

# INVESTING WITH VOLUME ANALYSIS

IDENTIFY, FOLLOW, AND PROFIT  
FROM TRENDS



BUFF DORMEIER

## *Praise for Investing with Volume Analysis*

“*Investing with Volume Analysis* is a compelling read on the critical role that changing volume patterns play on predicting stock price movement. As buyers and sellers vie for dominance over price, volume analysis is a divining rod of profitable insight, helping to focus the serious investor on where profit can be realized and risk avoided.”

—**Walter A. Row, III**, CFA, Vice President, Portfolio Manager, Eaton Vance Management

“In *Investing with Volume Analysis*, Buff builds a strong case for giving more attention to volume. This book gives a broad overview of volume diagnostic measures and includes several references to academic studies underpinning the importance of volume analysis. Maybe most importantly, it gives insight into the Volume Price Confirmation Indicator (VPCI), an indicator Buff developed to more accurately gauge investor participation when moving averages reveal price trends. The reader will find out how to calculate the VPCI and how to use it to evaluate the health of existing trends.”

—**Dr. John Zietlow**, D.B.A., CTP, Professor of Finance, Malone University (Canton, OH)

“In *Investing with Volume Analysis*, the reader ... should be prepared to discover a trove of new ground-breaking innovations and ideas for revolutionizing volume analysis. Whether it is his new Capital Weighted Volume, Trend Trust Indicator, or Anti-Volume Stop Loss method, Buff offers the reader new ideas and tools unavailable anywhere else.”

—From the Foreword by **Jerry E. Blythe**, Market Analyst, President of Winthrop Associates, and Founder of Blythe Investment Counsel

“Over the years, with all the advancements in computing power and analysis tools, one of the most important tools of analysis, volume, has been sadly neglected. Yes, it is true that it is included in all analysis programs, but the art and science has been almost lost. Buff’s new book should take care of that neglect and restore volume to its rightful place. They say, ‘In the land of the blind, the one-eyed man is king.’ This book will give technicians both eyes. It is clear, well written, and step-by-steps give the reader the tools to understand this important tool putting volume analysis in its proper historical context. It is highly recommended.”

—**Richard Mogey**, CMF Investment Advisors

“This book forced me to think in new investment directions and to re-evaluate my previous strategies.... I gained insights that were groundbreaking for me.”

—Dr. Dennis Hensley, Taylor University

“I found *Investing with Volume Analysis* of great interest. Any new study of volume and its great technical importance demands immediate attention. It is good to have Buff’s new ideas and discoveries added to the history and importance of volume in technical analysis. My sincere thanks to Buff for his great work and contribution.”

—Joseph E. Granville, *The Granville Market Letter*

“The author has gathered in one place all of the major methods and theories that deal with volume in the stock market and has recognized volume as an equal partner with price in the workings of market and stock movements. He puts it all together into usable and readable guidance, using effective analogies and occasional humor.”

—Richard W. Arms, Jr., Arms Advisory

“Buff presents a thorough discussion of the utility of volume and volume-based market indicators, both traditional and of his own creation. Fellow market analysts can be glad for this resource and the fact that the VPCI on Buff himself is in a strongly rising trend.”

—Robert Prechter, CMT, and Dave Allman, Elliott Wave International

“I really enjoyed and appreciated the author’s ability to combine volume with many of the basic indicators used by technicians today.”

—Ralph J. Acampora, CMT, Managing Director, Altaira Investment Solutions

“I trade for a living and don’t have time for fluff and puff. Buff tossed facts and figures in my face like a silver cross in front of a werewolf. He is on to much here, as you will see. This book is not a morsel; it’s a nine-course meal. Dig in.”

—Larry Williams, Private Trader, World Cup Trading Champion

“For every stock trade that takes place, three key pieces of information are recorded: price, time, and size. It is from these three pieces of data that we derive all the key information that technical analysts use to examine a stock’s behavior. If you are only looking at prices, then you are throwing out a whole lot of key information.

Buff’s book teaches you how to take that information about the size of trades and turn it into the seven types of volume indicators. Better still, he teaches you how to use those tools to improve your own trading.”

—Tom McClellan, Editor, *The McClellan Market Report*

# Investing with Volume Analysis

*This page intentionally left blank*

Investing with  
Volume Analysis  
*Identify, Follow, and  
Profit from Trends*

Buff Pelz Dormeier

Vice President, Publisher: Tim Moore  
Associate Publisher and Director of Marketing: Amy Neidlinger  
Executive Editor: Jim Boyd  
Editorial Assistant: Pamela Boland  
Operations Manager: Gina Kanouse  
Senior Marketing Manager: Julie Phifer  
Publicity Manager: Laura Czaja  
Assistant Marketing Manager: Megan Colvin  
Cover Designer: Alan Clements  
Managing Editor: Kristy Hart  
Project Editor: Jovana San Nicolas-Shirley  
Copy Editor: Deadline Driven Publishing  
Proofreader: Language Logistics, LLC  
Indexer: Larry Sweazy  
Compositor: Nonie Ratcliff  
Manufacturing Buyer: Dan Uhrig

© 2011 by Pearson Education, Inc.  
Publishing as FT Press  
Upper Saddle River, New Jersey 07458

**This book is sold with the understanding that neither the author nor the publisher is engaged in rendering legal, accounting, or other professional services or advice by publishing this book. Each individual situation is unique. Thus, if legal or financial advice or other expert assistance is required in a specific situation, the services of a competent professional should be sought to ensure that the situation has been evaluated carefully and appropriately. The author and the publisher disclaim any liability, loss, or risk resulting directly or indirectly, from the use or application of any of the contents of this book.**

**Technical analysis is only one form of analysis. Investors should also consider the merits of Fundamental and Quantitative analysis when making investment decisions. Technical analysis is based on the study of historical price movements and past trend patterns. There is no assurance that these movements or trends can or will be duplicated in the future. The solutions discussed might not be suitable for your personal situation, even if it is similar to the example presented. Investors should make their own decisions based on their specific investment objectives and financial circumstances. The material has been prepared or is distributed solely for information purposes and is not a solicitation or an offer to buy any security or instrument or to participate in any trading strategy.**

FT Press offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact U.S. Corporate and Government Sales, 1-800-382-3419, [corpsales@pearsontechgroup.com](mailto:corpsales@pearsontechgroup.com). For sales outside the U.S., please contact International Sales at [international@pearson.com](mailto:international@pearson.com).

Company and product names mentioned herein are the trademarks or registered trademarks of their respective owners.

All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher.

Printed in the United States of America

First Printing February 2011

ISBN-10: 0-13-708550-8

ISBN-13: 978-0-13-708550-7

Pearson Education LTD.  
Pearson Education Australia PTY, Limited.  
Pearson Education Singapore, Pte. Ltd.  
Pearson Education North Asia, Ltd.  
Pearson Education Canada, Ltd.  
Pearson Educación de México, S.A. de C.V.  
Pearson Education—Japan  
Pearson Education Malaysia, Pte. Ltd.

*Library of Congress Cataloging-in-Publication Data*

Dormeier, Buff, 1969-

Investing with volume analysis : identify, follow, and profit from trends / Buff Dormeier.  
p. cm.

ISBN-13: 978-0-13-708550-7 (hardback : alk. paper)

ISBN-10: 0-13-708550-8 (hardback : alk. paper) 1. Investment analysis. 2. Investments—Decision making. 3. Valuation. I. Title.

HC4529.D667 2011

332.63'2042—dc22

2010050894

# Contents

	Introduction . . . . .	1
<b>Chapter 1:</b>	<b>Two Perspectives of Market Analysis . . . . .</b>	<b>5</b>
	Building a Firm Foundation . . . . .	5
	Two Legitimate Approaches . . . . .	6
	The Fundamental Approach . . . . .	8
	The Technical Approach . . . . .	9
	Driving a Comparison Between Fundamental and Technical Analysis . . . . .	10
<b>Chapter 2:</b>	<b>The History of Technical Analysis . . . . .</b>	<b>12</b>
	The First Recorded Investment—A Fill or Be Killed Order . . . . .	12
	Babylonian Charts . . . . .	14
	Early European Markets . . . . .	14
	Samurai Trading . . . . .	14
	Early American Market Analysis . . . . .	15
	The Root—Charles H. Dow . . . . .	15
	The Shoots—William Peter Hamilton and Other Dow Theorists . . . . .	17
	Budding Practitioners . . . . .	17
	The Rise of the Fundamentals . . . . .	19
	Market Analysis in Today’s Efficient Markets . .	22
	Contrasting the Ages . . . . .	24
	Setting the Record Straight—Dow Theory Strikes Back . . . . .	24
<b>Chapter 3:</b>	<b>Price Analysis . . . . .</b>	<b>27</b>
	The Market’s Price Is Right . . . . .	28
	The Basic Building Block of the Chart . . . . .	28
	Volume Analysis: Digging Deeper . . . . .	30

