional conviction spends the majority of its time in very short-term balance areas. Intermittently, the market will breakout of the balance region and make a swift directional move to a new price level, whereupon it again returns to balance. This chain of events happens again and again, until conditions change significantly and sustained other time-frame conviction surfaces. Until then, it is wise to maintain a relatively short trading timeframe. Generally, a trade should be held overnight only if there is substantial structural evidence in its favor.

There is little opportunity in the short-term balance regions, for they usually lack any semblance of directional conviction. The sharp price spurts between balance areas, on the other hand, last for a short period of time but offer a high degree of opportunity for the trader who is alert and prepared to take advantage of them. Because of the swift nature of a breakout, traders must not only be able to recognize the auction behavior that leads to a probe away from balance, but also have the foresight to enter orders ahead of time to take advantage of the potential breakout.

The key to early identification of a breakout lies in the concept of market balance. In a bracket, the market develops a series of short-term balance areas (brackets within brackets), or consecutive days of overlapping value. In most cases, the direction that the market breaks out of these short-term balance areas proves to be the beginning of at least a short-term auction. The salient concept is follow-through. Monitoring a breakout for continuation is the key to identifying other timeframe control.

In the large majority of cases, a breakout will begin with either a gap or an auction failure. After several days of overlapping value, a gap opening indicates that the market is out of balance and could be breaking out in the direction of the gap. A more subtle form of breakout occurs when the market tests one extreme, fails to follow through, and breaks out in the opposite direction, forming an *outside day*—a day that extends beyond both of the previous session's extremes. For example, consider a market that develops overlapping value on six consecutive days. On the seventh day, the market tests below the balance area lows, fails to follow through, and then auctions quickly to the upside, forming an outside day. The initial auction

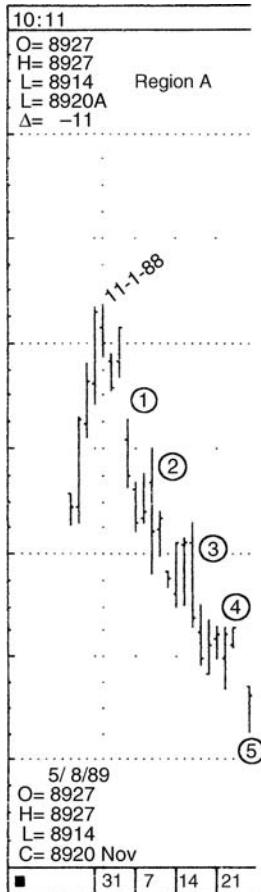
failure is the first indication that the market has the potential to breakout of balance, for it forms excess and establishes a known reference point. The frequency of this behavior is witnessed by the great number of substantial day timeframe price movements that are also outside days.

We emphasize, however, that observing market behavior and actually placing the trade are two entirely different actions. After several days of overlapping value, for example, it is easy to grow accustomed to the seemingly random, back-and-forth balancing. When the market finally tests below the short-term bracket low and fails to follow through, it is relatively easy to recognize the potential for an outside day. However, the ensuing auction back through the balance area appears to be the same activity that has lulled the trader to sleep during previous days. As one trader put it, “I can identify the auction failure and I know that there is a good possibility that the market will move substantially higher, but . . . I just can’t pull the trigger. The phone gets extremely heavy.”

Trading a bracketed market is by no means easy, even with clearly defined reference points. As we stated earlier, you must do the trade in order to build the experience and confidence necessary to take advantage of a sound market understanding.

As you proceed through our dissection of the Treasury bond market, one fact should ring loud and clear. Overlapping value regions, auction failures, breakouts, and the resulting outside days happen over and over again. They literally form the backbone of a bracketed market. As you become more familiar with their formations and consistent behavior, what once seemed to be virtually random, unorganized behavior will begin to take on a new meaning, to make sense. You will realize that through these apparently random auctions, the market is actually organizing itself, fulfilling its purpose—facilitating trade. For the trader, these behaviors and resulting structural features draw the road map that is so critical to selectively taking advantage of the dynamic short-term price movements that characterize a bracketed market. The points discussed below are highlighted in Figures 4.87 through 4.90.

**Region A (Figure 4.87)** After a strong buying auction, the Treasury bond market recorded potential buying excess at 90 to 12 on November 1st. The selling gap denoted by point 1 confirmed the excess and set into motion a sustained move to the downside. Excess, in this case a long-term selling tail and a selling gap, should act as resistance to future long-term buying auctions. If price trades back through these areas of rejection, the condition



**FIGURE 4.87** Detailed Analysis of a Developing Market, June Treasury Bonds. Region A.

Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

of the market will have changed (the other timeframe sellers that initially drove price are no longer present).

At point 2, the Bond market came into short-term balance, as is evidenced by two days of overlapping value. On the third day, a probe above the balance failed to attract buying and was swiftly rejected. Armed with the knowledge that there was no interest in buying, the bond market then broke below the balance area to start a new selling auction. The result was a dynamic outside day. When it comes to being selective in your trades, these are the conditions that you should be looking for. Identify overlapping

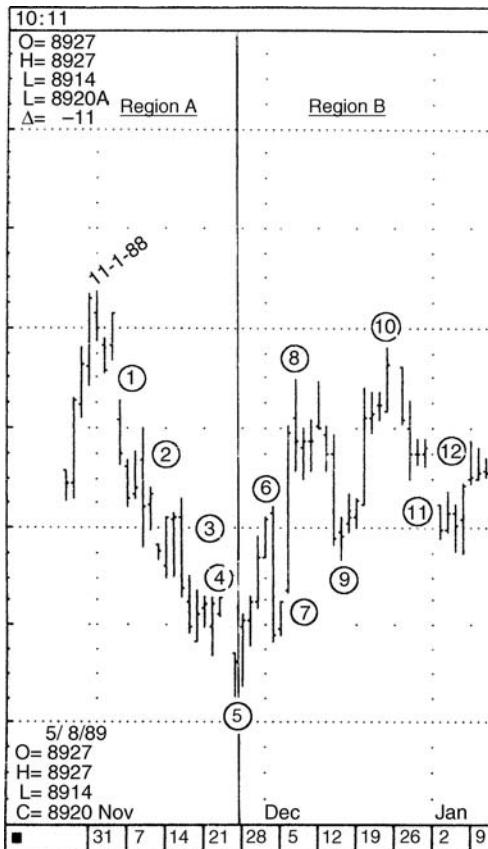
value/balance regions. Then, monitor the probes beyond these regions for acceptance or rejection. If they are accepted, the market will probably continue to auction in that direction, at least for a few days. If they are rejected, however, stay alert and get ready to reverse your trading state of mind.

Note that the failed auction created short-term excess on the day's high—remember, markets need to auction too high to know that they have gone high enough. Point 3 shows the same behavior occurring all over again. After three days of overlapping value, an auction above the previous two days' highs failed, resulting in yet another outside selling day. Following the breakout at point 3, bonds once again settled into balance, recording five days of narrowing, overlapping value (point 4). The bond market gapped sharply below the balance area on the following day, but failed to continue. Point 5 shows aggressive responsive buyers closed the market very near its high on this day, signaling the potential formation of selling excess. To confirm the excess at 89 to 06, buyers should show continuation out of this region.

**Region B (Figure 4.88)** The day following the selling gap at point 5 opened higher, then auctioned down to test the at 89 to 06 low. Aggressive other timeframe buyers were still present and they again closed the day on its highs, confirming the selling excess at 89 to 06. This new buying was fueled by strong directional conviction, as was evidenced by the fact that buyers were able to auction price completely through the previous day's selling gap.

After a quick upward swing auction, point 6 shows that bonds opened and attempted to auction higher, but failed to take out the short-term excess that had previously been formed at point 3. On this day, bonds had opened above the previous day's range—*out of balance*. When the buying auction failed and bonds returned down into the previous day's range, traders were alerted that the market possessed unlimited downside potential. Anyone still long at this point should have exited. Versatile traders might even have entered short positions, monitoring carefully for seller continuation. The result was a dynamic, outside selling day.

Point 7 demonstrates how important it is to be able to mentally switch gears. After the swift outside selling day, sellers were unable to muster continuation. Bonds gapped higher, erased the short-term excess at points 3 and 6, and stopped directly at the excess created at point 2. The fact that the bond market stopped at this level is no coincidence. Gaps and other forms of excess are important reference points. By monitoring activity around them



**FIGURE 4.88** Detailed Analysis of a Developing Market, June Treasury Bonds. Region B.

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

for follow-through or rejection, a trader can evaluate the market's directional attempts.

On the next day (point 8), bonds opened higher and began to auction into the selling gap established at point 1. However, buyers failed to auction completely through the selling gap and the market closed near its lows. The resistance provided by the gap created more than a month earlier was still intact.

After establishing potential buying excess at point 8, the market quickly came into balance, as is shown by the development of overlapping value on the following two days. On the third day, a test of the excess at point 8 failed (bonds closed on the low), which fueled an intermediate bracketing period

bounded by excess at points 9 and 10. Note that in the bracketing process the selling gap at point 1 was erased. The only remaining long-term reference point to the upside was the 90 to 12 long-term high established on November 1.

Points 11 and 12 show the familiar overlapping value/balance formation, followed by a failed auction in one direction and the resulting dramatic price move in the other. Known reference points come into play again at Point 11. In this case, the outside day was a result of the seller's failure to attract new selling business below the previous day's low, and also the short-term selling excess generated back at point 9.

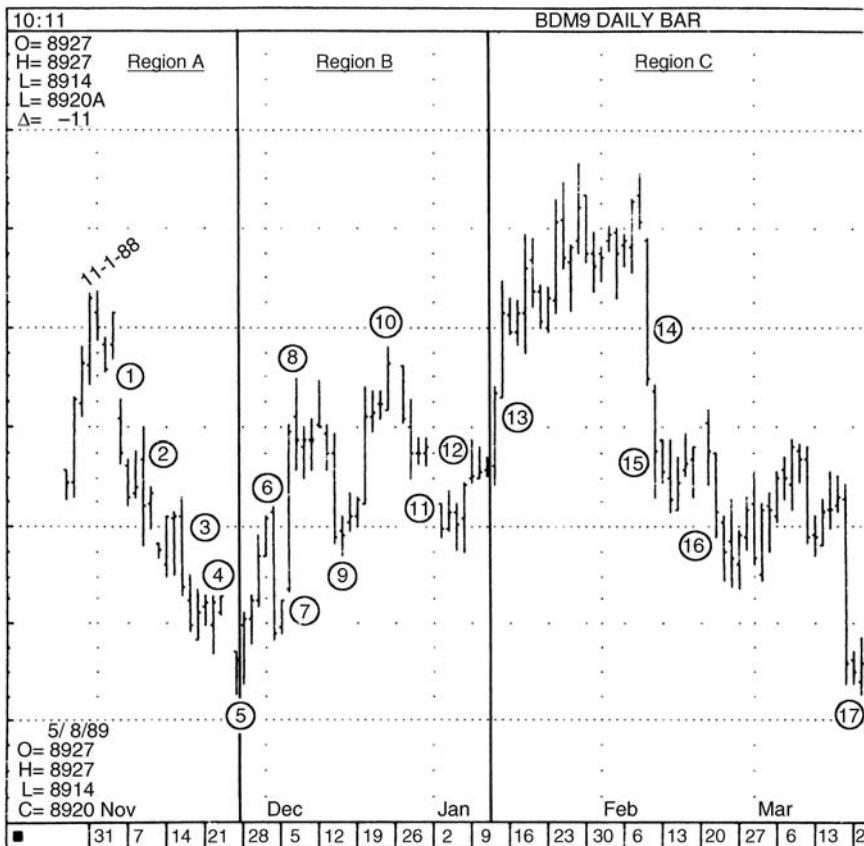
**Region C (Figure 4.89)** The buying auction at point 13 erased the 90 to 12 long-term high, negating any probability of a long-term top to the bond market. Treasury bonds then entered a period of extreme volatility. Although price was migrating higher, there was a total lack of directional conviction. Traders should have day timeframe traded only until clear signs of conviction appeared. Bonds finally gapped sharply lower at point 14—the first indication of directional conviction in nearly a month. Point 15 shows a similar nonconviction period occurring in February and March.

The areas marked by points 15 and 16 exhibit a clear lack of excess supporting their lower reaches—another characteristic of a nonconviction market. Even though the market began a gradual buying auction at point 15, it was unlikely that buyers would move price substantially until high-conviction selling excess was recorded.

Think back to the last time you got into a heated argument with a good friend. Remember how the issues became emotional rather than rational? Market behavior during times of nonconviction is much the same. It is not clear which way the market's "argument" is heading, nor when the directional issue will be solved. A lot of unintentional hurt can be dealt when an argument reaches the emotional level. Similarly, an irrational, nonconviction market can inflict severe financial pain on those who are too stubborn to stand aside and wait for clear signs of conviction.

Point 16 highlights a balance period that was again tipped over by a failed auction. After six days of overlapping value, bonds opened higher (out of balance) but failed to follow through. Price returned to value and the market broke to the downside on the next day.

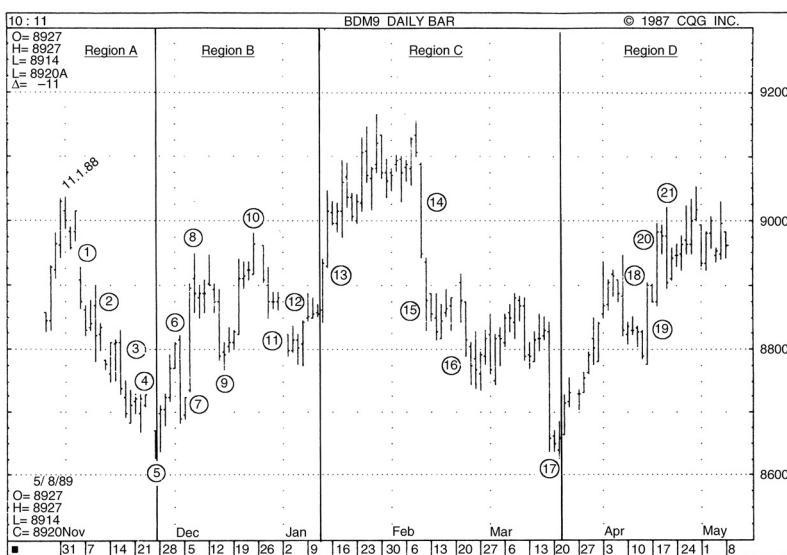
Point 17 is yet another outstanding example of the importance of known reference points. After breaking below the nonconviction region designated



**FIGURE 4.89** Detailed Analysis of a Developing Market, June Treasury Bonds. Region C.  
Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

by Point 16, the market came into balance just above the long-term lows created at Point 5. Sellers were unable to generate continuation below the 89 to 06 low, which attracted the responsive buyer. Bonds closed in the upper half of the range on this day, signaling the potential formation of long-term selling excess. Note, once again, that the dynamic outside day was sparked by a failed auction.

**Region D (Figure 4.90)** Region D provides several additional examples of why it is so important to be selective in your trading during bracketed conditions. Points 18, 19, 20, and 21 show dynamic outside days—two



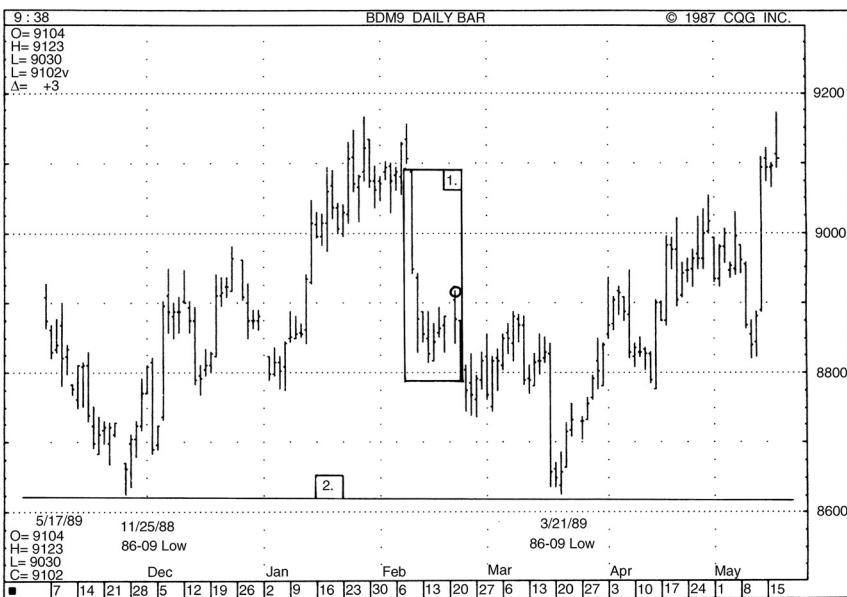
**FIGURE 4.90** Detailed Analysis of a Developing Market, June Treasury Bonds, Region D.  
Data courtesy of Commodity Quote Graphics, Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

buying and two selling—occurring within a 10-day period. If positioned the wrong way, each could have dealt a serious financial blow. However, note that all four were preceded by the characteristic clues that often signal their formation: (1) overlapping value/balance, and (2) an auction failure.

**Long-Term Auction Failures** An auction failure, for any timeframe, occurs when a market auctions above or below a known reference point and fails to follow through. Day Timeframe Trading detailed the forces that contribute to an auction failure and the characteristics of the rejection that often follows. The principal difference between a day and long-term auction failure lies in the magnitude of the tested reference point and, therefore, the magnitude of the subsequent rejection.

In Day Timeframe Trading, we described the implications of an auction failure—swift rejection and the opportunity to secure good day timeframe trade location during a day with the potential to generate significant price movement. We also mentioned that longer timeframe auction failures are usually followed by ensuing activity of greater magnitude. Suppose that a market auctions below a low that has held for several months but fails to attract new business. The ensuing reaction caused by the auction failure will often involve all timeframes and continue in the opposite direction for days, weeks, or even longer. Traders who are aware of the long-term reference points that exist in the marketplace are better prepared to secure good longer timeframe trade location in the event that a failure should occur.

The daily bar chart in Figure 4.91 illustrates two good examples of auction failures occurring in the Treasury bond market. The boxed area designated by point 1 highlights the activity leading up to an intermediate-term auction failure that occurred on February 21. Figure 4.92 expands the boxed area to include the daily Profiles for February 9 through 22. After aggressive other timeframe selling activity on February 9 and 10, the bond market came into balance, as is evidenced by the development of six days of overlapping value. On the 21st, Treasury bonds opened above the intermediate term bracket and attempted to auction higher but failed to generate continuation to the upside. Traders were alerted to the potential for an auction failure, because the test above the balance area failed to attract new, initiative buying. In addition, a narrow initial balance indicated the possibility for a Double Distribution Trend day. Shorts entered during the B period selling-range extension offered good day, swing, and intermediate-term trade location.



**FIGURE 4.91** Auction Failure Occurring in Treasury Bonds

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	Feb. 9	Feb. 10	Feb. 13	Feb. 14	Feb. 15	Feb. 16	Feb. 17	Feb. 21	Feb. 22
9024	.	.	.	.	.	.	.	.	.
9023	.	.	.	.	.	.	.	.	.
9022	Y	.	.	.	.	.	.	.	.
9021	YZ	.	.	.	.	.	.	.	.
9020	YZ	.	.	.	.	.	.	.	.
9019	YZ	.	.	.	.	.	.	.	.
9018	YZ	.	.	.	.	.	.	.	.
9017	YZAB	.	.	.	.	.	.	.	.
9016	YZABC	.	.	.	.	.	.	.	.
9015	YZABCDE	.	.	.	.	.	.	.	.
9014	YZCDEF	.	.	.	.	.	.	.	.
9013	ABCDEF	.	.	.	.	.	.	.	.
9012	ADEFG	.	.	.	.	.	.	.	.
9011	ADEFG	.	.	.	.	.	.	.	.
9010	ADGH	.	.	.	.	.	.	.	.
9009	ADGH	.	.	.	.	.	.	.	.
9008	GH	.	.	.	.	.	.	.	.
9007	GH	.	.	.	.	.	.	.	.
9006	GH	.	.	.	.	.	.	.	.
9005	H	.	.	.	.	.	.	.	.
9004	H	.	.	.	.	.	.	.	.
9003	H	.	.	.	.	.	.	.	.
9002	H	.	.	.	.	.	.	.	.
9001	H	.	.	.	.	.	.	.	.
9000	H	.	.	.	.	.	.	.	.
8931	H	.	.	.	.	.	.	.	.
8930	H	.	.	.	.	.	.	.	.
8929	H	.	.	.	.	.	.	.	.
8928	HI	.	.	.	.	.	.	.	.
8927	HJK	.	.	.	.	.	.	.	.
8926	HJK	.	.	.	.	.	.	.	.
8925	HJK	.	.	.	.	.	.	.	.
8924	HJK	.	.	.	.	.	.	.	.
8923	HJKL	.	.	.	.	.	.	.	.
8922	IJKL	.	.	.	.	.	.	.	.
8921	IJKL	.	.	.	.	.	.	.	.
8920	IJL	.	.	.	.	.	.	.	.
8919	IJL	.	.	.	.	.	.	.	.
8918	J	.	.	.	.	.	.	.	.
8917	.	.	.	.	.	.	.	.	.
8916	.	.	.	.	.	.	.	.	.
8915	.	.	.	.	.	.	.	.	.

**FIGURE 4.92** Auction Failure in March Treasury Bonds, February 9 to 22, 1989  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

8814	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8813	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Z	.	.
8812	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y2	.	.
8811	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZA	.	.
8810	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZA	.	.
8809	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YZAB	.	.
8808	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	YAB	.	.
8807	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	B	.	.
8806	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	B	.	.
8805	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8804	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8803	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8802	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8801	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8800	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8829	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8828	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8827	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8826	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8825	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8824	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8823	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8822	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8821	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8820	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8819	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8818	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8817	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8816	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8815	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8814	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8813	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8812	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8811	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8810	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8809	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8808	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8807	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8806	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8805	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8804	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8803	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8802	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8801	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.
8800	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	Y	.	.

FIGURE 4.92 (Continued)

Point 2 in Figure 4.91 identifies an auction failure following a probe below a long-term reference point. And, as would be expected, the subsequent activity is of much greater magnitude. On November 25, 1988, Treasury bonds recorded a long-term low at 86 to 09, forming long-term excess. After rallying to as high as 91 to 21 in late January, bonds eventually traded back down and approached the 86 to 09 excess on March 21, 1989—some four months later. On the 21st, price auctioned down and stopped *precisely* at 86 to 09. The selling probe failed to stimulate new activity, and the same responsive buyers were there quickly to buy below long-term value. In this particular case, the long-term auction failure sparked the beginning of a major long-term buying trend.

To experienced traders, known reference points serve as checkpoints on the market map. By observing market behavior at key locations, it is possible to determine the market's directional conviction before opportunity has slipped away.

## ■ Long-Term Short Covering and Long Liquidation

We discussed day timeframe short covering and long liquidation in Section I. The same forces that cause short covering and its converse, long liquidation, are also present in the longer timeframe. After a sustained down trend, for example, the anxiety level of participants who have been short for an extended period of time often begins to increase as their profits grow. Should something trigger covering, the ensuing rally could last for several days as traders scramble to buy back their short positions. Such swift buying can easily be interpreted to mark the end of the trend or even the beginning of a new trend in the opposite direction. However, if the buying is not accompanied by continuation and elongated Profile structure, the cause is probably short covering. Short covering is a result of old business covering positions placed with the original trend, not by new initiative buyers. The resulting Profiles tend to be short and narrow, often developing into the familiar *P* formation, indicating a lack of facilitation with the other timeframe buyer.

Figure 4.93 illustrates the beginning of long-term short covering in soybeans that was sparked by a selling auction failure on January 26, 1989. Following a 70-cent (\$3,500 per contract) downtrend, sellers auctioned price near the long-term 740 lows (Figure 4.94) and were confronted by the

	Jan. 25	Jan. 26	Jan. 26	Jan. 31	Feb. 1	Feb. 2	Feb. 3	Feb. 6	Feb. 7
777.50						FG			
777.00						FG			
776.50						EFG			
776.00						EFG			
775.50						EFG			
775.00						EFG			
774.50						EFGH			
774.00						EFGH			
773.50					X	EFGH			
773.00					K	EFGH			
772.50					JK	EDEH			
772.00					JK	EDEH			
771.50					JK	EDEH			
771.00					EJK	DHU			
770.50					EJU	DHU	HJK		
770.00					EJU	DHU	HJK		
769.50					EJU	DHU	HJK		
769.00					EDEHJU	DHU	HJK		
768.50					EDEHJU	DJK	HJK		
768.00		J			EDEGHI	K	HJK		
767.50		J			EDEGHI	K	HJK		
767.00		J			EDEGH	K	HJK		
766.50		J			EDEGH	K	HJK		
766.00		J			DEG	K	HJK		
765.50		JK			DE	K	HJK		
765.00	D	JK			D	K	HJK		
764.50	D	JK			D	K	HJK		
764.00	D	JK		K	D	K	HJK		
763.50	D	JK		K	D	GK			
763.00	D	JK		K	D	GK			
762.50	D	JK		K	D	GK			
762.00	D	JK		K	D	GK			
761.50	DH			DE	D	FGK	F	E	
761.00	DH			DE	D	FGK	F	E	
760.50	DEHI			DEFK	DEFK	EFHJK			DE
760.00	DEHI			DEFK	DEFK	EFHJK			DEF
759.50	DEFGHI			DEFK	DEFK	EFHJK			DEFG
759.00	DEFGHI			DEFK	DEFK	EFHJK			DEFGHI
758.50	DEFGHI			DEFK	DEFK	EFHJK			DEFGHI
758.00	DEFGHI			DEFK	DEFK	EFHJK			EGFHI
757.50	DEGHJU			DEFK	DEFK	EFHJK			EGFHI
757.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
756.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
756.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
755.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
755.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
754.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
754.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
753.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
753.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
752.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
752.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
751.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
751.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
750.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
750.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
749.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
749.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
748.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
748.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
747.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
747.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
746.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
746.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
745.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
745.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
744.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
744.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
743.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
743.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
742.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
742.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
741.50	DEGHJU			I	DEFK	EFHJK			EGFHJU
741.00	DEGHJU			I	DEFK	EFHJK			EGFHJU
740.50	DEGHJU			I	DEFK	EFHJK			EGFHJU

**FIGURE 4.93** Long-Term Short Covering in Soybeans, January 25 to February 7  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

responsive buying that commonly occurs at long-term reference points. This knee-jerk type of buying, combined with the seller's inability to extend price below 740, triggered a wave of aggressive buying that eventually developed into a Double Distribution Buying Trend day.

The rally on January 26 put sellers of all timeframes in a tenuous position. Imagine having the long-term foresight and discipline to build up a 60- or 70-cent gain in a trade, only to watch the market reclaim 20 cents in just a few hours. Or even worse, suppose that you sold into the trend late and had gains of only a nickel, and then suddenly found yourself 15 cents



**FIGURE 4.94** Long-Term Short Covering in Soybeans

Data courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

underwater. In the face of a move as dynamic as that, which occurred in soybeans on the 26th, it is likely that many traders exited in order to conserve gains or to limit losses.

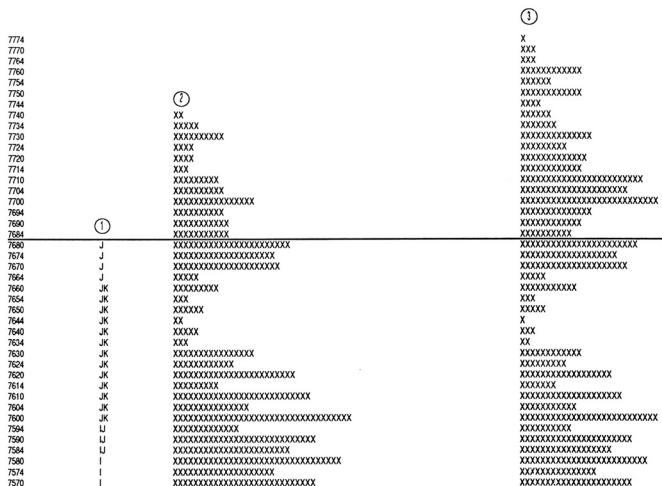
Once you have been forced out of a market by such a violent move, it is difficult to muster the confidence to place a new trade. However, it is during times like these, when market confidence is lowest, that some of the greatest opportunities are created.

When a market begins to move counter to the major auction, what is most important is not a lone day's structure; rather, how successful the market is at moving counter to the trend. The initial day of counteractivity may show directional conviction, but are subsequent days facilitating trade and exhibiting follow-through? In other words, "Is the market doing a good job in its attempts to go that way?" If not, the activity may be due to long-term short covering (or long liquidation).

Figure 4.93 shows the soybean rally on January 26, as well as the Profiles for the next seven trading days. After the strong rally, January 27 and 30 developed overlapping value areas just below the upper distribution of the 26th. If the soybean market was truly as strong as it had appeared to be on the 26th, these balancing days would have developed closer to, or even above, the January 26th 768 highs. February 1 and February 2 did manage to auction higher and establish value above 768. However, after soybean buyers had gained 30 cents in just one day, four more days of work netted only  $9\frac{1}{2}$  cents more. In addition, the fourth day (February 2) closed on its lows *below the January 26 highs*. Figure 4.93 illustrates the selling that continued through February 6. By the 9th, soybeans were again trading near the 740 lows.

If you look at January 26 through February 2 in isolation and without the benefit of hindsight, the short-term trend does appear to be up and higher value is developing. However, by overlaying the activity of each day onto the previous day (beginning with the start of the rally), a different picture begins to form. In Figure 4.95, we have combined the individual day timeframe Profiles into a *Long-Term Profile*.

