

The book cover features a complex background of technical analysis charts. The top half has an orange-to-yellow gradient with a candlestick chart and a red upward-sloping trend line. The middle section is a dark blue band containing the main title. The bottom half is white with red text. The overall design is professional and financial in theme.

Bloomberg

FINANCIAL SERIES

NEW FRONTIERS *in*
TECHNICAL
ANALYSIS

EFFECTIVE TOOLS AND STRATEGIES
FOR TRADING AND INVESTING

PAUL CIANA, CMT

NEW FRONTIERS IN TECHNICAL ANALYSIS

Effective Tools and Strategies for Trading
and Investing



Paul Ciana, CMT

BLOOMBERG PRESS

An Imprint of



Copyright © 2011 by Paul Ciana. All rights reserved.

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

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. 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.

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.

DeMark Indicators®

Kase StatWare™ is a registered trademark of Kase and Company, Inc.

Know What's Next™

Market Profile® is a registered trademark of the CBOT.

TAS PRO Approach to Trading and Market Analysis

TAS PRO Dynamic VAP

TAS PRO Indicator Suite

TAS PRO Navigator

TAS PRO VAP Map

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 also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books. For more information about Wiley products, visit our web site at www.wiley.com.

Library of Congress Cataloging-in-Publication Data:

Ciana, Paul, 1983–

New frontiers in technical analysis : effective tools and strategies for trading and investing / Paul Ciana.

p. cm. – (Bloomberg financial series)

Includes index.

ISBN 978-1-57660-376-5 (hardback); ISBN 978-1-118-155-608 (ebk); ISBN 978-0-470-879-085 (ebk); ISBN 978-1-118-155592 (ebk)

1. Investment analysis. 2. Investments. I. Title.

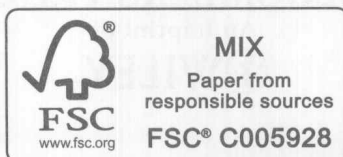
HG4529.C53 2011

332.63'2042–dc22

2011015868

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1



NEW FRONTIERS IN TECHNICAL ANALYSIS

Since 1996, Bloomberg Press has published books for financial professionals on investing, economics, and policy affecting investors. Titles are written by leading practitioners and authorities, and have been translated into more than 20 languages.

The Bloomberg Financial Series provides both core reference knowledge and actionable information for financial professionals. The books are written by experts familiar with the work flows, challenges, and demands of investment professionals who trade the markets, manage money, and analyze investments in their capacity of growing and protecting wealth, hedging risk, and generating revenue.

For a list of available titles, please visit our Web site at www.wiley.com/go/bloombergpress.

*This book is dedicated to my family,
in particular,
to the memory of my Grandmother, Charlotte Cianciulli,
and her 92 years of inspiring life, laughter, and love.*

Preface

In the struggle for survival, the fittest win out at the expense of their rivals because they succeed in adapting themselves best to their environment.

—Charles Darwin

This book has been assembled in response to the growing demand to diversify an investment strategy through the numerous styles of contemporary market analysis and the ongoing search for increasing alpha. Although the most frequently used style of analysis is fundamental, the adoption of technical analysis as an adjunct or preferred style of analysis is becoming increasingly sought after and accepted.

This evolution has become visible in many ways. One observation discussed in Chapter 1 is the tracking and measurement of the use and growth of charts and technical indicators in different regions of the world. Another observation is the growth rate of the number of market participants specializing in technical analysis. In 2010, the Market Technician's Association announced there were more than 1,000 active Chartered Market Technicians (CMTs) residing in 76 countries, representing a 100 percent increase in only four years. Yet another measure is the growing interest in and reliance on the development and implementation of innovative technical tools and strategies that capitalize on existing methods, such as those presented by the contributors to this book.

The bridge between fundamental and technical analysis continues to strengthen and the sophistication of each continues to develop. About a century ago, Charles Dow, who was a journalist, entrepreneur, and technician, created some of the world's most popular equity indices, which are relied on today by all market participants. About 30 years ago, the fundamental term *relative strength* had only one meaning, until the publication of the *Relative Strength Index* by established market technician J. Welles Wilder. The

theories of fundamental analysis and technical analysis are evolving together and affecting each other at rates faster than ever before. Therefore, a goal of this book is to properly document and share the gains of this evolution.