<b>Chapter 4:</b>	<b>Volume Analysis</b> . . . . .	<b>32</b>
	Volume . . . . .	32
	Volume Terminology . . . . .	33
	Volume Data in Market Analysis . . . . .	33
	Volume Validates Price . . . . .	34
	Volume Liberates Liquidity . . . . .	35
	Volume Substantiates Information . . . . .	35
	Volume Reveals Convictions . . . . .	35
	Volume Expresses Interest and Enthusiasm . . .	36
	Volume Denotes the Disparity of Opinions . . .	36
	Volume Is the Fuel of the Market . . . . .	36
	Volume Exposes the Truth . . . . .	37
	Volume Is the Cause . . . . .	37
	Volume Gives Rise to Velocity . . . . .	38
<b>Chapter 5:</b>	<b>Volume: The Force of the Market</b> . . . . .	<b>39</b>
	Volume Is the Force . . . . .	39
	Volume Leads Price . . . . .	39
	Volume Interprets Price . . . . .	40
	$B = S = T$ . . . . .	41
	Volume Analysis—Use the Force . . . . .	43
	Support and Resistance . . . . .	43
	Trends . . . . .	44
	Every Object in a State Motion Stays in Motion Unless Acted Upon . . . . .	46
	Force = Mass $\times$ Acceleration . . . . .	47
	Every Action Has an Equal and Opposite Reaction . . . . .	50
	Applying the Laws of Motion in Volume Analysis . . . . .	51
<b>Chapter 6:</b>	<b>How to Read the Market Like a Book</b> . . . .	<b>53</b>
	Reading the Tape . . . . .	54
	Understanding the Symbols of the Language . .	54
	This Is the Market, Allow Me to Introduce You . . . . .	55
	Fear and Greed . . . . .	56

	Volume: The Technician's Decryption	
	Device . . . . .	57
	Analyzing Price and Volume Bar by Bar . . . . .	58
	The Four Basic Phases of Closing Price Bar	
	Analysis . . . . .	58
	The Price Bar Is the Market's DNA . . . . .	59
	Volume Is the Market's RNA . . . . .	60
	Volume Price-Spread Analysis . . . . .	61
	High Volume Depreciation . . . . .	64
	Low Volume Price Movements . . . . .	67
<b>Chapter 7:</b>	<b>Volume in Trends . . . . .</b>	<b>73</b>
	Identifying Trends . . . . .	73
	Trends: The Words of the Market . . . . .	74
	Drawing Trend Lines . . . . .	74
	Evaluating the State of the Trend with	
	Volume Analysis . . . . .	77
	The Four Phases of Volume Analysis . . . . .	78
	Volume Rules and Laws: Cracking the	
	Contradiction Code . . . . .	85
	Volume Seasonality Trends . . . . .	91
<b>Chapter 8:</b>	<b>Volume in Patterns . . . . .</b>	<b>93</b>
	Patterns: The Market's Narrative . . . . .	93
	Plots: The Interactions of Two Major Trends . .	94
	Bullish Flags and Pennant Formations . . . . .	108
<b>Chapter 9:</b>	<b>Measuring Volume Information . . . . .</b>	<b>112</b>
	The Seven Types of Volume Indicators . . . . .	114
	Optimization: A Warning . . . . .	116
<b>Chapter 10:</b>	<b>Pure Volume Indicators . . . . .</b>	<b>118</b>
	Volume . . . . .	118
	Volume Moving Averages . . . . .	119
	Volume Oscillators . . . . .	120
	Volume Bands . . . . .	120

Volume Accumulation . . . . .	121
Volume at Price . . . . .	122
Price: Volume/Crocker Charts . . . . .	124
<b>Chapter 11: Interday Volume Accumulation</b>	
<b>Indicators . . . . .</b>	<b>127</b>
On-Balance Volume . . . . .	128
Volume Price Trend . . . . .	130
Intraday Volume Accumulation Oscillators . . .	130
<b>Chapter 12: Intraday Volume Accumulation</b>	
<b>Oscillators . . . . .</b>	<b>132</b>
Intraday Intensity Index/Accumulation Distribution . . . . .	133
Williams' Variable Accumulation Distribution . . . . .	133
Williams' Accumulation Distribution . . . . .	134
Intraday Volume Accumulation Oscillators . . .	136
<b>Chapter 13: Price Range Volume Indicators . . . . .</b>	<b>140</b>
Market Facilitation Index . . . . .	140
Equivolume Charting . . . . .	142
Ease of Movement . . . . .	144
<b>Chapter 14: Price Accumulation Based on Volume</b>	
<b>Indicators . . . . .</b>	<b>147</b>
Positive and Negative Volume Indexes . . . . .	147
<b>Chapter 15: Tick-Based Volume Indicators . . . . .</b>	<b>151</b>
Volume-Weighted Average Price . . . . .	152
Money Flow/Tick Volume . . . . .	152
<b>Chapter 16: Volume-Weighted Price Indicators . . . . .</b>	<b>157</b>
The Money Flow Index . . . . .	158
Volume-Weighted Moving Averages . . . . .	159
VW-MACD . . . . .	168
Trend Thrust Indicator . . . . .	171

<b>Chapter 17: The Volume Price Confirmation Indicator</b> . . . . .	<b>182</b>
The Calculation . . . . .	183
Using VPCI . . . . .	185
VPCI in Action . . . . .	190
The Study . . . . .	194
Other Applications: Comparing the VPCI to Other Price-Volume Indicators . . . . .	198
Other Applications . . . . .	204
<b>Volume Indicators Table</b> . . . . .	<b>205</b>
<b>Chapter 18: A Compendium of Breadth Indicators</b> . . . . .	<b>209</b>
Market/Breadth Statistics . . . . .	209
Breadth Statistics: A Source of Market Information . . . . .	211
Warning Construction Ahead: Breadth Data Pit Falls . . . . .	214
Breadth-Based Indicators . . . . .	218
Positive and Negative Volume Index . . . . .	219
Arms Index/TRIN . . . . .	220
<b>Chapter 19: Buff Up Your Volume: Introducing Capital Weighted Volume</b> . . . . .	<b>226</b>
It's Time to Buff Up Your Volume . . . . .	226
Traditional Volume: Price Volume Relationship Disconnect . . . . .	227
Blue Chips to Cow Chips . . . . .	229
Index Volume Analysis Alternatives . . . . .	231
Cap-Weighted Volume . . . . .	232
Comparing Traditional Volume Tallies to Cap-Weighted Volume . . . . .	233
Flash Crash: Cap-Weighted Volume in Action . . . . .	235
Cap-Weighted Volume: Rebuilding Breadth Indicators . . . . .	238

<b>Chapter 20: Risky Business</b> . . . . .	<b>241</b>
The Best Offense Is a Good Defense. . . . .	241
The Best and the Worst of It . . . . .	243
The Buy and Hope Strategy . . . . .	245
Dynamic Asset Allocation . . . . .	248
Risk Management . . . . .	251
The Anti-Volume Stop Loss . . . . .	253
The Best Mistakes Are the Realized Ones. . . . .	256
<b>Chapter 21: Putting It All Together: Volume-Dictated Strategies</b> . . . . .	<b>259</b>
Employing Volume-Based Strategies . . . . .	260
Understanding the Market: Supply and Demand. . . . .	260
Building an MPS with Individual Stock Issues . . . . .	269
The Four Phases of Volume Analysis . . . . .	270
<b>Chapter 22: Modern Day Volume Issues</b> . . . . .	<b>281</b>
How Trading Volume Has Changed. . . . .	281
Contrasting Market Ages . . . . .	293
The Effect of Changes in Market Structure on Volume Analysis . . . . .	302
Volume Data Reliability . . . . .	303
<b>Bibliography</b> . . . . .	<b>306</b>

# Foreword

Volume, price, and time are fundamental concepts in market analysis.

Volume tracks quantities of things, whether shares of stocks, contracts in options, or commodities. In business, volume tracks sales, inventory, customers, and the amount of goods bought or sold.

In *Investing with Volume Analysis*, Buff Dormeier presents new ideas, digging deeper into volume by identifying secrets these often overlooked statistics hold. He has devised methods for identifying when to climb on board and stay with sustainable trends, and perhaps more importantly, when to bail out of trends when unsustainable.

The Volume Price Confirmation Indicator (VPCI) is his creation, and it helps identify these situations. It was a significant enough discovery to earn him the internationally prestigious Charles Dow Award in 2006, only given to a work deemed surprisingly new and innovative.

Buff's career has combined both fundamental and technical analysis. Earlier, as a student of fundamental analysis, he reviewed the business activities of management and made forecasts based on a company's financial history and forward guidance. He wanted further understanding about a stock's price behavior and began studying technical analysis.

He found that technical analysis, at its core, is about the flow of money into and out of securities. Yet these technical findings were not always consistent with what fundamental analysts and company management were saying. As an analytic approach, he settled on two primary tools: price and volume.

## **His Discovery**

Buff learned that analysts had been combining price with many metrics in gauging market behavior, but many of the metrics did not

include volume. He then remembered an important concept he used in fundamental analysis for assessing the overall health of the economy, the turnover of money. A healthy economy turns money over faster than a weak economy. So he set out to measure money flow in the markets.