Figure 4.95 shows the gradual development of long-term value in the soybean market, beginning on January 26 and running through February 9. These particular Long-Term Profiles were formed using the price/volume data from the Liquidity Data Bank, although they may just as easily be formed using TPOs. The number of Xs at a given price represents the volume that occurred at that price, relative to the volumes occurring at all other prices traded during the period selected. Thus, the Long-Term Profile



**FIGURE 4.95** Long-Term Short Covering in Soybeans Illustrated by a Long-Term Profile. The Xs corresponding to each price indicate the level of volume occurring at that price, relative to the highest volume price

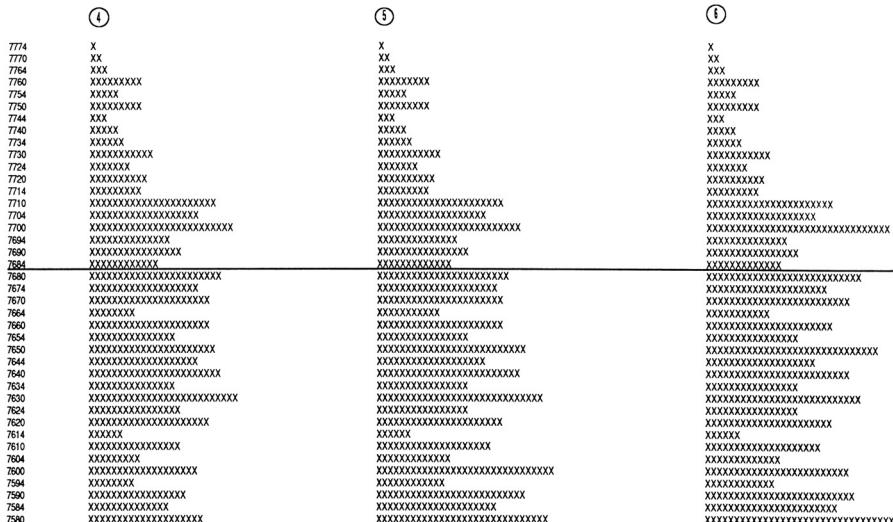
Data courtesy of CISCO. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

		①	②	③
7564	I	XXXXXXXXXXXXXX		XXXXXXXXXXXX
7560	HI	XXXXXXXXXXXXXX		XXXXXXX
7554	HI	XXXXXXXXXXXXXX		XXXXXXXX
7550	DHI	XXXXXXXXXXXXXX		XXXXXX
7544	DHI	XXXXXXX		XXXXXXX
7540	DHI	XXXXXXXXXXXXXXXXXX		XXXXXXXXXXXX
7534	DHI	XXXXXXXXXXXXXXXXXX		XXXXXXXXXXXX
7530	DHI	XXXXXXXXXXXXXXXXXX		XXXXXXXXXXXX
7524	DHI	XXXXXXX		XXXXXXX
7520	DHI	XXXXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXX
7514	DH	XXXXXXX		XXXXXX
7510	DH	XXXXXXXXXX		XXXXXX
7504	DH	X		X
7500	DEH	XXXXXXX		XXXXXXX
7494	DEH	XXX		XXX
7490	DEH	XXXX		XXXX
7484	DEFH	XXX		XXX
7480	EFH	XXXXX		XXXX
7474	EFH	XXXXXX		XXXXXX
7470	EFGH	XXXXXX		XXXXXX
7464	EFGH	XXXXX		XXXXX
7460	EFGH	XXXXXXXXXXXX		XXXXXXXXXXXX
7454	EFGH	XXXXXX		XXXXXX
7450	EGH	XXXXXXXXXXXXXXXXXX		XXXXXXXXXXXX
7444	EGH	XXXX		XXX
7440	EGH	XX		X
7434	GH	X		X
7430	GH	XXX		XX
7424	GH	XXX		XX
7420	H	XXXXX		XXXX
7414	H	XXX		XX
7410	H	XX		X
7404	H	X		X

1 / 26      1/26-1/31

1/26-2/1

**FIGURE 4.95** (Continued)



**FIGURE 4.95** (Continued)

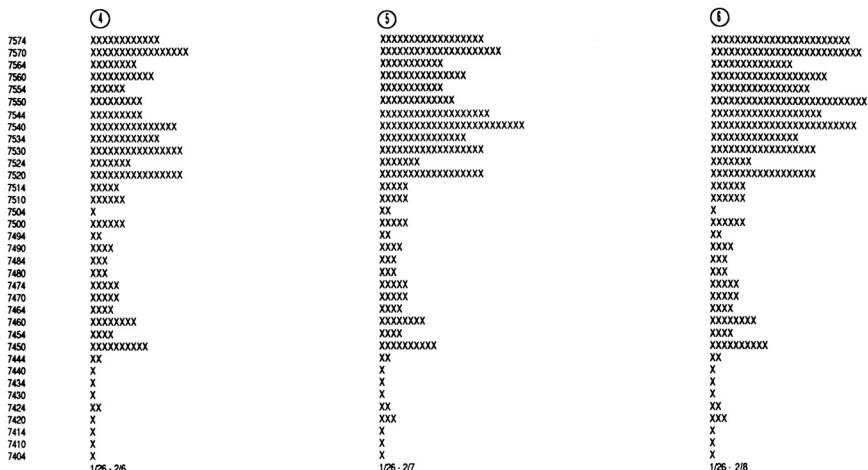


FIGURE 4.95 (Continued)

	(1)	(2)
7774	X	5
7770	XX	5
7764	XXX	5
7760	XXXXXXX	5
7754	XXXXX	5
7750	XXXXXXX	5
7744	XXX	5
7740	XXXX	4 5
7734	XXXXX	4 5
7730	XXXXXXX	4 5
7724	XXXXX	4 5
7720	XXXXXXX	4 5
7714	XXXXXX	4 5
7710	XXXXXXXXXXXXXXXXXXXX	4 5 7
7704	XXXXXXXXXXXXXXXXXXXX	4 5 7
7700	XXXXXXXXXXXXXXXXXXXXXX	4 5 7
7694	XXXXXXXXXXXXXX	4 5 7
7690	XXXXXXXXXXXXXX	4 5 7 8
7684	XXXXXXXXXXXXXX	4 5 7 8
7680	XXXXXXXXXXXXXXXXXXXXXX	1 4 5 7 8
7674	XXXXXXXXXXXXXX	1 4 5 6 7 8
7670	XXXXXXXXXXXXXXXXXXXXXX	1 4 5 6 7 8
7664	XXXXXXXXXXXX	1 4 5 6 7 8
7660	XXXXXXXXXXXXXXXXXXXX	1 4 5 6 7 8
7654	XXXXXXXXXXXXXX	1 4 5 6 7 8
7650	XXXXXXXXXXXXXXXXXXXXXX	1 4 5 6 7 8
7644	XXXXXXXXXXXXXX	1 6 7 8
7640	XXXXXXXXXXXXXXXXXXXX	1 3 6 7 8
7634	XXXXXXXXXXXXXX	1 2 3 6 7 8
7630	XXXXXXXXXXXXXXXXXXXXXX	1 2 3 6 7 8
7624	XXXXXXXXXXXXXX	1 2 3 6 7 8
7620	XXXXXXXXXXXXXXXXXXXX	1 2 3 6 7 8
7614	XXXXX	1 2 3 6 8
7610	XXXXXXXXXXXXXXXXXXXX	1 2 3 8
7604	XXXXXXXXXXXXXX	1 2 3 8
7600	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 2 3 8
7594	XXXXXXXXXXXXXX	1 2 3 8
7590	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 2 3 8 9 A
7584	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 2 3 8 9 A
7580	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 2 3 8 9 A

**FIGURE 4.95** (Continued)

	(7)	(1)
7574	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 2 3
7570	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 2 3
7564	XXXXXXXXXXXXXXXXXXXXX	1 2 3
7560	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7554	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7550	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7544	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7540	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7534	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7530	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7524	XXXXXXXXXXXX	1 2 3
7520	XXXXXXXXXXXXXXXXXXXXXX	1 2 3
7514	XXXXXX	1 2 3
7510	XXXXXXX	1 2 3
7504	XX	1 3
7500	XXXXXXXXXXXXXXXXXXXXXX	1
7494	XX	1
7490	XXXX	1
7484	XXX	1
7480	XXXXXX	1
7474	XXXXXX	1
7470	XXXXXXXXXX	1
7464	XXXXXXXXXX	1
7460	XXXXXXXXXXXXXXXXXXXXXX	1
7454	XXXXXXXXXX	1
7450	XXXXXXXXXXXXXXXXXXXXXX	1
7444	XXXXXX	1
7440	XXXXXX	1
7434	XXXXXX	1
7430	XXXXXXXXXX	1
7424	XXXXXX	1
7420	XXXXXXXXXXXXXXXXXXXXXX	1
7414	XXX	1
7410	X	1
7404	X	1

1/26 - 29

**FIGURE 4.95** (Continued)

for the January 26 to 31 period (four market days) shows the greatest value (volume) building around 760. In addition, we have drawn a line separating trade above and below 768, the January 26 high. Remember, the salient feature to observe in order to identify short covering in any timeframe is continuation. Any activity above the high for the 26th is indicative of buyer continuation.

Through February 1, soybeans auction higher and begin to build value above 768. However, continuation remains low relative to the magnitude of the initial rally. By February 2, there has been no further buyer follow-through, relative volume is beginning to decline above 768, and most notable, a *P* formation is beginning to form. In effect, long-term buying auctions are stalling, thus creating the noncontinuation structure found in day timeframe short covering. Higher prices are cutting off activity as old business has covered their shorts and new buyers have not entered the market. This is the first long-term structural indication of poor buyer continuation. The buying in the soybean market, in this case, was likely longer-term short covering, not healthy new initiative buying.

## Applications

224

Suppose that you are one of the traders forced out of the market by the covering. It has only been a few days, and the memory of the swift rally is no doubt still fresh in your mind. If your intent is to reestablish your short position, by February 3 the Long-Term Profile provides some of the long-term information you need in order to enter the market:

1. Risk is identified. If the soybean market returns up to trade above  $777\frac{1}{2}$  (7774), it is most likely caused by the actions of new, initiative other timeframe buyers. Thus, shorts should be exited if price returns above  $777\frac{1}{2}$ .
2. By February 2 and 3, buying auctions are subsiding as the short covering diminishes and control reverts back to the other timeframe seller. This transition phase is evidenced by the return of value below 768.
3. If the short covering is genuine, then soybeans should auction down to take another look at the 740 lows.

At the right side of Figure 4.95, we have created a sequential Profile in which each time period represents a day (instead of half-hour auctions). This long-term Profile clearly exhibits the similarities between day and long-term short covering. The quick initial rally in 1 period is followed by weak

buying-range extension attempts. Short-covering activity wanes and the seller resumes control in 8 period, eventually filling in the lower half of the Profile.

## ■ Corrective Action

Most great scientific discoveries are brought forth by a creative individual who looks at something old in a new and innovative way. Often using the same information that others have studied and researched for years, the inventor simply sees the data in a different light. It is easy to become entrenched in a mode of thinking or behavior. By locking our minds into a single mindset, however, we often fail to question what we think are the obvious answers.

Before we enter our discussion, take a minute to write down your first reaction to the following questions:

1. What do we mean when we say that a market needs to correct itself (assuming that the current auction is up)?
2. What forms can this corrective action take?

A common dictionary definition of the term *correction* is counteraction. For something to be corrected, an opposite action must take place. If your thinking is locked into the generally accepted definition, you might conceptualize a correction to be a situation where the market auctions lower after a sustained rally, resulting in lower prices. Or, in a larger timeframe sense, you may see a correction as a gradual sell-off resulting in several days of lower prices. The point is, a typical stimulus response to the question “What is correction after an up auction?” is often simply that price needs to move lower. We, however, define correction as counteraction. When viewed as counteraction, you will begin to see that corrective action can take a more subtle, and perhaps more powerful, form.

Traditionally, a correction after an up auction is assumed to be selling, or profit taking, that results in lower prices. This is not always true. Even though there are sellers in the market covering longs after an up auction, *price does not necessarily have to fall*. For example, a market may open higher and sell off all day, resulting in higher prices, higher value, and a higher close. On such a day, correction can still be taking place even though lower prices are not evident.

This sort of correction occurs when old buyers sell, taking their profits at the same time new buyers are just deciding to enter the market. Thus, responsive selling (profit taking) is met by initiative buyers entering new positions. If the initiative buying is strong enough, price may remain higher despite old businesses liquidating their original positions. Remember, however, that when the responsive seller is able to exert more influence on price than the initiative buyer, the up auction may be over (refer to “Bracketed Markets” in Chapter 3).

## The Function of Corrective Action

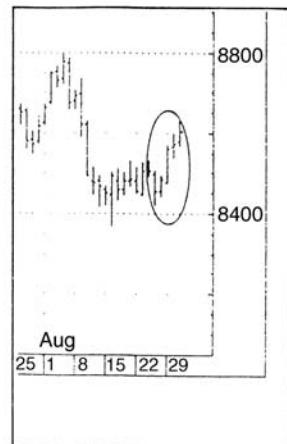
Corrective action serves several purposes. First, it allows for profit taking—a vital ingredient in maintaining a healthy market. Profit taking eases the anxiety level of the market. Naturally, traders with well-placed trades often build up high levels of anxiety about being able to keep their profits. The way to reduce this worry and nervousness is to lock in your profit—to sell if price has been going up or to buy if price has been going down.

More important, counteraction also serves as a test of the strength of the buyer (or seller). If a correction is occurring in an up auction and the market still manages to establish higher value, then the underlying market conditions are very strong. A textbook example of such corrective action is provided by Treasury bonds in Figure 4.96.

Following a higher opening, traders holding longs were given ample time to sell all they wanted. The resulting selling-range extension and Normal Variation selling structure suggests that this is exactly what happened. Although lower prices were not the result, this selling is nonetheless a counteraction to the buying that had been occurring over the previous three days. Reviewing the Treasury bond activity prior to August 30, excess was created on August 25, which ultimately marked the beginning of an up auction. As the bar chart windowed inside Figure 4.96 shows, the buying auction continued with a breakout above a previous short-term high at 85 to 11. On August 30, the market opened above value and attempted to trade lower most of the session (until J period). However, the resulting value area and close were actually higher than the previous day. As the activity of subsequent days proved, within the sell-off of August 30 was the well-disguised correction for which alert buyers had been waiting.

Corrective action is important to the health of a trend. The fact that corrective selling attempts occurred at the same time value was being established higher indicated that the bond market was exceptionally strong.

	AUG. 25	AUG. 26	AUG. 29	AUG. 30	AUG. 31
86 10/32	.	.	.	.	A
86 9/32	.	.	.	.	O
86 8/32	.	.	.	.	A
86 7/32	.	.	.	.	A
86 6/32	.	.	.	.	A
86 5/32	.	.	.	.	ABC
86 4/32	.	.	.	.	ABC
86 3/32	.	.	.	.	ABCLM
86 2/32	.	.	.	.	BCLM
86 1/32	.	.	.	A	CDL
86 0/32	.	.	.	A	CDEFIL
85 31/32	.	.	.	A	CDEFHIL
85 30/32	.	.	.	A	CDEFHIJKL
85 29/32	.	.	.	OC	DEFGHIJKL
85 28/32	.	.	.	ABC	EFGHIJKL
85 27/32	.	.	.	ABCKL	EFGJKL
85 27/32	.	.	.	ABCKL	FJK
85 25/32	.	.	.	BCKLM	
85 24/32	.	.	.	CKL	J
85 23/32	L	.	.	CDK	J
85 22/32	L	.	.	CDJK	
85 21/32	KLM	.	.	CDEJK	
85 20/32	KL	.	.	CDEJ	
85 19/32	KL	.	.	DEFHJU	
85 18/32	JK	.	.	DEFHJU	
85 17/32	JK	.	.	FGHU	
85 16/32	IJK	.	.	FGHIJ	
85 15/32	IJ	.	.	FGHIJ	
85 14/32	IJ	.	.	FGIJ	
85 13/32	IJ	.	.	G	
85 12/32	I	.	.		
85 11/32	HI	.	.		
85 10/32	CHI	.	.		
85 9/32	CGHI	.	.		
85 8/32	ABCDEFGH	.	.		
85 7/32	ABCDEFG	.	.		
85 6/32	ABCDEFG	.	.		
85 5/32	AB	.	.		
85 4/32	A	.	.		
85 3/32	A	.	.		
85 2/32	A	.	.		
85 1/32	A	.	.		
85 0/32	A	.	.		
84 31/32	A	.	.		
84 30/32	DJ	A	.		
84 29/32	DJK	O	.		
84 28/32	DFJKLM	A	.		
84 27/32	CDEFGIJKL	.	.		
84 26/32	CDEFGHIKL	.	.		
84 25/32	CGHIKL	.	.		
84 24/32	CGHL	.	.		
84 23/32	CG	.	.		
84 22/32	C	.	.		
84 21/32	K	C	.	.	
84 20/32	KL	C	.	.	
84 19/32	JKL	C	.	.	
84 18/32	JKL	OBC	.	.	
84 17/32	BJKL	ABC	.	.	
84 16/32	BCIJK	ABC	.	.	
84 15/32	ABCDEIJ	A	.	.	
84 14/32	ABCDEIJ	.	.	.	
84 13/32	ABCDEFGHI	.	.	.	
84 12/32	ABEFGH	.	.	.	
84 11/32	AEGH	.	.	.	
84 10/32	AFG	.	.	.	
84 9/32	AFG	.	.	.	
84 8/32	AF	.	.	.	
84 7/32	.	.	.	.	



**FIGURE 4.96** Corrective Action in September Treasury Bonds, August 25 to 31, 1988  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Old buyers had ample time to liquidate their positions at a favorable price, and new buyers had plenty of opportunity to place longs with good day timeframe trade location. Conventional traders relying mainly on price might not have recognized the correction, and instead reacted to the sell-off

after the open by entering short positions. As Figure 4.96 shows, any short positions on this day soon became losing trades.

Whether talking about corrective action or any other natural market function, it is important to keep in mind that the most obvious behavioral clues, such as lower prices, are not always available. On August 30, creative, open-minded traders probably recognized that price did not have to go lower for a correction to take place.

## Summary

Being able to identify corrective action without the benefit of an obvious price break or rally requires a level of creativity that can only come from the trader who is willing and able to look at the same information from more than one angle. Objectivity stretches far beyond this one isolated instance, however. Futures trading presents us with a formidable variety of such situations every day. As we gain more experience and draw closer to the levels of proficient and expert, our goal is to begin to consistently see the unusual—to develop the open-minded-ness that allows us to identify and take advantage of the unique trading opportunities that arise when the market deviates from the norm.

## ■ Long-Term Profiles

The truth knocks on the door and you say, “Go away, I’m looking for the truth,” and so it goes away.

From *Zen and the Art of Motorcycle Maintenance*, by Robert Pirsig

In today’s complex world, we are continually confronted by the ever-changing demands and influences of society. It is difficult to remain coolly objective in the face of the shifting images produced by public opinion, the media, and noted financial experts. Occasionally, everyone gets caught up and loses sight of the big picture—whether it be in one’s profession, family life, or trading. In such cases, it is easy to miss the proverbial forest for the trees, to tell truth to go away when it should be as obvious as a knock on the door.

How many times have you gotten so involved with the individual, day-to-day auctions that you lost sight of the real market? When you focus on the individual trees, you lose the long-term big picture. What is needed is a consistent method of recording the long-term auctions so that they can be

observed objectively. A Long-Term Profile simply plots greater units of time in relation to price in order to form a long-term version of the day timeframe Market Profile.

The salient concept behind the Long-Term Profile is the fact that the principles of the market's auction process apply to all timeframes, from the shortest time period to the long-term auctions. Just as each day's Profile is composed of a series of half-hour auctions, a weeklong Profile would be composed of five-day timeframe Profiles. It follows then, that a Long-Term Profile develops the same structural manifestations of market activity, such as gaps, brackets, trends, high and low volume areas, excess, and tails.

Shown in Figure 4.97 are a typical day timeframe Profile, a 10-day Swing Profile, and a one month, Long-Term Profile. Notice the strikingly similar characteristics. To make the distributions appear more generic, the individually lettered TPOs have been replaced with common Xs.

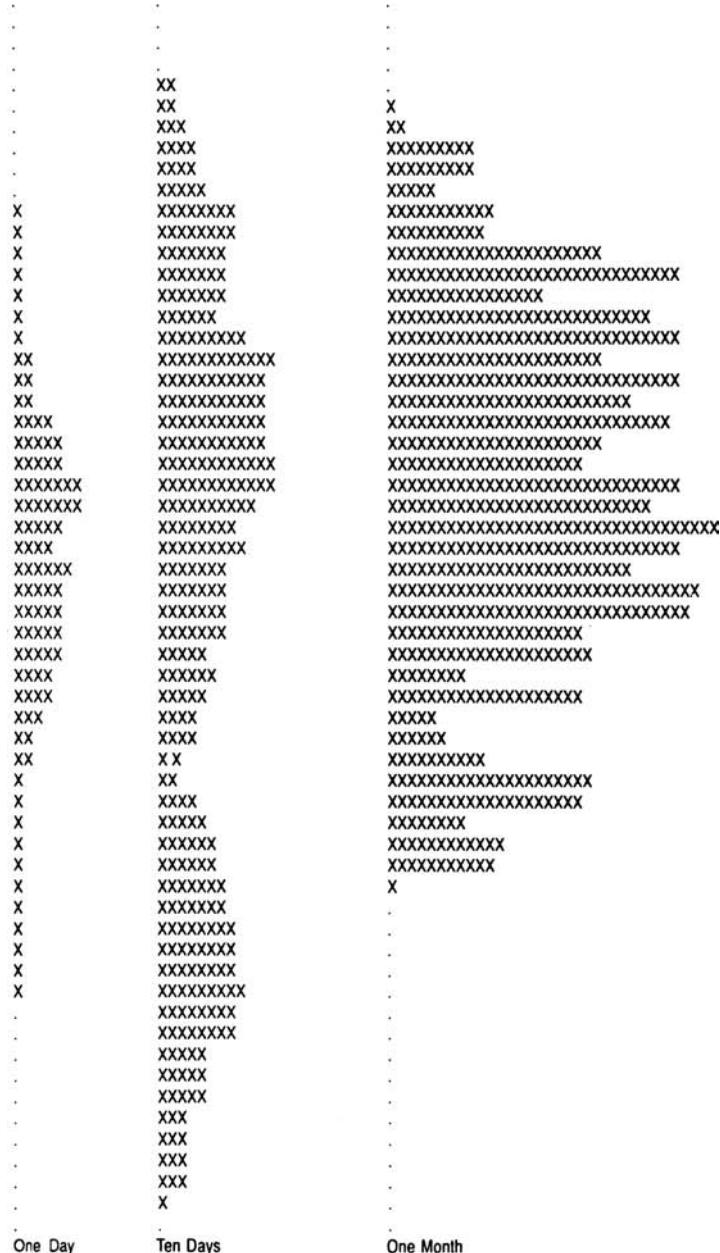
## Using Long-Term Profiles

The main strength of the Long-Term Profile lies in the clear definition of brackets and the migration of value. It not only provides a visual picture of the long-term structures of the market but also enables you to easily monitor elements that signify change. By identifying changing conditions through the Long-Term Profile, long-term traders are prepared to act in the early stages of opportunity.

Theoretically, if a Long-Term Profile was accumulated indefinitely, the ultimate result would be a giant, normal distribution curve that is of little value to anyone. Thus, to use the Long-Term Profile effectively, you need to begin building the Profile when a significant long-term change has occurred, such as a long-term high or low. As you witness significant market changes that influence your particular timeframe, you might consider a running Long-Term Profile, starting at the point of change in order to better evaluate continuation. When the market enters a new period marked by confirmed long-term change, you should begin a new Long-Term Profile. It is wise to keep your past Profiles as well, in order to keep track of long-term reference points that might have an effect on future auctions.

## The Long-Term Profile in Action

We have illustrated the similarities between the day, swing, and longer timeframes throughout the book. In this section, we present an ongoing



**FIGURE 4.97** Profiles across Timeframes

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

analysis of a Long-Term Profile for the Japanese yen during the first few months of 1989. The aim is to demonstrate how the Long-Term Profile accurately pinpoints the key long-term reference points that traders commonly attempt to glean from a daily bar chart. In addition, we show that through the added dimension of time (TPOs), the *success* of the long-term auction is easily discernible through a Long-Term Profile.

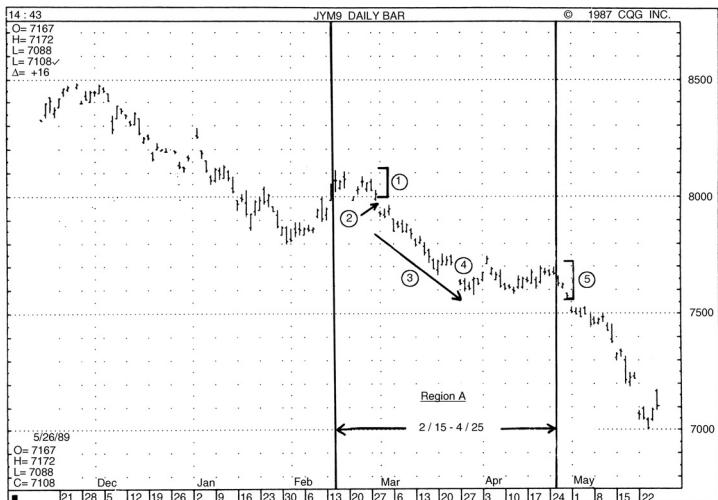
This period in the yen is particularly useful, because it also illustrates how markets evolve from trend, to bracket, then back to trend again (see “Trending versus Bracketed Markets” in Chapter 3). The example displays the usefulness of the Long-Term Profile during both types of market conditions.

The analysis is segmented into two regions. Each region is accompanied by a Long-Term Profile and the daily bar chart for the corresponding period of time.

**Region A (Figures 4.98 and 4.99)** Region A displays a long-term selling trend that began with a breakout of a short-term bracket and then slowed when the market eventually came into balance near the .7600 level. Point 1 in the bar chart shows several volatile but basically overlapping days occurring in the .8000 to .8100 region. Point 1 on the Long-Term Profile vividly depicts the bracket resulting from this balancing process. Notice how the Long-Term Profile displays the bracket in a well-defined high-volume area bound by long-term tails (Figure 4.99, points 1a and 1b). Just like a day timeframe Profile, high volume represents acceptance and serves to attract price. The low-volume extremes indicate strong responsive other timeframe presence at the bracket top and bottom.

The yen broke below the bracket with the sharp selling gap denoted by point 2. The gap is represented on the Long-Term Profile by the single prints directly below the bracketed region at point 1. (This particular Long-Term Profile assumes that some degree of trade took place and therefore records single prints in the area of the gap.) The excess created by the gap gave other timeframe sellers the confidence they needed to initiate the selling trend denoted by point 3. During a trend, the Long-Term Profile exhibits relatively low volume and elongated structure. In the bar chart, the trend is witnessed by the steady progression of lower prices.

After another selling gap at point 4 (the gap is less evident through the Long-Term Profile, because the yen had actually traded in the region of the gap four days earlier), the yen entered the second balanced area (point 5) evidenced by a high-volume region in the Long-Term Profile. This particular bracketing phase was caused by central bank intervention to slow the U.S.



**FIGURE 4.98** Region A, Japanese Yen  
Data courtesy of Commodity Quote Graphics.

COMBINED TPO PLOT. IF ACTUAL TPO COUNT EXCEEDS 50 THE PLOT IS NORMALIZED TO 50

PRICE      DYS TPO (TPO DENSITY)

8116	1	1 X
8112	1	2 XX <-- (1A)
8108	2	3 XXX
8104	2	4 XXX
8100	2	4 XXX
8092	2	3 XXX
8088	2	5 XXXXX
8084	3	8 XXXXXXX
8080	3	12 XXXXXXXXXXXX
8076	3	11 XXXXXXXXXXX
8072	4	12 XXXXXXXXXXXX
8068	5	18 XXXXXXXXXXXXXXX
8064	5	19 XXXXXXXXXXXXXXX
8060	6	18 XXXXXXXXXXXXXXX
8056	6	25 XXXXXXXXXXXXXXXXXXXXXXX
8052	6	24 XXXXXXXXXXXXXXXXXXXXXXX
8048	6	16 XXXXXXXXXXXXXXX
8044	7	18 XXXXXXXXXXXXXXX
8040	6	17 XXXXXXXXXXXXXXX
8036	6	15 XXXXXXXXXXXXXXX
8032	5	15 XXXXXXXXXXXXXXX
8028	6	19 XXXXXXXXXXXXXXX
8024	4	15 XXXXXXXXXXXXXXX
8020	2	10 XXXXXXXXX
8016	2	12 XXXXXXXXXXXX
8012	2	9 XXXXXXX
8008	2	7 XXXXX
8004	2	5 XXX
8000	2	4 XXX
7996	2	3 XXX
7992	2	4 XXX <-- (1B)
7988	2	4 XXX
7984	1	1 X
7980	1	1 X
7976	1	1 X <-- (2) SELLING GAP; LOW VOLUME
7964	1	1 X
7960	1	2 XX

(1) BRACKET;  
HIGH VOLUME

233

COMPETENT

**FIGURE 4.99** Region A, Long-Term Profile for Japanese Yen. The Xs corresponding to each price indicate the relative number of TPOs occurring at that price, relative to the highest TPO price.

Data courtesy of CISCO. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

dollar's rise (which had a supportive effect on the yen). Note, however, that the long-term point of control continued to fall (Figure 4.99, points 5a, b, and c), indicating the long-term seller remained in control and was gradually establishing lower value. While strong excess above the bracket is shown by the Long-Term Profile through the gap and accompanying low volume at point 4, the lower extreme of the bracket does not display the aggressive rejection indicative of a high-confidence low.

7956	1	2 XX
7952	1	3 XXX
7948	2	7 XXXXXX
7944	2	14 XXXXXXXXXXXX
7940	3	22 XXXXXXXXXXXXXXXXX
7928	3	22 XXXXXXXXXXXXXXXXX
7924	2	11 XXXXXXXXX
7920	2	2 XX
7916	1	1 X
7908	1	1 X
7904	1	3 XXX
7900	1	2 XX
7896	3	12 XXXXXXXXXX
7892	3	17 XXXXXXXXXXXXXXX
7888	3	14 XXXXXXXXXXXXXXX
7884	3	13 XXXXXXXXXXXXXXX
7880	4	18 XXXXXXXXXXXXXXXXX
7876	4	16 XXXXXXXXXXXXXXXXX
7872	4	11 XXXXXXXXX
7868	3	8 XXXXXX
7864	4	10 XXXXXXXXX
7860	4	12 XXXXXXXXXXXXXXX
7856	4	13 XXXXXXXXXXXXXXX
7852	4	9 XXXXXXXXX
7848	2	5 XXXX
7844	1	9 XXXXXXXXX
7840	1	7 XXXXXX
7836	2	13 XXXXXXXXXXXXXXX
7832	2	11 XXXXXXXXXXXXXXX
7828	3	10 XXXXXXXXX
7824	3	17 XXXXXXXXXXXXXXXXX
7820	3	12 XXXXXXXXXXXXXXX
7816	2	15 XXXXXXXXXXXXXXXXX
7812	2	15 XXXXXXXXXXXXXXXXX
7808	2	5 XXXX
7804	3	4 XXX
7800	2	3 XXX
7796	2	4 XXX
7792	2	5 XXXX
7788	1	5 XXXX
7784	1	4 XXX <-- (4) SELLING GAP; LOW VOLUME
7780	2	5 XXXX
7776	2	2 XX
7772	2	6 XXXXX
7768	2	5 XXXX
7764	2	9 XXXXXXXXX

**FIGURE 4.99** (Continued)

7760	2	4 XXX
7756	3	5 XXXX
7752	3	7 XXXXXX
7748	5	17 XXXXXXXXXXXXXXXXX
7744	5	20 XXXXXXXXXXXXXXXXX
7740	5	19 XXXXXXXXXXXXXXXXX
7736	5	24 XXXXXXXXXXXXXXXXX
7732	6	30 XXXXXXXXXXXXXXXXX (5A)
7728	7	28 XXXXXXXXXXXXXXXXX
7724	7	29 XXXXXXXXXXXXXXXXX
7720	6	23 XXXXXXXXXXXXXXXXX
7716	6	21 XXXXXXXXXXXXXXXXX
7712	5	14 XXXXXXXXXX
7708	4	11 XXXXXXXXXX
7704	2	13 XXXXXXXXXX
7700	3	11 XXXXXXXXXX
7696	5	14 XXXXXXXXXX
7692	5	24 XXXXXXXXXXXXXXXXX
7688	6	25 XXXXXXXXXXXXXXXXX
7684	8	34 XXXXXXXXXXXXXXXXX
7680	9	39 XXXXXXXXXXXXXXXXX
7676	10	40 XXXXXXXXXXXXXXXXX
7672	10	44 XXXXXXXXXXXXXXXXX (5B)
7668	9	33 XXXXXXXXXXXXXXXXX
7664	6	24 XXXXXXXXXXXXXXXXX
7660	7	20 XXXXXXXXXXXXXXXXX
7656	9	20 XXXXXXXXXXXXXXXXX
7652	11	29 XXXXXXXXXXXXXXXXX
7648	12	36 XXXXXXXXXXXXXXXXX
7644	12	42 XXXXXXXXXXXXXXXXX
7640	11	46 XXXXXXXXXXXXXXXXX
7636	12	57 XXXXXXXXXXXXXXXXX (5C)
7632	11	47 XXXXXXXXXXXXXXXXX
7628	10	40 XXXXXXXXXXXXXXXXX
7624	11	45 XXXXXXXXXXXXXXXXX
7620	9	48 XXXXXXXXXXXXXXXXX
7616	9	34 XXXXXXXXXXXXXXXXX
7612	9	26 XXXXXXXXXXXXXXXXX
7608	5	15 XXXXXXXXXX
7604	3	7 XXXXX
7600	3	9 XXXXXXXX
7596	2	10 XXXXXXXX
7592	2	8 XXXXXX
7588	1	3 XXX
7584	1	1 X <- (5D)

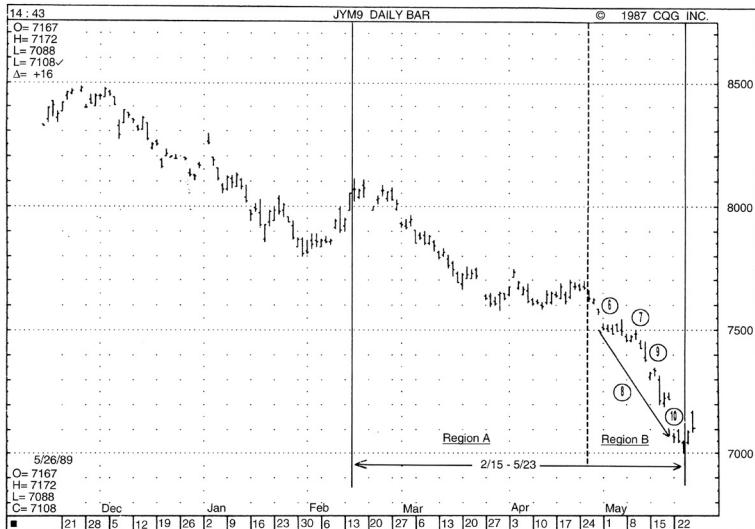
5 BRACKET;  
HIGH  
VOLUME

235

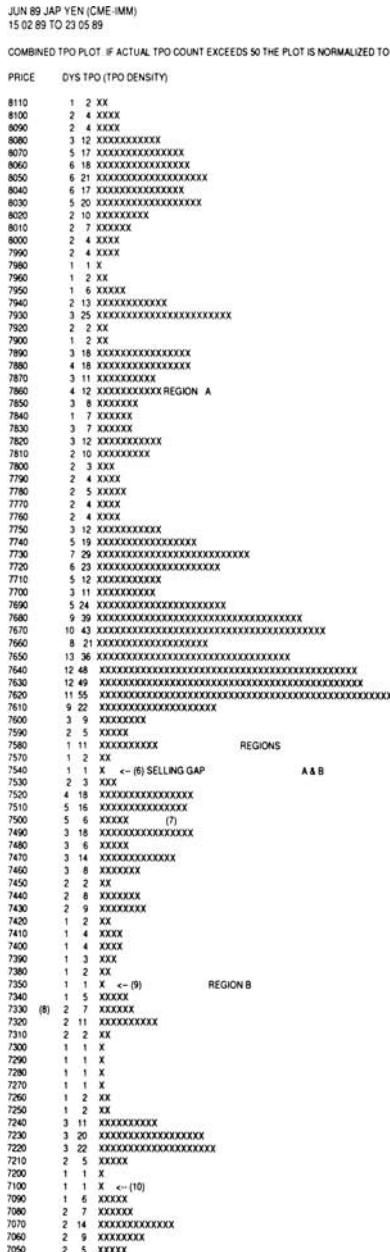
COMPETENT

**FIGURE 4.99** (Continued)

**Region B (Figures 4.100 and 4.101)** The Long-Term Profile in Figure 4.101 displays the entire down auction for February 15 through May 24. Readers should note that the price intervals used are now tens instead of fours so that the selling auction can be represented in its entirety on one page. In Figure 4.100, at point 6 in region B, the yen gapped below the bracket established at point 5, reigniting the strong selling auction and confirming the control of the other timeframe seller. After a short-term balancing period at point 7, the long-term selling trend resumed as other timeframe sellers auctioned price substantially lower. Much like a Trend day, when the long-term trend denoted by point 8 was underway, the Long-Term Profile never



**FIGURE 4.100** Region B, Japanese Yen  
Data courtesy of Commodity Quote Graphics.



**FIGURE 4.101** Region B, Long-Term Profile for Japanese Yen. The xs corresponding to each price indicate the relative number of TPOs occurring at that price, relative to the highest TPO price.