This book comprises contributions from five individuals who have spent most of their careers, if not all, studying the financial markets through a “technical” lens with the goal of identifying, developing, and implementing effective trading and investment strategies. These strategies attempt to capitalize on the experiences in their careers and explain how existing market actions will impact the future. Their methods are based on the existing body of knowledge of Technical Analysis, and have evolved to support and appeal to technical, fundamental, and quantitative analysts alike.

I view the contributors as accomplished market participants who do everything they can to continually adapt to the modern-day securities exchange industry. They are constantly modifying and refining their methodic approaches to the markets in order to achieve success, and I feel privileged to be a part of the sharing of their strategies.

These five individuals bring with them a combined 150 years of market experience. Their methods, at some point in time, were likely somewhat simplistic, such as the application of moving averages, overbought and oversold momentum indicators, trending indicators, volume analysis, and so forth. We could ask them to recall how they would use these studies, as I’m certain they remember from their earlier days, but this has been done many times with experienced market professionals.

Rather, Chapter 1 begins with the release of previously undisclosed evidence about the most preferred chart types and technical studies. It continues into a lucid and simple summary of the essential elements of those chart types and indicators. The following chapters continue with in-depth explanations of the work of Julius de Kempenaer, Phil Erlanger, Cynthia Kase, Andrew Kezeli, and Rick Knox. All of the chapters can be considered work that has mostly never been seen before, and if seen, never in this much detail. Where some parts of their work is considered intellectual property and therefore proprietary, subjective discussions provide readers with challenging theories and ideologies for their own use. Other parts certainly are not, and hopefully some, if not all, of the work contained in this book will be published again and again, in the same way that Gerald Appel’s MACD indicator was 40 years ago.

Chapter 2 presents the work by Julius de Kempenaer on formalizing a sector rotation strategy for world markets by tracking relative performance, the momentum of, and implementing leading visualizations to hasten the process

of this traditional strategy. Chapter 3 presents the quantitative work by Phil Erlanger on investing with seasonality and his four-step approach to trading using Bias, Setups, Triggers, and Monitoring. Chapter 4 is a quantitative and statistical approach by Cynthia Kase, who evolved from an engineer into a market technician. She explains her trading strategies using a multitude of tools that address challenging subjects such as appropriate stop levels, adjusting for volatility, and the confluence of multiple timeframes. Chapter 5 by Andrew Kezeli discusses how Trade Angle Securities has incorporated the advantages of the unorthodox yet extremely powerful Market Profile into a suite of technical indicators that are applied to the more traditional bar chart. Finally, Chapter 6 takes the work of Rick Knox, formerly a pit trader and chart software developer, and emphasizes the importance of improving the clarity of indicators through the use of color and a variety of types of technical tools such as Elliott Waves, cycles, velocity, and also the agreement of multiple timeframes. Additional information on the background of the contributors is provided at the back of the book.

Most of the book's contributing authors also maintain web sites, which are mentioned throughout the text. If you're interested in exploring these valuable resources, go to any of the following:

www.bloomberg.com/professional/charts_launchpad/
<http://tamresearch.com/>
www.erlanger.com/
www.kaseco.com/
www.atmstudies.com/
www.tradeangle.com

These and other useful resources are listed in the Recommended Reading section.

Whether you're a novice or a seasoned veteran in the subject of technical indicators, there is much to be gained by reading this book. An associate on a trading desk or a beginner in the subject of technical analysis has the opportunity to learn about the universally accepted studies, how to use them, and how the evolution of technical analysis has improved them. An analyst or portfolio manager has the opportunity to discover tools that can bolster his performance by studying the thought-provoking material on seasonality, sector rotation, and market distributions. Technical analysts/strategists will learn about groundbreaking tools and data visualizations to add to and possibly replace some of their preferred indicators. Creative minds will be challenged to

brainstorm on which calculations, visual cues, and risk/reward ratios will work the best for them when trading, investing, and creating their own indicators.

On behalf of all of those involved with the writing and editing of this book, thank you for considering this work. We feel confident you will not be disappointed and trust that this book will sharpen your investment strategies and enhance the way you view the market.

Acknowledgments

I would like to express my appreciation for all who were involved in the construction of this book and for their influence on my career.