He turned to one of the grandfathers of technical analysis and masters in volume analysis, Joseph E. Granville, and he studied his On-Balance Volume concepts. Many considered these concepts a hallmark in technical analysis. Granville taught that volume precedes prices. That resonated.

Buff wondered if there might be a way to measure a *dynamic* relationship between price and volume, one that one might influence the other, and he wondered whether he could design a method for discerning such nuances when they occurred.

He examined the differences between a volume-weighted *moving* price average and the corresponding *simple* moving price average. The differences he found would often expose information about the relationship between price and volume that was not visible any other way. He now had a way to assess the staying power or enthusiasm of investors, the force behind price moves. He had a metric for gauging the flow of money.

Although this topic of volume analysis is by nature quite technical, Buff is skilled at presenting and documenting the essentials of volume theory with exceptional clarity. He explains the depths of volume analysis with amazing simplicity, and he shows by example not only what works but why it works.

In *Investing with Volume Analysis*, the reader should find many pearls of wisdom from such technical giants as Charles Dow, Richard Wyckoff, and Joseph Granville. He should be prepared to discover a trove of new ground-breaking innovations, ideas for revolutionizing volume analysis. Whether it is his new Capital Weighted Volume, Trend Trust Indicator, or Anti Volume Stop Loss method, Buff offers the reader new ideas and tools unavailable anywhere else.

—Jerry E. Blythe, Market Analyst  
President of Winthrop Associates  
Founder of Blythe Investment Counsel  
Former Editor and Publisher of the Market Consensus Letter

# Acknowledgments

I would like to personally thank Dr. Jerry Blythe for all his help with the book. Your broad insights, professional resources, and technical expertise have proven to be very valuable. Further appreciation goes to Joseph Granville. Thank you, Joe, for sharing your wisdom. Your depth of knowledge about volume surpasses all.

I would also like to thank Tom McClellan. Tom, you are a brilliant technician. Your expertise in market breadth has been invaluable to me. You have given me many excellent suggestions, pointed out some inconsistencies, and provided me with some great resources. Moreover, you have given me many terrific ideas about how to rephrase sentences and even paragraphs, plus you have provided many valuable quotes and charts. Thanks a bunch, Tom.

I would like to offer praise for others who helped me with this work, such as Steve Poser, George Schade, and Dr. John Zietlow. Steve, your knowledge of technical analysis and market structure is outstanding. Thank you for your help, expertise, and advice with modern volume issues! In my search for original resources, George Schade was hot on the trail like a bloodhound on a fresh scent! Thank you for your help and your pursuit and passion for truth, George. Professor Dr. John Zietlow, your assistance with financial formulas was very helpful to me in this assignment. Your depth of knowledge in finance is amazing. You reflect a spiritual light, encouraging me and many others.

Further praise goes to Scott Marcouiller. I am indebted to you, Scott, for conducting the book's compliance review. Thank you for sifting through each page for accuracy and advice. In you, our firm has a valuable resource. Thanks a bunch! A special thanks to Julia Ormond for your assistance in programming my Cap-Weighted Volume formula into Stockfinder. My appreciation to Dr. Dennis Hensley, Jeffrey Neuenschwander, and Jacqueline Ramey for your exceptional and exhaustive editorial assistance. A big thank you to my good buddy, Pep, for designing the book's website: [www.volumeanalysis.com](http://www.volumeanalysis.com). Great work!

A tip of the hat to three former MTA (Market Technicians Association) presidents who conducted the book's primary peer review:

Ralph Acampora, Larry M. Berman, and Philip M. Roth. Thank you for volunteering to peer review this work. I know none you had the time to do it, but nonetheless you did it anyway. When I asked for your help in conducting the review, I really did not know what to expect as you are all among the most accomplished and respected technicians. Thank you for your insights, kind words, and encouragement. Your personal dedication to the elevation of our profession is something to be very much admired.

My sincere appreciation to my team who picked up the slack while I was hidden away writing. Laura Rowe, thank you for being my assistant, but you are so much more than that. Not only are you wonderful with everyone, especially our clients, but you also do a fantastic job keeping me organized. Dad, thank you for teaching me the business. You are the most honest, sincere man one could hope to know and be privileged to work with. Thank you for being my father.

I spent much time researching and writing this book. However, it was not really my time to spend; it was my families' time. So this book is dedicated to my family. Speaking of which, I want to thank the sweetest person I've ever met—my wife, Kathy. Marrying you was absolutely the wisest thing I've ever done. Our marriage is the greatest earthly blessing God could ever bestow upon me. You are wonderful, amazing, and incredibly beautiful. I could never reach my goals without you, nor would I want to without your support, my Love. I love you, Beautiful! To my sister Tiffany, thank you for your selfless act and commitment to our family. Your gift to us is hope, love, and life. We are forever grateful and indebted to you.

This book is much about price and value. I assert an item's value or worth is ultimately determined by the price someone else is willing to pay for it. With this in mind, there could be nothing more valuable than one's soul. And what is the value of the soul? Pondering this question, I am so utterly grateful to my Good Sheppard, who in love, ransomed His life, redeeming this unworthy soul. Blessed be the name of God for ever and ever, for wisdom and might are His. He changes the times and the seasons. He removes kings and sets up kings. He gives wisdom unto the wise and knowledge to them that know understanding. He reveals the deep and secret things. He knows what is in the darkness, and the light dwells with Him. I thank thee and give You my praise.

# About the Author

Armed with proprietary indicators and investment programs, **Buff Pelz Dormeier**, CMT dynamically manages private investment portfolios for affluent individuals, institutions, trusts, and endowments. Buff builds customized strategies designed to meet or exceed a client's specific investment objectives in what is often uncertain market conditions. This is accomplished by utilizing proprietary state-of-the-art portfolio management tools designed to grow and preserve wealth in a risk-conscience manner.

In Buff's 15+ years in the securities industry, he has been employed as a financial advisor, an analyst, and a portfolio manager. An award-winning industry innovator, Buff is the developer of Volume Weighted Moving Averages (VWMA), the VW-MACD, the Volume Price Confirmation Indicator (VPCI), VPCI Stochastics, the Anti-Volume Stop Loss (AVSL), the Trend Thrust Indicator (TTI), Capital Weighted Volume Indexes, and a host of cap-weighted, volume-based breadth indicators.

As a celebrated source of investment knowledge, Buff's work with market indicators and trading system design has been published and/or referenced in *Barron's*, *Stock's & Commodities*, *SFO and Active Trader* magazines, and the *IFTA & MTA Journals*. A Chartered Market Technician, Buff received the 2006 Charles Dow Award recognizing research papers breaking new ground or which make innovative use of established techniques in the field of technical analysis. The Charles H. Dow Award is considered one of the most important recognitions in the field of technical analysis. He has also been a featured speaker at national and international conferences including Expo Trader Brazil, the TradeStation World Conference, and the Moneyshow International Trader's Expo.

Buff was a double major graduate of Indiana State University participating in varsity track and cross country as a student athlete. Still an avid runner, Buff is a former Indiana Marathon champion.

Presently, Buff is a member of the Markets Technician Association, Emmanuel Community Church, and he is an executive board member of the Inter-Faith Hospitality Network of Greater Fort Wayne.

---

## Introduction

Do you believe navigating the markets in the coming decades will be as easy as it was in the 1980s and 1990s? If not, perhaps you should consider sharpening your investment skills with technical analysis, specifically volume analysis.

My exposure to technical analysis began early in my career as a financial advisor. Like in most major brokerage firms, my firm's squawk box reported various stock stories from the market analysts. These stock stories would make a case for why a particular company was undervalued, overlooked, or discounted relative to some future development or innovation. The best of these stories would be relayed to retail clients, who would invest in the stock of the companies featured in the stories. Occasionally, some of these stories came true, and the stock increased in value. Other times, the stock had to be relegated to the long-term holdings file while investors with losses waited until the company or industry group moved back into favor. Unfortunately, although many of these stories originally sounded promising, they ended up being nothing more than hyped-up fairy tales told by supposed Wall Street geniuses.

Fortunately, one analyst was different from all the others. His recommendations came without flashy stories. Speaking in terms of trend, support, resistance, patterns, breakouts, and risk management, his recommendations often showed profits immediately. When they did not, he would quickly admit his mistake, something unheard of among market analysts. His approach allowed investors to preserve their capital for the next investment opportunity. What was the difference between this analyst and the others? He was not a Chartered Financial Analyst (CFA), but he was a Chartered Market Technician

(CMT)—a technical analyst. I was so impressed by his technical approach that I pursued my own CMT designation.

So, what is technical analysis? Market analysis breaks down into two basic schools of thought: fundamental analysis and technical analysis. Assuming value is the sole determinant of price, fundamental analysis attempts to determine intrinsic value. The fundamental analyst collects, analyzes, and models information about a company, including earnings, assets, liabilities, sales, and revenue. Fundamental analysts embrace as core beliefs that the markets are inefficient, all necessary information is available to the public, and valuation is quantifiable. Fundamental analysts are concerned with how value is reflected within price. However, the fundamental approach cannot tell its practitioners when to buy or sell. For example, in 2000, Cisco Systems was Wall Street's darling. No one needed to look far to find many fundamental "buy" ratings on the stock. Yet, an investor who purchased Cisco on January 1, 2000, and held it until January 1, 2002, would have experienced a 65 percent loss. On the other hand, an investor who bought Cisco on January 1, 1998, and held it until January 1, 2000, would have experienced a 64 percent gain. Any investor with just a bit of experience investing during the past decade could list many more such examples. Timing represents a serious limitation to the fundamental approach in an investment strategy.