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

showed a significant accumulation of volume at any lone price. The trend is obvious in the bar chart. Two “acceleration” selling gaps, at points 9 and 10, present in both the bar chart and through the low-volume areas in the Long-Term Profile, illustrate just how quickly this market is auctioning through time.

**Summary** The Long-Term Profile vividly illustrates how the auction process is the same in all timeframes. Just as changes in other timeframe control are evident in day timeframe auctions and structural development, the Long-Term Profile reveals other timeframe activity in a big-picture sense through the evaluation of high- and low-volume areas.

## ■ Special Situations

A high school teacher tells the story of a frustrating day in his career. He was lecturing on the bravery of the American soldiers during the fight for independence. On this particular day, he became quite dramatic and descriptive, vividly portraying the battlefields and the courage of our forefathers. He described the freezing cold winter, the meager rations, and the eloquent words of Washington that kept the men’s spirits high. The teacher was trying to give his students a feeling for what it was like to fight for one’s country, the self-sacrifice that led to our freedom from England so many years ago.

The class was nearing its end when a student raised his hand. “Yes,” the teacher said.

“Will this be on the test?” he asked.

The teacher was trying to give his students an understanding of the cost of freedom, but the boy who raised his hand was so worried about what he had to know for the test that he missed the point entirely. The student wanted to be given the answers. He did not want to have to actively think for himself. By focusing on what he thought he had to know, he did not hear what the instructor was really teaching.

It would be nice to know the answers, to rely on a little certainty. We would all be rich and successful if someone would come up with an answer that would tell us when to buy and when to sell. But if we are dogmatically given the answers, we will never truly *understand* their roots. In the words of Heraclitus, “Much learning does not teach understanding.” Many traders do not want to actively think and make their own decisions. They want steadfast rules to guide their trading.

However, market-generated information, when observed and interpreted through the Market Profile, will at times reveal unique situations that offer a high degree of certainty. We call these high-probability occurrences Special Situations. We will introduce six of these market-created opportunities. They are:

1. 3 to I days
2. Neutral-Extreme days
3. The Value-Area Rule
4. Spikes
5. Balance-area breakouts
6. Gaps

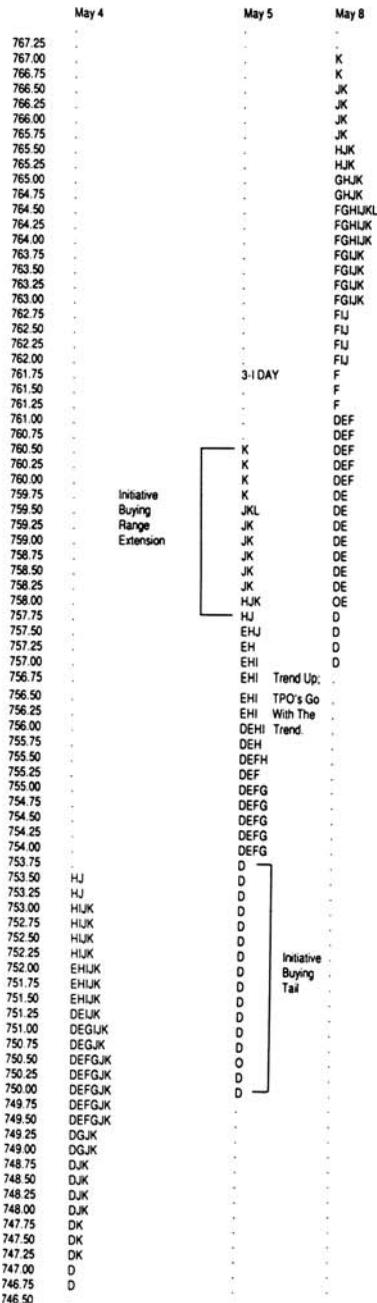
There are no guarantees, but one of the comforts of a Special Situation is the identification of a *mechanical trade*—a trade that almost has to be done (under the right market conditions). And, while the limited studies that we have performed reveal encouraging results, it is important to note that the success of a Special Situation trade lies in the trader's *understanding* of the market conditions influencing that trade.

## 3 to I Days

Probably the best-known Special Situation is the 3 to I day. A 3 to I day is characterized by an initiative tail, TPO count, and range extension. Thus, a 3 to I buying day would show an initiative buying tail, initiative buying TPOs, and initiative buying range extension. Figure 4.102 displays a 3 to I Buying Trend day in soybeans (TPOs always favor the trend).

Over a large sample size, the trading session following a 3 to I buying day should open within value or higher. Thus, traders holding longs placed within the previous day's value area should have an opportunity to exit within the same region (the opposite applies to a 3 to I selling day). In sum, 3 to I days often provide an opportunity to hold a highly leveraged position while incurring minimal risk.

We conducted a limited study evaluating the opportunity embodied in 3 to I days by observing their continuation into the first 90 minutes of the following trading session as well as through to the day's close. Specifically, we recorded whether the subsequent day's trading took place at prices better than, within, or worse than the previous day's value area. For example, if the day following a 3 to I Buying day opened higher, then activity was given a better reading for the initial 90 minutes of trade. Conversely, if



**FIGURE 4.102** 3 to 1 Day Occurring in Soybeans, May 4 to 8, 1989  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

the session following a 3 to I Buying day closed below the previous day's value area, then it was given a worse reading in the Next Day's Close category. For purposes of the study, we also examined 2I to 1R days—days possessing a responsive buying tail instead of an initiative buying tail (Figure 4.103). The results, compiled from Treasury bond data over the June 24, 1986, to May 29, 1987, period follow Figure 4.103.

The results suggest that, over the period studied, 3 to I and 2I to 1R structure identified relatively low-risk trading opportunities with astounding reliability. We note, however, that these findings are derived from one market studied over a limited period of time. Other markets behave differently, and all markets change over time. A few of the significant findings are highlighted below.

1. In 94 percent of the days following a 3 to I day, the market traded at prices better than the previous day's value area during the first 90 minutes of trading (higher on 3 to I Buying days and lower on 3 to I Selling days). This figure was 71 percent following 2I to 1R days.
2. In *every* case the market allowed time for a trader to exit trades *without loss*. However, it is important to note that in a few cases the opportunity did not last for long.
3. Some 59 percent of the days following a 3 to I day closed at prices better than the previous day's value area, while only 3 percent closed worse. In all, 97 percent of the days following a 3 to I day closed within or better than the previous day's value area. For 2I to 1R days, this figure measured 82 percent, with 18 percent closing worse.

A 3 to I develops when three specific factors indicating a day's attempted direction—tails, range extension, and TPOs—all point the same way. When these three elements are generated in unison, they alert the trader to the potential for a high-probability trade, a trade that almost has to be done.

## Neutral-Extreme Days

A Neutral day indicates day timeframe balance and is characterized by range extension on both sides of the initial balance. In a sense, both other timeframe participants are active in a day timeframe vertical tug-of-war. If the market closes near the middle of the range, then control is even. If, however, the close occurs on one of the day's extremes, there is a clear victor, and the following day is likely to open in the direction of the closing activity.

May 4

May 5

May 8

7546	.	.	.
7544	.	Responsive	y
7542	.	Selling	y
7540	.	Tail	y
7538	.		y
7536	.		yz
7534	.		yz
7532	.		yz
7530	.		yz
7528	y		yz
7526	yA		yzA
7524	yzABC		yzA
7522	yzABC		yzA
7520	yzABCHI		yzA
7518	zABCDHIJK	Initiative	yzAB
7516	zCDEHIJK	Selling	yAB
7514	DEFGHIJK	TPO's	yB
7512	DEFGHIJK		yB
7510	EFIK		yB
7508	EK		yB
7506	KL		yBC
7504	KL		yBC
7502	L		OBC
7500	L		yc
7498	L		CKLM
7496	L		CEKL
7494	.	Initiative	CDEK
7492	.	Selling	CDEFIJK
7490	.	Range	CDEFGHIJ
7488	.	Extension	CDEFGHIJ
7486	.		DEFGH
7484	.		DEF
7482	.		E
7480	.		.
7478	.		.
7476	.		.
7474	.		2I-1R DAY
7472	.		.
7470	.		.
7468	.		.
7466	.		.
7464	.		.
7462	.		.
7460	.		.
7458	.		.
7456	.		.
7454	.		.
7452	.		.
7450	.		.

**FIGURE 4.103** 2I-1R Day in the June Japanese Yen, May 4 to 8, 1989  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

## **Next Day Initial 90 Minute**

### **Price Movement**

<i>Day Type</i>	<i>Better Than Prev. VA</i>	<i>Within</i>	<i>Worse Than</i>
3 to I	94%	6%	0%
2I to 1R	71%	29%	0%
<b>Next Day Close</b>			
<i>Day Type</i>	<i>Better Than Prev. VA</i>	<i>Within</i>	<i>Worse Than</i>
3 to I	59%	38%	3%
2I to 1R	46%	36%	18%

To test this Special Situation, we studied Treasury bond activity from June 24, 1986, to August 12, 1987. Like the 3 to I day, we evaluated Neutral-Extreme days for their continuation into the first 90 minutes of the following session, and also through to the day's close. Over the yearlong study, the continuation properties of the Neutral-Extreme days were almost as impressive as those represented by 3 to I days.

### **Neutral Day Closing on an Extreme**

<b>Initial 90 Minutes</b>	<b>Next Day's Close</b>		
<b>Better</b>	<b>Within</b>	<b>Worse</b>	<b>Better</b>
64%	28%	8%	45%

In 92 percent of the cases studied, the market traded within or above the previous day's value area during the initial 90 minutes of trade. Sixty-four percent of the time this activity occurred *above* the value area during a Neutral day closing on the highs, or *below* the value area on a Neutral day closing on the lows. These figures dropped to 73 percent and 45 percent, respectively, when compared to the following day's close.

In terms of trading applications, suppose that Neutral structure develops, and it is apparent that the market will close near the highs. A long placed within the value area will usually offer good trade location into the following day. In the majority of cases, you will have time to monitor early activity for

continuation during the next day. If directional conviction reverses, 92 percent of the time you will have an opportunity to exit your long within the previous day's value area.

Again, we note that these findings are derived from one market studied over a limited period of time. Other markets behave differently and all markets change over time.

## The Value-Area Rule

We have mentioned many times the slowing properties of volume. Unless something significant has changed, price movement will often slow upon reentering an area of previously accepted high volume, as the market spends time trading there again.

The value area represents the range where the greatest volume of trade took place in the day timeframe. If the market opens outside the value area on the following day, then the previous day's value area has been rejected by other timeframe participants. Due to the presence of the other timeframe participants who caused the initial rejection, the top of the previous day's value area generally provides support against price probes back down into value, and the bottom of the value area will offer resistance against auction attempts to the upside. *However, if price should be accepted (double TPO prints) within the previous day's value area, there is a good possibility that the market will auction completely through that value area.* We have deemed this Special Situation the Value-Area Rule.

Entering an area of established value represents a test of the market's most recent assessment of value. If the test results in acceptance, it is only logical that market participants will conduct trade throughout that region of value. For example, in Figure 4.104, the soybean market opened below the previous day's value area, reentered value and proceeded to trade completely through it, closing on the high.

Monitoring the market's close after value has been penetrated and price has auctioned all the way through is a subtle nuance of the Value Area Rule. If the market opens lower and trades up through the previous trading session's value area, a close on the highs is an indication of market strength (just as a close on the lows below the previous day's value area after a higher open is a sign of market weakness). On the day following our soybeans example in Figure 4.104, the market had to trade higher to find sellers and cut off buying.

	May 26	May 30
718.50	.	.
718.00	.	K
717.50	.	K
717.00	.	KL
716.50	.	K
716.00	.	JK
715.50	.	JK
715.00	.	JK
714.50	.	JK
714.00	.	FJK
713.50	.	FHIJK
713.00	H	FHIJK
712.50	HI	FHIJK
712.00	HIJK	FGHI
711.50	HIJK	FGHI
711.00	HIJK	FGHI
710.50	DHIJK	FGHI
710.00	DHIJK	FGHI
709.50	DFGHIJK	FGI
709.00	DEFGHIJK	GI
708.50	DEFGHJK	FGI
708.00	DEFGK	F
707.50	DEFG	F
707.00	DEF	F
706.50	DEF	EF
706.00	DE	DEF
705.50	DE	DEF
705.00	DE	DEF
704.50	E	DEF
704.00	E	DEF
703.50	E	DEF
703.00	.	OEF
702.50	.	DEF
702.00	.	DE
701.50	.	D
701.00	.	D
700.50	.	D
700.00	.	D
699.50	.	D
699.00	.	D
698.50	.	D
698.00	.	.

**FIGURE 4.104** The Value-Area Rule in July Soybeans, May 26 to 30, 1989  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

The Value-Area Rule does not suggest that every time the market pierces the bottom of the previous day's value area (from below) you should blindly buy. It is equally important to objectively evaluate overall market conditions and specific circumstances before employing a Special Situation trade. The following considerations should be taken into account before executing a Value-Area Rule trade:

1. *Distance from Value.* The closer a market opens to the previous day's value area, the greater the chances of it penetrating and traveling through that value area. The logic behind this lies in the concept of market balance. A market that opens within range or value is in relative balance, thus perceptions of value have not changed significantly, and there is a good probability that trade will be conducted within the same value area. Conversely, if a market opens away from accepted value, it is out of balance. Therefore, the market is less likely to return to trade in the previous day's value area, since the forces that caused the imbalance have altered the underlying condition of the market. We caution, however, that if such a breakout of balance should be rejected by responsive participants, the return to value could be sudden and forceful, to the point that price auctions straight through the value area and completely through the previous day's range.
2. *Value-Area Width.* Narrow value is a sign of poor trade facilitation and lower volume. Because volume slows price, narrow value areas are more easily traversed than wider, high-volume value areas. Therefore, the Value-Area Rule carries a higher probability when price enters a narrow value area.
3. *Market Direction.* The direction of the current long-term auction has an obvious influence on the momentum, or strength behind the value-area penetration. When price auctions up into value during a buying trend, for example, the chances for continuation are much better than if the market were in a downward trend.

## Summary

If a trader enters a Value-Area Rule trade without evaluating other market conditions, the probability that price will trade all the way through the value area is little better than a flip of a coin. The power of the Value-Area Rule lies in your interpretation of surrounding market conditions. Through an understanding of the confluence of balance, value-area width, and market

direction, you can identify the situations during which the Value-Area Rule offers a high degree of reliability.

## ■ Spikes

A spike is generated when price trends swiftly away from established value during the last few time periods of a trading session. Specifically, a spike begins with the time period marking the breakout. For example, in Figure 4.105 the S&P market broke away from value during N period on May 5. Therefore, the spike's range extends from the top of N period (311.00) down to the day's low at 308.00.

Ordinarily, a breakout from value can be monitored for continuation in following time periods. However, when it occurs at or near the end of the trading day, the crucial element of time ( $\text{Price} \times \text{Time} = \text{Value}$ ) is absent. Thus, the trader must wait until the next day to judge the price movement for follow-through and conviction. Where the market opens and subsequently builds value relative to the previous day's spike sends clear signals regarding the underlying directional conviction of the market.

## Acceptance versus Rejection

Whenever price moves quickly away from value, it takes *time* to validate the new levels. If price subsequently slows, allowing volume to "catch up" and TPOs to accumulate, then value has been accepted at the new price levels. Thus, a market that opens within a spike created during the previous day indicates confirmation of that area. The price spike is also *accepted* if the following day opens beyond the spike—above a buying spike or below a selling spike. An open in the direction of the spike indicates the probe is not yet over. The market will likely continue to auction in the direction of the spike, seeking new value.

Conversely, a spike is *rejected* if the subsequent trading session opens in the opposite direction from the spike. For example, after a buying spike, an open below the base of the spike would constitute rejection of the upward price probe.

## Openings within the Spike

An opening within the spike indicates that the market is balancing. Thus, two-timeframe, rotational trade will likely develop within or near the

	May 5	Spike Range	May 8
312.80	.	.	.
312.60	JK	.	.
312.40	DJK	.	.
312.20	CDGJKLM	.	.
312.00	CDEFGHIJL	.	.
311.80	CDEFGHIJLM	.	.
311.60	OCDFLM	.	.
311.40	BCM	.	.
311.20	BCM	.	.
311.00	BCMN	N	.
310.80	BMN	N	.
310.60	MN	N	.
310.40	N	N	.
310.20	N	N	.
310.00	N	N	.
309.80	N	N	.
309.60	N	N	.
309.40	N	N	.
309.20	N	N	.
309.00	NP	NP	.
308.80	NP	NP	.
308.60	NP	NP	C
308.40	P	P	BCDNP
308.20	PQ	PQ	OCDNP
308.00	P	P	BCDENP
307.80	.	.	BCEMN
307.60	.	.	BCEKLMN
307.40	.	.	EKLMN
307.20	.	.	EFKLMNQ
307.00	.	.	EFHIKLMN
306.80	.	.	FGHIJKMN
306.60	.	.	FGHIJKMN
306.40	.	.	FGJM
306.20	.	.	F
306.00	.	.	.

**FIGURE 4.105** Open within a Spike—Definition of Range, June S&P 500, May 5 to 8, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

spike's range for the duration of the day. In Figure 4.105, for example, the S&P market opened at 308.20 on May 8, 1989—within the 308.00 to 311.00 selling spike created on the previous trading day. The market then balanced, confirming the previous day's probe to lower value. In a second example in Figure 4.106, the S&P opened at the bottom of the May 2 selling spike. Price auctioned higher and found resistance near the spike's highs (311.00), providing several opportunities for alert traders to place shorts with good day timeframe trade location.

On a side note, during days that open and accept value within a spike generated on the previous day, we use a variation of the Range Estimation rules (introduced in Section I) to estimate the day's range. Normally, the entire previous day's range is used to estimate the current day's range potential. In the case of an open within a spike, however, the spike is treated like a "new day." Thus, when estimating the range on a day that opens within a previous day's spike, we use the length of the spike as our estimate, not the whole day's range. In Figure 4.106, for example, the spike on May 2 extends from 311.30 (the top of the breakout period) to 309.30, a range of 200 points. The following day recorded a range just one tick short of 200 points.

## Openings outside the Spike

Whenever a market opens outside the previous day's range, the market is out of balance. The same general rule applies to openings beyond the spike's range, but the magnitude of the imbalance varies depending on where the market opens relative to the direction of the spike.

**Bullish Openings** An open above a buying spike signifies a market that is extremely out of balance—initiative buyers are in obvious control. Ideally, a trader should seek to place longs near the support offered by the top of the spike. In Figure 4.107, crude oil opened above the price spike on the 3rd and established substantially higher value. The opportunity to secure excellent trade location for longs was created when B period met resistance at the 20.15 spike top. Be aware, however, that if the market should auction down into the spike, thus negating its supportive top, price could move very quickly.

When the market opens above a *selling* spike (rejects the spike), sentiment is still bullish for the day timeframe, but for different reasons. This sort of conflicting activity often occurs when price has gotten ahead of the market, inviting the responsive participant to auction price back into previously

	May 2	May 3
312.80	.	.
312.70	D	.
312.60	CD	.
312.50	CD	.
312.40	BCD	.
312.30	BCD	.
312.20	BCD	.
312.10	BCD	.
312.00	BCDL	.
311.90	BCDJLM	.
311.80	ODIJLM	.
311.70	BDGHIJKLM	The Spike
311.60	DGHJKLM	.
311.50	DEFGHIJKLM	.
311.40	DEFGHIJKLM	.
311.30	DEFGJKLMN	N
311.20	DEFKMN	N
311.10	DEMN	N
311.00	DEMN	N
310.90	DMN	N
310.80	DN	N
310.70	N	N
310.60	N	N
310.50	N	N
310.40	N	N
310.30	N	N
310.20	N	N
310.10	N	N
310.00	NP	NP
309.90	NP	NP
309.80	NP	NP
309.70	NP	NP
309.60	NP	NP
309.50	P	P
309.40	PQ	P
309.30	P	P
309.20	.	.
309.10	.	.
309.00	.	.
308.90	.	.
308.80	.	.
308.70	.	.
308.60	.	.
308.50	.	.

**FIGURE 4.106** Open within a Spike, June S&P 500, May 2 to 3, 1989  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	May 3	May 4
2062	.	
2060	.	KL
2058	.	KLM
2056	.	JKL
2054	.	JKL
2052	.	JKL
2050	.	EJKL
2048	.	DEFIJKL
2046	.	DEFGHIL
2044	.	DEFGHI
2042	.	DEFGH
2040	.	OEGFH
2038	.	BDF
2036	.	BCDF
2034	.	BCD
2032	.	BC
2030	.	BC
2028	.	B
2026	.	B
2024	.	B
2022	.	B
2020	.	B
2018	.	
2016	.	
2014	L	.
2012	L	.
2010	LM	.
2008	L	.
2006	L	.
2004	L	.
2002	L	.
2000	L	.
1998	L	.
1996	L	.
1994	L	.
1992	L	.
1990	BIL	.
1988	BHIL	.
1986	BHJL	.
1984	BHJL	.
1982	OHJKL	.
1980	BHJKL	.
1978	BDHJKL	.
1976	BCDHJKL	.
1974	BCDHJKL	.
1972	BCDEGHJKL	.
1970	BCDEGHJL	.
1968	BCDEGHJL	.
1966	BCDEG	.
1964	BCDEG	.
1962	BCEFG	.
1960	EFG	.
1958	EFG	.
1956	EFG	.
1954	EFG	.
1952	E	.
1950	.	.

**FIGURE 4.107** Open outside of a Spike—Bullish (above a Buying Spike), Crude Oil, May 3 to 4, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

perceived value. A case in point is crude oil activity following a selling spike on May 8th. On May 9th, crude oil opened above the 8th's 19.36 to 19.60 selling spike (Figure 4.108). After auctioning down three ticks and finding strong support at the top of the spike, the market auctioned higher for the remainder of the day.

**Bearish Openings** When a market opens *below* a *selling* spike, day time-frame sentiment is extremely bearish, as is the case with Crude Oil in Figure 4.109. When crude oil opened below the spike, traders were alerted that the previous day's selling spike was *leading* value. The eventual development of a selling Trend day exhibited the clear acceptance of lower prices. An open below a *buying* spike represents rejection of the spike and is also bearish for the day timeframe, but not to the extent of the scenario outlined above.

**Spike Reference Points** During the trading session following a price spike, the spike's extremes often provide useful day timeframe reference points (Figure 4.110). After a higher open, for example, auction rotations are often supported by the spike's top. Similarly, the bottom of a price spike offers resistance on days that open lower. However, it is important to note that the spike extremes are only valid reference points for the first price probe into the spike. If the market returns to test the spike several times in the same half-hour time period, then the chances are good that price will eventually auction through the spike extreme. An additional test into the price spike in a subsequent time period would create double TPOs, in effect establishing value within the spike. In crude oil on the 8th (Figure 4.109), double TPO prints above the 19.98 spike bottom would negate its reliability as a resistance level.

## ■ Balance-Area Breakouts

Imagine a large stone precariously balanced on a mountain peak. In a gale force wind, the stone might come loose and tumble down the mountainside. When it falls, it falls quickly in one direction. If the wind is less forceful, the stone may rock to one side and then tumble in the other direction. A balanced market acts in a similar fashion. And, financially speaking, a market that is breaking out of balance can be just as dangerous as a falling rock.

The identification of a balance area depends largely on your timeframe. For example, a ledge (see Section I) may constitute a balance area to a day

	May 8	May 9
1995	.	.
1994	.	JL
1993	.	JL
1992	.	JL
1991	.	JL
1990	.	JKL
1989	.	JKL
1988	O	IJKL
1987	BC	IJKL
1986	BC	IJKL
1985	BCD	IJKL
1984	BCD	IJKL
1983	BCD	IJKL
1982	BCD	IJKL
1981	BCD	Cijkl
1980	BCD	CDijkl
1979	BCD	CDikl
1978	BCD	CDikl
1977	BCD	CDil
1976	BDE	CDilm
1975	DE	BCDEFhil
1974	DE	BCDEFGhil
1973	DE	BCDEFGhl
1972	DEF	BCDEFGh
1971	DEF	BCEFGH
1970	DEF	BCEFh
1969	EFG	BEFH
1968	EFG	BEH
1967	EFG	BE
1966	EFGHI	BE
1965	EFGHI	BE
1964	EFGHI	BE
1963	EFGHI	O
1962	EFHI	B
1961	EFHI	B
1960	EFHIJ	B
1959	EFIJ	.
1958	FJ	.
1957	J	.
1956	JL	.
1955	JL	.
1954	JL	.
1953	JL	.
1952	JL	.
1951	JL	.
1950	JKL	.
1949	JKL	.
1948	JKL	.
1947	JKL	.
1946	JKL	.
1945	JKL	.
1944	KLM	.
1943	KL	.
1942	KL	.
1941	KL	.
1940	KL	.
1939	KL	.
1938	L	.
1937	L	.
1936	L	.
1935	.	.

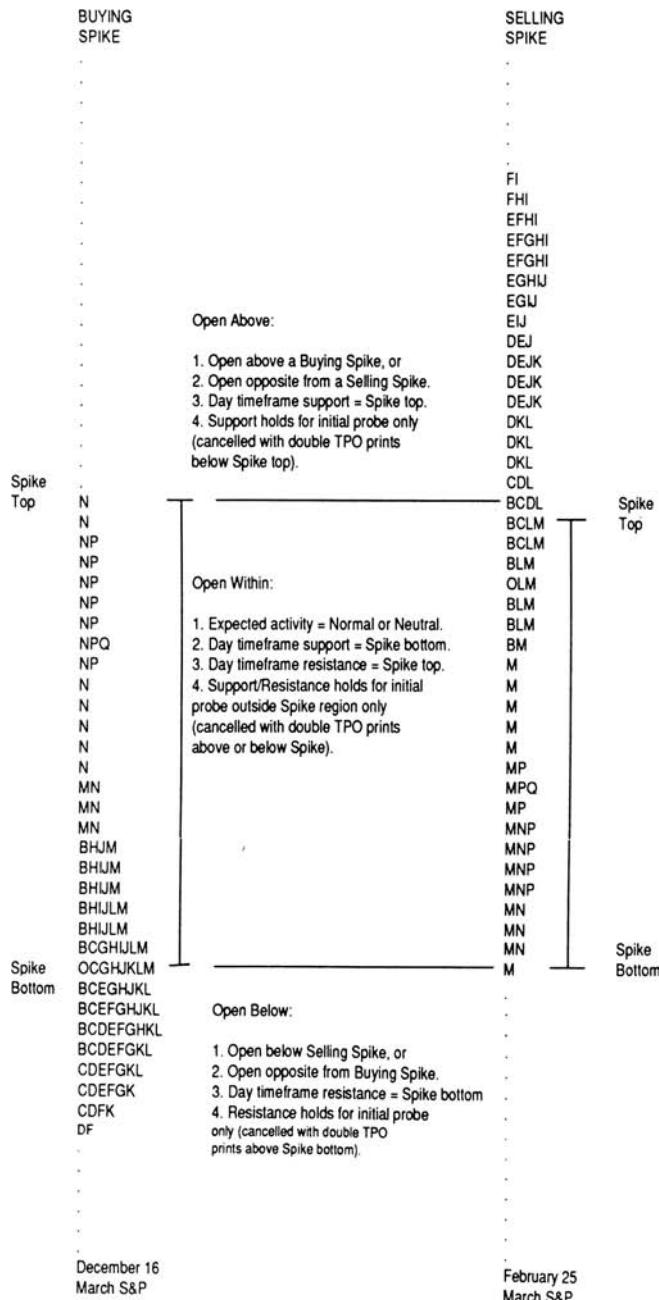
**FIGURE 4.108** Open outside of a Spike—Bullish (above a Selling Spike), Crude Oil, May 8 to 9, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	MAY 5	MAY 8
2044	.	.
2042	B	.
2040	B	.
2038	BC	.
2036	BCDE	.
2034	BCDEFG	.
2032	BCDEFGH	.
2030	CDEFGH	.
2028	DEFGH	.
2026	DEHJK	.
2024	DEHJK	.
2022	HJK	.
2020	OJK	.
2018	HJKL	.
2016	IJKL	.
2014	KL	.
2012	L	.
2010	L	.
2008	L	.
2006	L	.
2004	L	.
2002	LM	.
2000	L	.
1998	L	.
1996	.	.
1994	.	.
1992	.	.
1990	.	.
1988	.	O
1986	.	BC
1984	.	BCD
1982	.	BCD
1980	.	BCD
1978	.	BCD
1976	.	BCDE
1974	.	DE
1972	.	DEF
1970	.	DEF
1968	.	EFG
1966	.	EFGHI
1964	.	EFGHI
1962	.	EFGHI
1960	.	EFHIJ
1958	.	EFIJ
1956	.	JL
1954	.	JL
1952	.	JL
1950	.	JKL
1948	.	JKL
1946	.	JKL
1944	.	JKLM
1942	.	KL
1940	.	KL
1938	.	KL
1936	.	L
1934	.	.
1932	.	.
1930	.	.