This includes, but is not limited to, many of my colleagues at Bloomberg LP in the Application Specialist, Sales, Product, Analytics, R&D, News, and Markets groups. In addition, I thank the members and employees of the Market Technicians Association, those who encouraged and supported me in the quest to achieve the Chartered Market Technician (CMT) designation, many of the clients of Bloomberg LP, and, of course, each of the contributors to this book: Julius de Kempnaer, Phil Erlanger, Cynthia Kase, Andrew Kezeli, and Rick Knox.

More specifically, I would like to thank Eugene Sorenson, Karsten Gaebele, and David Keller. You have been great mentors, colleagues, and friends during this project and throughout my career. I look forward to our future endeavors.

Contents

Preface	xi
Acknowledgments	xv
CHAPTER 1	
Evidence of the Most Popular Technical Indicators	1
<i>Paul Ciana, CMT</i>	
Defining Technical Analysis	2
Defining Chart Types	5
Evidence of Chart Type Popularity	10
Evidence of Technical Indicator Popularity	14
Applying the Most Popular Technical Indicators	18
Conclusion	45
CHAPTER 2	
Everything Is <i>Relative Strength</i> Is Everything	49
<i>Julius de Kempnaer</i>	
“This Time It’s Different”	50
What Is Comparative Relative Strength?	51
The JdK RS-Ratio and JdK RS-Momentum	65
Relative Rotation Graphs	75
Conclusion	83
CHAPTER 3	
Applying Seasonality and Erlanger Studies	85
<i>Philip B. Erlanger, CMT</i>	
Testing for a Valid Seasonal Cycle	86
Applying Cycles as a Strategy	94

Monitoring Seasonal Data	101
Erlanger Studies: The Art of the Squeeze Play	108

CHAPTER 4

Kase StatWare™ and Studies: Adding Precision to Trading and Investing	155
<i>Cynthia A. Kase, CMT, MFTA</i>	

Introduction to KaseSwing	157
Kase DevStops	169
Kase Momentum Divergence Algorithm	177
Kase PeakOscillator and KaseCD	188
Why Use KasePO and KaseCD?	189
Kase Permission Stochastic and Screen	199
Entering Trades and the Kase Easy Entry System	201
About the Kase Easy Entry System	206
Trading with Kase StatWare	209
Kase Bar Chart (Equal TrueRange Bar Chart)	211
Summary	215

CHAPTER 5

Rules-Based Trading and Market Analysis Using Simplified Market Profile	217
<i>Andrew Kezeli</i>	

Technical Analysis Is Simple in Theory—Difficult in Practice	218
Rules-Based Trading: Automated Strategy Trading versus Discretionary Trading	221
Balance versus Imbalance: Distinguishing the Two Phases of Market Activity	222
There Are Only Three Market Segments: Nontrending, Uptrending, and Downtrending	224
Four Market Participants—and Then a Fifth . . .	228
Market Profile	231
Market Movement: The Four Steps of Market Activity	234
Market Structure	236
The Relative Speed of the Market's Building-Block Components	239
Vertical Nondevelopment ("Minus Development")	240
Simplifying Market Profile	245
TAS PRO VAP Map	247
Rules-Based Trading and Analysis with TAS PRO Navigator	255

TAS PRO Indicator Application Examples	257
Conclusion	280
CHAPTER 6	
Advanced Trading Methods	283
<i>Rick Knox</i>	
From the CBOT to the Charts	283
Trading by Gut Feeling	287
Understanding the Background of an Opportunity	288
They Say Entry Is Easy, but Not in My Book	295
Trade When the Odds Are in Your Favor	299
Don't Fight the Trend	300
Trade Location Is Key to Long-term Success	301
Adjusting to Volatility	302
Anticipating What Needs to Happen	303
Using Time as Part of Your Risk Management	304
Learning to Control Your Emotions	306
The Hardest Part of Any Strategy Is the Exit	306
Putting It All Together: Two Examples	307
Picking Up the Right Tools	310
Recommended Reading	313
About the Authors	315
Index	319

CHAPTER 1

Evidence of the Most Popular Technical Indicators

Paul Ciana, CMT

Bloomberg LP

The application of various technical indicators is nothing new to the majority of financial market participants. The opportunity to trade a moving average cross or an overbought market is a frequent observation during normal market hours worldwide. The challenge that many ponder is which technical indicators to use. In an effort to resolve that challenge, market participants wonder what others are using. If this information can be identified and verified, market participants will likely monitor those indicators to understand what others are thinking and seeing. Therefore, it might be possible to develop a trading strategy based on the most popular technical indicators.