The technical analyst acknowledges that fundamental analysis plays a prominent role in security analysis. However, the technical analyst believes that price is ultimately the end result of the battle between the forces of supply and demand. Price represents all that is known, feared, and hoped for by the market. Technical analysis focuses on the forces behind supply and demand that produce price. Technical analysts hold as core beliefs that the markets are efficient at discounting even future developments, prices move in trends that can be forecast (up, down, and sideways), investors are both logical and emotional creatures, and history repeats itself—more so after it has been forgotten.

Hundreds of millions of dollars are poured into fundamental research by brokerage firms, mutual fund companies, hedge funds, and advisory services, all in an effort to determine their proper intrinsic value. With all this money invested in research, one would presume that an informed investor should know the worth of a given security. Yet, wide and violent price swings are still as prevalent as

ever. Why? Perhaps because the fundamental information ignores the human element. And it is in the human mind, not theoretical models, that price is ultimately determined. For example, a fundamental analyst might perform a great amount of research to determine possible results of an important announcement. The data is the critical information. In contrast, the technical analyst focuses his or her forecast on how the market participants react after the data is released. The datum themselves are inconsequential relative to the importance of predetermining investor expectations.

A technical analyst studies four major areas: sentiment, cycles, price, and volume. Sentiment indicators monitor market participants. Insiders, specialists, and institutions generally are regarded as having superior or leading opinions, whereas advisory services, journalists, and small traders usually are seen as having stale news or inferior opinions. Cycle analysis is the study of time—the order, length, and recurrences of market trends. The preponderance of technical analysis involves price and chart analysis. The price chart represents the actions and behavioral patterns of investors—the market's testimony. Price testifies to what investors believe and how strongly they believe it. However, if price is the market's testimony, volume is the market's polygraph. As a stock rises, more and more investors should be attracted to participate in the stock's move. However, if fewer and fewer investors are willing to participate as the stock price continues to rise, then the volume contradicts the price movement. In this way, volume substantiates price by measuring the force and extent of investor convictions. When volume increases, it confirms price movements; when volume decreases, it contradicts price movements.

Therefore, volume analysis is a quest for truth in an otherwise scrambled investment puzzle. To solve any puzzle, it helps to look at the puzzle's box cover to form a perspective of the image. In volume analysis, volume is the box cover that enables us to view the markets through the lens of supply and demand. Like other skills, volume analysis is as of much an art than an exact science. And like most skills, a little knowledge without application experience could do more harm than good. Volume analysis is no different. It deals with probabilities; it leaves room for unfavorable outcomes because many factors can affect future price movements. Investors employing

volume analysis should also apply a strict and rigorous, unemotional discipline to encourage long-term success. Fortunately, in volume analysis, it is not necessary to wait for the outcome of often already dated, stale fundamental figures or economic statistics to develop an informed opinion. A disciplined and planned approach of analyzing moving markets allows for decisive market action. Thus, as with fundamental analysts, successful technical analysis depends on one's ability to execute and one's ability to analyze and gauge the market.

Experience is the best teacher, but the market can charge some hefty tuition. However, the market need not be a closed-book test. We can also learn through sharing our knowledge and experience with one another. This book shares with you what I have gleaned from my 15 years in the field of volume research. The endeavors of *Investing with Volume Analysis* are to

- Equip the savvy investor with a foundational understanding of the market, its history, and its present structure.
- Present an enlightened perspective on the role of volume in the markets, not only in terms of what may pragmatically work but also in terms of apprehending the underlying rationale of how and why.
- Review many of the traditional volume indicators and introduce my own ground-breaking methodologies.
- Arm the investor with volume-based strategies for assessing risk and gauging and tracking the market, similar to that of a GPS device.

Albert Einstein once said, "The essence of mathematics is not to make simple things complicated but to make complicated things simple." With this thought in mind, the essence of this book is to convey advanced technical concepts in an easily understood manner. As such, this book starts with the basics, and then rapidly builds on these essential concepts. For those seeking further information, including where to find many of indicators and new developments discussed in the forthcoming pages, go to [www.VolumeAnalysis.com](http://www.VolumeAnalysis.com).

# 1

---

## Two Perspectives of Market Analysis

“This is one of the most important points I’ve had to learn. For me, at least, ‘why’ is the most expensive and *least valuable* information. When you get ‘why’ wrong (and act accordingly), you lose lots of money. You only can know ‘why’ for sure after the fact (when it is useless). You gotta learn to live with the reality that there are things that are beyond the individual’s ken. The search for ‘why,’ whether right or wrong, can just as easily lead you to irrelevancies, or, worse yet, to valid data that will not impact on the market. The best analog is arguing with your wife. Being right is often totally valueless if not counterproductive.”

—*Mike Epstein (1931–2009) Quoted on June 21, 2006*

### **Building a Firm Foundation**

We start our journey by getting acquainted with the basics, the fundamentals of technical analysis. These fundamentals are so self-evident that they are often overlooked. However, a rock-solid foundation is critical to understanding the volume analysis perspective. Your ability to succeed ultimately depends on your ability to discern. Every day, causal investors attempt to employ complicated indicators in their analyses of the market and individual securities; however, they generally do not fully understand what information the indicators are designed to reveal. When the markets turn and investors’ indicators no longer work, they’re at a loss.

Even when these investors experience short-term success, they are often building on sand because blind success reinforces poor

practices. The difference between being wise and foolish is neither information nor intellect, but a depth of understanding. A thorough understanding of the basics enables investors to develop the necessary perspectives to build a cause for action. Building a cause for action is what analysis is all about.

As one of these investors yourself, a solid understanding of the basics is the bedrock that builds your perspective, shapes your beliefs, and influences your ideas. You can either seek to build a perspective on a solid foundation or be consumed with the moment—continually seeking the hottest tip, trying out the latest indicator, or reading about the newest five-step program to success. You can continue searching for the Holy Grail of market success or you can develop the understanding required to start believing in your own ability to discern, and thereby, gauge the market.

## Two Legitimate Approaches

“It is the glory of God to conceal a thing, but the honor of kings is to search out a matter.”

—*King Solomon*

There are many forms of security analysis on which to build an understanding. The two most common methods of analysis are the fundamental analysis and the technical analysis. Acknowledging these two approaches, the Financial Industry Regulatory Authority (FINRA) recognizes two types of research analysts: the Chartered Financial Analyst (CFA) and the Chartered Market Technician (CMT). Although the two schools of research may be used together effectively, they stem from vastly different perspectives. Your perspective of the market, what it is and how it works, plays a major role in your investment success.

Early in my career, while studying for my CMT designation, I taught technical analysis to many of the top brokers at the major brokerage firm where I was employed. A colleague who was part of the CFA program taught fundamental analysis. I once spent a day monitoring his crash course on fundamental analysis. His explanation of using financial ratios to assess the value of companies made sense. Despite

my early concerns about fundamental analysis, formed from past unproductive experiences and my preconceived beliefs regarding the efficiencies of the markets' discounting mechanism, I was intrigued.

Like many fundamental analysts, the presenter had his favorite stock. He provided seemingly convincing reasons for why this stock was overlooked and undervalued in relation to earnings, the industry, and other comparative valuations. According to his analysis, the stock was intrinsically worth \$6, although it traded slightly below \$3. At \$3, it was a cheap stock, so I inserted the symbol into my quote machine just to keep an occasional eye on it. Several days and weeks that turned into several months went by, and the stock did nothing but trade in a tight sideways channel despite the broader market being strongly bullish. One day, however, the stock broke through its long-standing resistance at a little over \$3. I pulled it up. It had developed a huge base and was breaking out on strong volume. I bought it. In a short time, the stock ran up close to \$6 and then began to wane. I sold part of my position and put a limit order in just below the round number of \$6 to sell the rest based on some technical considerations. The \$6 was the same price level the fundamentalist had estimated as fair value. I watched the stock closely and prepared to change the limit order to market if it showed further weakness. However, my order filled as the stock moved a bit over \$6. It was at this time that I first realized that the fundamentals were indeed most likely wagging the dog, suggesting that the fundamentals were driving the technical aspects.

Believing I was bearing an olive branch, I sought out my new fundamental ally to point out that he was right and thank him for helping me make a buck. I even made a point to mention that he had bought the stock at a lower price than I had while I intentionally neglected that he had been sitting on dead money for over a year. Meanwhile, I had enjoyed participating in numerous stock issues throughout the bull market. However, I was floored when he told me he had not sold the stock. Based on revised data, he now saw the stock fairly valued at \$9. I tried to inform him that the stock appeared to be weakening technically and perhaps he should sell part of it while he had a double in hand. No, he was far too excited. He proceeded to list many more reasons why the stock was still undervalued. As a staunch technician, those details were just not important to me. As he went on,

I listened politely while deliberately blocking out his arguments for fear that it might influence my own objectivity. The stock went back down to its former base at \$3 faster than it rose. I felt really bad for the guy. He had finally gotten it right, and yet he had missed it! How could I face him again? I thought I might repurchase some shares with my profits as the stock met support at \$3, just so misery might have some company. But, nah, I would just be wasting my good capital on bad assets. What kind of example would that be for my stockbroker students?