**FIGURE 4.109** Open outside of a Spike—Bearish (below a Selling Spike), Crude Oil, May 5 to 8, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

**FIGURE 4.110** Spike Reference Points

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

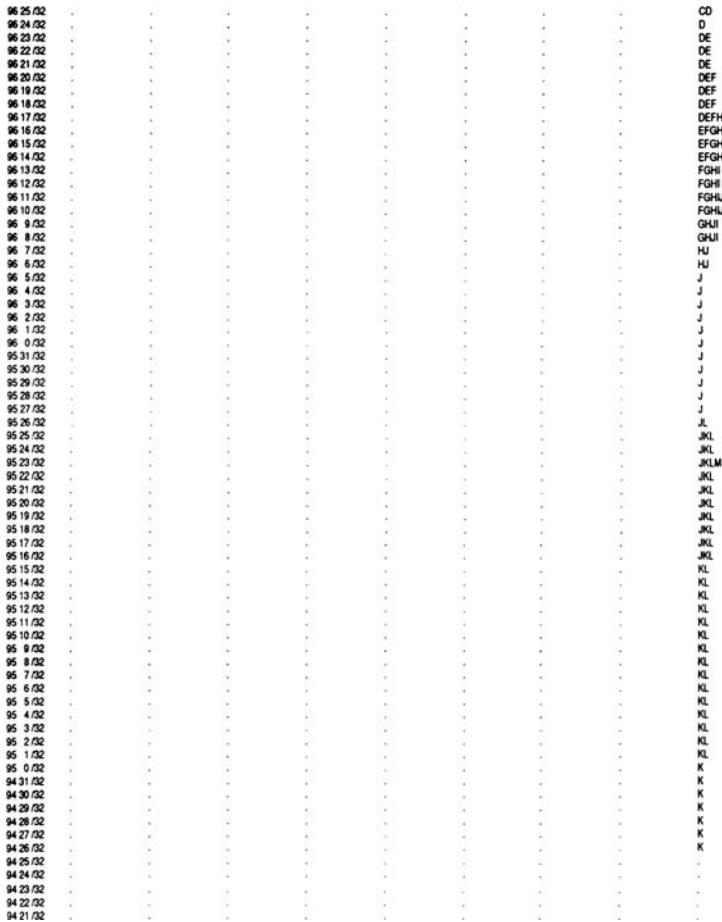
	March 30	March 31	April 1	April 2	April 3	April 6	April 7	April 8	Apr. 9
98 0/32	-	-	-	-	-	-	-	-	-
98 31/32	-	-	-	-	-	-	-	-	-
98 30/32	-	-	-	-	-	-	-	-	-
98 29/32	-	-	-	-	-	-	-	-	-
98 28/32	-	-	-	-	-	-	-	-	-
98 27/32	-	-	-	-	-	-	-	-	-
98 26/32	-	-	-	-	-	-	-	-	-
98 25/32	A	-	-	-	-	-	-	-	-
98 24/32	A	-	-	-	-	-	-	-	-
98 23/32	A	-	-	-	-	-	-	-	-
98 22/32	A	-	-	-	-	-	-	-	-
98 21/32	A	-	-	-	-	-	-	-	-
98 20/32	A	-	-	-	-	-	-	-	-
98 19/32	A	-	-	-	-	-	-	-	-
98 18/32	A	-	-	-	-	-	-	-	-
98 17/32	A	-	-	-	-	-	-	-	-
98 16/32	A	L	-	-	-	-	B	-	-
98 15/32	A	LM	-	-	-	-	BCH	-	-
98 14/32	A	L	-	AB	-	-	ABC	-	-
98 13/32	AB	AL	-	AB	-	-	ABCDGHU	-	-
98 12/32	AB	AL	-	AB	-	-	ABDDGU	-	-
98 11/32	ABD	ABE	-	AB	-	-	ABCDEGHU	-	-
98 10/32	ABDE	ABUL	-	ABD	-	-	ABCDEGDU	-	-
98 9/32	ABCDEF	ABCFL	-	ABD	-	-	ABEGU	-	-
98 8/32	ABCDEF	ABULK	-	ABCDE	H	-	AEGUJK	-	-
98 7/32	ABCDEF	ABULK	-	ABCDE	H	-	AEGJK	-	-
98 6/32	ABCDEF	ABCULK	-	BCDE	H	-	EJJK	-	-
98 5/32	ABCDEF	ABCULK	-	BCDE	GH	-	EFLX	-	-
98 4/32	BCEGU	ABCULK	-	CE	GH	-	EKLM	D	-
98 3/32	BCHGU	ACLUK	E	CE	GHJK	-	EKL	CD	-
98 2/32	CCHU	ACI	E	E	GHJK	-	KL	CD	-
98 1/32	CCHU	CI	E	E	FGHJK	-	KL	CDE	-
98 0/32	CGHUK	CI	EF	EF	FGHJK	-	L	CDE	-
97 31/32	CGHUK	CDI	EFL	EFL	FGHJK	-	L	CDE	-
97 30/32	CHUK	CDI	EFL	EFL	FGLK	-	L	CDE	-
97 29/32	CHUK	CDI	EFL	EFL	FJK	-	L	CDE	A
97 28/32	HJKL	CDHI	CDEFGJL	FGJK	EFLKL	-	-	BCEFG	A
97 27/32	HKL	CDEHJ	CDEFGJL	FGJK	EFLKL	-	-	ABCDFG	AB
97 26/32	HKL	CDEHJ	CDEGJL	FGJK	DEFKL	-	-	ABCDFG	AB
97 25/32	KL	DEHI	CDEGJL	FGJK	DEFKL	-	-	ABCDFG	AB
97 24/32	KLM	DEGI	ABCDEGHULK	FGHK	DEFKL	-	-	ABCDFGH	ABJ
97 23/32	KL	DEGH	ABCDCGHULK	GHKLM	ADFL	-	-	ABCDFGH	ABDJK
97 22/32	KL	DEG	ABCCHULK	GHKL	ADFL	-	-	ABCENHJK	ABDHJK
97 21/32	KL	DEFG	ABCCHULK	GHKL	ADFL	-	-	CHUK	BDEHJKL
97 20/32	KL	DEFG	ABDHK	GHKL	ADL	-	-	CHUK	BCDENHJKL
97 19/32	KL	DFG	ABDHK	HKL	ADL	-	-	HUKL	BCDENHJKL
97 18/32	KL	DFG	ABD	HKL	ADL	-	-	HUKL	BODEDHJKL
97 17/32	KL	FG	AB	HL	ABD	-	-	UKL	CDEGHJKL
97 16/32	F	AB	HL	HL	ABD	-	-	U	CDEGHJUL
97 15/32	F	AB	HL	ABD	ABCD	-	-	U	CEFGHJUL
97 14/32	F	A	L	BCD	ABCD	-	-	U	CEFGHJUL
97 13/32	-	-	L	BCD	BCD	-	-	U	CEFGHJLM
97 12/32	-	-	L	BCD	BCD	-	-	U	CEFGHJLM
97 11/32	-	-	L	BC	BC	-	-	U	EFGL
97 10/32	-	-	L	BC	BC	-	-	U	EFGL
97 9/32	-	-	L	BC	BC	-	-	F	AB
97 8/32	-	-	L	BC	BC	-	-	F	ABC
97 7/32	-	-	L	BC	BC	-	-	U	BC
97 6/32	-	-	-	-	-	-	-	-	BC
97 5/32	-	-	-	-	-	-	-	-	BC
97 4/32	-	-	-	-	-	-	-	-	C
97 3/32	-	-	-	-	-	-	-	-	C
97 2/32	-	-	-	-	-	-	-	-	C
97 1/32	-	-	-	-	-	-	-	-	C
96 31/32	-	-	-	-	-	-	-	-	C
96 30/32	-	-	-	-	-	-	-	-	C
96 29/32	-	-	-	-	-	-	-	-	C
96 28/32	-	-	-	-	-	-	-	-	C
96 27/32	-	-	-	-	-	-	-	-	C
96 26/32	-	-	-	-	-	-	-	-	C

**FIGURE 4.111** Balance Area Breakout Occurring in June Treasury Bonds, March 30 to April 9, 1987

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

trader. To a swing trader, however, a balance area might be five days of overlapping value. A long-term trader might consider a major bracket to be a balance area. When something upsets the balance, price moves are often sudden and forceful.

Balance area breakout strategy is straightforward—go with the breakout. Thus, if price is accepted outside the balance area, place trades in the direction of the new activity. In Figure 4.111, Treasury bonds had recorded basically eight days of overlapping value within a relatively well-defined



**FIGURE 4.111** (Continued)

balance region spanning from 97 to 03 to 98 to 16. On April 9, a narrow initial balance forming near the short-term bracket low alerted traders to a potential Double Distribution Trend day. When C period broke below the balance-area lows set on April 3 at 97 to 32, traders should have entered short positions. Buy (exit) stops should have been placed a few ticks above the point of breakout, for a price return into the balance area would indicate rejection by responsive buyers.

Occasionally, the market rocks one way, then breaks out in the opposite direction. This sort of activity often occurs when the locals or short-term traders auction price beyond a known reference point (in this case a balance-area high or low), to see if there is new activity to sustain the price

	January 31	February 1	February 2	February 3	February 6	February 7
302.70	.	.	.	.	.	.
302.60	.	.	.	.	.	M
302.50	.	.	.	.	.	LM
302.40	.	.	.	.	.	LM
302.30	.	.	.	.	.	LM
302.20	.	.	.	.	.	LM
302.10	.	.	.	.	.	LM
302.00	.	.	.	.	.	LM
301.90	.	.	.	.	.	KLM
301.80	.	.	.	.	.	KLMN
301.70	.	.	.	.	.	KLMN
301.60	.	.	.	.	.	JKLMN
301.50	.	.	.	.	.	JKLPN
301.40	.	.	.	.	.	JKLNP
301.30	.	.	.	.	.	JKNP
301.20	.	.	.	.	.	HJKP
301.10	.	.	.	.	.	HJK
301.00	.	.	.	.	.	HJK
300.90	.	.	.	.	.	HJK
300.80	.	.	.	.	.	HJK
300.70	.	.	.	.	.	HJ
300.60	.	.	.	.	.	HI
300.50	.	.	.	.	.	H
300.40	.	.	.	.	.	H
300.30	.	C	.	.	.	FH
300.20	.	CD	.	.	.	FGH
300.10	.	CD	.	.	.	FGH
300.00	.	CD	.	.	.	FGH
299.90	.	CD	K	.	.	FGH
299.80	.	CD	K	.	.	FG
299.70	N	CD	K	.	.	CFG
299.60	N	CD	JK	.	.	CDFG
299.50	N	CDM	JK	C	.	CDFG
299.40	N	CDM	BJK	C	.	CDF
299.30	NP	CDEM	BJK	BC	.	CDEF
299.20	NP	CELMN	BJKL	BC	B	CDEF
299.10	NP	CELMNP	BJKL	BCDN	BC	CDEF
299.00	NP	CELMNP	BJKL	BCDMN	BC	CDE

**FIGURE 4.112** Balance Area Breakout Occurring in the March S&P 500, January 31 to February 7, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

movement. If there is no response, then the opposite participant can enter the market with confidence, driving price with strong directional conviction. On February 6 in Figure 4.112, price auctions below the three days of overlapping value in the S&P market. Since the rule of this Special Situation is to *go with the breakout*, traders should have been short when D period auctioned below 297.20. When no follow-through developed and price traded back into the balance area, however, shorts should have been exited at minimal loss. With the knowledge that there was no activity below the lows, traders should have been prepared to buy a breakout to the upside, which occurred on the following day at 300.40. A balance-area breakout is a

		January 31	February 1	February 2	February 3	February 6	February 7
298.90		NP	CEFULMNP	BCJL	BCDMN	BC	CDE
298.80		MNP	CEFLUMNP	BCJL	BCDEMP	BC	CDE
298.70		MNP	BCEFHIJLMNP	BCJLM	BDEHLMNP	BC	BCD
298.60		MNP	BCEFHJLMNP	BCJLM	BDEGHLNP	BC	BC
298.50		M	BCEFHJLMN	IJLMN	BDEFGHJLMNP	BC	BC
298.40		LM	BCEFGHIJKL	CHIJMNP	BEFGHIJLN	BCI	BC
298.30		LM	BEFGHIJKL	CFHIMNP	BEFGHIJKL	BCHI	BC
298.20		LM	BEFGHIJKL	CFGHIMNP	BEFGHIJKL	BCHI	B
298.10		LM	BEGHJKL	CFGHMN	BFGHIJK	BCHIM	B
298.00		LM	BEGJK	CEFGHMN	BFIK	BCDHIM	B
297.90		KL	BEGK	CDEFGM	BFIK	BDHJLMP	B
297.80		KL	BGK	CDEFM	BF	BDHJLMNP	B
297.70		KL	BGK	DEFM	B	BDGHJLMNP	B
297.60		HKL	GK	DEM	B	BDGHJLMNP	B
297.50		HKJL	G	DE	B	DGHJKLMNP	B
297.40		BHJK	G	DE	B	DFGJKLMNP	B
297.30		BHJK	.	D	.	DEFGJKLMN	B
297.20		BCHJK	.	D	.	DEFGJKLMN	.
297.10		BCHJK	.	.	.	DEFGJKLMN	.
297.00		BCHJK	.	.	.	DEFGKMN	.
296.90		BCGHJ	.	.	.	DEFGMN	.
296.80		BCGHJ	.	.	.	DEGM	.
296.70		BCGHJ	.	.	.	DEM	.
296.60		CGHI	.	.	.	EM	.
296.50		CGI	.	.	.	E	.
296.40		CFGI	.	.	.	E	.
296.30		CFGI	.	.	.	.	.
296.20		CFGI	.	.	.	.	.
296.10		CEFG	.	.	.	.	.
296.00		CEFG	.	.	.	.	.
295.90		CEFG	.	.	.	.	.
295.80		CEG	.	.	.	.	.
295.70		CDE	.	.	.	.	.
295.60		CDE	.	.	.	.	.
295.50		CDE	.	.	.	.	.
295.40		DE	.	.	.	.	.
295.30		D	.	.	.	.	.
295.20		D	.	.	.	.	.
295.10		.	.	.	.	.	.
295.00		.	.	.	.	.	.

**FIGURE 4.112** (Continued)

trade you “almost have to do.” Risk is minimal and profit potential is very high.

In hindsight, a balance-area breakout trade looks like such an easy trade to make. However, when you have spent the last few days watching price move sideways, it is not so easy to enter the market initiatively. It feels as if the trade is late, for technically, better trade location could have been secured on previous days. In reality, a breakout is usually the start of a much bigger move, and trades placed with the initiator are ultimately *early*. Taking advantage of these market-created opportunities is essential to gaining the confidence and experience that are vital to becoming a competent trader.

## ■ Gaps

The last Special Situation we will discuss is the *gap*. A gap is an opening outside the previous day's range, signifying a market out of balance. A gap is created when the other timeframe perceives price to be away from value and enters the market aggressively, forming excess in the form of an "invisible tail." The salient feature of a gap (that holds) is that it should offer significant support or resistance to price, and it therefore stands as a valuable guide for day traders and an important reference point for long-term traders.

Gaps fall into three broad categories: (1) *Break-away* gaps, (2) *Acceleration* gaps, and (3) *Exhaustion* gaps. Briefly, a Break-away gap occurs when the market is in the early stages of a long-term trend. This sort of gap is fueled by new, initiative other timeframe participants possessing strong directional conviction. An Acceleration gap develops within a trend and reaffirms the conviction and strength of the trend's direction. Finally, an Exhaustion gap will sometimes mark the end of a trend. In the final stages of a buying trend, for example, more and more participants are gradually convinced that the market is indeed trending. Eventually, practically everyone is a buyer. The final consensus is so strong that the market gaps higher as the last doubters jump on board. Once everyone is long, however, there is no one left to buy and the trend is effectively over.

Whether or not a gap is a Break-away, Acceleration, or Exhaustion gap will greatly influence the likelihood that it will hold. However, what we are concerned with here is the Special Situation properties of gaps. Thus, the following discussion treats all gaps the same by evaluating each in the present tense.

### Day Timeframe Significance of Gaps

Generally speaking, most gaps are eventually filled—some on the same day. In the day timeframe, if a gap is going to be retraced (filled) by responsive participants, the rejection will usually fill the gap within the first hour. The longer a gap holds, the greater the probability of its continuation.

The Special Situation rule for trading gaps is to trade with the initiative activity that caused the gap, placing stops at the point where a price rotation would effectively erase the gap by trading completely through it. Figure 4.113 represents an ideal gap trade in crude oil. Shorts placed in the first half hour of trade with the gap lower and subsequent Open-Drive

	May 5	May 8
2044	.	.
2042	B	.
2040	B	.
2038	OC	.
2036	BCDE	.
2034	BCDEFG	.
2032	BCDEFGH	.
2030	CDEFGH	.
2028	DEFGH	.
2026	DEFJK	.
2024	Hijk	.
2022	Hijk	.
2020	Hijkl	.
2018	IJKL	.
2016	KL	.
2014	L	.
2012	L	.
2010	L	.
2008	L	.
2006	L	.
2004	L	.
2002	LM	.
2000	L	.
1998	L	.
1996	.	.
1994	.	.
1992	.	.
1990	.	.
1988	.	O
1986	.	BC
1984	.	BCD
1982	.	BCD
1980	.	BCD
1978	.	BCD
1976	.	BCDE
1974	.	DE
1972	.	DEF
1970	.	DEF
1968	.	EFG
1966	.	EFGHI
1964	.	EFGHI
1962	.	EFGHI
1960	.	EFHIJ
1958	.	EFIJ
1956	.	JL
1954	.	JL
1952	.	JL
1950	.	JKL
1948	.	JKL
1946	.	JKL
1944	.	JKLM
1942	.	KL
1940	.	KL
1938	.	KL
1936	.	L
1934	.	.
1932	.	.

**FIGURE 4.113** A Selling Gap Occurring in Crude Oil, May 5 to 8, 1989  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

activity resulted in good trade location during a selling Trend day. Shorts should have been exited if price had filled the gap by trading back above 19.98.

Not all gap days are quite so ideal, however. Like the Value-Area Rule, there are outside factors that influence the way a gap should be traded. In Figure 4.114, the Swiss franc opened 26 ticks below the previous trading session's low. Such an extreme gap should have alerted traders to the possible entry of the responsive buyer. The farther away from the previous day's range a market opens, the greater the likelihood that the market has temporarily overextended itself. When this occurs, the responsive participant will often narrow the gap by auctioning price toward the previous day's value. When a market gaps significantly away from the previous day's range, the prudent action is to monitor activity soon after the open before placing trades. In the case of the Swiss franc in Figure 4.114, if the responsive buyer enters, traders should wait until the initiative seller reappears, monitoring the gap for support. When responsive activity waned and two-timeframe trade developed with the downward rotation in A period, shorts should have been entered and buy stops placed at 59.87 (the gap erasure point).

Again, successfully using Special Situations involves a synthesis of market understanding, time, and experience. It is difficult to explain the ideal point at which a gap trade should be entered. In many cases, blindly placing a trade in the direction of the gap will eventually result in a successful trade. However, without monitoring early activity, a trade placed too early might suffer undue exposure if price temporarily auctions against the position.

Starting out with poor trade location can be both financially and mentally taxing, often to the point that the trader is forced to exit what would have developed into a good trade. Our Swiss franc example provides a good example of how this can occur. A trader who sold immediately with the selling gap could easily have been forced out of his or her short position, given that the Swiss auctioned against the position for better than the first half hour of trade. Traders who anticipated responsive buying after such a sharp break from value would have probably waited for a return of the selling auctions before entering shorts. With the responsive buying over (at least temporarily), traders placing short positions would have had more confidence, and therefore a better chance at completing a successful trade. In this case, notice that both scenarios would have ended in similar trade location. The difference between the two trades is the level of accompanying anxiety.

	April 28	May 1
6019	.	.
6018	C	.
6017	C	.
6016	C	.
6015	C	.
6014	C	.
6013	C	.
6012	yCD	.
6011	yCD	.
6010	yCD	.
6009	OCDE	.
6008	yCDE	.
6007	yCDE	.
6006	yCDE	.
6005	yzACDE	.
6004	yzACDEF	.
6003	yzACDEFGH	.
6002	yzABCDEFGH	.
6001	yzABCFGHJU	.
6000	yzABCFHJU	.
5999	zABCDU	.
5998	zABCJK	.
5997	zABJK	.
5996	zBJKL	.
5995	BJKL	.
5994	BL	.
5993	BL	.
5992	L	.
5991	L	.
5990	L	.
5989	LM	.
5988	L	.
5987	L	.
5986	.	.
5985	.	.
5984	.	.
5983	.	.
5982	.	.
5981	.	.
5980	.	.
5979	.	.
5978	.	.
5977	.	.
5976	.	z
5975	.	z
5974	.	z
5973	.	z
5972	.	z
5971	.	z
5970	.	yz
5969	.	yz
5968	.	yzA
5967	.	yzA
5966	.	yzA
5965	.	yzA
5964	.	yzA
5963	.	yA
5962	.	yA
5961	.	OA
5960	.	yA
5959	.	A
5958	.	A
5957	.	AB
5956	.	AB
5955	.	AB
5954	.	ABLM
5953	.	ABL
5952	.	BL
5951	.	BOL
5950	.	BCDL
5949	.	BCDIKL
5948	.	BCDFIJK
5947	.	BCDEFHIJK
5946	.	CDEFHIJK
5945	.	CDEFGHIJK
5944	.	CDEFGHIJK
5943	.	CDEFGHJU
5942	.	CDEFG
5941	.	CE
5940	.	C
5939	.	.

**FIGURE 4.114** A Selling Gap Occurring in the June Swiss Franc, April 28 to May 1, 1989

Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	April 28	May 1
3836	.	.
3834	y	.
3832	y	.
3830	y	.
3828	yz	.
3826	yzA	.
3824	yzA	.
3822	yzAB	.
3820	OzAB	.
3818	yzAB	z
3816	zABJ	z
3814	zABIJ	z
3812	zABCDEIJ	zIJK
3810	zABCDEGHIJK	zIJK
3808	zABCDEFGHIJK	yzAHJK
3806	zABCDEFGHIJK	yzAHJKL
3804	zABCDEFGHIJKL	yzABFHIJK
3802	zBCGHIJK	yzABFHJ
3800	zBCGK	yzABCDEFGH
3798	zK	yABCDEFGH
3796	z	yBCDEF
3794	.	yCD
3792	.	yC
3790	.	y
3788	.	y
3786	.	y
3784	.	y
3782	.	y
3780	.	y
3778	.	O
3776	.	y
3774	.	y
3772	.	.
3770	.	.

**FIGURE 4.115** A Filled Gap Occurring in June Gold, April 28 to May 1, 1989  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

Gaps do not hold every time. On some occasions, the buying or selling auction that produced the gap will fail, inviting responsive participants to return price to previous value. When this occurs, however, there are usually clear signs that the gap will be erased. In the case of the gold market in Figure 4.115, gold gapped below the previous day's range. After a quick test

to the downside, the responsive buyer entered and drove price up through the gap and into the value area of April 28th. All of this activity occurred during the first half hour of trade. Traders who sold with the selling gap should have covered when gold auctioned above 379.60 in Y period.

Gaps are created by aggressive other timeframe activity. They are significant reference points as long as they hold. If, however, responsive participants overcome the initiator and return price through the gap, then conditions have changed and the gap is no longer a significant trading guide.

## Summary

Special Situations are not fail-safe answers, but they do offer a trader some degree of comfort and security. Still, your imagination should not stop at these limited examples. By incorporating the different methods for evaluating directional conviction and performance, a trader can identify other circumstances that offer high leverage and low risk. To put it simply, the big picture is made up of many small, more specific components. By synthesizing these factors into a more all-encompassing market understanding, you will increase your chances of success. Consistently successful trading is the result of a unique combination of opportunity, experience, and market *understanding*.

---

265

COMPETENT

## ■ Markets to Stay Out Of

Special Situations are useful for identifying trading opportunities that possess a relatively high degree of security. On the opposite end of the spectrum, but no less important, are those times when one simply should not trade at all. A trader who forces a trade when there is no real opportunity in the market is like a basketball player who forces a shot when he is off-balance or heavily guarded—the chances of scoring are low. A good basketball player who does not have a clear shot will generally not shoot the ball. Similarly, experienced traders who do not see a clear market opportunity do not force the trade. The harder you have to look, the lower the potential for a good trade. In such a situation, it is best to stand aside and wait for an opportunity to develop.

The following discussion covers four market situations that signify the existence of relatively little trading opportunity:

1. Nontrend days
2. Nonconviction days

89 23 /32	.
89 22 /32	H
89 21 /32	zADEHKL
89 20 /32	zADFGHIKLM
89 19 /32	yzACDEFGHIJKL
89 18 /32	yzABCDEFGIJK
89 17 /32	yzBCIJ
89 16 /32	OB
89 15 /32	yB
89 14 /32	B
89 13 /32	.
89 12 /32	.
89 11 /32	.

**FIGURE 4.116** A Nontrend Day Occurring in June Treasury Bonds, May 8, 1989  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

3. Long-term nontrend markets
4. News-influenced markets

## Nontrend Days

The most obvious market to stay out of is the Nontrend day. On a Non-trend day, the market is not facilitating trade with any participant and opportunity is low, for the day's range is small and activity is scarce. Figure 4.116 shows a typical, low-volume Nontrend day that occurred in bonds on May 8, 1989.

## Nonconviction Days

A less obvious type of low opportunity market is a Nonconviction day. Structurally, a Nonconviction day often appears to be no different than a Normal, Normal Variation, or Neutral day. However, the Nonconviction day exhibits none of the other timeframe directional conviction that these standard day types typically display—there are no recognizable reference points for a day timeframe trader. During a Nonconviction day, the open is often of the Open-Auction variety, occurring within the previous day's value area. Price rotates randomly back and forth with very little confidence throughout the day.

3656	.
3654	DFGJ
3652	CDEFGHJ
3650	CDEFGHIJK
3648	yCDEFGHIJK
3646	yCDGHJKLM
3644	yACJ
3642	OzABCJ
3640	yzABC
3638	yzABC
3636	zAB
3634	zA
3632	.

**FIGURE 4.117** A Nonconviction Day Occurring in June Gold, May 24, 1989  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

In hindsight, a Nonconviction day's range can be misleading, for it appears as if a number of good opportunities should have been generated as the day progressed. In the thick of such low-confidence activity, however, traders are provided no real reference points by which to base their trading decision. Consequently, traders often end up forcing trades that just aren't there.

Figure 4.117 provides a good example of a Nonconviction day in the gold market. After an Open-Auction, gold spent the remainder of the trading session auctioning back and forth with no apparent directional conviction. The completed Profile looks like a Normal Variation day, but at no point was there a clear indication of other timeframe presence. On such a day, it is relatively easy to lose objectivity due to the lack of market sentiment. When a Nonconviction day develops, it is best to stay out of the market altogether, for any trading decision would be based on conjecture and random price rotations.

## Long-Term Nontrend Markets

On a larger scale, long-term activity may at times exhibit a lack of directional conviction. While long-term traders should not have positions in the market, there may still be plenty of opportunity for day timeframe traders. In Figure 4.118, for example, crude oil exhibited extremely erratic

	May 2	May 3	May 4	May 5	May 8
2062	.	.	KL	.	.
2060	.	.	KL	.	.
2058	.	.	JKL	.	.
2056	.	.	JKL	.	.
2054	.	.	JKL	.	.
2052	.	.	JKL	.	.
2050	.	.	EJKL	.	.
2048	B	.	DEFIJKL	.	.
2046	B	.	DEFGHIL	.	.
2044	B	.	DEFGHI	.	.
2042	B	.	DEFGH	B	.
2040	B	.	BDFGH	B	.
2038	B	.	BDF	BC	.
2036	B	.	BCDF	BCDE	.
2034	BC	.	BCDF	BCDEFG	.
2032	BC	.	BCD	BCDEFGH	.
2030	BC	.	BC	CDEFGH	.
2028	BCEG	.	BC	DEFGH	.
2026	BCEFG	.	B	DEHJK	.
2024	BCEFG	.	B	HJK	.
2022	CDEFGHK	.	B	HJK	.
2020	CDEFGHK	.	B	HJK	.
2018	CDEHK	.	.	HJKL	.
2016	CDHK	.	.	JKL	.
2014	CDHIKL	L	.	KL	.
2012	HJKL	L	.	L	.
2010	HJKL	L	.	L	.
2008	HJKL	L	.	L	.
2006	HJKL	L	.	L	.
2004	IJKL	L	.	L	.
2002	IJKL	L	.	L	.
2000	IJL	L	.	L	.
1998	IJL	L	.	L	.
1996	IJL	L	.	.	.
1994	L	L	.	.	.
1992	L	L	.	.	.
1990	L	BIL	.	.	.
1988	L	BHIL	.	.	B
1986	L	BHJL	.	.	BC
1984	L	BHJL	.	.	BCD
1982	L	BHJKL	.	.	BCD
1980	L	BHJKL	.	.	BCD
1978	L	BDHJKL	.	.	BCD
1976	.	BCDHJKL	.	.	BCDE
1974	.	BCDHJKL	.	.	DE
1972	.	BCDEGHJKL	.	.	DEF
1970	.	BCDEGHJL	.	.	DEF
1968	.	BCDEGHJL	.	.	EFG
1966	.	BCDEG	.	.	EFGHI
1964	.	BCDEG	.	.	EFGHI
1962	.	BCEFG	.	.	EFGHI
1960	.	EFG	.	.	EFHI
1958	.	EFG	.	.	EFL
1956	.	EFG	.	.	JL
1954	.	EFG	.	.	JL
1952	.	E	.	.	JL
1950	.	.	.	.	JKL
1948	.	.	.	.	JKL
1946	.	.	.	.	JKL
1944	.	.	.	.	JKL
1942	.	.	.	.	KL
1940	.	.	.	.	KL
1938	.	.	.	.	KL
1936	.	.	.	.	L
1934	.	.	.	.	.
1932	.	.	.	.	.
1930	.	.	.	.	.

**FIGURE 4.118** A Long-Term, Non conviction Market. Crude Oil, May 2 to 8, 1989  
 Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

behavior for several weeks, auctioning back and forth with no long-term conviction. Although this was clearly a market to be avoided by long-term traders, the resulting price spikes and gaps offered several high-percentage trades for day timeframe traders.

## News-Influenced Markets

The final “stand-aside” scenario is a day prior to a major news announcement. Generally, many other timeframe participants have balanced their positions prior to a scheduled news announcement. Thus, the day or two just prior to the news is often left in the hands of the locals and other shorter-term traders. The resulting low-volume environment can be dangerous, for rumors and predictions can cause price to rotate wildly.

## Summary

Staying out of a market is more difficult than it sounds. When there are few clues regarding directional conviction, it is easy to lose objectivity. Sitting in front of a quote monitor all day without placing a trade requires a tremendous amount of patience. Even the most experienced traders begin to hear that little subjective voice: “It has got to break. TPOs favor sellers . . . sell it.” When the market has no confidence, *stand aside until new activity develops*. Not only do bad trades lead to losses, but they also keep you from entering a good trade when opportune conditions finally arise.

### ■ News

The release of a major news announcement (such as Gross National Product, Merchandise Trade, or Producer Price Index) often creates a violent knee-jerk reaction by the market’s participants. Trying to anticipate the news item and how it will affect market sentiment is a highly dangerous gamble. Once the news information is out, price moves so violently and with such speed that it is nearly impossible to make a rational trading decision (or locate your trade where you want it). This is due to the manner in which the news is generally announced. The initial number usually causes a sudden price reaction, depending on early estimates that form market opinion. Soon after the actual announcement, however, there is often a revision of previous periods’ figures, which can cause further erratic movement. Finally, the components that make up the economic figure come out, often causing yet

another reaction to the number. All of this activity takes place in an extremely short period of time. The resulting sporadic price spurts can wipe out a substantial amount of capital in minutes.

Long before a piece of news is ever announced, the market's participants form expectations that begin to influence market activity. The consensus opinion (available in *Barron's* and various news sources) is, in effect, built into the market prior to the news announcement. If a trader is aware of the market's preconceived notions regarding the pending news, then he or she can evaluate the true strength or weakness of the market by observing the reaction to the actual numbers.

Let us look at a real market example. Before the Producer Price Index (PPI) was announced on May 12, 1989, the bond market was expecting a number between +.06 percent and +.08 percent. Due to bearish expectations, bonds had been in a short-term down auction, as evidenced by point 1 in Figure 4.119. The direction of the major auction, however, was up (point 2). The actual number released was +.04 percent, which indicated lower inflation than expected, a bullish sign for bonds. The market immediately rallied some 16 ticks (Figure 4.120). Shortly after, it was announced that an increase in oil contributed +.07 percent of the figure. Thus, had it not been for oil, the PPI would have actually been *negative*. This extremely bullish news caused bonds to rally nearly two full points to 90 to 26. Many market participants lost money because they had anticipated a bearish number. It is extremely difficult to trade during the volatility created by a news announcement.