Although I cannot prove the latter as statistically true, this chapter reveals a hierarchy of the most popular technical indicators on the Bloomberg Professional Service. Then it presents the indicators' commonly accepted signals. But first, it attempts to define what *technical analysis* represents; it would be ill advised to discuss only indicators when technical analysis is much more than that.

Defining Technical Analysis

Sometimes it seems that the majority of market participants may be misled about the broad scope of theories used in the application of technical analysis when trying to understand and forecast the financial markets. My gut feeling is that if we were to sample a random group of market participants to define technical analysis, they would present terms such as *price*, *moving averages*, *charts*, and *oscillators*. A simple Internet search confirmed my suspicions about what words we would hear. Some of the definitions that can be easily found do a good job of describing parts of the theory, while others should not be read by a technician who lacks a sense of humor.

Three of the better definitions are:

1. Analysis of past price changes in the hope of forecasting future price changes.
2. Analysis based on market action through chart study, moving averages, volume, open interest, formations, and other technical indicators.
3. An approach to forecasting commodity prices that examines the patterns of price change, rates of change, and changes in volume of trading and open interest, without regard to underlying fundamental market factors.*

Technical analysis offers much more than these definitions suggest. The first is so generic it could be used to describe many fields of analysis. It suggests market participants study prices and fails to elaborate on the variety of data types that can be analyzed. The second mentions *market action*, a common term used in describing technical analysis, but then repeats itself by listing the data sets that represent market action. It assumes that most of the methods of a technical analyst are focused on technical indicators and therefore it does not elaborate on the variety and depth of the theories in this field of study. The third suggests that technical analysis is used in the commodity markets, which is true, but the application of technical analysis is not restricted to only the commodity markets. Technical analysis can be applied to nearly all types of financial markets.

The methods of a technician span a wide array of theories and use countless different tools to strategize, quantify, and discuss the financial markets in ways that other types of analyses don't or can't. One of my goals in writing this

*Definition one from wordnetweb.princeton.edu/perl/webwn; definition two from www.worldwidemoneyexchange.com/terminology.html; and definition three from www.lind-waldock.com/education/glossary/technical_analysis_terms.shtml.

chapter is to create a one-sentence definition that broadens the scope of the known definitions. It has proved to be very challenging to come up with one sentence that defines *technical analysis* in its entirety. I believe this is a debate for the entire industry to continuously weigh in on, especially as technical analysis evolves; furthermore, I do not mean to suggest that any one definition would ever be universally acceptable. At present, and with the input of a few friends, I lean toward the following definition:

Technical analysis is the extraction of information from market data into objective visualizations through the use of mathematics with an emphasis on investor behavior and supply and demand to explain the current and anticipate the future path of the financial markets.

This definition suggests that technical analysis comprises the following five attributes:

1. *Market data*: Represents a variety of data sets that includes the most frequently used ones such as price, volume, and open interest, but does not exclude data sets such as volatility, ticks, ratios, and dividend yields.
2. *Objective visualizations*: A preference for analyzing information in a chart, but visualizations could be more than a chart, such as a figure, table, scatter plot, or query of results.
3. *Use of mathematics*: The application of measurements and calculations to measure the market actions of an individual security or a group of securities.
4. *Emphasis on investor behavior and supply and demand*: We have a bias for identifying rational and irrational market actions and look for imbalances in the availability or desire for a security.
5. *Explain the current and anticipate the future*: We are attempting to understand what the market is telling us about itself to estimate where it may go in the future.

To further explain the definition, we will summarize the three premises of technical analysis (see Figure 1.1) and explain some of the most popular tools (certainly not all) used for this method of analyzing the financial markets.

The first principle states that *market actions discount everything*. This premise suggests that all publicly available information—such as company-specific news, political changes, weather, and so forth—is already priced into the current value of a security. Therefore we do not necessarily need to know why something is happening; we need only to understand the reaction of