This anecdote shows that my colleague and I each had our own perspectives of the market. The fundamentalist viewed stocks as companies in which he could become part owner. He believed his favored company was worth significantly more than the market price, so he bought it. This perspective of the market springs from what is called fundamental analysis. My view of the market is that stocks are shares of companies. These shares go up because eager buyers push them up, and they go down because fervent sellers sell, forcing them down. When I saw a stock that had previously gone nowhere suddenly pop up, I concluded the force of buying pressure could propel the stock further, and I bought it. Our different investment approaches did not reflect a difference in intelligence, but they did reflect a difference in our perspectives. Fundamental analysis is primarily about the “what,” whereas technical analysis is much about the “when.” Rather than being pitted against each other, technical and fundamental analysis can be used to complement each other. With that clearly stated, *Investing with Volume Analysis* introduces you to a perspective of market analysis based on the principles of supply and demand. In security analysis, this perspective is technical analysis.

## The Fundamental Approach

Fundamental analysis presumes security prices are based on the intrinsic value of the underlying company. Price is formed based on these values and facts surrounding the company. Seemingly, this is a highly logical approach, one that many assume is correct in most markets most of the time. The fundamentalist believes that with

time, stocks will move up to minimize the disparity between their present value and their perceived intrinsic value. Thus, fundamental analysis presumes the future prospects of a security are best analyzed through a proper assessment of the intrinsic value of the underlying company.

Fundamental analysis is not concerned with the behavior of investors as measured through the stock price or trading volume. Rather, the pure fundamental analyst's focus is on finding the true worth of the underlying company. In pursuit of value, the fundamentalist collects, analyzes, and models company information, including earnings, assets, liabilities, sales, revenue, and other information required to evaluate the company. Assumptions of the fundamentalist include a belief that markets are not completely efficient and that all necessary information is available to the public, but the company may not always be efficiently priced. Overall, fundamentalists are concerned with what the price should be according to their valuation models. The determination of value from the collective action of these fundamentalist investors is the primary force moving today's markets.

## **The Technical Approach**

While fundamental analysis focuses on the investment's intrinsic value, technical analysis is the study of the market through its creators, the investors. Therefore, the focus of technical analysis is the behavior and motivations of investors observed primarily through their own actions. It is imperfect people who determine market prices, not highly perfected valuation models. However, the technician does not deny that the pursuit of value is a primary source of market movement. Yet, the technical perspective deems that market price is formed by the collective opinions of market participants pursuing value. Thus, in the mind of a technician, price is less about company facts and more about investors' feelings and perceptions concerning those facts.

In the exchange markets, prices are determined by what one party is willing to pay and another is willing to accept. Therefore, price is

ultimately the end result of a battle between the forces of supply and demand, manifested through the actions and behaviors of investors. Price represents all that is known, feared, and hoped for by the market. It is through the diagnostics of price, volume, and other technical metrics formed by the actions and sentiments of market participants that the technician gauges stock performance.

Technical analysis assumes that market participants are efficient in price formation, thus avoiding any judgments about the intrinsic value of the underlying company. Therefore, the technician is not concerned with what the ideal price should be; rather, he is concerned just with what it is. Consequently, the company or any dataset used to determine the company's value is not the pure technician's direct concern. The technician's objective is to develop an understanding of the behavioral forces producing price (such as supply and demand). The core aspects of the technician include believing that the markets are efficient at discounting even future developments, price moves through trends, investors are both logical and emotional creatures, and past behaviors tend to repeat themselves more so when enough time has elapsed that the behaviors have been forgotten.

## **Driving a Comparison Between Fundamental and Technical Analysis**

The movie *Vantage Point* begins by playing out the same scene over and over again, each time from a different vantage point as experienced by each major character. From such a portrayal or depiction, the viewer can easily see that one's vantage point largely influences one's perspective. Likewise, the fundamentalist and the technician have similar objectives in analyzing securities. Their views are, however, developed from different vantage points. An analogy can be drawn between a fundamentalist and a technician who both examine a high-performance automobile. The fundamentalist looks under the hood, kicks the tires, and inspects the frame—the physical aspects of the car. The technician does not look under the hood. Rather, he evaluates how the car performs under a set of conditions, such as turning, accelerating, and shifting. The fundamentalist examining the engine

notices a potential flaw in the engine design. Similarly, when the gauges exceed the threshold of the expected parameters, the technician is led to the same conclusion as the fundamentalist, but without a physical inspection of the engine.

A fundamentalist might identify a good valuation point of a stock based on his analysis of the company. The technician observing the actions of market participants through the stock's movements might identify the same price level as a potential support level. What is support? Support is demand (buyers). So where does this demand come from? Often, it originates from the fundamentalist's determination of value. In this way, the two perspectives often yield the same conclusion using different methodologies. One opinion is based on the search for intrinsic value, whereas the other is shaped by extrinsic behavior.

Whatever one's vantage point, price goes up for only one reason: Demand has surpassed available supply. When the available supply outweighs demand, the price must go back down. Volume is the scale weighing these forces of supply and demand that produce price. In this way, volume ultimately reflects the ebb and flow of money into and out of the market or the security. Therefore, my belief is that volume analysis provides a superior view of the market's internal structure that other forms of analysis do not offer. This book explores the market from this underemployed perspective of volume analysis, providing an investor with the tools and concepts to advance his or her own abilities in evaluating the market.

# INDEX

## A

*ABC of Stock Speculation, The*, 16  
Acampora, Ralph, 21, 83  
accumulation  
  distribution, 133  
  interday volume indicators, 127-139  
  prices based on volume indicators,  
    147-150  
  volume, 121  
actions, reaction, 50  
addition, 218  
advance-decline lines, 215, 223  
*Advanced Trading*, 301  
allocation, dynamic asset, 248-251  
alphabet, markets, 54  
Alphier, James E., 128  
Altaira Investment Solutions, 83  
American International Group, 229  
American markets, history of, 15  
American Statistical Association, 127  
Amsterdam exchange, 14  
analysis. *See also* studies  
  closing prices, 58-59  
  comparisons of fundamental/  
    technical, 10-11  
  fear and greed, 56-57  
  fundamentals of, 5-6, 8, 11  
  index analysis alternatives, 231  
  markets, 53-70  
    *modern techniques of*, 22-24  
    *sectors*, 265  
    *volume*, 33-34  
  patterns, 93-94  
  prices, 27-31, 55-58  
  technical, 9-10, 13-14, 30  
  trends, identifying, 73-74  
  volume. *See* volume, analysis  
Anti-Volume Stop Loss (AVSL),  
  253, 256

Appel, George, 169  
applying  
  Volume Price Confirmation  
    Indicator (VPCI), 185, 188,  
    192-193, 204  
  volume-based strategies, 260  
arbitrage, 284  
Arms, Richard, 142-144, 218, 220-222  
Arms index (TRIN), 220, 222  
ascending triangles, 99-100  
assets, dynamic allocation of, 248-251  
Association for Investment Manage-  
  ment and Research (AIMR), 23  
ATS (Alternative Trading System), 286  
Average Directional Index (ADX), 199  
averages  
  moving, 119  
  volume, 33  
  volume-weighted average price  
    (VWAP), 152  
  Volume-weighted Moving Averages  
    (VWMA), 160-164, 168-171  
Ayers, Leonard P., 17, 213

## B

B = S = T formula, 42-43  
Babylonian charts, 14  
Balance of Power (BOP), 155  
bands, volume, 120  
Bank of America, 229  
Barron, Clarence W., 17  
*Barron's* magazine, 17, 214  
bars  
  downtrends, 74  
  prices, 28, 54-55, 58-60  
  volume, 54-55  
Bear Stearns, 300  
bearish markets  
  diamond top patterns, 103  
  head-and-shoulders patterns, 105