Traders could have gained valuable information on the 12th if they had entered the market prepared with the following information:

1. Direction of the major auction.
2. Known reference points.
3. Market expectations for a scheduled news announcement.

The direction of the major auction was up, despite the short-term selling rotation due to bearish expectations. The market had broken below several days of overlapping value (not in view) on May 9, establishing two important reference points: the 9th's high (89 to 16) and the point at which the market broke lower (89 to 04). As previously mentioned, the consensus opinion was that the PPI should have been between +.06 percent and +.08 percent. When the number was announced as bullish for bonds, the market auctioned through the first reference point (point 1 in Figure 4.120) easily, and slowed at the highs for the 9th (point 2). The subsequent announcement of the PPI's



**FIGURE 4.119** A News Event's Effect on June Treasury Bonds

Data Courtesy of Commodity Quote Graphics. Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

	May 8	May 9	May 10	May 11	May 12	May 15
91 8/32	.	.	.	.	.	.
91 6/32	.	.	.	.	.	yA
91 4/32	.	.	.	.	.	yAFG
91 2/32	.	.	.	.	B	yzABCDEFG
91 0/32	.	.	.	.	zBIJ	yzBCDEFGH
90 30/32	.	.	.	.	zABDFGHIJKL	zBCDGHIJKL
90 28/32	.	.	.	.	zABCDEFGHIJKL	zGHIJKL
90 26/32	.	.	.	.	yzABCDEFHJKL	zJK
90 24/32	.	.	.	.	yzABCDEFHK	z
90 22/32	.	.	.	.	yzA	.
90 20/32	.	.	.	.	yz	.
90 18/32	.	.	.	.	yz	.
90 16/32	.	.	.	.	yz	.
90 14/32	.	.	.	.	y	.
90 12/32	.	.	.	.	y	.
90 10/32	.	.	.	.	y	.
90 8/32	.	.	.	.	y	.
90 6/32	.	.	.	.	y	.
90 4/32	.	.	.	.	y	.
90 2/32	.	.	.	.	y	.
90 0/32	.	.	.	.	y	.
89 30/32	.	.	.	.	y	.
89 28/32	.	.	.	.	y	.
89 26/32	.	.	.	.	y	.

**FIGURE 4.120** A News Event's Effect on June Treasury Bonds, May 8 to 15, 1989.  
Copyright Board of Trade of the City of Chicago 1984. All Rights Reserved.

89 24 /32	.								y
89 22 /32	H	.	.	.	.	.	.	y	y
89 20 /32	zADEFGHIKL	.	.	.	.	.	.	y	y
89 18 /32	yzABCDEFHJKLM	.	.	.	.	.	.	①	y
89 16 /32	yzBCIJ	y	.	.	.	.	.	y	y
89 14 /32	yB	yzAH	.	.	.	.	.	y	y
89 12 /32	.	yzABCDH	.	.	.	.	.	y	y
89 10 /32	.	zABCDEGHI	.	.	.	.	.	y	y
89 8 /32	.	AEFGHIJ	.	.	.	.	.	①	y
89 6 /32	.	GHIJ	.	.	.	.	.	y	y
89 4 /32	J	.	.	.	.	.	.	y	y
89 2 /32	J	.	.	.	.	.	.	.	.
89 0 /32	J	.	.	.	.	.	.	.	.
88 30 /32	.	JK	.	.	.	K	.	.	.
88 28 /32	.	JK	.	.	.	ABJKL	.	.	.
88 26 /32	.	JK	.	.	.	ABCJKL	.	.	.
88 24 /32	.	KL	z	.	.	yzABCDIJK	.	.	.
88 22 /32	.	KL	yzA	.	.	yzACDEFJU	.	.	.
88 20 /32	.	L	yzABCJ	.	.	yzDEFGHI	.	.	.
88 18 /32	.	L	yzABCDJ	.	.	yzDEFGHI	.	.	.
88 16 /32	.	.	ABCDHJ	.	.	yFGHI	.	.	.
88 14 /32	.	.	DEHJKL	.	.	yFGHI	.	.	.
88 12 /32	.	.	DEFGHJKL	.	.	yHI	.	.	.
88 10 /32	.	.	EFGHKL	.	.	y	.	.	.
88 8 /32	.	.	EFGHK	.	.	y	.	.	.
88 6 /32	.	.	GK	.	.	.	.	.	.
88 4 /32	.	.	.	.	.	.	.	.	.
88 2 /32	.	.	.	.	.	.	.	.	.
88 0 /32	.	.	.	.	.	.	.	.	.

**FIGURE 4.120** (Continued)

components was also bullish, and the market exploded to the upside. Despite the recent down auction, bonds had no trouble auctioning two points higher on May 9. It became apparent that underlying market conditions were strong.

The following list displays the basic news/market sentiment relationships, and our previous bond example is illustrated by the third scenario (denoted by an asterisk). The major auction was up, the news announcement was bullish, and the market reacted by auctioning substantially higher in the day timeframe. These circumstances indicate a market that is strong and continuing higher.

Direction of Major Auction	News Announcement	Day Timeframe Direction	Market Sentiment
1. Up	Bearish	Up	Very strong
2. Up	Bearish	Down	Neutral, expected
3. Up*	Bullish	Up	Strong
4. Up	Bullish	Down	Very weak
5. Down	Bearish	Up	Very strong
6. Down	Bearish	Down	Weak
7. Down	Bullish	Up	Neutral, expected
8. Down	Bullish	Down	Very weak

## Summary

Instead of getting emotionally and/or financially whipped back and forth along with the market during a major news announcement, traders can use the news to their benefit by following these steps:

1. Balance your inventory so that you hold no position going into the scheduled announcement (except for long-term traders).
2. Make note of market expectations, recent market direction, and salient reference points.
3. Monitor activity after the actual number is announced to determine underlying market sentiment (use the above reference chart, if necessary).
4. Monitor ensuing activity near recent reference points for confirmation or rejection of apparent conviction.

5. If an opportunity is present, enter trade. Place stops at previous known reference points—exit if conditions arise that contradict market sentiment.

## ■ Beyond the Competent Trader

Let us look back to David, the aspiring pianist, and his path to becoming an expert musician. When he reached competency after years of learning and practice, he had mastered the technical and mechanical aspects of playing the piano. Yet, he had not transcended the physical notes on paper to become an expert. Similarly, a good market understanding is only part of the equation for achieving expert results. Many traders who develop a solid academic background still do not make enough money to justify being in the market.

To progress beyond the average, beyond the middle of the bell curve and into the upper extremes of excellence, you must achieve self-understanding. To become a proficient trader, it is necessary to become so intimate with the mechanical aspects of the market that they form a holistic pattern in your mind. Only then can you begin to understand how your own personal strengths and weaknesses directly influence your trading performance. As Adam Smith said in his book *The Money Game*, “If you don’t know who you are, the market is an expensive place to find out.”

We have reached the end of the Competent chapter. The study of the basic theories behind evaluating market-generated information through the Market Profile is now complete. We have covered a tremendous amount of information in a relatively short time. So before we move on to the next step in the learning process, take some time to review and solidify the concepts we have discussed. Observe the market. Test and apply your market understanding. Build the experience that will clear the fogged corners of the window to reveal the big picture.



# Proficient

Throughout the book, we have followed the five levels of skill acquisition through a college student named David. After hearing a moving rendition of Beethoven’s “Moonlight Sonata,” David decided he wanted to learn to play the piano. He started the learning process by studying purely derivative sources—taking lessons and reading books on music theory. After becoming familiar with the basics, David began to practice while continuing his derivative learning. In other words, the instruction and mechanical knowledge acted as a catalyst, allowing David to actively apply and develop the theory into actual musical ability. He was building experience.

Finally, after years of practice, lessons, and study, David transcended the realm of derivative knowledge. He simply knew the theory and technique backward and forward. When David sat down at the piano, the fingering had been committed to muscle memory and the notes and time signatures were so fully assimilated in his mind that he no longer actively thought of them while playing. David had reached the level of proficiency that allowed him to express his thoughts and feelings through an instrument as though it were an extension of his emotion.

Becoming proficient in any endeavor is a highly personal process. Think about something you excel in, something that has become an instinctive, intuitive ability. Perhaps it is an athletic talent such as golf or tennis. Maybe you have a knack for fly-fishing, sailing, or chess. Whatever it is, remember the way you felt when you finally performed the activity perfectly.

Suppose that after years of working on your golf swing through lessons, Arnold Palmer books, and hours at the driving range, you play the perfect round. A proficient golfer intuitively combines course conditions, wind, the ball’s lie, stance, club selection, position, and the actual stroke to achieve the

perfect shot. Imagine the exhilaration of having the ability to make such a shot 70 times in one round. A perfect round transcends all derivative learning. It is the culmination of knowledge and experience. When all the factors come together, the golfer can “feel” the shot. Developing and learning to recognize that feeling of excellence is the result of a synthesis of derivative and empirical knowledge—of academic learning and hands-on experience.

A futures trader who has progressed beyond competency also begins to intuitively feel when conditions are right for a successful trade. Again, this intuitive ability is fostered by more than just a sound fundamental base. Through market experience, you will begin to recognize certain situations where all the concepts and theories come together and you “feel” the trade. Once you have reached this stage of market understanding, the difficult part becomes learning to trust your intuitions—to trust the feeling of opportunity. In other words, a proficient trader must begin to learn and develop *self-understanding*.

In the final stages of learning, experience becomes the primary teacher, and introspection the vehicle for excellence. In this chapter, we will discuss the importance of self-understanding and its relation to becoming an expert trader.

The Results Equation:  $\text{Market Understanding} \times (\text{Self-Understanding} + \text{Strategy}) = \text{Results}^1$

The Results Equation is an oversimplified formula for achieving successful trading returns. It is built upon three concepts: market understanding, self-understanding, and strategy. Up to this point, we have covered the large volume of theory that leads to a sound market understanding. In addition, we have discussed many trading strategies based on specific structural features, such as opening types and Special Situations. We have also examined the strategic application of more general concepts such as other timeframe control and trending versus bracketed markets. These structural strategies arise from an understanding of the marketplace, but they are useless if a trader does not have the confidence to implement them.

A truly effective strategy must incorporate your strengths and weaknesses into a comprehensive game plan that uses your abilities to their fullest potential. The pivotal element in turning market understanding into a practical, successful trading strategy is self-understanding. You may have developed a thorough understanding of the marketplace and a reliable academic trading strategy, but without an understanding of yourself, you

---

<sup>1</sup> J. Peter Steidlmayer and Kevin Koy, *Markets & Market Logic* (Chicago: The Porcupine Press, 1986), p. 5.

will not be able to effectively employ that strategy. Your trading results will not rise above the bell curve average. And, as we have mentioned before, the average market participant does not make money. To become proficient, you must begin the ongoing process of learning to understand yourself.

## ■ Self-Understanding: Becoming a Successful Trader

Most of us do a great deal of soul-searching before we choose a profession. Whether we realize it or not, in this process we consider not only the intellectual and academic requirements of the profession, but also how that vocation meets our own psychological and emotional needs. What does it take to become a surgeon, and can I deal with patients that die on the operating table? Do I want to work for someone else, or do I want to call my own shots? Do I want to manage people, or would I prefer to do research on my own? Do I want a profession that is steady and predictable, or would I prefer to have each day be entirely different?

Additionally, we also consider whether or not we possess the innate skills that can spell the difference between success at one profession over another. Do I have the precision hand-eye coordination to become a professional baseball player, the mathematical mind to work as a physicist, the writing style to become a reporter, or the mechanical aptitude to become a mechanic or electrician? These basic skills are usually identifiable early on. When choosing a profession, we need to consider whether we possess the skills required to succeed at that profession. While there are many ways to develop these skills through education, coaching, and experience, the seeds must already be planted if they are to grow.

Most individuals have never given much thought to the underlying skills necessary to become a successful trader. Consequently, when they begin to trade they wander into a very dangerous area totally unprepared. The personal characteristics that generally accompany success in the futures market include maturity and stability, a strong sense of self-competitiveness (as opposed to team-competitiveness), the inner strength to maintain contrary opinions, an orderly mind, and the ability to make a decision and act with confidence.

The ultimate decision to become a professional futures trader involves a melding of your personal skills with your financial and emotional needs. Many view futures trading as a glamorous profession in which it is

possible to make a lot of money with very little effort. Few professions are truly glamorous, however, and to the most successful futures traders, the greatest reward is often emotional, while the financial reward is regarded as secondary. If this comes as a shock to you, consider our Olympic athletes. Although a few are compensated well through sponsorships, the majority of these individuals are in the athletic profession first for the emotional value—for the inner feeling of accomplishment that comes with mastering a sport, with winning the game. The financial rewards are secondary and flow naturally as a consequence of their success. And this, it seems, is where most futures traders err. They are drawn to, and in a sense intoxicated by, the lure of the financial reward, while never giving a second thought to the emotional or intellectual requirements of success.

Most traders, like drunk drivers, should be taken off the streets. They are trading under the influence—under the influence of the many advertisements that blanket the pages of trading magazines and newspapers with claims and near promises of quick, easy success. Each month, a new guru is touting a break-through system that turns a computer into a black box gold mine. Enter the orders and scoop out your profits. These glittery ads spark interest and induce sales, but they are misleading.

In contrast, how would you respond to an advertisement that read:

*Wanted:* People willing to undergo specialized training in how to succeed. This program will require rigorous intellectual schooling, intensive introspection geared toward identifying invisible blocks to success that are trapped within you, and then a long behavior-modification process necessary to overcome these inner obstacles. At the same time, you will undergo a daily on-the-job training program. Requirements for this training program are as follows: intellectual ability, a meaningful amount of capital, and the willingness to immerse your entire self-esteem into the program. It is anticipated that you will lose most, if not all, of your capital and will be forced to rationalize the whole experience to maintain your self-esteem. Although it takes a minimum of two years to reach a moderate level of success, soon after this initial training program the majority of you will drop out because it is too hard, takes too much time, requires too much flexibility, is not well defined, and there are not enough concrete rules. Of the few that remain, less than 10 percent of you will enjoy the feeling of exhilaration that goes with completing what you set out

to accomplish. Like the artist who only gets better, your newly acquired skill and experience will be just the start of a process that can continue for a lifetime. You will be equipped to succeed at your profession. You will be an entrepreneur.

This imaginary advertisement could apply to virtually any serious professional venture. It is not meant to convince you not to trade. Rather, it is meant to dispel the glamorous illusions that surround the field of futures trading. You have already experienced the difficulty of learning the vast amount of theory that makes up market understanding. Developing self-understanding is just as difficult—perhaps more so, for self-understanding cannot be learned from a derivative source.

## ■ Self-Observation

The Profile graphic enables a trader to objectively organize and observe the market's behavior, which leads to the development of market understanding. Similarly, self-observation is essential to developing self-understanding. One of the most effective methods to observe and reflect on your actions is to keep a trading journal.

For a trading journal to be useful, you must be honest and consistent, writing down thoughts, feelings, and surrounding circumstances before, during, and after each trade. Observing how your emotions affect the outcome of each trade can reveal your propensity for risk, your intuitive skills, the affects of outside circumstances, and myriad other factors that contribute to self-understanding.

Eventually, you will begin to identify behavioral patterns and the types of events that directly affect your trading performance. Perhaps you are overly affected by conflicting news sources and professional opinions. Maybe you find it difficult to trade against the crowd and are easily shaken from your convictions by contrary opinion. For example, you may notice that every time you make a trade based on a fundamental source, you exit too early and have little confidence in the trade. If this is the case, it may be best to simply not expose yourself to outside opinion. Or, perhaps you want to be a long-term trader, but find you have trouble sleeping during nights when you are carrying outstanding positions. By keeping a trading journal, you can begin to understand how you affect your trading results.

## ■ The Whole-Brained Trader

Although we still know relatively little about the vast capabilities of the human brain, research has revealed that the brain is divided into two separate hemispheres, each having very different functions. Bennett W. Goodspeed describes these differences in *The Tao Jones Averages*:

. . . our left hemisphere, which controls the right side of the body, is analytically oriented. It reasons logically and sequentially and is responsible for our speech. It is adept at math, accounting, languages, science and writing. Like a computer, it is programmable and is nurtured by our highly analytic educational process. The properties of the left brain are not unique; man has developed computers that can duplicate those functions.

Our right-brain hemisphere, which controls the movements of the left side of the body, is unique. It operates non-sequentially, is intuitive, artistic, has feelings, is gestalt-oriented (sees the forest and not just the trees), and controls our visual perceptions. Since it is nonverbal, it communicates to us through dreams and ‘gut reactions.’ The right hemisphere provides and stores all of our nonverbal experience—a vast amount of input, certainly much more than we can verbally retrieve.<sup>2</sup>

The difference between right- and left-brain function explains a great deal about the diversity of interest and talent in the human species. Every individual has a different right/left brain balance, resulting in a vast array of mental and physical abilities. Someone who is very left-brain oriented might become an excellent scientist or administrator, whereas a right-brained person would more likely become an artist or playwright.

The division of right- and left-brain thinking is readily apparent in the futures market as well. The technicians who analyze historical data, economic figures, charts, and other technical information are primarily left-brain oriented. Conversely, floor traders who rely on instinct are acting according to right-brain intuition, or gut feelings. Unfortunately, attempting to trade with only the left or right hemisphere will result in an imbalance and poor results. The most successful traders are able to achieve a balance between the analytic left brain and the holistic right brain—they are whole-brained traders.

---

<sup>2</sup> Bennett W. Goodspeed, *The Tao Jones Averages* (New York: Penguin Books, 1983), pp. 22–23.

## The Left Hemisphere

The left hemisphere is highly attuned to time, rules, and facts. It has been shown that this half of the brain, while very precise, is capable of processing only small amounts of information at a time. Therefore, attempting to trade with only the left, factual portion of the brain is very limiting—it incorporates only one viewpoint. Yet, there are times, such as in preparation and planning for the day, when it is necessary to be very exact and calculating. To grasp the facts, you must often consider them very rationally and individually. Still, the left hemisphere is seldom able to successfully coordinate the vast amounts of conflicting information disseminated by the market each day.

Imagine yourself sitting in front of your quote monitor, observing a trading day when the markets seem to have gone haywire. You murmur in a barely audible voice, “I cannot believe what is happening in the market today.” Your left brain is whispering to you. The analytic decisions you made based on rationally processed facts have not been confirmed by the market. By immersing yourself in technical indicators and scientific study, the real, evolving nature of the marketplace slipped right past you.

## The Right Hemisphere

The left brain stores knowledge. However, only through fine-tuned interaction with the intuitive right hemisphere can you successfully synthesize that knowledge and develop understanding. The right hemisphere is generally known as the creative, emotional half of the brain. It is dominated by free association and holistic processing of mass amounts of information.

A trade based on pure emotion may have an even lesser chance of success than a trade based on calmly calculated fact. Nonetheless, once the market opens, it is impossible to analyze the vast numbers of interacting elements that are combined, absorbed, and reflected by the market at any point in time. It takes a careful balance of academic knowledge and intuition based on a larger understanding to trade successfully.

## Combining the Two Hemispheres

It is possible to mentally change gears in order to use both hemispheres of the brain. Each has its clear advantages and powers. After the market’s close, for instance, the analysis of the day’s activity and preparation for the following trading session are best accomplished by using predominantly left, analytical talents. On the other hand, when the market is in full gear, the

fast-processing, free-associating right brain should have more control. Ideally, we should strive to operate in a more central hemisphere, freely calling on both sides of the brain to contribute when needed.

Neither [hemisphere] should be blindly followed, as to do so would be to act in a half-brained way. Nor should we ignore either, for each effectively represents half of our brain. By understanding both and being able to use the correct hemisphere for the correct task, we can be more whole brained and effective in our decision-making.<sup>3</sup>

Recall our discussion of Bears' linebacker Mike Singletary in Section I of Chapter 4. Between games, Singletary used his analytical left-brain skills to design a game plan and thoroughly understand the opposing team's offense. When the game started, however, he did not have time to actively process the overwhelming amount of incoming stimuli. He then operated in a right-brain dominated mode, relying on intuition and holistic pattern recognition to guide his actions.

Experts in any field, like Mike Singletary, make whole-brained balance appear easy. This misconception is apparent to any trader who has had a gut feeling about a trade or an opinion based on careful analysis, only to see the market move in the opposite direction. Like any worthwhile endeavor, whole-brained trading takes time, patience, and experience to master.

You may come to realize that you are a predominantly right-brained or left-brained person. This is the first step in achieving balance. By knowing your left/right brain strengths and weaknesses, you can begin to develop a trading strategy that best uses your individual talents.

## ■ **Strategy**

As we near the end of Proficient, we look at the role and importance of strategy. Throughout the book, we have discussed many trading strategies based on market structure. However, there is a difference between a complete strategy and just managing a trade. Individual trades are guided by a set of rules based on market understanding. A complete trading strategy, on the other hand, is more of a holistic game plan, built upon an infrastructure of market understanding, self-understanding, and structural guidelines.

---

<sup>3</sup> Bennett W. Goodspeed, *The Tao Jones Averages* (New York: Penguin Books, 1983), pp. 49–50.

Every trader has a different timeframe, different goals, and different needs and emotions. Consequently, developing a strategy is a unique, individual process in which we each mold our strategy to best use our strengths and support our weaknesses. In this discussion, then, we focus on the *business* aspects of strategy, purposely avoiding the more personal elements of self-understanding.

## A Business Strategy

There are many facets to running a business. You must first consider the *tangibles*, such as capital, risk, cash flow, taxes, and other general expenses. Then, there is the upkeep and use of informational sources, basic record keeping, and performance evaluation/measurement. Of equal importance are the *intangibles*, such as knowing your competition and the role of time—both in managing your own time and introducing a new product. Also within this category are qualities like dedication, daily execution, and overall strategic planning that are ultimately the driving force behind any successful business.

*Trading is a business.* It involves the same tangible and intangible elements of any business strategy. We will examine many of these crucial areas, first from a general business perspective, and then within the context of how together they form a strategic trading plan.

**Capital** When running a business, two golden rules apply to capital: (1) make sure that you are adequately capitalized to begin with; and (2) *conserve it*. A business that is undercapitalized is handicapped from the start. A new venture must be able to absorb unexpected start-up costs, as well as fund projects that may be important to long-term survival.

There are obvious costs to trading, particularly when one is just starting out. It is critical that traders are adequately capitalized for their style of trading. For example, day traders generally do not need to be as highly capitalized as long-term traders who hold positions overnight. However, even a day trader needs enough capital to take advantage of a market-created opportunity to “take a trade home” with minimal risk, such as that which is often provided by a 3 to 1 day.

Undercapitalization leads to “tick-watching.” Traders who must constantly worry about taking a loss are less likely to be objective in their interpretation of the market and, therefore, how they manage their positions.

**Location** Locating a business is similar to locating a trade. Where would you prefer to build a gas station, on a four-way corner just off the interstate, or somewhere between two traffic lights on a road divided by a median strip? Trades, too, are located based on cost/revenue considerations. Where would you prefer to buy for a long-term trade, near the long-term lows with strong apparent excess to lean on or somewhere in the middle of the long-term range? A poorly located trade suggests that you are assuming greater risk for less than optimal reward.

How do you achieve optimal trade location? *Planning*. Do your homework, identify regions of potential good trade location afforded by excess, balance areas, and brackets, and then put your orders in ahead of time. When you are in the thick of the trading day, the best trade location often looks like the worst at the moment it is reached. (Remember, the best trades generally fly in the face of the most recent activity). It becomes extremely difficult to pull the trigger—to make the trade. That little subjective voice begins to cloud your rational decision-making ability to the point that you just sit there frozen, watching a good opportunity slip away.

Many times ideal trade location seems too far away for the market to move in one day. *Put the order in anyway*. The anxiety that often accompanies such dynamic moves can keep you from entering the trade unless the order is already in the pit. In addition, if the trade location is truly ideal, then those prices will not be offered long enough to enter a position unless you have already placed your order. Just as a good chess player always plays several moves ahead of his opponent, playing ahead of the market is what secures good trade location.

**Timing** Negotiating skills are an important part of business, and *patience* is crucial to successful negotiation. For example, now and then every business has to deal with its suppliers. Would you rather negotiate when the product is plentiful or scarce? The timing of your negotiations often has a direct impact on the price you will pay.

Timing a trade is just as important as timing in a negotiation. Like the business that waits until its supplier has excess, traders should patiently wait for the market to demonstrate excess before they act. Many traders had strong bearish opinions prior to the stock market crash in October 1987. However, those who sold too early were forced out of the market (for financial reasons) long before the global selling began. Traders who are consistently too early need to be more patient in their negotiations with the market.

**Information** Every business decision and every trading decision is based on facts gleaned from market information. The car dealer only restocks his inventory if his information sources suggest that he will be able to sell the new cars. His information tells him the size of the market, the willingness of the consumer to buy, how many cars he should purchase from the manufacturer, and what he should charge for his stock. These same decisions must be made in any market.

Information influences virtually every aspect of a business strategy. In a sense, your information sources are your eyes in the market. That is why it is essential to trade based on reliable, objective information. Many traders surround themselves with so many opinionated and conflicting sources that their decision-making abilities are paralyzed. Think back to Jim Kelvin, the currency trader introduced at the beginning of the book. He knew that the yen was weak, based on purely objective market-generated information. Unfortunately, he also considered several other conflicting technical and fundamental sources that made him doubt his intuitive ability.

If conflicting sources are hindering your trade, eliminate them. Good businesspersons will narrow their information down, select the most reliable sources, and get rid of the rest. Streamlining your information helps you arrive at decisions faster and *earlier*.

Historically, the best and most profitable businesses have entered their respective markets *before* all the information was available. They saw an opportunity and acted on it before it became obvious and the whole world jumped in. A successful trader does not wait until structure has provided 100 percent confirmation. Identify the opportunity and then do the trade.

**Know Your Competition** Perceptive businesses understand their competition and the kinds of responses to expect from them and devise their strategy accordingly. What will the other players do if price drops too low or rises too high? General Motors has a pretty good idea what the Japanese carmakers will do given any number of price-related decisions. Such knowledge of participant behavior is applicable to trading as well. Successful traders have a good inclination of how other market participants will react to a given change in price.

From a trading standpoint, one part of knowing your competition should involve making a continual assessment of whether the other market participants (your competition) are too long or too short. For example, if a market that had been in a sustained up auction suddenly breaks in the day timeframe and stalls, creating a *b* formation, participants were probably

too long. Through an understanding of the competition, you know that the activity was most likely a long liquidation break, and the buying auction will continue. *Every successful businessperson and every successful trader understands the behavior of the other participants.*

**Know Yourself** In addition to knowing your competition, you must know yourself. What is it you do best? Under what conditions do you find it difficult to be objective? There are many examples of businesses that have grown very successful by identifying and concentrating on their specific strengths, such as Midas Mufflers and McDonald's hamburgers. Learning to recognize, accept, and work with your strengths and weaknesses is perhaps the most difficult aspect of becoming an expert trader.

Earlier in Proficient, we discussed the You portion of trading at length. However, a derivative source can only offer suggestions and provide ideas for growth. Self-understanding must be developed through continual self-observation and introspection. Keep a trading journal. Find patterns of thought and circumstance that lead to successful trades and actively incorporate those patterns into your trading strategy. Eliminate negative influences that cause bad trades and promote irrational thought. Self-understanding is an ongoing process essential to an effective overall strategy.

**Consistent, Daily Execution** A healthy business turns out revenues day after day. The old adage "Successful trading is a lot of small losses and a few big winners" is simply not true. It still may be that the really big profits are made on a few trades, but the first goal is to see that the overhead is covered on a daily basis. A lot of small losses actually contribute to the overhead. A proficient trader will generate revenues virtually every day.

*Consistency breeds objectivity.* Consistency produces cash flow and takes care of current expenses, such as (in trading) office space, quote equipment, medical insurance, and so on. Consistency also eases tensions, so that the business can operate from a clear state of mind, look ahead, and plan expansion.

**Inventory** Both in a general business and trading, inventory management often spells the difference between success and failure. The goal, of course, is to buy at the most advantageous price. And, like investing in real estate, that generally means that *you have to buy inventory when no one else wants it*, or else you do not get the ideal price. Similarly, a trader will seek to initiate larger positions when the market appears to be near its long-term highs or

lows. Price generally reaches a long-term high when the entire market is buying, and therefore when it is least popular to sell. Conversely, price reaches a long-term low when the entire market is selling and it is least popular to buy.

Keep in mind, however, that many traders lose a lot of money attempting to pick market tops and bottoms. Be alert to conditions that create market extremes and place your positions just after the high or low has been confirmed.

The handling of inventory varies from business to business, just as traders handle their positions differently. For example, locals handle their inventory much like football ticket scalpers outside the stadium or the grocer in your local supermarket—high volume, low mark-up—the less time spent on the shelves the better. Long-term traders, however, probably handle their positions with greater patience, much like a jeweler and his diamonds.

There are costs associated with not having enough inventory as well as costs of having too much. If you have no inventory (no positions), your opportunity for revenue declines. On the other hand, if you carry too much inventory, you may not have enough capital or space to take advantage of new opportunities. In addition, as one's inventory grows older, it may lose or gain value depending on changing market conditions. The overriding difference between most businesses and trading, however, is that the futures market controls the price of your inventory. You have less control over risk and opportunity and, therefore, must pay much closer attention to your inventory and changing market conditions.

**Risk** Every good businessperson keeps a watchful eye on risk. This means dedicating the majority of one's time and capital to playing the short odds rather than the long odds, for the main objective is to stay in business. This concept is well illustrated by a theme common among sales organizations. Generally, the salespersons who continually seek the big deals, hoping to hit the grand pay-off, invariably go broke. On the other hand, the individuals who succeed are those who work on five or six big deals, while spending the majority of their time on the 70 or 80 small accounts that provide consistent revenue. If a decision is made to go after a big deal, it is generally only with a portion of the capital or resources of the business.

As an example of how one might incorporate this concept into one's trading strategy, consider the regulation of maximum trades (large, long-term positions). Suppose that part of your strategy is to trade up to three futures at one time. If so, then perhaps you limit yourself to just one

maximum trade at a time. This way, you do not risk all of your trading capital on big deals (this is just an example, not a specific recommendation). Similarly, if your capitalization is lower, or if you want to reduce the anxiety that often accompanies maximum trades, perhaps you elect to participate in a maximum trade using option spreads.

Trading requires continual risk evaluation. Like a credit policy at a bank where overnight, intermediate and long-term spending limits are calculated precisely through conscious decisions, with each new trade one must evaluate the accompanying risk.

**Goals** There are short-term goals as well as long-term goals. Good businesspeople realize that long-term goals are achieved as a result of the constant, cumulative meeting of short-term goals. *Write down your goals.* Make them clear and concise and strive to achieve them through realistic shorter-term checkpoints. From time to time, review them and make sure they still represent your current wants and needs.

**Record Keeping and Performance** All businesses keep records for reasons more than satisfying the IRS. Records help a business remain objective and realistic when evaluating performance. How productive is your sales force? How well is the market responding to your advertising and marketing? Is your overall strategy producing the hoped-for results? What is the bottom line?

Record keeping is equally important to trading. Records give you an objective way to evaluate how your trading strategy is faring and whether it is in need of change. Proper record management should tell you more than if you are making money. It should reveal where your trading revenues are coming from, what market conditions and trading techniques are most profitable, whether you are meeting daily expenses, and so on. The better your records, the easier it is to isolate the problem areas, find solutions, and hone in on what you do best.

**Dedication** Dedication is one of the intangibles, unique to each individual and therefore not easily measured or valued. Dedication is doing your homework every day. It is keeping up your charts, getting up that extra hour early to get a head start on the markets, and putting in that extra hour afterward.