- high volume with low stock appreciation, 65-67
  - inverted head-and-shoulders patterns, 106
  - low volume with high stock appreciation, 63-65
- behaviors, observing, 57
- Better Trading Through Effective Volume, 156
- bid-ask spreads, calculating, 295
- bid-offer premise, 14
- Birinyi, Laszlo, 154
- block trades, 24
- Bloomberg*, 300
- Bollinger, John, 169, 254
- Bollinger Bands, 121, 186-188, 254
- Bollinger on Bollinger Bands*, 169
- bonds, 12. *See also* investments
- Bostian, David, 133
- bottoms, rounding, 101-102
- breadth
  - markets, 262, 265, 268
  - indicators, 209-225
- breakdowns, 96
- breakouts, 95-96
- broadening patterns, 97-98
- Brown, Stephen J., 25
- Buff Averages, 161
- Buff Spreads, 172
- Buffett, Warren, 34
- building MPS maps, 269
- Bulkowski, Thomas, 97
- bullish markets
  - cup-and-handle patterns, 104
  - flags, 108-110
  - high volume with high stock appreciation, 61-63
  - indexes, 149
- buying, pressure, 52
- C**
- C (close), 60
- calculations
  - of average Buff Spreads, 172
  - bid-ask spreads, 295
  - Volume Price Confirmation Indicator (VPCI), 183-184
  - Volume-weighted Moving Averages (VWMA), 162
- calendar tax years, trends, 91
- Can Stock Market Forecasters Forecast?, 21
- capital weighted volume, 226
  - cap-weighted volume, 232, 235, 238-239
  - credit crisis of 2008, 229-231
  - index volume analysis alternatives, 231
  - price volume relationship disconnects, 227
- capitalization, 227
- Carder, John A., 220
- Castaing, John, 14
- cause and effect, volume, 37
- CFA (Chartered Financial Analyst), 6
- CFA Institute, 23
- CFP Board's Code of Ethics, 244
- Chaikin, Marc, 133
- Chaikin's Money Flow, 136
- change, 30
- channels, 94-95
- Chartered Financial Analyst (CFA), 6
- Chartered Market Technician (CMT), 6
- Charting the Market* television show, 224
- charts
  - Babylonian, 14
  - Crocker, 124
  - equivolume, 142-144
  - point and figure, 55
  - trends, drawing trend lines, 74-76
  - volume, 119
- Cisco, 245
- Citigroup, 229
- Clay, Paul, 127
- closing prices, 29, 58-59
- CMT (Chartered Market Technician), 6
- CMT of Miller Tabak + Co. LLC., 283
- Cobb, Ty, 258
- Coca-Cola, 254
- coffee shops, stock trading in early
  - European markets, 14
- Columbia University, 20
- combinations, plot, 94-103
- commissions, 285
- commodities, Babylonian charts, 14
- companies, determination of value, 10
- comparisons
  - between fundamental/technical analysis, 10-11
  - traditional volume to cap-weighted volume, 234-235
  - Volume Price Confirmation Indicator (VPCI) to other indicators, 198, 202
- competition, 303
- compounding, power of, 252
- computers, statistical arbitrage, 284

conditions for Market Facilitation Index (MFI), 141  
 confirmation  
   price-volume, 113  
   Volume Price Confirmation Indicator (VPCI), 183-204  
*Confusion de Confusiones*, 14  
 contradictions  
   price-volume, 113  
   Wyckoff's law, 85  
 Convergence, Volume-Weighted Moving Average Convergence Divergence, 169-171  
 convictions, volume, 35  
 countertrends, 108  
*Course of the Exchange and Other Things, The*, 14  
 Cowles, Alfred, 20  
 credit crisis of 2008, 229-231  
 Crocker, Benjamin, 124  
 cumulative sums, 218  
 cumulative volume, 127  
 cup-and-handle patterns, 104  
 curve-fittings, 116. *See also* indicators  
*Customers' Afternoon Letter*, 16

**D**  
 Daily Trading Barometer, The, 130  
 Daily Volume Indicator, 133  
 Dalton, James, 35  
 Dalton, Robert, 35  
 dark pools, 289-293, 302  
 day-to-day (or bar-to-bar) measurements, 145  
 de la Vega, Joseph, 14  
 decimalization, 215, 303  
 declines, 215  
 decoding price with volume, 59  
 demand, 36, 260-268  
   actions and reactions, 50  
   lines, 44  
   opportunity cost models, 51  
   strong demand phase, 79  
   supply and, 11  
   weak demand phase, 79  
 deregulation of commissions, 285  
 descending triangles, 100  
 Desmond, Paul F., 217  
 diamond top patterns, 103  
 direction of trends, 261, 279  
 disconnects, relationships, 227  
 disparity of opinions, volume, 36  
 displaying volume bars below price bars, 118

dissemination of information, 35  
 distribution  
   accumulation, 133  
   Money Flow, 154  
 Divergence, Volume-Weighted Moving Average Convergence Divergence, 169-171  
 diversification, 251. *See also* risk  
 dividend weighting, 227  
 DJIA (Dow Jones Industrial Average), 16, 213, 220  
 Dodd, David, 19  
 dollar volume, 33  
 Domowitz, Ian, 301  
 Donaldson & Lufkin seminar (1976), 22  
 doubt, 96  
 Dow Jones Corporation, 17  
 Dow Jones Industrial Average (DJIA), 16, 213, 220  
 Dow Jones Transportation Average, 16  
 Dow Theory, 16-17, 20, 24, 26  
*Dow Theory Comment*, 17  
 Dow, Charles H., 15-16, 24, 38, 49, 77, 176  
 down volume, 127  
 downtrends, 42, 45, 76. *See also* trends  
 dynamic asset allocation, 248-251  
 Dysart, Jr., Paul F., 219  
 Dysart, Paul L., 147

**E–F**  
 ease of movement, 144-145  
 economy, growth of, 283  
 Edwards, Robert, 18, 19  
 Efficient Market Theory, 20  
 efforts versus results, law of, 87  
 emotions, analyzing, 57  
 equal weighting, 227  
 equilibrium, markets, 277-279  
 equity markets, 283. *See also* markets  
 equivolume charts, 142, 144  
 European markets, early (1690s), 14  
 evaluation, state of trends, 77-78  
 exchange markets, determination of prices, 9  
 exchange-traded funds (ETFs), 232, 245, 283, 303  
 exponential moving averages (EMAs), 131, 223  
 extremes  
   price volume, 277  
   Volume Price Confirmation Indicator (VPCI), 186  
 Exxon, 229

falling  
 resistance, 96-97, 100  
 support, 42, 97-98  
**Fannie Mae**, 229  
 fear, analyzing, 56-57  
 fill or killed orders, 12-13  
**Financial Industry Regulatory Authority (FINRA)**, 6, 287  
**First Law of Motion**, 46  
 flags, bullish markets, 108-110  
**Flash Crash (2010)**, 24, 236-238, 281, 300  
 flash trading, 291  
 flickering, quotes, 291  
 flipping, 304  
 float, 33  
*Forbes* magazine, 18  
 force, 43-44, 47-49  
 forecasting, 20, 128, 260  
 formations  
   countertrends, 108  
   pennant, 108-110  
 formulas  
    $B = S = T$ , 42-43  
   on-balance volume (OBV), 128  
   Williams' Accumulation Distribution (WAD), 135  
   Williams' Variable Accumulation Distribution (WVAD), 133  
**Fosback, Norman G.**, 147, 219  
 401(k) plans, 283  
*Fountain of Gold, The*, 15  
**Freddie Mac**, 229  
 frequency, high-frequency trading, 287-293  
 fundamentals  
   analysis, 5-11  
   history of, 19-22  
   prices, 28. *See also* prices

**G–H**  
 gaming, 291  
 gaps, 69  
**Gartley, Harold**, 214  
**Gire, Paul J.**, 244  
**Goetzmann, William N.**, 25  
**Gould, Jr., Edson B.**, 127, 130  
**Graham, Benjamin**, 19, 22, 34  
**Granville, Joseph E.**, 128, 132, 139, 223  
*Granville's New Key to Stock Market Profits*, 128  
**Great Market Crash of '29**, 18, 21  
 greed, analyzing, 56-57

growth  
 of economy, 283  
 of pessimism, 76  
 of volume, 282-291, 293

**H (high)**, 60  
**H.W. Poor Company**, 17  
**Hamilton, William Peter**, 17-25  
 hands, strong/weak, 86  
**Hauran, Peter N.**, 223  
 head-and-shoulders patterns, 105  
**Healy, Patrick**, 300  
 high ease of movement, 145  
 high-frequency trading, 287-293  
 high prices, 29  
 high volume  
   with high stock appreciation, 61-63  
   with low stock appreciation, 63-65  
   with low stock depreciation, 65-67  
 "The High Volume Return Premium," 39  
 "The High Volume Return Premium and the Investor Recognition Hypothesis: International Evidence and Determinants," 40  
 history  
   Charles H. Dow, 15-16  
   of fundamentals, 19-22  
   of indexes, 16  
   of investments, 12-15  
   of markets, 293-302  
   on-balance volume (OBV), 128  
   William Peter Hamilton, 17  
 holiday trends, 91-92  
**Homma, Munehisa**, 15  
 horizontal resistance, 99-100  
 horizontal support, 100  
*How to Chart Your Way to Stock Market Profits*, 130

**I**  
 identifying trends, 73-74  
 index funds, 245  
 indexes  
   analysis alternatives, 231  
   ARM (TRIN), 220, 222  
   history of, 16  
   Intraday Intensity Index, 133  
   Money Flow Index, 158-159  
   Negative Volume Index (NVI), 147-148  
   Positive Volume Index (PVI), 147-148  
   S&P 500, 215, 269  
   Trend Thrust Indicator Index (TTI), 269  
   volume, 33

indications of interest (IOI), 286  
 indicators  
   breadth, 209-225  
   interday volume accumulation, 127-131  
   intraday volume accumulation, 132-139  
   Money Flow, 153-156  
   Moving Average Convergence Divergence (MACD), 169  
   on-balance volume (OBV), 128-129  
   price range volume, 140-146  
   pure volume, 118-124  
   tick-based volume, 151-156  
   Trend Thrust Indicator (TTI), 171-174  
   volume, 114-117, 147-150  
   Volume Price Confirmation Indicator (VPCI), 183-204  
   volume-price trend (VPT), 130-131  
   volume-weighted price, 157-159, 164-175, 177-181

individual stock selection, 268  
 inflation, 282

information, dissemination of, 35  
 inside days, 70

interday volume accumulation indicators, 127-131

intermediate-term trends, 75

Intraday Intensity Index, 133

intraday volume accumulation indicators, 132-139

inverted head-and-shoulders patterns, 106

investments

- Babylonian charts, 14
- Charles H. Dow, 15-16
- early American markets, 15
- early European markets, 14
- early Japanese markets, 14
- history of, 12-13
- prices, 28. *See also* prices
- risk strategies. *See* strategies, risk
- volume as a market force, 39

Investor Business Daily (IBD), 137

## J-K-L

Japanese markets, early (1700s), 14

Jensen's Measure, 25

Jonathan's Coffee House, 14

Jones, Edward, 16

Jones, Eric, 35

*Journal of Finance*, 41

Khalil, Waleed Aly, 130

Kumar, Alok, 25

L (low), 60

languages, 54-55

large caps stocks, 212

laws

- of cause and effect, 52
- of effort versus result, 47
- of motion, 46, 51-52
- volume, 85-88, 91

left shoulders, 106

Lincoln, Abraham, 257

lines

- advance-decline, 215, 223
- demand, 44
- signal, 172
- trends, drawing, 74-76
- Up-Down Volume Line, 217

liquidity

- measurements, 297
- volume, 35

Livermore, Jesse, 17

logs, 218

London Stock Exchange, 14

low prices, 29

Lowery Research Corporation, 217

## M

*Magazine of Wall Street, The*, 18, 20

Magee, John, 18, 21

Managed Funds Association, 301

maps, building MPS, 269

Market Break, 301

Market Facilitation Index (MFI), 141-142

"Market Statistics and Technical Analysis: The Role of Volume," 41

Market Technician's Association. *See* MTA

markets

- analysis, 22-24, 53-70
- B = S = T formula, 41-43
- breadth, 262, 265, 268
  - indicators*, 209, 219-225
  - reliability of*, 214-218
  - as a resource*, 211-213
  - statistics*, 209-210
- cup-and-handle patterns, 104
- diamond top patterns, 103
- early American, 15
- early European, 14
- early Japanese, 14
- equilibrium, 277-279
- exchange, determination of prices, 9
- flags, 108-110
- head-and-shoulders patterns, 105
- history of, 293-302

indexes, 149  
 inverted head-and-shoulders  
   patterns, 106  
   prices, 28. *See also* prices  
   regulation, 23-24  
   risk strategies. *See* strategies, risk  
   sectors, 265-266  
   structures, changes in, 302  
   trends, identifying, 73-74  
   volume, 33-37  
 Markowitz, Harry, 247  
 Markstein, David L., 130  
 McClellan, Marian, 223  
 McClellan, Sherman, 223  
 McClellan, Tom, 215-218  
 McClellan oscillator, 223-225, 238  
 McDonald's, 248  
 McGinley, John R., 222  
 measurements  
   liquidity, 297  
   types of indicators, 114-117  
   volume, 112-113  
 Mehta, Nina, 300  
 methods of security analysis, 6-8  
 Miles, Jonathon, 14  
*Mind over Markets*, 35  
*Missing the Ten Best*, 244  
 modern market structure, 294-301  
 money  
   management, 251  
   velocity of, 34  
 Money Flow, 133, 153-154, 156  
 Money Flow Index, 158-159  
 Money Stream, 155  
 Moody's Investors Services, 127  
 Morgan, Gene, 224  
 motion, 46, 51-52  
 movement  
   markets, analyzing, 59  
   prices, 51  
 Moving Average Convergence  
   Divergence (MACD), 169-173,  
   177-181  
 moving averages, 119, 218  
   Volume-Weighted Moving  
   Average Convergence Divergence  
   (VW-MACD), 169, 171  
   Volume-weighted Moving Averages  
   (VWMA), 160-168  
 MPS (market positioning system)  
   maps, building, 263-264, 269  
 MTA (Market Technician's  
   Association), 22  
 mutual funds, 283. *See also* bonds;  
   investments; stocks

## N

NASDAQ, 215  
   Nasdaq Composite, 213  
   Nasdaq Stock Market, 303  
 National Market System (NMS), 286  
 necklines, 106  
 Negative Money Flow, 158  
 Negative Volume Index (NVI),  
   147-148, 219  
 Nelson, Samuel A., 16  
 New York Stock Exchange (NYSE),  
   16, 215, 282, 303  
*New York Times, The*, 18  
 New York University Stern School of  
   Business, 25  
 NMS (National Market System), 286  
 Nobel Prize in economics, 247  
 nonexchange markets, 286  
 nontrending price patterns, 129  
 normalized volume (%V), 120  
 NYSE (New York Stock Exchange),  
   16, 215, 282, 303  
   NYSE Amex (formerly the American  
   Stock Exchange), 303  
   NYSE Arca (formerly the  
   Archipelago ECN), 303

## O-P

O (opening), 60  
 on-balance volume (OBV), 128-129  
 open competition, 303  
 opening values, 28  
 optimization, 116-117  
 oscillators, 218  
   intraday volume accumulation,  
   136-139  
   McClellan, 223-225, 238  
   volume, 120  
   volume zone oscillator (VZO), 130  
 outside days, 71  
 parallel support and resistance, 94  
 patterns, 51  
   analyzing, 93-94  
   bullish flags and pennant  
   formations, 108-110  
   countertrends, 108  
   cup-and-handle, 104  
   diamond top, 103  
   head-and-shoulders, 105  
   inverted head-and-shoulders, 106  
   plot combinations, 94-103  
*Patterns For Profit*, 224  
 pennant formations, 108-110  
 pessimism, growth of, 76

phases of volume analysis, 78,  
270-276, 280  
  strong demand, 79  
  strong supply, 80-82  
  weak demand, 79  
  weak supply, 82-83

plots  
  combinations, 94-103  
  countertrends, 108

point and figure charts, 55

Poor, H.V., 17

portfolio managers, 251

Positive Money Flow, 158

Positive Volume Index (PVI),  
147-148, 219

power of compounding, 252

price-volume confirmation/  
  contradiction, 113

prices  
  accumulation based on volume  
    indicators, 147-150  
  analysis, 27-31, 55-59  
  bars, 28, 54-55, 58-60  
  channels, 95  
  closing, 29  
  determination of, 9  
  high, 29  
  low, 29  
  motion, 47  
  movement, 51  
  range volume indicators, 140-146  
  trends, 44  
  as truth (volume), 37  
  validation of, 34  
  velocity, 38  
  volume, 32  
    *extremes*, 277  
    *interpreting*, 40-41  
    *leading*, 39-40  
    *relationship disconnects*, 227  
  Volume Price Confirmation  
    Indicator (VPCI), 183-204  
  volume price-spread analysis, 61-71  
  volume-weighted average price  
    (VWAP), 152  
  volume-weighted price indicators,  
    157-159, 164-171, 175-181

primary trends, 75

profit  
  Volume Price Confirmation  
    Indicator (VPCI), 196, 198  
  volume-weighted price indicators,  
    179-181  
  unity windows, 141

pure volume indicators, 118-124

## Q-R

Quong, Gene, 158

quotes, flickering, 291

railroads, Dow Jones Transportation  
  Average, 16

ranges, 30, 140-146

ratios, 218

reactions, actions, 50

reading  
  price bars, 60  
  the tape, 54, 57

Reagan, Ronald, 77

real estate investment trusts  
  (REITs), 216

RealMoney.com, 144

reforms in 1934, 20

Regulation NMS, 294

regulations  
  growth of trading volume, changes  
    in, 285-293  
  markets, 23-24

relationships  
  disconnects, 227  
  price-volume, 185

reliability  
  of breadth indicators, 214-218  
  volume, 303, 305  
  Volume Price Confirmation  
    Indicator (VPCI), 197  
  Volume-weighted Moving Averages  
    (VWMA), 164  
  volume-weighted price indicators,  
    177-178

resistance, 43-44  
  falling, 96-97, 100  
  parallel support and, 94  
  horizontal, 99-100  
  rising, 97-98

resources, breadth indicators, 211-213

responsiveness  
  Volume-weighted Moving Averages  
    (VWMA), 163  
  volume-weighted price indicators,  
    176-177

retirement plans, 283

returns  
  Volume Price Confirmation  
    Indicator (VPCI), 196  
  Volume-weighted Moving Averages  
    (VWMA), 166