Dedication is not just time and work; it is the heartbeat of a business. It is that personal element, the desire for personal achievement possessed by a

handful of individuals. It is the driving force behind any successful business. Just wanting to be successful is not enough; you have to make it happen. *True dedication involves paying a price . . . and there is a price.*

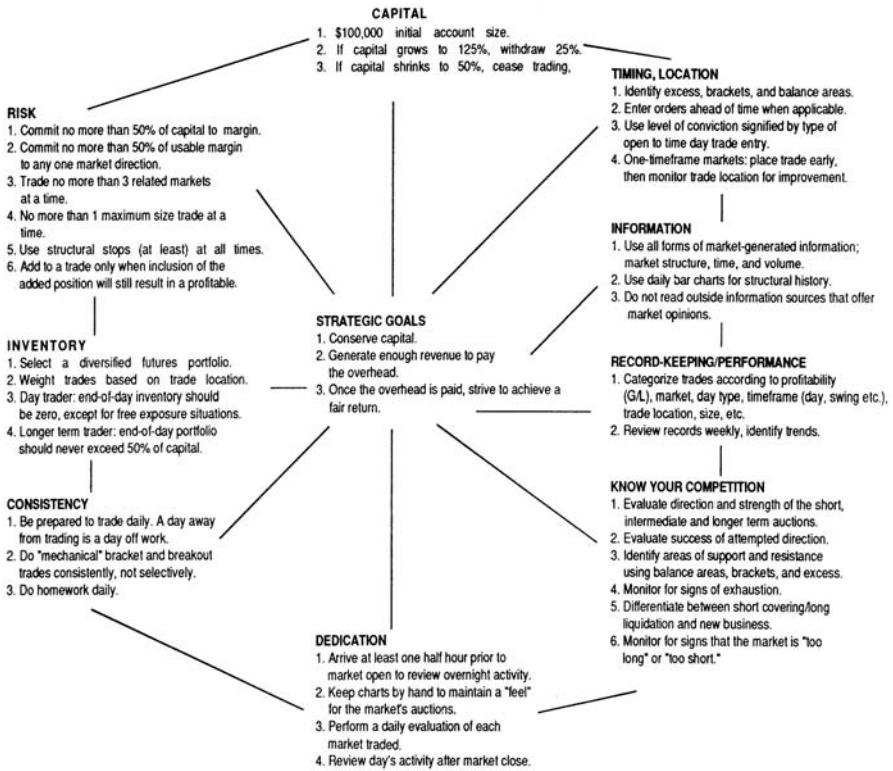
**Applications** When dealing in the minute-to-minute or day-to-day specifics of trading, it is sometimes difficult to appreciate the importance of strategy. Many traders have spent thousands of dollars learning the market and developing rules and guidelines for their trading. These aids come in multiple forms, from the Market Profile to rigidly disciplined trading models. Unfortunately, much of this knowledge and money is wasted, unless it is also woven together with a comprehensive strategy that takes into account those attributes that are important to staying in business as a trader. In summary, we offer three very general steps to getting started in developing your trading business.

- Step 1: Accept and begin to view trading as a business.
- Step 2: Develop a comprehensive strategy based on the concepts of successful business management. To restate, every business—and trading is no exception—needs a healthy interaction of the following areas if it is to survive.

– Capital	– Information
– Timing	– Inventory
– Location	– Risk
– Knowing Your Competition	– Goals
– Knowing Yourself	– Record Keeping/Performance
– Consistency	– Dedication

This very ideal listing, collectively considered, forms the strategic shell of trading survival.

- Step 3: Formulate specific rules and mini-strategies that will help guide and mold your individual trades in order to meet the long-term goals of your trading strategy. Unfortunately, we as humans cannot function purely on a strategic level. We have to deal with facts, disappointments in our own shortcomings, capital requirements, the day-to-day details of physically and mentally entering and exiting trades, and so forth. Thus, once these long-term goals have been laid out, we can begin to outline a series of short-term goals and trading disciplines to help us fulfill our long-term strategy.



**FIGURE 5.1** Trading Strategy Flow Chart

Figure 5.1 illustrates, in a very general sense, how one trader might design the underpinnings of a business trading strategy. This figure represents a basic set of guidelines that begin to tie the strategy together. Once these basic requirements are established, one must then fine tune them with yet additional rules, so that eventually a daily, trade-by-trade application can be reached.

## ■ Summary

The poor performance by most professional Wall Street investors is the result of an imbalance . . . a lack of whole-brainedness.

**Bennett W. Goodspeed, *The Tao Jones Averages***

Most traders eventually become competent, but few transcend the rules and theories to reach proficiency. To progress beyond the average, traders must learn to understand themselves—how their personal strengths,

weaknesses, and individual personalities affect their trading results. On the other hand, some traders have a good self-understanding but view their trading as a part-time endeavor or hobby. Trading is a business, and to become proficient a trader must develop a business strategy.

Successful futures trading is the result of a delicate balance between derivative learning and experience, between analytical thinking and intuition. A proficient trader forms a trading strategy built upon an infrastructure of market understanding, self-understanding, and structural guidelines. He begins to intuitively feel when conditions are right for a successful trade, balancing left-brain discipline with right-brain creativity. Strive to achieve balance—to become a whole-brained trader.



# The Expert Trader

The knowledge that is gained from books and experience is an integral part of becoming a successful trader, but the path to expert trading begins within yourself. You must believe that you can reach your goals, fulfill your aspirations. Mastering the academics is not enough. An athlete with average ability will be victorious over opponents of greater skill if he believes he can be a champion.

Achieving the level of expert in any pursuit is a challenge that few people attempt, for it requires complete dedication and determination. To reach and maintain excellence, an individual must have a desire to succeed that transcends personal sacrifice. Understandably, most people are not willing to give up the diversity of their lives for a single all-encompassing goal.

Consider anyone that you perceive to be an expert in his or her field. Olympic swimmers spend from four to six hours in the water every day. Great composers and musicians have been known to practice for most of their waking hours. Top salespersons work 12- to 16-hour days. The best creative advertising personnel are always rethinking their accounts, shaping and detailing new ideas. Any highly successful business exceeds the norm by going beyond the rules and calculative rationality to the higher grounds of innovation and excellence.

Do you have what it takes to become an expert trader? We have covered a tremendous wealth of material, from the market's smallest unit to the importance of self-understanding—but the knowledge contained in this book is only the beginning. A derivative source can impart all the learning in

the world, but again, much learning does not teach understanding. Benjamin Hoff put it wonderfully simply in *The Tao of Pooh*: “Knowledge and Experience do not necessarily speak the same language . . . there is more to Knowing than just being correct.”<sup>1</sup>

In your pursuit of excellence, you may sometimes stumble and feel the frustration of your mistakes. The challenge before you is not without difficulties, but with the inner strength that grows from believing in your potential, you can strive to soar beyond the average—feel the exhilaration that goes with completing what you set out to accomplish. As you continue to learn and build experience, remember that your newly acquired skill and understanding is just the start of a process that will continue for a lifetime.

---

<sup>1</sup> Benjamin Hoff, *The Tao of Pooh* (New York: Penguin Books, 1982), p. 29.

# Experience

One of the most astute [Amazon.com](#) reviews for this book was not intended as a compliment—the reviewer said *Mind Over Markets* was “too complicated.” Those two words capture the reason why most traders fail, as well as the reason why the book in your hands is still relevant, challenging, and insightful after two decades: It was written for serious traders, and it doesn’t purport to be a total solution.

*Mind Over Markets* is a practical handbook for developing an understanding of market behavior that will help you trade with the odds in your favor. And in the 22 years since it was published (and translated into Chinese and French) the authors have continued on their journeys, delving deeper into practical experience. And so it is *experience* that this final, fresh chapter is all about; we’ll bring the book learning in the preceding chapters into the light of real experience, where real money is won and lost in the market’s endless heaving to and fro. The examples we’ll employ are simply meant to provide context for the content—the synthesis of the five stages of learning can only happen in practice.

297

## ■ Set Aside Your Expectations

Traders, being human, want markets to be orderly and easily understandable. But if you start with that expectation then you’re off on the wrong foot. We’re all prone to seeking only what we’re looking for, which keeps us from being present for what is actually happening.

Being free from all distractions, he can undertake his practice wholeheartedly. Practice combined with non-attachment helps him to continue his search until he reaches the goal.

—Swami Rama

To be successful, you must set aside your desires and expectations. You've got to get inside the head of the people you're competing against. How gruesome does it feel to get caught short? How would that feeling manifest itself in a herd of day traders? So much of trading today is about *momentum*, which can offer invaluable insight when considered in the proper context.

After you understand how markets operate—not as orderly and scientific as you'd like—then you've got to figure out how your own head operates. You can have all the market knowledge in the world, but if you don't understand the ways in which rationalization can be a powerful gravitational force, then market knowledge might not help you.

Trading is a game. And if you can figure out what's going on in your head, and in the heads of your competitors, you're more likely to win.

## ■ Mind Over Markets in Profile

In 2007, 15 years following the publication of our original work, we published *Markets in Profile: Profiting from the Auction Process*, which examines the market's continuous two-way auction process by taking a profoundly different approach toward sorting and understanding the differences in behavior between the various timeframes:

- Day
- Short-term
- Intermediate-term
- Long-term

Seemingly knowledgeable experts routinely maintain that there is a buyer for every seller, and a seller for every buyer. This simple utterance sets up a mental block that impedes a real understanding of the auction process; actionable reality begins with understanding the relationships and behavioral expectations among the timeframes. While it is true that there is

a buyer for every seller, the buyers and sellers are not evenly matched—they are operating in different timeframes, which means their actions have different weight.

*It is imbalance between the timeframes that drives the auction process.*

The longest timeframe, for example, most commonly transacts with the day, or short-term timeframes, that are considered to be “weaker hands” and less committed to holding inventory. When this occurs, the inventory for the shorter timeframes often gets out of balance, which leads to short-covering rallies or long-liquidation breaks. This is the ebb and flow of the market’s tides.

*Markets in Profile* offers a deeper dive into the behavior of each of the separate timeframes. The book revolves around a central idea: *Information has no impact until individuals act on that information*. There are as many responses to any given piece of information as there are humans who receive it; we all find ourselves somewhere on the long continuum between leader and follower, in every endeavor.

To illustrate the importance of this concept, consider what would happen if you were to simultaneously share a perfect investment idea with five different people. One of those five might act immediately, without requiring further evidence, while each of the remaining four would act in successively later time periods, waiting to see proof that the idea was, in fact, generating profits. The Diffusion Model, made popular by Malcolm Gladwell in *The Tipping Point: How Little Things Can Make a Big Difference* (Boston: Little, Brown, 2000), would label each of these individuals, in succession, as:

- Innovators
- Early adopters
- Early majority
- Late majority
- Laggards

These five archetypes can help us better understand the way various timeframes’ interactions influence the market’s auction process. Once the laggards have transacted, for example, the market is generally prepared to begin to auction in the opposite direction. If a market has been rising, the top of the rally may be drawing in new laggard longs, as well as laggard shorts that are finally covering.

## ■ Market-Understanding and Self-Understanding

Many successful traders we've worked with over the years have expressed a common opinion: Once they've gained market understanding, at least 75 percent of their results are based upon self-understanding. But attempting to advance your self-understanding is difficult, in this context, until you have a solid grasp of market fundamentals; if you're not looking at the correct information to begin with, then market understanding may never arrive. Our goal has been to provide you with a realistic framework for understanding how markets function. The essential component of that framework is the continuous two-way auction process, captured and recorded with the Market Profile.

## Perfect Practice Makes Perfect

Reading *Markets in Profile*, the follow-up to *Mind Over Markets*, is the next step on the path to becoming an expert trader. In it, you will learn to formulate a *contextual* understanding of the market; real learning always begins with appreciating the importance of context. At the highest level of skill acquisition, time spent studying, interpreting, and trading the market is the most important factor that separates the winners and losers—like in any endeavor. But note that the efficacy of the practice is entirely dependent on the practice being correct. You can practice a bad golf swing all day, but that dimpled white ball will never obey until you practice a correct swing. All day.

*The more advanced your trading, the more nuanced your education becomes.*

## Blinded by Price

You will recall that price is simply a mechanism for advertising opportunity, with time regulating all opportunities, and volume serving to validate the success or failure of the advertised opportunities. Most traders (as well as most academics) begin by incorrectly responding to the single dimension of price. What is far more important is what lies behind the response to that price. You must continuously ask yourself the right questions. For example:

- Which timeframe(s) responded to price?
- How strong was the response, as represented by volume?

- Were the responders innovators, early adopters, early or late majority, or laggards?
- Were the innovators responding opportunistically to the actions of the late majority and laggards?

In *The Invisible Gorilla* by Christopher Chabris and Daniel Simons, the audience is invited to view a film that features two teams passing basketballs back and forth in a complicated pattern. One team is dressed in white shirts, while the other is wearing black. The audience is asked to count the passes made by the white-shirted team, while ignoring the black-shirted team. Here's the amazing part: Half-way through the film, a woman wearing a gorilla costume appears, ambles onto the court, thumps her chest, then walks off the court. The gorilla is in view for nine full seconds, but approximately half of all viewers didn't even notice the gorilla. And not only did half the audience miss the gorilla, but they couldn't believe a gorilla was really there!

Traders who are focused solely on price miss most of the salient information embedded within the market's two-way auctions. These same traders often wonder, after the market has closed, how they could have missed some of the market's most obvious opportunities. Many resolve to step back and take a more comprehensive view of the market, focusing on those elements that are far more important than price. The difficulty is that leaning on price has become such an automatic response that it is difficult to broaden your focus and execute new resolve.

But there's a course of action that will help you overcome that automatic, knee-jerk response to price—*preparation*.

## Be Prepared

How do you prepare to overcome the inexorable forces of will, memory, and desire? You start by developing a tactical plan—a game plan that lays out tactical choices, based on potential outcomes. The execution of a tactical plan of course requires that you remain very much aware of the current price action, but the goal is to be prepared to make a *tactical* choice, avoiding price blindness.

My personal preparation begins by getting as far away from daily price as possible—I begin by reviewing a monthly bar chart, like the one in Figure 7.1.



**FIGURE 7.1** S&P Indices Monthly Bar Taken December 2012

## Perspective

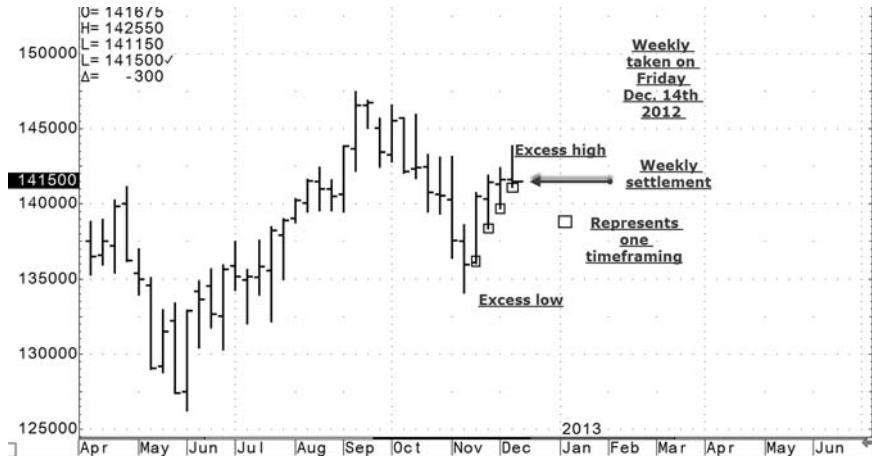
The monthly bar shows that the S&P indices are just below the multiyear high set in September 2012. Additionally, an excess low was established in November. The two most important concepts we deal with are *excess* and *balance*. Excess marks the end of one auction and the beginning of a new auction. When a market comes out of balance, it also represents the beginning of a new auction. Notice that the excess on the September high is far less than the excess on the November low. The long-term trend remains up.

Next, I review the weekly bar. If change is to occur, it will manifest itself through the weekly bar prior to becoming evident through the monthly bar. Then I review the daily bar. Similarly, the daily bar will indicate change prior to the weekly bar. Bar charts are employed to speed-read the market. Finally, I review the Profiles for greater detail.

Let's take a closer look at Figure 7.2.

The weekly bar shows an excess low followed by four weeks of one-timeframing higher (one-timeframing higher occurs when the low of the next week does not exceed [take out] the low of the preceding week).

The latest weekly settlement is close to the low for the week. Close your eyes and imagine what the weekly bar will look like if, during the early part of the next week, the prior week's low is taken out. The market will have stopped one-timeframing higher, and an excess high will be confirmed. The cessation of a one-timeframing mode represents change, and trading is all about understanding and anticipating change.



**FIGURE 7.2** S&P Weekly Bar

Now imagine what the weekly bar might look like if the one-timeframing mode remains in place (Figure 7.3). If you haven't imagined the two scenarios described above, early price movement during the following week will be more difficult to keep in perspective. Additionally, focusing on the importance of weekly one-timeframing will reduce the odds of price blindness.

The daily bar shows an excess high, similar to the excess high shown on the weekly bar. Next, focus on the downward one-timeframing mode.



**FIGURE 7.3** S&P Daily Bar

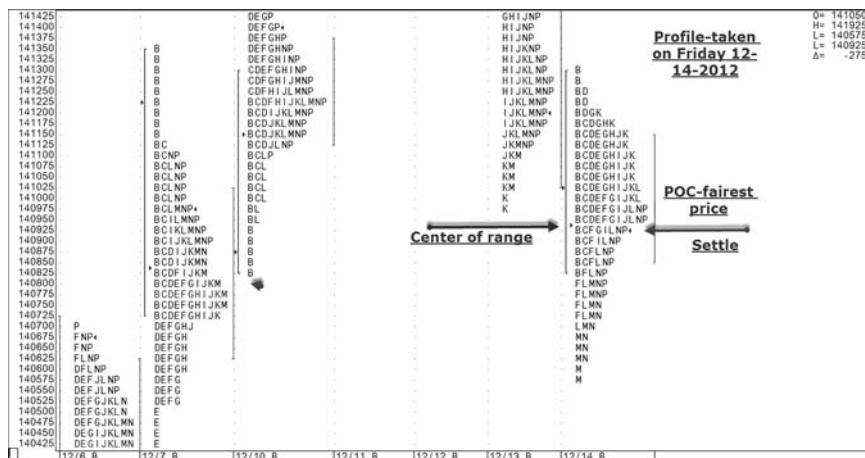
This contrasts with the upward one-timeframing mode shown under the weekly bar—change is very likely to occur early in the week.

*Trading is about dealing with change. People generally don't like change, but change is at the heart of opportunity, in any endeavor.*

The upward one-timeframing mode shown on the weekly bar versus the downward one-timeframing mode displayed on the daily bar presents an ambiguous picture. And as much as people tend to dislike change, they abhor ambiguity. But again, real trading opportunities develop from ambiguous situations (if the situation weren't ambiguous, everyone would be sharing the same position).

The daily Profile from December 14, 2012, depicts an almost perfectly balanced day; the Point Of Control (POC) is just a single tick above the center of the range (Figure 7.4). Think of the POC as the fairest price at which business is being conducted in the day timeframe. This conceptual approach makes it easier to understand what is actually occurring in the market. In this case, the question is this: Are traders selling S&P futures at prices below the fairest price and becoming short-in-the-hole? Or are they buying futures above the fairest price?

As I finish my analysis for the following week, my expectation is for a balanced Monday opening. Any meaningful change to the weekly bar will occur outside of Friday's daily balanced range. Reflect back on the weekly bar, which settled at a level where the market could continue to one-timeframe higher—this would represent the status quo—or cease one-timeframing higher, which would represent change.



**FIGURE 7.4** S&P Daily Profile

There are three likely scenarios when trading a balanced market:

1. Remain within balance.
2. Look above or below the balance and fail to show continuation—we refer to this as a *breakout failure*. When the breakout fails in one direction, it is common to see the market trade toward the opposite extreme of the identified balanced range.
3. Look above or below the balance and accelerate, which completes the breakout. These are what we refer to as *go with* opportunities.

Your mental flexibility will be exponentially increased if you are always prepared for at least these three possible scenarios. The action may be the result of an unexpected short-covering rally or long-liquidation break, an exogenous event, out-of-range earnings, an economic announcement, or larger time-frames entering the market. If you have already considered different scenarios, you will be better prepared to quickly adapt to any directional auction.

## Overnight Inventory

The final preparatory step, which is completed just prior to the pit session opening, is to evaluate overnight trading and inventory. This is why we split out our Profiles between pit session and overnight trade. You will only gain confidence in employing this analysis through your own observation; misunderstanding overnight inventory or disregarding it is another example of price blindness.

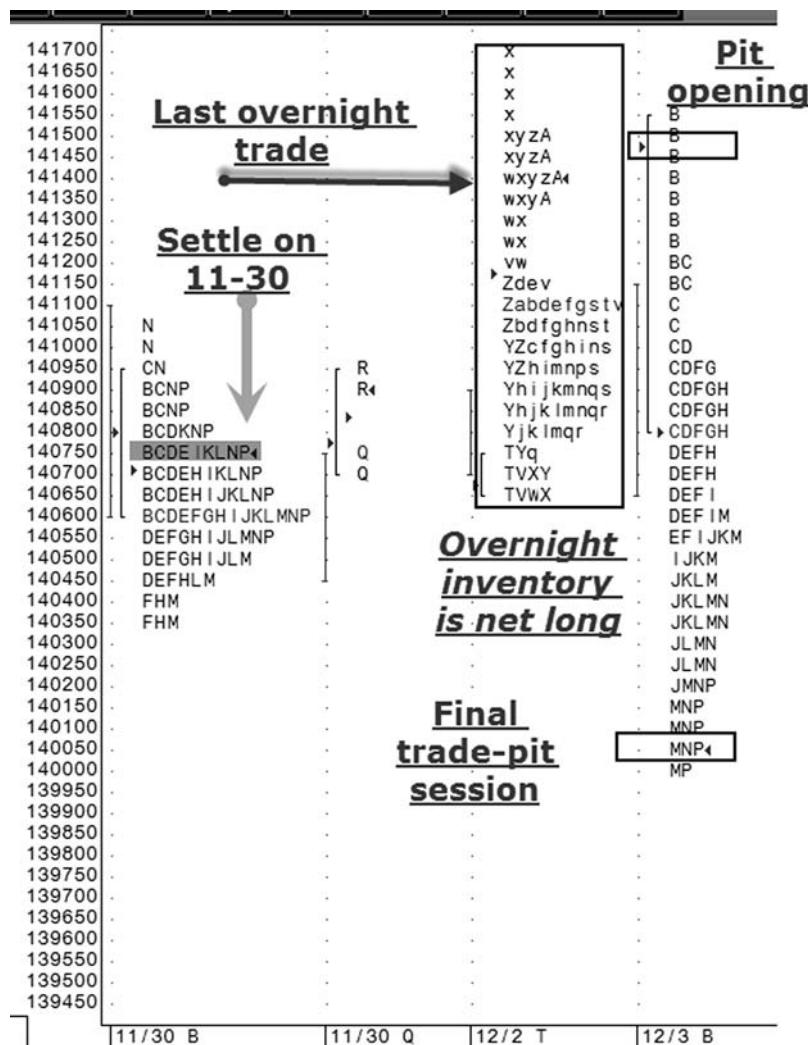
Determining if overnight inventory is long or short is simply mechanical. We measure overnight inventory from the prior pit session close or settle, and if the majority of overnight trade is above this level, we consider overnight inventory to be long. Similarly, if the majority of overnight trade occurs below the prior pit session settle, we deem overnight inventory as short. If overnight trade occurs about equally on both sides of the prior pit session settle, then we determine that overnight inventory is neutral.

The following example—selected to explain the concept—is not all that unusual.

The volume that occurs overnight is often no more than 25 percent of the volume experienced during the pit session hours. Generally, overnight trade involves shorter timeframe, weaker-hands traders. If inventory gets too long or too short, the odds are good that there will be an inventory adjustment shortly after the pit session opening. On occasion, the inventory adjustment can occur later in the session, depending on the confidence level in the current pit session.

The opening on December 3, 2012, occurs near the high of the overnight trade, and begins to sell off immediately; long-overnight inventory is immediately liquidated to bring the market into balance. Understanding the behavior of shorter timeframe traders and their tendency to fall prey to price blindness is pivotal in appreciating the influence of overnight trade.

Clearly it isn't as simple as conveyed in this example. However, your final morning analysis should assess overnight inventory, and alert you to the potential adjustment of that inventory (Figure 7.5).



**FIGURE 7.5** Overnight Inventory Example

If overnight inventory is long, for example, and the market doesn't adjust, that is an indication of a strong market—at least in the short term.

Quite often you'll see an early adjustment when there is a significant degree of long or short overnight inventory. Not being aware of a potential adjustment, or seeing the adjustment as more than it actually is, can mislead you for the entire session. This is a difficult concept for inexperienced traders to grasp. The best way to begin to internalize overnight trading is to monitor each day, always forming your own opinion—as we've said a hundred times, self-confidence and market-understanding can only be gained through your own experience. The concepts addressed here are meant to provide contextual awareness, which is the ultimate starting point for self-development.

Traders who don't prepare, or don't know how to prepare, are generally at a serious disadvantage. Being prepared includes writing down at least three possible market scenarios: What will I do if the auction moves up, down, or remains in balance? How will I assess the conviction of those moves?

## Gaps Can Be Gold

Leading up to November 23, 2012, the financial news stations interviewed a number of traders and analysts who were bullish on gold based on price—price had been rising. Let's look at the daily bar in Figure 7.6.



**FIGURE 7.6** Gold Daily Bar Taken December 14, 2012

Earlier we stated that the two most important concepts we deal with are excess and balance. Please note that a gap is a form of excess—view a gap as a series of invisible single prints. The November 23, 2012, high at 1754.7 did not fill the gap that extended up to 1761.3; long-term sellers remained in control. Once again, the importance of understanding timeframes and their attendant behaviors is vital. As short-term traders were covering shorts, short-term momentum traders began to pile on to the auction. Selling to these buy orders were long-term, opportunistic traders who were selling at the top of the trading range, which was defined by the very visual gap. As you can see from this example, there was a “seller for every buyer.” However, the different timeframe participation reveals that the process cannot be explained so simplistically.

An inside day followed the failed attempt to fill the gap. An inside day is one form of balance. Within a couple of days, our two most important references—excess and balance, *not price*—have garnered our full attention.

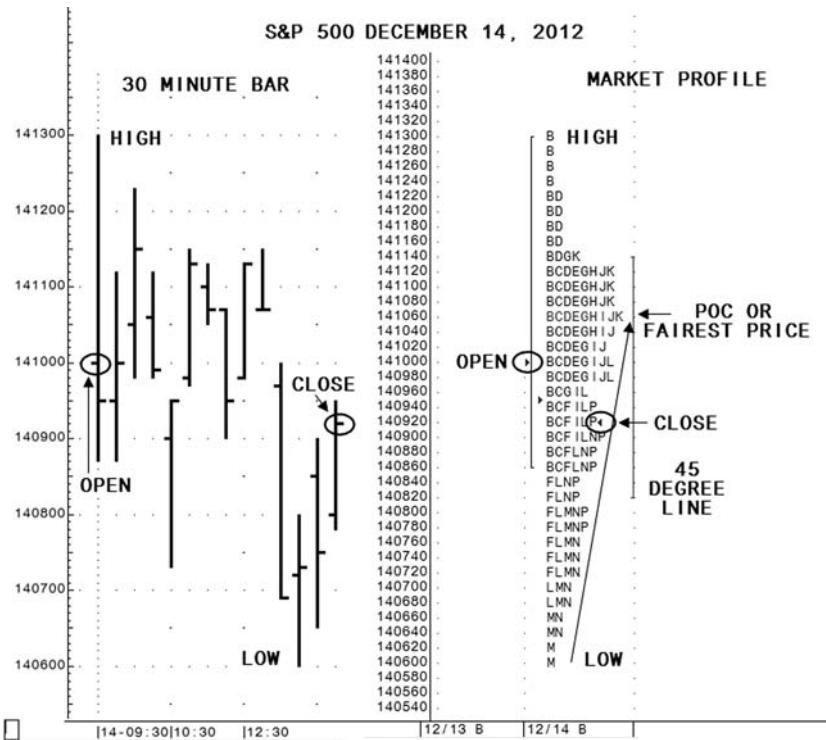
Earlier we outlined the three scenarios for preparing to trade balance; go with the downside breakout from the inside day. The above analysis was all published before the fact through a service offered at J Dalton Trading. Traders who were simply following rising prices and listening to price-based analysis were likely caught long as the market began to break. Additionally, these price-following traders were more likely to be buying breaks rather than selling rallies.

## Gaining an Edge

You constantly read and hear about the importance of traders “getting an edge.” We have already discussed the importance of preparation, which builds the initial base for obtaining an advantage over those who are less prepared. Here, we’ll discuss two additional ways for gaining an edge—learning to read and interpret market structure, and becoming an odds-based trader.

In Figure 7.7, you see December 14, 2012, represented by a one-dimensional, 30-minute bar chart on the left, and a two-dimensional Market Profile on the right. The 30-minute bar chart lacks dimension and structure; it does not graphically depict the critical fact that *all prices are not equal*.

The Market Profile shows the same open, high, low, and close, in addition to showing time and volume performance at each price. The wider a single price is, reading from right to left, the more time was spent at that price. Additionally, by applying the  $price \times time = volume$  equation, we can estimate volume at each price level.



**FIGURE 7.7** Conventional Bar Chart versus the Market Profile Graphic

While we are not technically Profile traders (we employ a range of tools and interwoven analysis), we value the Market Profile for its ability to reveal the inherent inequality in different prices—information you can leverage to trade more competitively. The multidimensional Profile gives structure to the market’s continuous two-way auction process. Learning to read and interpret that structure can provide you with a serious edge, because it helps you avoid the perils of price blindness.

The study and interpretation of structure is a lifelong endeavor, as no two days are ever the same; this is an exciting and welcome challenge for many professional traders.

## The Fairest Price Revealed

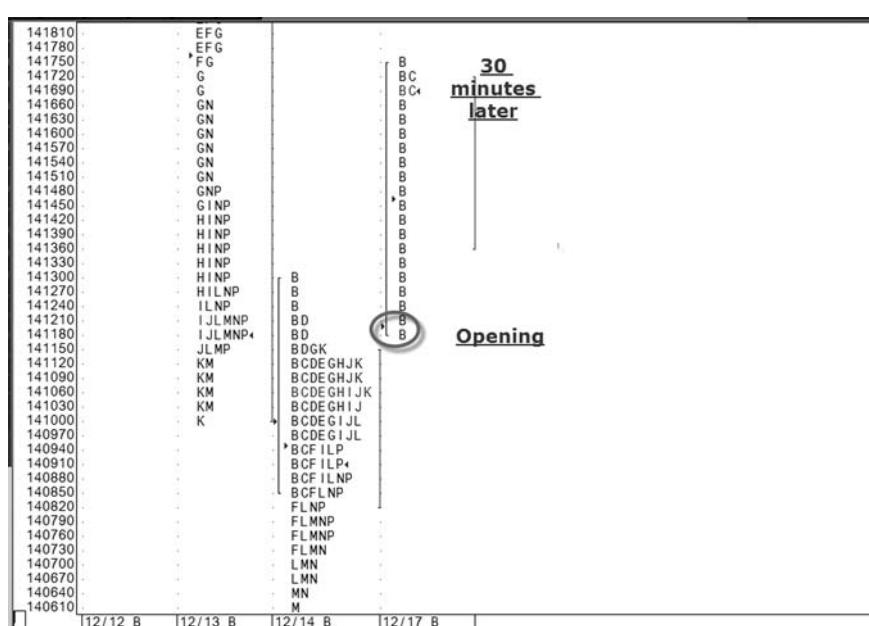
The example above depicts a structure that indicates a market that has gotten very short in the day timeframe. The POC, or fairest price at which business is being conducted, is the longest line reading from left to right. Selling that

takes place below the fairest price is an indication of traders' willingness to sell futures below the current day's fairest price; traders refer to this as selling "short-in-the-hole," or selling short at poor prices. There isn't always a short-covering rally following this pattern. However, the odds of profiting from remaining short have decreased, and the odds of a rally to adjust short-term inventory have increased.

The above example is from Friday, December 14, 2012, and was written about on Saturday, December 15th. The capture shown in Figure 7.8 was taken on Monday morning, December 17th, 33 minutes after the opening, and shows the early rally. You can never prove it was a short-covering rally. But from our experience, we're comfortable identifying it as such.

Thinking in terms of odds will help keep you from becoming too focused on price, which will help keep you out of bad trades. You may not have wanted to go home long on the December 14th close, but taking home a short was against the odds. Market structure—not price—contained the information necessary to read Friday's market.

Prior to the second edition of *Mind Over Markets*, we talked a lot about the POC, but since then this acronym has evolved into the more conceptual descriptor, *fairest price*—the fairest price at which business is being



**FIGURE 7.8** December 17th after Opening

conducted. The last example revealed how the fairest price lens was employed to identify a particular market condition and opportunity. This was just one example of the power of the Profile, and how it reveals the continuous two-way auction process in an evolving visual schema.

## Thinking Statistically

Few of us naturally think logically all the time. Most of us are ruled by cascading waves of emotion, influenced by our environment and the day's events. Statistical thinking is hard, because it requires focus and parallel processing, or thinking about several things at once. Some examples of this type of contextual thinking include simultaneously assessing current market direction, volume, and market structure—Profile shape, daily settlement, who's buying or selling, and overall trade location within the daily, weekly, and monthly bars. That's a lot to keep straight and uncluttered in your brain.

Traders are prone to overestimating how much they understand about the market by looking at price, and becoming overconfident by the illusion of certainty. As Nassim Nicholas Taleb writes in *The Black Swan* (New York: Random House, 2007), "We tend to learn the precise, not the general." Nonlinear auctions occur when the illusion of certainty is shattered. And when opinions are revealed to be illusory, human behavior can become extremely erratic; nonlinear auctions often make some traders a lot of money, while destroying the majority of those who have difficulty accepting what is actually happening in the market.

### ■ The Trader's Dilemma

In our last example, price was going lower. However, the odds of downside continuation were decreasing. The market is regulated through time—if you don't use the opportunity to adjust your position and time runs out, the financial consequences can be severe. Many traders are like new aggressive male drivers in that they know the dangers, but believe it could never happen to them. Understanding the odds adds a dimension to your thought process that not only alerts you to asymmetric opportunities, but also keeps you from becoming too focused on price and ending up on the wrong side of the trade.

The best example of "The Trader's Dilemma" was captured on film over a two-day period in early October 2011 at DePaul University in Chicago. We were presenting and filming *J Dalton Trading's Live Market Seminar*. The S&P

indices had been declining for several days on poor volume and structure (volume should always be evaluated on a relative, rather than absolute, basis). A sound structural review begins with understanding the *attempted direction* on each day. Elongated structure that develops in the attempted direction is viewed as positive for directional continuation. Truncated structure that develops in the direction of the auction is considered negative for continuation.

As the final day's session began, Jim stated that, "This may be one of those days that sees the market open weak, but close strong." The odds appeared to be building against the shorts; most traders simply continued to press the current trend, as they were addicted to price movement. We have often referred to this trader dilemma as being mesmerized by price.

During the session, traders sold each small rally, which was continually adding to the short inventory. With about an hour to go, Jim asked who was still short—a few nods indicated that some seminar participants were. Soon after, with less than an hour remaining in the New York pit session, the market rallied over 400 points.

The dilemma occurs when traders are compelled to act immediately upon the information that indicates a struggling decline (in this example). Often, this information has to be "carried forward" until there is completion to the current auction. And completion generally occurs only after the laggard longs have completed their liquidation, along with the laggard shorts, who continue to sell.

When do you cover your shorts and when do you go long? You want to cover your shorts when the odds are becoming overwhelming, even though the auction may not yet be complete. You may elect to be a little late in going long; the additional information you gain by being late may lower the risk of being wrong in a big way. Failure to exercise control and patience will likely result in you getting whipsawed.

## ■ The Most Important Omission from the First Printing in 1990

In the first printing of this book, we talked about buying and selling tails in Profile structure. Tails represent short-term excess, while a lack of a buying or selling tail represents an auction high or low that has not been completed. We describe a lack of a buying or selling tail as a *poor low*, or a *poor high*. While the concept of tails, or the lack thereof, remains true, we have since

developed a more nuanced appreciation for what causes poor lows and highs. The lack of a tail may indicate that the market has gotten too long when there is no selling tail, and too short when there is no buying tail.

This understanding—like all understanding—evolved over time. It is the *context* that leads to the high or low that signals a deeper layer of meaning. Volume will often be below the relative volume for the past several days; tempo, or pace, will be halting or slow; and the Profile will likely be more truncated. Once the inventory is adjusted, the market often returns to take out the initial high or low in order to complete the original auction—but this action doesn’t always occur on the same day (one of the most damaging trader tendencies is acting too soon).

*The biggest disappointment is that there are no absolute answers.*

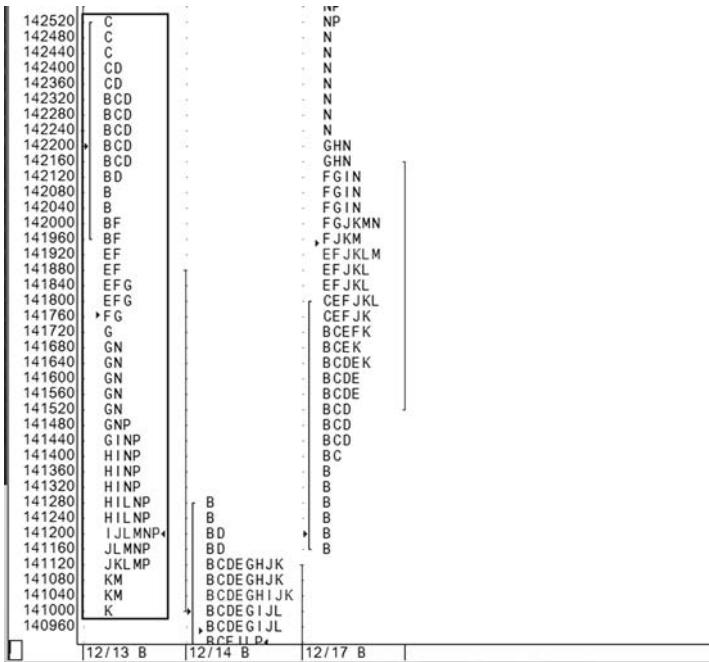
Continual practice and observation are required before this information becomes internalized, and can be appreciated and understood fully.

## Emotional Markets

In a prior example, we reviewed the situation when a market gets too short over time. The mirror formation would indicate the inverse—the potential for a market that has gotten too long. A contextual understanding will likely include this inventory imbalance building over multiple sessions, with deteriorating volume and market structure (a Profile becoming less elongated). In the following example we will see a Profile that quickly gets too elongated, usually within a single session (Figure 7.9).

On December 13, 2012, the S&P indices broke hard and fast. As the market began to break, multiple short-term timeframe traders continued to pile onto the short side of the market—there was little thinking going on. Traders have often heard us say, “Traders do what works until it doesn’t work anymore.” Price-based traders continued to pressure the market on the following day; the trade to sell every rally was still working. However, inventory had become extremely short.

As we discussed earlier in the book, an elongated Market Profile is a sign of auction continuation. When the Profile is *too* elongated, however, the result (as shown above) is often just the opposite. This kind of information can’t be internalized or even fully understood by reading a book—the process of internalization begins with *knowing what to look for*. In the above example, a day and a half prior to the recovery rally it was possible to begin to visualize the recovery. And consider that even while the market was auctioning lower, the potential for a short-covering rally was increasing.



**FIGURE 7.9** S&P 500

## A Landscape View of the Market

It is highly unlikely that simple systems will win over any reasonable length of time. That's why serious professional traders begin with a landscape view of the markets—landscape referring to a bank of monitors lit up to display potentially interconnected markets. While a trader may be trading a single market, he or she should be acutely aware that other markets could impact that single market. Examples include:

1. In some market environments, rising bond prices might influence stocks negatively. In other situations, higher bonds prices might be seen as positive for equities.
2. Depending upon the circumstance, a rising Dollar has the potential to be positive or negative for stocks.
3. Crude oil is influenced by its own fundamentals, the Dollar, and the economy.

With accumulated experience, you learn to keep a constant eye on multiple markets, paying particular attention to sudden shifts in sentiment.

## Personal Evolution

*There is nothing quite so compelling as real personal anecdote. As the lead author of this book, and a full-time trader, I (Jim Dalton) would like to share a summary of my own experience with the Market Profile. Hopefully this passage will provide some insight and inspiration as you continue on your quest to becoming an expert trader.*

From the beginning, I was skeptical about analysis that treated all prices as equal. After years in the markets, with a membership on the Chicago Board of Trade (CBOT) and a founding membership on the Chicago Board Options Exchange (CBOE), I came to the conclusion that fundamental analysis is generally too long term, often appearing out of touch with the market. Auction market theory, on the other hand, seemed to offer the most objective means of allocating the constant flow of bids and offers.

*I embraced the idea that auctions are really mechanisms for price discovery.*

For example, if an auctioneer couldn't get buyers to raise their bids as he was attempting to get the auction underway, he would lower the bid. Once the auction got going, it usually took one of two courses. If the auction occurred as expected, rising prices would indicate that some bidders had their orders filled, while others dropped out as prices increased. Eventually, the auction would end as the last bidder bid. Volume decreased as prices rose—this was the expected course, as higher prices were cutting off buyers. The *unexpected* auction was far more complex and exciting: As prices auctioned higher, volume increased with new bidders continually entering the market. These kinds of auctions often end with an upward flurry as the laggards arrive (once I was introduced to the Gladwell's Diffusion Model, I more fully appreciated the auction process in all its nuances).

It was a much smaller step to grasp the concept of a continuous two-way auction process—auctioning from high to low, and low to high—than to consider the influence of the different participants on the auction process. The Market Profile served as an innovative way to organize these continual two-way auctions in such a way that specific participant behavior could sometimes be visualized. I'm often asked if the Profile works. Or, more commonly, if it still works. The better question is this: “Is the Market Profile a valid scientific way to organize data?”

The answer to that question is a definitive yes. The Profile is constructed using a constant, *time*, on the horizontal axis, and a variable, *price*, on the vertical axis to form a distribution. Scientists have employed this method to study and observe data for generations. Personally, I would much rather

study organized data than unorganized data; the Profile is simply a valuable tool for organizing objective information.

To be clear, I'm a trader, not a Profile trader. However, the Profile has been invaluable to my analysis, and it has enabled my personal evolution through decades of reading and interpreting data in its ever-changing visualizations. The previous discussion around tails is a good example of how the Profile has enabled deeper insight into the patterns of human behavior that often emerge.

Over time, our knowledge deepens through practice—and not just practice, but correct practice (remember that golf swing metaphor).

## ■ Hierarchy of Information

When we begin to learn any skill we start with basic definitions. As time goes on, we begin to internalize these basics. Then as we become competent, we have internalized enough information to, for example, play the piano well enough that the piece can be recognized by a patient listener. We are not alone at this stage—countless would-be artists can play that same tune well enough to be recognizable. In short, our skill level has no meaningful revenue potential at this stage.

Reflect on how easy it has become for most of us to drive ourselves to the store, yet we're still nowhere close to becoming a racecar driver—or even a New York taxi driver. If we want to advance professionally once the basics have been acquired, we must continue to practice, learning one nuance at a time. Setbacks of course occur when we have acquired so many nuances that we have to begin to decide which are most important, as well as when a particular nuance becomes irrelevant under changing conditions. Think of this as *ruling reason*. For example, you may have six data points that suggest a positive bias for price direction, but the one observation that points to a negative bias outweighs those six. It is the ruling reason that drives your decision.

As you advance toward proficient and expert, the information that is most salient within the current context becomes easier to discern. A professional baseball coach doesn't routinely have his players attempt to steal home, but under the right circumstances the risk/reward may be attractive enough to attempt such a bold gambit. Most successful professionals have identified multiple mentors, and constantly look to coaches to keep them on track. But finding a coach that is truly knowledgeable (and affordable) is prohibitive for most people, traders included.

Below, we have attempted to list many of the nuances that you must deal with every day. And while listing and describing them is far easier than internalizing them, we believe that once you have these nuances in mind, you will be in a better position to constantly observe them, honing your ability to effectively employ them as part of your trading strategy. An important part of this internalization process includes recognizing the changing hierarchy of this subtle information from day to day.

## ■ **Timeframe Control—Who Is Dominating the Current Session?**

It will be more practical, in the earlier stages of your career, if you think in terms of day timeframe, and then “all the others.” But as you become more experienced, you will begin to see four timeframes: day, short-term, intermediate-term, and long-term.

On days when the day timeframe is in control, the trading is likely to be restrained with lower volume, less range extension, and guided by very mechanical references. Among these references:

1. The opening, which may be a day-timeframe guide for the entire day.
2. Halfback, which is simply the center of the range, and provides a dynamic reference point that changes as the daily range extends on the high or low.
3. Unchanged, or “unched” in trader lingo, which is simply the settle of the previous day.

Additionally, the high and low from overnight trading—as well as the previous day, week, and month—will be very much in play. Weekly highs and lows are only relevant to the day trader if they are easily within range. When the day timeframe is in control, you are far more likely to experience nonexcess highs and lows, which simply indicate a lack of buying or selling tails. We also refer to these as poor or unsecured lows and highs. During these days, you’re much more likely to see day timeframe inventory becoming too short or too long, with constant counter auctions to correct the day timeframe inventory imbalance.

When the other timeframe is in control, the references listed above will be far less significant; in fact, long-term traders may not even acknowledge some of them as references. Day-timeframe traders attempting to apply these references (or anchors) when the other timeframe is in control are likely to get run over. How many times have we heard day- and short-term

traders say that they gave back three weeks of profitable trading in one day? Many times we've also heard it said, "If it weren't for that one day, my month would have been profitable." It is critical to day- and short-term traders to respect the dominance of the longer timeframes, who always trump the actions of the shorter timeframes.

The other timeframe is more likely to recognize a multiple day trading range. Interchangeable terms are balance areas or trading brackets, highs and lows, weekly and monthly extremes, unfilled gaps, and common knowledge moving averages. More alert and experienced day-timeframe traders who are able to quickly recognize who's in control pile on to the auctions driven by the longer timeframe. These adaptable day traders shift their strategy and tactics from more mundane rotational trading to momentum trading. The less experienced day trader is fading or going against the action of the longer timeframes. The addiction to price—the temptation to sell at a price higher than they could previously, or buy at a price lower than they could previously—cannot be resisted . . . they step in front of the proverbial train.

## ■ Markets Are Visual

318

MIND OVER MARKETS

A standard bar chart is the best way to identify visual references, such as trading range highs and lows, as well as weekly and monthly extremes. Most people have a tendency to view the 24-hour electronic bar chart rather than view a bar chart that includes the pit sessions only. As of this writing, the New York or Chicago pit sessions are still the center of trading for most U.S. listed equities and world commodities. For this reason, we view a bar chart for the U.S. pit session, and may separately view 24-hour bar charts, particularly for the currencies. We do this so that we can view gaps between the U.S. day sessions. We define a gap as an opening that occurs outside of the previous day's high or low (we don't measure gaps from the close of the prior day). We also view U.S. day session bar charts for daily, weekly, and monthly trading ranges and excess highs and lows. This affords us an opportunity to see visual areas on the bar charts that may be destinations for current directional auctions, hereafter referred to as "destination trades."

We are often asked why we use bar charts, rather than composite Profiles, for long-term charts. The reason is that long-term, composite Profiles can contain *too much* information, and hide important structural information such as the gaps and trading range highs and lows we just

discussed. Additionally, significant references—points such as daily, weekly, and monthly highs and lows—may blend into the composite, where they are lost.

## Destination Trades

Destination trades are far easier to grasp when you appreciate what timeframe is dominating, as well as the visual nature of the markets' prominent reference points. Once a directional auction gets underway, the auction tends to travel to a very visual reference. For a day timeframe trade, for example, the reference may be the previous day's high or low, a three-day high or low, or to the top or bottom of a gap.

The destination for a long-term trade may be from a five-month bracket high or low to the opposite extreme of that bracket; it may take days, weeks, or months to reach the destination. Of course destinations don't have to be reached, but they always serve as benchmarks to chart market progress. We often say, "Put the trade on and monitor for continuation." Understanding possible destinations will help you maintain a better perspective of the multiple auctions, and help you better gauge your position's performance. For example, it is not uncommon to have a long-term auction to the upside with an intermediate-term corrective auction to the downside, as well as a day timeframe trend day to the upside. Employing destination areas from the bar charts will help you sort out this potentially conflicting data, and keep this information out of the abstract.

## The Opening

The Market Profile is a time-sensitive, evolving database that records the market's continuous two-way auction process, the study of which is termed *Auction Market Theory*. The opening is the first recorded data point each day; we want to observe if the market opens within balance (within the previous day's range) or out of balance (outside of the previous day's range). Of course, in or out of balance is a matter of degree. If we opened just four ticks below yesterday's high, for example, we would still be in balance. However, the odds are higher that the market will trade out of balance to the upside, or failing that, begin to trade toward the previous day's low. The more out of balance we are to begin the day, the greater the opportunities; the more out of balance we are, the greater the odds that the other timeframe is responsible. Remaining within balance limits traders

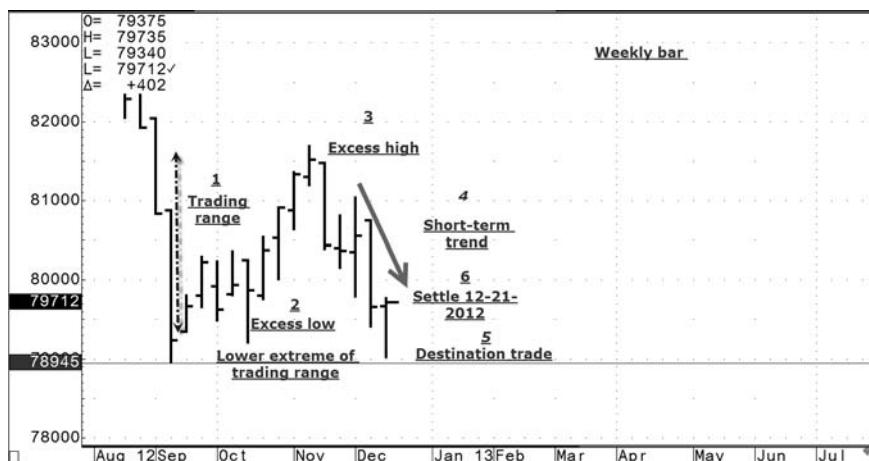
to much smaller opportunities. When in balance, the odds are also much greater that trading is being dominated by the day timeframe.

## Trends

We have simplified the timeframes down to two. For this discussion, we will determine the direction of the long- and short-term trend. The definition of a trend is entirely dependent upon your own timeframe. At a minimum, we generally want to trade with the direction of the short-term trend. And if you are trading against the trend, you want good trade location, and you want your trade to work quickly. Trade location is the best risk control we have available. Let's review an example (Figure 7.10).

Remember, these concepts are applicable to all timeframes—from 30-minute bars to daily, weekly, monthly bars, and so on.

1. The current trading range evolved from the nonlinear break in early September 2012. You will often find that these types of breaks (or rallies) define the extremes of the brackets that develop thereafter. This initial range is validated with the Excess Low 2 to the Excess High 3.
2. If you look to the left of the Excess Low 2 you will see four weekly lows; the excess low occurred when price explored below the prior four weekly lows and found aggressive opportunistic buyers responding to the lower prices. We refer to this attempt to break below the trading range's lower extreme and the rejection that followed as a downside breakout



**FIGURE 7.10** U.S. Dollar Index as of December 21, 2012

- failure. This is often a strong signal that change has occurred, and provides attractive trade location. Remember: *Trading is about change*, and without change there are no meaningful opportunities. Excess marks the moment of change.
3. The short-term auction to the upside ended with the excess high. Excess and balance are the two most powerful concepts we employ. The rally began with a look below the four-week balance that led to the Excess Low 2 and signaled the start of a new upward auction. The weekly one-timeframed higher until Excess High 3 formed. One-timeframing occurs when, in the case of a rising market, the next weekly low does not take out (trade below) the low of the prior week. Of course, it is a mirror image for a declining market when the next weekly high does not take out the prior week's high. One-timeframing occurs in all timeframes. You want to respect the direction of the one-timeframing auction, and in most instances trade with it.
  4. Following Excess High 3, the Short-Term Trend 4 rotated back down. This excess marked the end of one auction and the beginning of a new auction to the downside.
  5. The destination trade was to the bottom of the trading range; the prior Excess Low is seen as the potential destination. The identification of the potential destination was based upon experience and observation. As we approach the destination, the risk for the shorts has increased and the odds of remaining profitable in the short position have deteriorated. Momentum traders often get caught at these levels as momentum is often the highest at excess lows and highs. Remember, excess is mostly the result of momentum traders taking the auction to extremes. Excess is identified after the fact—after the innovator has stepped in to opportunistically fade the laggard momentum traders.
  6. The weekly settle following the completion to the destination.

Reflect on the risk/reward at different levels along the continuum from high to low. This same analysis is relevant to all timeframe trades. For day traders, we suggest using the daily Market Profile, and placing a green pin on the Profile for each buy, and a red pin for each sell. After the day is over, review your overall trade location—if a majority of the pins are within the fattest portion of the Profile, then you are trading with the majority; you are not getting an edge and are unlikely to be profitable. If too many of your green pins are near the higher end of the Profile, and the red pins are near the lower portion, then your trading is of the laggard category, and you are likely to get whipsawed.

## Daily Perspective

Every day, we seek a balanced perspective by seeking to determine the nature of any existing trends, which timeframe is dominating, whether the opening is in or out of balance, and so on, as well as the opportunity that each of these situations reveals—trade location, potential visual destinations, and evolving structural cues.

## Cognitive Dissonance

All humans feel an acute discomfort when we find ourselves holding two opposing thoughts. This is an extremely common emotion shared by traders. But cognitive dissonance can actually be positive for those traders who are willing to think through the source of that dissonance. For example, it is powerful to recognize that a market is rising, but the higher it goes without confirming structure and volume, the better the downside opportunity to follow. The trend may be your friend, but it is equally important to recognize when that trend is ending. Being prepared for change affords us the best trade location and opportunity. Let's see this process in action (Figure 7.11).

As we approach the end of the Second Edition of *Mind Over Markets*, our examples are getting more complex. Figure 7.11 serves to establish the background for this discussion.



**FIGURE 7.11** Treasury Bonds

Hopefully, by this point you're feeling like you did the last time you visited your ophthalmologist—as you sat behind the refractor staring at rows of fuzzy letters, you noticed how they came in and out of focus. Hopefully this is occurring now as the layers of information that have been presented are beginning to form a recognizable whole.

1. Markets continually auction from high to low, and low to high. This example begins with an excess high. An excess high marks the completion of one auction and the beginning of a new auction. It is always helpful to ask yourself if the current auction has been completed. Excess is one way that an auction can end, but it is not uncommon for an auction to be temporarily suspended as a result of inventory getting too long or too short. This leads to short-term counter-auctions. We often say, “The market has to take care of current business first.” Regardless of whether the long-term trend is up or down, these moves often create short-term inventory imbalances that need to be adjusted.
2. Following an excess high, the market gaps lower. The message behind a gap is that a total reorientation in thinking has taken place, along with the market’s perception of value. A gap is another form of excess. The combination of an excess high followed by a gap deserves respect.
3. The possibility of a suspended intermediate-term auction presents itself as a short-term counter-auction begins.<sup>1</sup> There is never any certainty until after the fact. However, as you become more skilled at reading and interpreting the market’s two-way auction process, you can better assess the odds that it was a suspension.
4. A clear excess low is revealed. Remember, excess and balance are the two most powerful trading concepts we deal with.
5. Following the excess low, the market begins to one-timeframe higher. One-timeframing is an important piece of auction information; it is generally financially dangerous to trade counter to one-timeframing.
6. An excess high forms.
7. An inside day—a form of balance—develops following the excess high. The general trading rule is to go with any breakout from balance, which marks the start of a new auction. Once again, change has occurred.

---

<sup>1</sup> Notice also that these two similar weekly lows lack excess—they are considered a poor or unsecured low, albeit on the daily bar chart. We will come back to this later in the discussion.

Take a moment to reflect back on the suspended auction discussed under item 3. The poor low that formed suggested that it would be revisited or repaired at some time in the future, as there was no excess—in other words, no aggressive buying that led to an excess low.

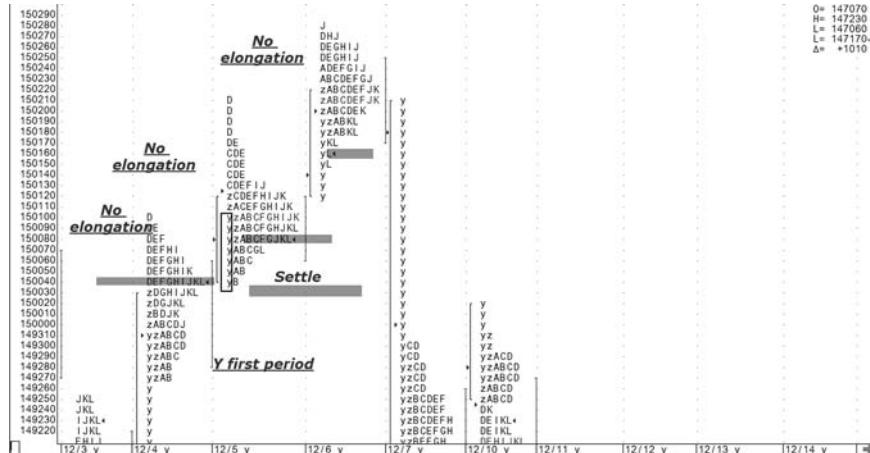
Recording and carrying this information forward is important for reading the subtleties of the continuous two-way auction process. Many traders complain that this type of information is simply too ambiguous, yet the market's best opportunities are often hidden in the subtleties of market-generated information.

Having reviewed the overall market and a series of auctions, it's time to transition to the real discussion.

The previous example shown in Figure 7.12 included a suspended downward auction followed by a market that was finding ways to work itself higher. We suspect that there were two underlying causes for the auction going higher:

1. The market had gotten extremely short following the excess high seen in our first daily bar chart.
2. The Federal Reserve had reaffirmed its decision to support the bond market by keeping rates low.

In Figure 7.12, you notice that each day's low was established in the initial pit session 30-minute Y period, which allows us to easily determine that the attempted direction was up. The basic question that we ask each day



**FIGURE 7.12** Excess High Marked on the Previous Daily Bar Chart

is: "What was the market trying to do, and how effective was the effort?" A solid attempt to trade higher would begin with value beginning to develop higher, which we see revealed in the Profiles. Additionally, the Profile structure would be much more elongated, with most prices attracting no more than five or six TPO prints. In the above example, some prices attracted as many as 10 letters—a lot of time was spent trading at these prices. This is not a science, but rather the art of reading and interpreting market structure. Some markets are open for shorter periods, while others, like bonds and stocks, are open for longer periods. The amount of time spent trading at a particular level, relative to the pit session hours, affects our analysis of this data.

On a solid day, the market is more likely to settle near the higher end of the range. In the above example, the settle of each of the last two days is well off of the highs. At the time, I found myself holding two contrasting opinions: 1) The larger auction was down and had been temporarily suspended, and 2) the short-covering and short-term momentum buying was occurring, which was related to the Federal Reserve's FOMC release. We always want to trade value, and value was developing higher each day; no matter what my opinion of the long-term, you don't want to fade or go against value.

This is a good opportunity to reflect back on systems that trade price. In this instance, price was trading higher each day. Yet, while value was also trading higher, the Market Profiles were revealing structural weakness that demonstrated slowing momentum. The odds of upside continuation were weakening, while the odds of a market reversal were increasing. The break that began on Friday, December 7, 2012, took the market down approximately \$5,000 per contract over a period of six days before a new excess low emerged. The suspended auction that we discussed earlier was revisited and repaired, meaning that the poor, or in this case suspended auction, no longer existed.

## Imagination

The career of a professional trader is largely dependent upon his or her imagination—if you can't imagine what might occur, it will be difficult for you to recognize market opportunities as they arise. You will end up taking small profits and fading larger opportunities that lead to net losses, when a chance for larger profit was right in front of you. We foresaw such a scenario in real time when we discussed a similar market situation while recording our Live Markets Seminar in October 2011.

In the above example, a substantial opportunity was identified through positive cognitive dissonance; the dissonance was observing one rising auction and sensing that a reversal was probable. The deteriorating auction, when combined with carrying forward information conveyed by the suspended auction, allowed us to imagine and capitalize on a large opportunity to the downside.

## False Certainty

Traders are prone to overestimate how much they understand about the markets by looking at price, which often causes them to become overconfident. Nonlinear auctions occur, as we have often stated, when the illusion of certainty is shattered. I'm writing this on Sunday morning, December 23, 2012; during the electronic trade on Thursday evening, December 20, such an illusion was shattered, which briefly took the S&P indices limit down. Let's examine the market leading up to this break.

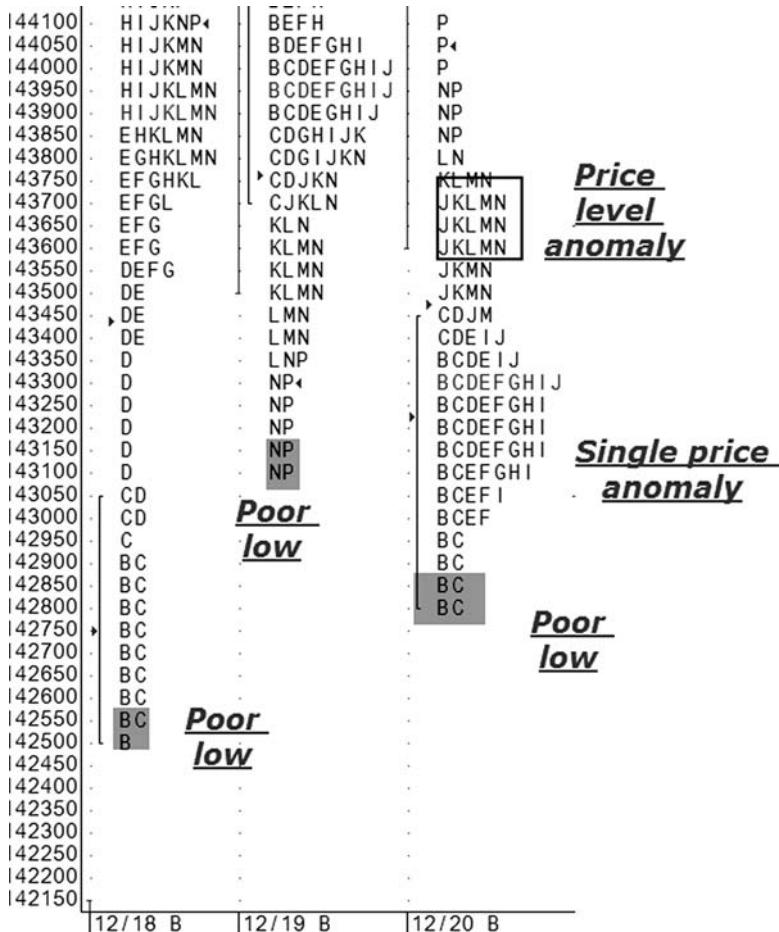
The final line in our daily *S&P Pre-Market Update*, published just prior to the break, read: "I continue to be concerned regarding underlying structure. Thursday's anomalies contribute to my concern." This was an odds-based comment—I certainly didn't foresee a limit down move in just a few hours. However, the odds of holding long inventory appeared to be extraordinarily high. Much of this conclusion was based upon structural analysis, which was similar to the analysis discussed in the last bond example. Two additional contributing observations are discussed below.

## Anomalies

An anomaly, as described under the glossary on our website, is a single price or price level that lacks symmetry—an unusual structural arrangement in the Market Profile. An anomaly represents structural weakness. Learning to spot anomalies is the first step toward understanding the pivotal information that anomalies provide. See the Market Profile from Thursday, December 20, 2012, in Figure 7.13.

The Profile shows a single price anomaly, as well as a price-level anomaly. In addition, there was a series of poor lows—another indication of structural weakness.

*Markets in Profile*, published in 2007, discusses timeframes extensively. When longer timeframes are active in the market, they tend to be more



**FIGURE 7.13** Market Profile, Thursday, December 20, 2012

aggressive on the highs and lows. Their interest will be more evident through single-print buying and selling tails. When tails are nonexistent, the higher and lower structural portions of the Profile lack excess. In the above S&P example, the lack of buying tails for three successive days is an indication that the market is being dominated by short-term, weaker-hands traders. These are the traders that impulsively liquidate and reverse their positions at the first sign of a problem. A single poor low represents one data point, which I give limited attention. But multiple poor lows represent exponential risk to those holding long positions. The graphic in Figure 7.14 shows that risk as the market traded limit down.