revenue, 227

reversal warnings, 65-67

Rhea, Robert, 17

- right shoulders, 106
  - rising
    - resistance, 97-98
    - support, 44, 96-100
  - risk
    - Sharpe Ratio, 197
    - strategies, 241-242
      - Anti-Volume Stop Loss (AVSL)*, 253, 256
      - buy and hope*, 245, 248
      - dynamic asset allocation*, 248-251
      - errors*, 256-258
      - management*, 244, 251
    - Volume Price Confirmation Indicator (VPCI), 197
    - Volume-weighted Moving Averages (VWMA), 165
  - Rodney L. White Center for Financial Research, The, 39
  - Roth, Philip J., 283
  - rounding
    - bottoms, 101-102
    - tops, 102-103
  - rules, volume, 85-91
  - Russell, Richard, 223
  - Ruth, Babe, 258
- S**
- S&P 500
    - Growth Index, 269
    - index, 215
    - Value Index, 269
  - Sandler, Doug, 249
  - Schabacker, Richard W., 17-18
  - Schade, Jr., George A., 219
  - Schilling, Molly, 21
  - A School Boy's Faith*, 128
  - Schumer, Charles E., 287, 300
  - seasonal trends, 91-92
  - Second Law of Motion, 47
  - Secret of Selecting Stocks for Immediate and Substantial Gains, The*, 133
  - sectors, markets, 265-266
  - securities, fundamentals of analysis, 6-8
  - Securities Exchange Act of 1934, 20
  - Securities and Exchange Commission (SEC), 20-21, 285
  - Security Analysis*, 19-20
  - Security Information Processor (SIP), 303
  - Segal, Jeremy J., 245
  - selection of individual stocks, 268
  - selling, pressure, 52
  - sessions, trading, 33
  - Sharpe Ratio, 25, 197
  - short-term trends, 75
  - signal lines, 172
  - simple addition, 218
  - Simple Moving Averages (SMAs), 183
  - Smith, Adam, 50
  - Soudack, Avrum, 158
  - SP500, 213
  - spreads
    - Buff Spread, 172
    - volume, 59-71
  - Standard and Poor's, 17
  - Standard Statistics, 17
  - statistical arbitrage, 284
  - statistics, breadth indicators, 209-210
  - stochastics, 218
  - Stock and Commodities Magazine*, 142
  - Stock Market Barometer, The*, 17
  - Stock Market Logic, 147
  - stocks, 7, 12. *See also* investments
    - fundamental analysis of, 7
    - individual selection, 268
    - large cap, 212
    - risk strategies. *See* strategies, risk
    - volume, 32
  - Stocks for the Long Run*, 245
  - strategies
    - risk, 241-242
      - Anti-Volume Stop Loss (AVSL)*, 253, 256
      - buy and hope*, 245, 248
      - dynamic asset allocation*, 248-251
      - errors*, 256-258
      - management*, 244, 251
    - volume, 259
      - applying*, 260
      - MPS maps*, 269
      - phases of volume analysis*, 270-276, 280
      - supply and demand*, 260-268
  - strong
    - demand phase, 79
    - hands, 86
    - supply phase, 80-82
  - studies, 174-176
    - breadth indicators, 210
    - Volume Price Confirmation Indicator (VPCI), 194-198
  - subtraction, 218
  - summaries, Volume-weighted Moving Averages (VWMA), 168
  - supply, 260-268
    - and demand, 11
    - opportunity cost models, 51

strong supply phase, 80-82  
 weak supply phase, 82-83  
**support, 43-44**  
 falling, 97-98  
 horizontal, 100  
 parallel, and resistance, 94  
 rising, 96-100  
 surges, volume, 120  
 sustainability of trends, 261-262  
 symbols, 54-55  
 symmetrical triangles, 96-97

## T

T.P. Donovan Investments, 169  
 tape, reading the, 54, 57  
 technical analysis, 9-10, 30  
   Babylonian charts, 14  
   fill or be killed orders, 13  
*Technical Analysis and Stock Market Profits*, 19  
*Technical Analysis of Stock Trends*, 18-19  
*Technical Analysis of Stocks and Commodities*, 158  
*Technically Speaking*, 21  
 TeleChart, 45  
 terminology, volume, 33  
 theories, 50  
   Dow Theory, 16-17, 20-26  
   Efficient Market Theory, 20  
 Third Law of Motion, 50  
 Tick Volume, 154  
 tick-based volume indicators, 151-156  
 Time-Segmented Volume, 155  
 tops, rounding, 102-103  
 total trades/volume, 33  
 tracking zones, 271  
 Trade Reporting Facilities (TRFs), 290, 304  
 Tradestation, 44  
 trading  
   block trades, 24  
   flash, 291  
   high-frequency, 287-293  
   history of, 293-302  
   total trades, 33  
   volume, changes in, 281-293  
*Trading Chaos*, 141  
*Trading Classical Patterns*, 97  
 Trading with Equivolume at RealMoney.com, 144  
 transactions, 33. *See also* trading  
 Trend Thrust Indicator (TTI), 171-174, 269

## trends, 44

of accumulation and distribution, 51  
 countertrends, 108  
 determining type of, 74  
 direction of, 261, 279  
 downtrends, 42, 45  
 identifying, 73-74  
 lines, drawing, 74-76  
 seasonal, 91-92  
 state of, evaluating, 77-78  
 sustainability, 261-262

## triangles

ascending, 99-100  
 descending, 100  
 symmetrical, 96-97

## TRIN, 220, 222

## Twiggs, Colin, 137

## Twiggs' Money Flow, 137

## U–V

U-shaped tails, 266  
 uncertainty, 96  
 uneventful nontrending price patterns, 129  
 up volume, 127, 211  
 Up–Down Volume Line, 217  
 uptrends, drawing, 75-76. *See also* trends  
 upward breakouts, 95  
 validation of price, 34  
 values  
   judgments of, 10  
   opening, 28  
 vantage points, 10  
 variable market-based insurance products, 283  
 VARSITI (Volume Adjusted Relative Strength Increasing Thrust Indicator), 251  
 velocity  
   of money, 34  
   volume, 38  
 volume, 32  
   accumulation, 121  
   analysis, 43, 55-60  
     *applying laws of motion to*, 51-52  
     *changes in*, 302  
     *evaluating state of trends with*, 77-78  
     *phases of*, 78-83  
     *price-spread*, 61-71  
   averages, 33  
   B = S = T formula, 42-43

- bands, 120
- bars, 54-55
- capital weighted, 226-239
- cause and effect, 37
- convictions, 35
- cumulative, 127
- dark pools, 291-293
- disparity of opinions, 36
- dissemination of information, 35
- dollar, 33
  - as fuel for markets, 36-37
  - high volume, 61-67
  - indexes, 33
  - indicators, price accumulation based on, 147-150
  - interday accumulation indicators, 127-131
  - intraday accumulation indicators, 132-139
  - liquidity, 35
  - low volume with high stock appreciation, 63, 65
  - as a market force, 39
  - markets, 33-34
  - measurements, 112-117
  - motion, 47
  - moving averages, 119
  - oscillators, 120
  - overview of, 33
  - patterns, 93. *See also* patterns prices
    - extremes*, 277
    - interpreting*, 40-41
    - leading*, 39-40
    - range indicators*, 140-146
  - pure indicators, 118-124
  - reliability, 303-305
  - rules and laws, 85-91
  - strategies, 259-280
  - Tick Volume, 154
  - tick-based indicators, 151-156
  - total, 33
  - trading, changes in, 281-293
  - trends, 73-78, 91-92
  - truth (prices as), 37
  - validation of price, 34
  - velocity, 38
- Volume Moving Average Convergence Divergence (V-MACD)**, 120
- volume multiplier (VM), 185
- %Volume Oscillator (%VO)**, 120
- Volume Price Confirmation Indicator (VPCI)**, 183, 254
  - applying, 185-193, 204
  - calculations, 183-184
  - comparing to other indicators, 198, 202
  - studies, 194-198
- volume-price trend (VPT), 130-131
- Volume Rate of Change (V-ROC)**, 120
- Volume-Weighted Average Pricing (VWAP)**, 152, 298
- volume-weighted moving average convergence divergence (VW-MACD), 169-171, 266
- Volume-Weighted Moving Averages (VWMAs)**, 160-168, 183
- volume-weighted price indicators, 157-159, 164-181
- volume zone oscillator (VZO), 130
- W-Z**
- Wall Street Journal, The**, 15, 38, 304
- Walters, Patricia D.**, 23
- warnings, reversal, 65-67
- weak
  - demand phase, 79
  - hands, 86
  - supply phase, 82-83
- weighting, 227
- Wharton School, University of Pennsylvania, 39
- Wilder, J, Welles, 134
- William, Pascal, 156
- Williams' Accumulation Distribution (WAD)**, 134
- Williams' Variable Accumulation Distribution (WVAD)**, 133
- Williams, Bill, 37, 140
- Williams, Larry, 133-134
- Worden, Don, 154
- Worden Brothers, Inc., 45, 154
- worms, 114
- Wright, Charley F., 142
- Wyckoff, Richard D., 17, 47, 37, 52
- Wyckoff's law, 85
- zones
  - resistance, 43
  - support, 43
  - tracking, 271