144200	P	R	T
144100	P	QR	TVW
144000	NP	Q	TVWX
143900	LNP		WX
143800	JKLMN		X
143700	JKLMN		XY
143600	JKMN		XY
143500	CDE I JM		Y
143400	BCDEF GH I J		Y
143300	BCDEF GH I		Y
143200	BCDEF GH I		Y
143100	BCDEF GH I		Y
143000	BCEF I		Y
142900	BC		Y
142800	BC		Y
142700			Y
142600			Y
142500			Y
142400			Ymn
142300			YZ lmnwx
142200			YZak lmnpt vwxxy
142100			YZak lmnpt vwxxyz
142000			YZabi jkmnpqrstvwyz
141900			YZabdef ijkqrstyza
141800			YZabcdef ghirsyzA
141700			YZabcdef ghirsza
141600			Yb cesA
141500			Yb
141400			Y
141300			Y
141200			Y
141100			Y
141000			Y
140900			Y
140800			Y
140700			Y
140600			Y
140500			Y
140400			Y
140300			Y
	12/20 B	12/20 Q	12/20 T

**Thursday**  
**overnight**

**Thursday**  
**12-20-**  
**2012**

**FIGURE 7.14** Exponential Risk as Market Traded Limit Down

## Market Logic

It is not unusual for market logic to supersede all other analysis and understanding. During the period leading up to Thursday's overnight limit down break, short-term traders—who were afraid that they would miss the anticipated rally following a favorable outcome between the president and Congress to keep the country from falling off of fiscal cliff—couldn't buy enough. As often happens, they were misguided in their actions and paid a severe price. Additionally, many reversed their positions only to experience another whipsaw.

Other examples of market logic include what didn't happen; almost all traders can accurately report what actually occurred during a trading session, but professional traders reflect on what *didn't* happen. What could have happened and didn't is often extremely valuable information. For example, when a negative Monthly Jobs Report fails to lead to a declining market, the market will likely rally—those left staring at the report are unable to trade with the market, and experience negative cognitive dissonance.

As we've often stated, the Market Profile is a valuable analytic tool for recording and interpreting the market, but it should not be employed in a vacuum.

## ■ We Are All Day Traders

No matter what timeframe trader you are, we are all day traders on the day we enter and exit a position. And *how* we enter our initial trade, no matter our timeframe, will ultimately influence our subsequent actions. Understanding that influence—both positive and negative—is vital to success. Positive psychology is an important element for successful trading; knowing how your emotions influence your behavior is just as important as understanding the fundamental market dynamics discussed in this book. For example, most traders are far too eager to get involved as the market opens, for fear of missing an opportunity. When such a feeling is controlling you, the odds are good that you'll make an impulsive trade as a result. It is common knowledge that impulsive trades seldom work out.

When markets open within balance relative to the previous day's range, the opportunities are usually limited, and it's probably best to wait for better trade location. In this situation, the additional information gathered while waiting will give you a more complete, coherent picture of who is driving market behavior. View the opening on a continuum relative to the previous day's range—the closer to the center of the range, the lower the odds that you need to trade early; the closer you are to the previous day's extremes, the more likely that you can benefit from early entry. The more out of balance the market is relative to the center of the range, the greater the opportunities. Attractive opportunities usually develop around gap openings, as gaps reveal the ultimate out-of-balance experience. The bigger the gap, the smaller the odds that the gap will be filled during the current trading day. This may feel counterintuitive, but the bigger the gap the more likely

that longer timeframe traders are caught the wrong way, and will have to trade in the direction of the gap to adjust their existing inventory.

*Free from distractions, we continue until we reach our goal . . .*

While it may seem strange to quote a swami in a book on trading, we can think of no better goal than the one commonly described by wise folks throughout the ages: *We must free ourselves from attachment to desired outcomes if we are to see the world as it really is.* In reading this book, you have made progress on your path to becoming a successful trader. Over time, you will transform these insights into instincts in the kiln of experience. And those instincts will help you rise above the distracting maelstrom of conflicting information with a broader, more holistic market perspective. You will begin to understand the big picture, while also participating in the daily minutia—that is the hallmark of a professional trader.

Developing this level of market understanding is not an easy process. Most people find it impossible to even parse ambiguous, conflicting information, let alone transcend it. But armed with awareness, you have the ability to separate yourself from your competitors, most of whom are lost in the shallows of price and opinion. You have the opportunity to forge your own path toward expert. Good luck on your journey!

# Value-Area Calculation

The value area represents the area of greatest trade facilitation and acceptance of value in the day timeframe and is signified by the price region where 70 percent of the day's volume occurred. It can be calculated using either actual price/volume numbers or approximated by substituting TPOs when volume is not available.

331

## ■ Volume Value-Area Calculation

Figure A1.1 illustrates how to calculate the volume value area. First, identify the price at which the greatest volume occurred. Then, sum the volumes occurring at the two prices directly above the high-volume price and compare it to the total volume of the two prices below the high-volume price. The dual price total with the highest volume becomes part of the value area. This process continues until 70 percent of the volume is reached.

In Figure A1.1, the greatest volume (22,168) occurred at 96–12. The total volume for the two prices above 96–12 is 34,491 (Sum of Dual Prices) and the two price total below is 43,773. Since the lower total is greater, it is added to the high-volume price as part of the value area. The same process is repeated, comparing the next two lower prices (96–15 and 96–16), to 96–10 and 96–11 again. The lower total is higher and is, therefore, the next addition to the developing value area. This process is repeated until the volume reaches 70 percent of the day's total volume.

<i>Price</i>	<i>Volume</i>	<i>Sum of Dual Prices</i>	<i>Selection Order</i>
96-02	3827		
96-03	5341		
96-04	6107		
96-05	7134		
96-06	8706	21073	7
96-07	12367		
96-08	13971	30871	6
96-09	16900		
96-10	15700	34491	4
96-11	18791		
96-12*	22168		1
96-13	21973	43773	2
96-14	21800		
96-15	19626	37227	3
96-16	17601		
96-17	16496	31417	5
96-18	14921		
96-19	10819	19906	8
96-20	9087		
96-21	6056		
96-22	5071		
96-23	4311		

\* High-Volume Price

Total Volume: 327,000      70%: = 228,900

Value Area: 96-06 to 96-20

$$240,926 = 73.6\%$$

**FIGURE A1.1** Volume Value-Area Calculation

## ■ TPO Value-Area Calculation

The calculation of the TPO value area follows the same general steps as the volume value area. First, count the total number of TPOs, including the single prints. Take 70 percent of this number to establish how many TPOs approximate 70 percent of the day's volume. Then, examine the two prices above and below the longest line on the Profile, adding the two with a

greater number of TPOs to the longest line. Continue this process until 70 percent of the TPOs are included.

Price	Volume	TPOs	Selection Order
100–04	A		
100–03	A		
100–02	AL		
100–01	AL		
100–00	AL		
99–31	AL		
99–30	AL		
99–29	AL		
99–28	ACGKL	10	4
99–27	ABCGK		
99–26	ABCGHK	16	2
99–25	ABCDEFGHIK		
99–24*	ABCDEFGHIJK	11	1
99–23	BCDEFHIJK	16	3
99–22	BCDEHIJ		
99–21	BCDJ	4	5†
99–20	BCD		
99–19	BC		
99–18	B		
99–17	B		

\* High TPO Price

† Only the closest price is used since it fulfilled the 70 percent or better volume requirement.

$$\text{Total TPOs} = 78 \quad 70\% = 54.6 \text{ or } 55$$

Value area is 99–21 to 99–28 (73%)

For comparison, the volume value area was 99–20 to 99–30.



# TPO versus Volume Profiles

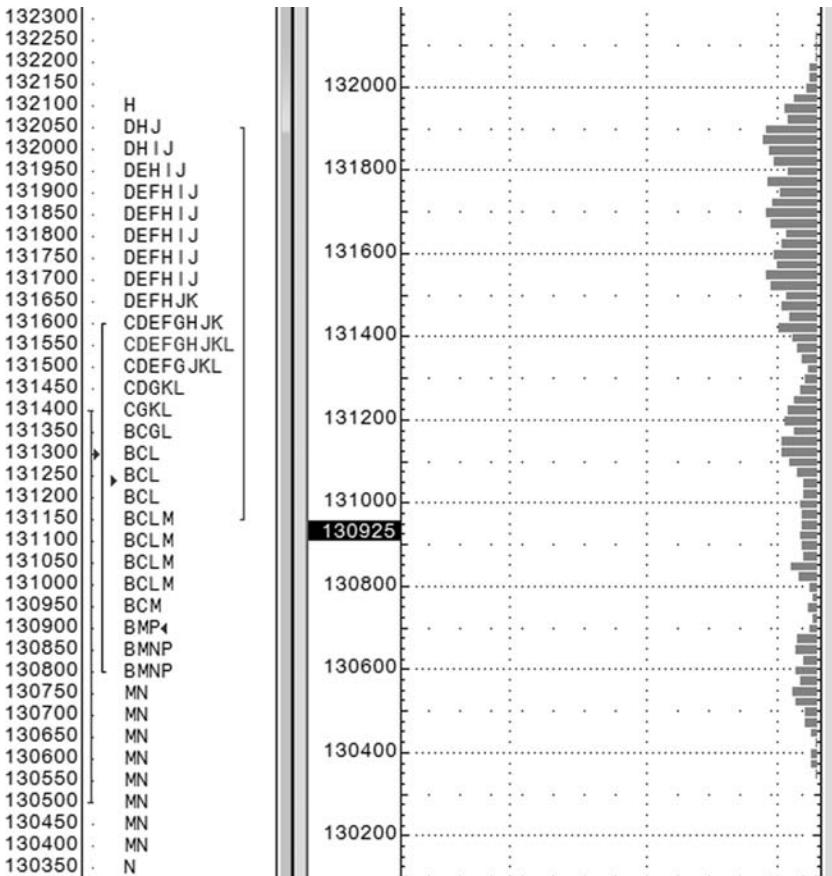
Humans have a fascination with numbers. We crave exactness and abhor ambiguity; if we can't comfortably comprehend a piece of information, we often discard it in favor of contrary indicators that match our preconceived notions. Yet it is precisely in moments of uncertainty that the experienced trader identifies opportunity, like the savvy angler who looks for a subtle ripple in the slow water below a snag.

Consider volume, which can serve to validate market opportunities. You must constantly ask yourself, "Is volume validating the current market direction?" Volume profiles (not to be confused with Market Profiles) show you exactly how much volume—including relative volume—occurred at each price, as well as the exact number of contracts for the entire session. See the example in Figure A2.1.

To reiterate, the three main components of the auction process are:

1. Price—advertises all opportunities.
2. Time—regulates all opportunities.
3. Volume—measures the success or failure of advertised opportunities.

It's important to note that what the volume profile does *not* show is far more important to the way I trade than what it actually displays. I believe it is the more ambiguous combination of time and volume—rather than volume alone—that provides the most timely, relevant insight (when considered within the larger market context). Volume is important, but so is time, because a price that is not accepted over time is, in fact, rejected.



**FIGURE A2.1** Volume Example

All traders know the psychological pressure of time (tick, tick, tick). Being in a trade that begins to stall can create serious psychological doubt. And the longer a trade fails to advance in our favor, the longer we have to sit there imagining what might be going wrong. For example, the late liquidation or short-covering rally in the pit session may be the result of time running out for day traders, rather than a lack of volume. The most likely scenario is that these situations are caused by a combination of both factors.

## ■ Single Price Level Distortions

It is not uncommon to witness much higher volume at or around a single price level. For example, the previous day's high or low, or the overnight

high or low, is likely to attract above-average trade. Additional examples include the opening and the halfback. When viewed on an absolute-volume basis, these levels may appear to be far more important than they deserve to be. Therefore, it's imperative to view volume in relation to time, which is more likely to smooth out these prominent levels, allowing us to better maintain a more complete overall perspective.

## ■ End of Day Total Volume versus Ongoing Volume throughout the Day

Markets often develop a direction, or tone, for a single day. This direction may not be confirmed by volume, however, even while the auction continues until the close. In many instances, the movement is corrected the following day due to lack of volume. In other words, there is often a delay in the effect that such a low-volume move may have on a market.

## ■ Anomalies

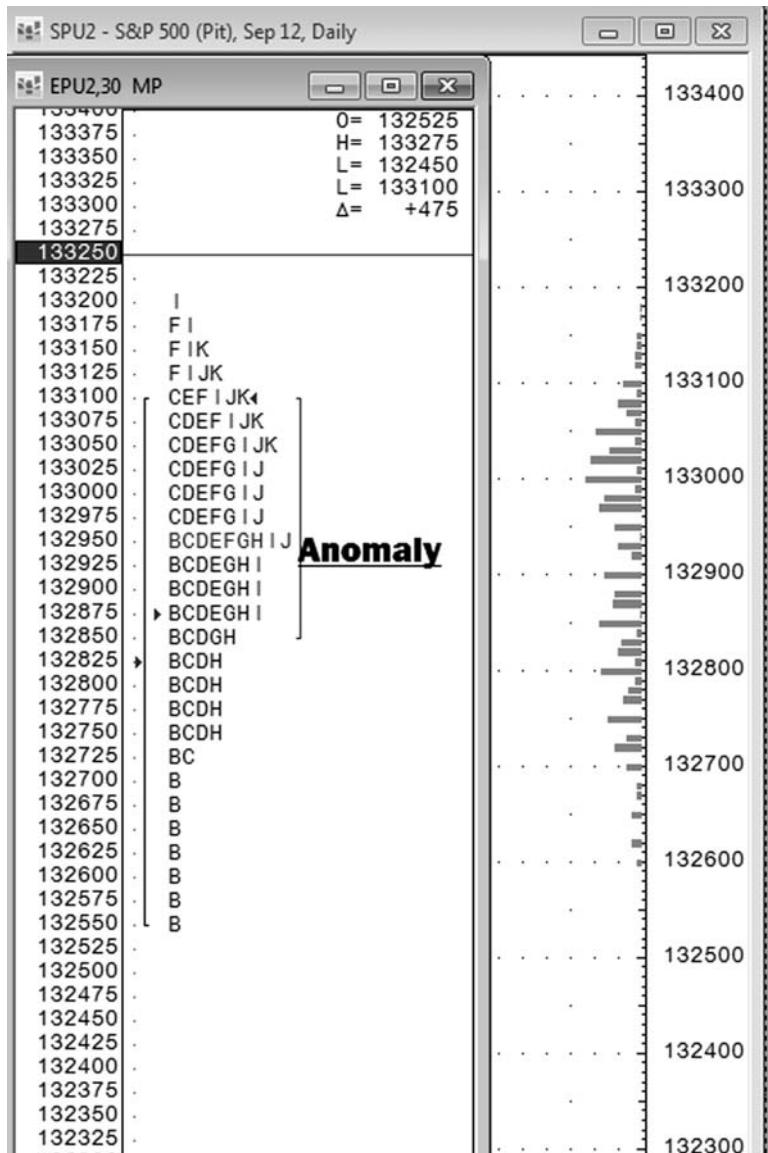
An anomaly is a single price or price level that lacks symmetry, which creates an unusual shape in the Market Profile. Anomalies represent structural weakness, and they're created through a combination of time and price—and therefore may not show up on volume profiles. In fact, volume profiles alone often identify *false* anomalies, such as the previous day's high or low, as discussed earlier. These points of structural weakness are often revisited during the current or following trading session.

The graphic in Figure A2.2 will help make this point.

It's hard to believe that these two charts are from the same market on the same day. The difference is revealed by combining volume and time. In a conventionally constructed Market Profile, volume is estimated by multiplying price x time—the greater the number of TPOs reading from left to right, the higher the estimated volume. While this method isn't perfect, I believe it offers superior insight to volume in a vacuum.

The Market Profile—with its extremely visual, pattern-forming TPOs—enables me to better answer pivotal questions about how volume is being distributed throughout the day:

- Is volume being distributed within a rotational market?
- Is volume being distributed as part of a trend?



**FIGURE A2.2** TPO Profiles Next to Volume Profiles

I start a new Market Profile anytime I think that a new directional auction is underway. That way, I can compare the new volume to the old volume within the context of distinct directional movements.

## ■ Too Focused on Volume

Of course, volume is only one element to consider during any given trading day. Among the other considerations (discussed elsewhere in this book, and in *Markets in Profile*) are:

- Value—developing higher, lower, overlapping, and so on.
- Which timeframe is in control (this is paramount).
- Rotational trading day.
- Trend day.
- One-timeframing.
- Short covering.
- Long liquidation.

## ■ Conclusion

After a lifetime spent observing markets, I choose to give more emphasis to the Market Profile—with its evolving, multidimensional structure—because I believe it provides a more accurate representation of the auction process by juxtaposing volume and time. In addition, it smooths out aberrations when there is high volume at the opening price, as well as other static references, like the prior pit session high and low, and the overnight high and low.

Ultimately, you must make your own decisions as you carefully choose which tools you use and which indicators you follow as you trade. Rest assured that no matter what you decide, there is never a single, simple answer. I suggest you compare volume profiles and Market Profiles side by side, writing down your observations as you see how they mirror and/or contradict each other. What does the ambiguity tell you? Can you identify change before your competitors (mostly laggards) transform opportunity into the familiar patterns of consensus?



## SUGGESTED READINGS

Dalton, James, Robert Bevan Dalton, and Eric T. Jones. *Markets in Profile: Profiting from the Auction Process*. Hoboken, NJ: John Wiley & Sons, 2007.

Gladwell, Malcolm. *The Tipping Point*. New York: Little, Brown and Company, 2000.

Kahneman, Daniel. *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux, 2011.

Kasparov, Garry. *How Life Imitates Chess*. New York: Random House, 2007.

Restak, Richard, M.D. *Mozart's Brain and the Fighter Pilot*. New York: Three Rivers Press, 2001.

Steenbarger, Brett N. *The Daily Trading Coach: 101 Lessons for Becoming Your Own Trading Psychologist*. Hoboken, NJ: John Wiley & Sons, 2009.

This book consists of practical self-help techniques to meet common trading challenges.

Steenbarger, Brett N. *Enhancing Trader Performance: Proven Strategies from the Cutting Edge of Trading Psychology*. Hoboken, NJ: John Wiley & Sons, 2006.

This book explains the learning curves of traders and how developing traders can cultivate expertise.

Steenbarger, Brett N. *The Psychology of Trading: Tools and Techniques for Minding the Markets*. New York: John Wiley & Sons, 2002.

This book explains the patterns of thought, behavior, and emotion that impact traders and trading decisions.

- Taleb, Nicholas Nassim. *The Black Swan*. New York, Random House, 2007.
- Taleb, Nicholas Nassim. *Fooled by Randomness*. New York, Random House, 2004.
- Waitzkin, Josh. *The Art of Learning*. New York: Simon & Schuster, 2007.

## ABOUT THE AUTHORS

### ■ James F. Dalton

Jim Dalton has been involved in the stock and futures markets for more than 40 years. He has been a member of the Chicago Board of Trade and member of the Chicago Board Options Exchange where he was a Senior Executive Vice President of the CBOE during its formative years.

At Paine Webber—which merged into UBS Financial Services—Jim managed an institutional trading desk, then served as Manager, Hedge Fund Research, and finally became Director of Research for Managed Accounts. His experience is fully realized in two books, *Mind Over Markets: Power Trading with Market Generated Information* (1993), which has recently been translated into French, and *Markets in Profile: Profiting from the Auction Process* (2007), and his latest work, the *Field of Vision DVDs and Workbook*.

Currently a full-time trader, Jim advises two hedge funds and several trading firms. Jim is a discretionary trader and long-time proponent of employing the Market Profile to facilitate trading.

The ways in which the behavior of markets and traders affect each other serves as a common thread through Jim's writing, trading, and mentoring. He believes that ultimately self-understanding is as important as market understanding; only when the two are equally well comprehended can the whole trader emerge and compete with greater odds of success. Jim lives in Scottsdale, Arizona.

## ■ Eric T. Jones

Eric Jones is a Senior Managing Director and Head of Advisory Solution and Product Development at TIAA-CREF, responsible for TIAA-CREF's individual investment strategy and portfolio management teams, managed account services, financial planning, retirement plan advice, and new product development.

Eric's past experience includes more than 25 years of developing new investment products and programs designed to help individual investors more successfully achieve their financial goals and dreams. He has served in a variety of senior roles at national financial services firms spanning the wealth management spectrum, including serving as President and CEO of a broker dealer, a trust company, and a life insurance company.

Eric is the co-author of two other books on the financial markets, investments, and trading: *Hedging Foreign Exchange* (Wiley) and *Markets in Profile* (Wiley).

## ■ Robert B. Dalton

Rob Dalton is the progenitor of Karass Creative, a Seattle agency that bonds brands to tribes by telling stories that matter. For two decades, he has woven compelling campaigns across myriad media—from Addy-winning websites to short films and poetry—for a long list of artistic, nonprofit, and corporate clients ranging from Starbucks to TEDx. He lives in the woods on an island with his wife and two boys.

## INDEX

345

- Acceptance
- open outside of range, 84–86
  - open outside of value but within range, 80–82
  - open within value, 75–79
  - spikes, 247
- Anomalies, 326–328, 337–338
- Auction
- auction failures, 105–110, 210–214
  - defined, 9–10
  - long-term, 39
  - market imbalance and auction process, 298–299
- See also* Auction rotations
- Auction rotations
- example, 103–114
  - long-term, 147, 183–192
  - market structure and market time, 97–103
  - one-timeframe market conditions, 97
- Rotation Factor, 112–114
- two-timeframe market conditions, 96–97
- Balanced market
- balance-area break outs, 252–259
  - estimating daily range potential, 74–75
  - initial balance, 11–13, 17–18, 65, 70
  - market imbalance and auction process, 298–299
  - perspective and, 302–305
- Bell curve, 7–9
- Bracketed markets
- bracket reference points, 201–214
  - bracket to trend transition, 192–197
  - defined, 49–56
  - long-term auction rotations, 183–192
  - trend to bracket transition, 197–200
- Brain, hemispheres of, 282–284
- Capital, 285
- Chabris, Christopher, 301
- Close
- closing range, 15
  - day timeframe trading, 120–121

- Composite analysis, 155–157
- Corrective action, 225–228
- Dalton, Jim, 298, 311–312, 315–316, 326
- Dalton, Robert, 298, 326
- Day timeframe trading, 60–145
- auction rotations, defined, 96–97
  - auction rotations, evaluation, 97–103
  - auction rotations, example, 103–114
  - close and, 120–121
  - day timeframe structure, defined, 19
  - definitions, 62–74
  - dominance of current session and, 317–318
- Double Distribution Trend day, 23, 25–27
- estimating daily range potential, 74–86
  - evaluation, 38–45, 60–61
  - high- and low-volume areas, 131–145
  - ledges, 129–131
  - market structure, trading logic, and time, 34–38
  - Neutral day, 27–31
  - Nontrend day, 27
  - Normal day, 19–21
  - Normal Variation of a Normal day, 21–23
  - opening/value relationships
    - example, 86–95  - point of control (POC), monitoring, 115–120
  - structure and Open-Drive activity, 65
  - Trend day, 23–25
  - visualization and pattern recognition, 122–129
- See also* Long-term trading
- Derivative learning, 277
- Destination trades, 319
- Diffusion Model (Gladwell), 299
- Directional conviction
- interpreting timeframe activity and, 61 (*See also* Open)
  - long-term, 146
  - open as gauge of, 63
  - Rotation Factor and, 112–114
  - (*See also* Auction rotations)
  - value-area placement and, 157, 159–169
- Double Distribution Trend day, 23, 25–27, 70
- Double prints, 104–105
- Dreyfus, Hubert, 3–5
- Dreyfus, Stuart, 3–5
- Excess
- defined, 110–111
  - long-term, 150–155
  - perspective of, 302–305
  - signs of, 111–112
- Experience. *See* Trading
- Extremes. *See* Tails
- Fairest price. *See* Point of control (POC)
- Gaps
- evaluation, 307–308
  - long-term trading and, 155, 260–265
  - special situations, 260–265
  - visualization of market and, 318
- Gladwell, Malcolm, 299
- Goodspeed, Bennett W., 282
- Half-hour auctions, 100
- High-volume areas
- defined, 131–132
  - examples, 134–138
  - identifying, 132–134

- Initial balance  
defined, 11–13, 17–18  
Open-Auction activity and, 70  
Open-Test-Drive activity and, 65  
*See also* Day timeframe trading
- Initiative activity, 45–49
- Inside day, 159
- Inventory management, 288–289
- Invisible Gorilla, The* (Chabris, Simons), 301
- Island days, 152
- J. Dalton Trading's Live Market Seminar*, 311–312
- Jones, Eric, 298, 326
- Ledges, 129–131
- Liquidity Data Bank (LDB), 132, 133
- Locals  
behavior of, 41–42  
role of, 12–13
- Location, importance of, 37, 188–192, 286
- Long liquidation, 127–129, 214–225
- Long-Term Nontrend Markets, 265, 267–269
- Long-term tails, 152–155
- Long-term trading  
auction rotations, 147  
balance-area break outs, 252–259  
bracket to trend transition, 192–197  
composite analysis, 155–157  
corrective action, 225–228  
defined, 145–146  
detailed analysis of developing market, 201–214  
directional conviction, 146  
evaluating direction indicators, 146–147  
gaps, 260–265  
long liquidation, 127–129, 214–225
- Long-Term Activity Record (LTAR), 171–182
- long-term auction rotations, 183–192
- long-term excess, 150–155
- long-term profiles, 228–238
- long-term short covering, 214–225
- markets to avoid, 265–269
- Neutral-extreme day, 241–244
- news announcements and effect on markets, 269–275
- range extension, 147–149
- special situations, 238–239
- spikes, 247–252
- 3 to 1 day, 239–241
- trend to bracket transition, 197–200
- value-area placement and directional performance, 157, 159–169
- Value-Area Rule, 244–246
- value-area width and directional performance, 157, 169–171
- volume and directional performance, 157, 158–169
- See also* Day timeframe trading
- Low-volume areas  
defined, 131, 138–140  
examples, 140–144
- Market, balanced. *See* Balanced market
- Market-generated sources of information, 7–9
- Marketplace, role of, 16
- Market Profile  
author's personal experience, 315–316  
bell curve, 7–9  
“body” of, 40–45  
day timeframe structure, 19–31  
elements of, 10–15  
elongated, 40  
identifying high-volume areas, 132  
initial balance and, 17–18

- Market Profile (*Continued*)**
- Long-Term Profiles, 228–238
  - marketplace role and, 16–17
  - objectivity and, 33
  - pattern recognition, 122–129
  - point of control (POC) and, 115
  - Profile graphic (market structure), 34–38, 65
  - structure, trading logic, and time, 34–38
  - structure and auction rotations, 97–103
  - structure and Open-Drive activity, 65
  - See also* Tails
- Markets in Profile: Profiting from the Auction Process* (Dalton, Dalton, Jones), 298, 326
- Mind Over Machine* (Dreyfus, Dreyfus), 3–5
- Neutral day**
- defined, 27–31
  - Neutral-center and Neutral-extreme days, defined, 28–29
  - two-timeframe markets, 96
- Neutral-extreme day**, 241–244
- News announcements, effect of, 269–275
- Nonconviction days, markets to avoid, 265–269
- Nontrend day, 27, 265–269
- Normal day, 19–21, 68, 96
- Normal Variation of a Normal day, 21–23
- Open-Drive activity, 65
- Open-Rejection-Reverse activity and, 68
- Open-Test-Drive activity and, 67
- two-timeframe markets, 96
- One-timeframe market, 23, 97, 104–105. *See also* Auction rotations
- Open**
- defined, 62–63
  - estimating daily range potential, 74–75
  - market conviction and, 63
  - Open-Auction, 69–70
  - Open-Auction in range, 70–71
  - Open-Auction out of range, 71–73
  - Open-Drive, 63–65
  - opening call, 61–62
  - opening/value relationships example, 86–95
  - open outside of range, acceptance, 84–86
  - open outside of value but within range, acceptance, 80–82
  - open outside of value but within range, rejection, 83
  - Open-Rejection-Reverse, 68–69
  - Open-Test-Drive, 65–68
  - open within value, acceptance, 75–79
  - open within value, rejection, 79–80
  - outside spike, 249–252
  - within spike, 247–249
  - visualization of market and, 319–320
- Outside day**, 159
- Overnight inventory**, analyzing, 305–307
- Pattern recognition**, 122–129
- Point of control (POC)**, 14–15, 115–120, 304
- Price**
- fairest, 309–310
  - response to, 300–311
- Range**, defined, 14
- Range extension**
- auction rotations, 101
  - defined, 11–14

- estimating daily range potential, 74–75
- initiative *versus* responsive activity, 45–49
- long-term trading, 147–149
- Open-Auction in range activity, 70–71
- Open-Auction out of range activity, 71–73
- open outside of range, acceptance, 84–86
- open outside of value but within range, acceptance, 80–82
- open outside of value but within range, rejection, 83
- point of control and, 116–117
- timeframe control, 38–39, 40
- See also* Open
- Record keeping, 290
- Rejection
- defined, 85
  - open outside of value but within range, 83
- Open-Rejection-Reverse, 68–69
- open within value, 79–80
- spikes, 247
- Responsive activity, 45–49
- Risk, 289–290
- Rotation Factor, 112–114. *See also* Auction rotations
- Self-understanding, 300–311. *See also* Trading
- Short covering, 123–127, 128–129, 214–225
- Simons, Daniel, 301
- Single price level distortions, 336–337
- Single-print tails, 14, 41
- Skill acquisition stages, defined, 3–5.
- See also* Trading
- S&P daily/weekly bar, reviewing, 302–305, 307–308
- Spikes, 247–252
- Strategy, importance of, 284–292
- Tails
- auction rotations, 100
  - initiative *versus* responsive activity, 45–49
  - long-term, 152–155
  - opening call and, 62
  - poor lows or highs, 312–316
  - timeframe control, 40
- Tao Jones Averages, The* (Goodspeed), 282
- 3 to 1 day, 239–241
- Tick volume, 132–134
- Timeframe transition, identifying, 102–103
- Time Price Opportunities (TOP)
- defined, 10–15
  - initiative *versus* responsive activity, 48
  - timeframe control evaluation, 41–45
  - TPO value-area calculation, 332–333
  - volume profiles *versus*, 335–339
- Tipping Point: How Little Things Can Make a Big Difference, The* (Gladwell), 299
- “Trader’s Dilemma, The,” 311–312
- Trading, 297–330
- as business strategy, 284–292
  - cognitive dissonance of traders, 322–325
  - expectations and, 297–298
  - futures trading, generally, 1–6
  - imagination of traders, 325–326
  - importance of, 297
  - market imbalance and auction process, 298–299
  - poor lows or highs, 312–316
  - psychological side of, 59–60

- Trading (*Continued*)  
recognizing subtle information, 317–318, 329–330  
self-understanding for, 300–311  
skill acquisition stages, defined, 3–5  
“The Trader’s Dilemma,” 311–312  
timeframe control, 317–318  
trading logic, 34–38  
visual references for markets, 318–329
- See also* Day timeframe trading;  
Long-term trading
- Trading range. *See* Bracketed markets
- Trend day  
defined, 23–25  
one-timeframe markets, 97  
Open-Drive activity, 65  
Open-Test-Drive activity and, 67
- Trending markets, 49–56  
bracket to trend transition, 192–197  
one-timeframe markets, 97  
trend, defined, 50–51  
trend to bracket transition, 197–200
- Trends, long- and short-term, 320–321
- Two-timeframe market conditions, 96–97. *See also* Auction rotations
- Value area  
defined, 14
- initiative *versus* responsive activity, 45–49  
long-term trading, 157, 159–169  
open outside of value but within range, acceptance, 80–82  
open outside of value but within range, rejection, 83  
open within value, acceptance, 75–79  
open within value, rejection, 79–80  
timeframe control evaluation and, 38–39  
value-area calculation, 331–333  
Value-Area Rule, 244–246  
value-area width, 157, 169–171
- Visualization, for day timeframe trading, 122–129, 318–329
- Volume  
high-volume areas, 131–138  
long-term trading and, 157, 158–169  
low-volume areas, 131–132, 138–144  
value-area calculation, 331–332  
volume profiles *versus* TPO, 335–339
- Von Oech, Roger, 15
- Whack on the Side of the Head, A* (von Oech), 15