

The background of the book cover features a dark blue grid with several jagged, glowing lines in shades of blue and green, representing financial market trends. A faint image of a skyscraper is visible in the background.

SECOND EDITION

TECHNICAL **ANALYSIS**

The Complete Resource
for Financial
Market Technicians

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INTRODUCTION TO TECHNICAL ANALYSIS

Technical analysis—these words may conjure up many different mental images. Perhaps you think of the stereotypical technical analyst, alone in a windowless office, slouched over stacks of hand-drawn charts of stock prices. Or, maybe you think of the sophisticated multicolored computerized chart of your favorite stock you recently saw. Perhaps you begin dreaming about all the money you could make if you knew the secrets to predicting stock prices. Or, perhaps you remember sitting in a finance class and hearing your professor say that technical analysis “is a waste of time.” In this book, we examine some of the perceptions, and misperceptions, of technical analysis.

If you are new to the study of technical analysis, you might be wondering just what technical analysis is. In its basic form, technical analysis is the study of prices in freely traded markets with the intent of making profitable trading or investment decisions. Technical analysis is rooted in basic economic theory. Consider the basic assumptions presented by Robert D. Edwards and John Magee in the classic book, *Technical Analysis of Stock Trends*:

- Stock prices are determined solely by the interaction of demand and supply.
- Stock prices tend to move in trends.
- Shifts in demand and supply cause reversals in trends.
- Shifts in demand and supply can be detected in charts.
- Chart patterns tend to repeat themselves.

Technical analysts study the action of the market itself rather than the goods in which the market deals. The technical analyst believes that “the market is always correct.” In other words, rather than trying to consider all the factors that will influence the demand for Gadget International’s newest electronic gadget and all the items that will influence the company’s cost and supply curve to determine an outlook for the stock’s price, the technical analyst believes that all of these factors are already factored into the demand and supply curves and, thus, the price of the company’s stock. We find that stock prices (and prices for any security in freely traded markets)

are influenced by psychological factors as well, most of them indecipherable. Greed, fear, cognitive bias, misinformation, expectations, and other factors enter into the price of a security, making the analysis of the factors nearly impossible. The technical analyst, thus, disregards all these imponderables and studies how the marketplace is accepting the multitude of exogenous information and beliefs with the intention of finding secrets in that action that have predictive potential.

Students new to any discipline often ask, “How can I use the knowledge of this discipline?” Students new to technical analysis are no different. Technical analysis is used in two major ways: predictive and reactive. Those who use technical analysis for predictive purposes use the analysis to make predictions about future market moves. Generally, these individuals make money by selling their predictions to others. Market letter writers in print or on the Web and the technical market gurus who frequent the financial news fall into this category. The predictive technical analysts include the more well-known names in the industry; these individuals like publicity because it helps market their services.

On the other hand, those who use technical analysis in a reactive mode are usually not well known. Traders and investors use techniques of technical analysis to react to particular market conditions to make their decisions. For example, a trader may use a moving average crossover to signal when a long position should be taken. In other words, the trader is watching the market and reacting when a certain technical condition is met. These traders and investors are making money by making profitable trades for their own or clients’ portfolios. Some of them may even find that publicity distracts them from their underlying work.

The focus of this book is to explain the basic principles and techniques for reacting to the market. We do not attempt to predict the market, nor do we provide you with the Holy Grail or a promise of a method that will make you millions overnight. Instead, we want to provide you with background, basic tools, and techniques that you will need to be a competent technical analyst.

As we will see when we study the history of technical analysis, the interest in technical analysis in the United States dates back over 150 years, when Charles H. Dow began to write newsletters that later turned into the *Wall Street Journal* and developed the various Dow averages to measure the stock market. Since that time, much has been written about technical analysis. Today, there are entire periodicals, such as the *Technical Analysis of Stock and Commodities* and the *Journal of Technical Analysis*, devoted to the study of the subject. In addition, there are many articles appearing in other publications, including academic journals. There are even a number of excellent books on the market. As you can see from this book’s extensive bibliography, which is in no way a complete list of every published item on technical analysis, a massive quantity of material about technical analysis exists.

So, why does the world need another book on technical analysis? We began looking through the multitude of materials on technical analysis a few years ago, searching for resources to use in educational settings. We noticed that many specialized books existed on the topic, but there was no resource to provide the student of technical analysis with a comprehensive summation of the body of knowledge. We decided to provide a coherent, logical framework for this material that could be used as a textbook and a reference book.

Our intent in writing this book is to provide the student of technical analysis, whether a novice college student or an experienced practitioner, with a systematic study of the field of technical analysis. Over the past century, much has been written about the topic. The classic works of

Charles Dow and the timeless book by Edwards and Magee still contain valuable information for the student of technical analysis. The basic principles of these early authors are still valid today. However, the evolving financial marketplace and the availability of computer power have led to a substantial growth in the new tools and information available to the technical analyst.

Many technical analysts have learned their trade from the mentors with whom they have worked. Numerous individuals who are interested in studying technical analysis today, however, do not have access to such a mentor. In addition, as the profession has advanced, many specific techniques have developed. The result is that the techniques and methods of technical analysis often appear to be a hodgepodge of tools, ideas, and even folklore, rather than a part of a coherent body of knowledge.

Many books on the market assume a basic understanding of technical analysis or focus on particular financial markets or instruments. Our intent is to provide the reader with a basic reference to support a lifelong study of the discipline. We have attempted to provide enough background information and terminology that you can easily read this book without having to refer to other references for background information. We have also included a large number of references for further reading so that you can continue learning in the specialized areas that interest you.

Another unique characteristic of this book is the joining of the practitioner and the academic. Technical analysis is widely practiced, both by professional traders and investors and by individuals managing their own money. However, this widespread practice has not been matched by academic acknowledgment of the benefits of technical analysis. Academics have been slow to study technical analysis; most of the academic studies of technical analysis have lacked a thorough understanding of the actual practice of technical analysis. It is our hope not only to bring together a practitioner-academic author team but also to provide a book that promotes discussion and understanding between these two groups.

Whether you are a novice or experienced professional, we are confident that you will find this book helpful. For the student new to technical analysis, this book will provide you with the basic knowledge and building blocks to begin a lifelong study of technical analysis. For the more experienced technician, you will find this book to be an indispensable guide, helping you to organize your knowledge, question your assumptions and beliefs, and implement new techniques.

We begin this book with a look at the background and history of technical analysis. In this part, we discuss not only the basic principles of technical analysis but also the technical analysis controversy—the debate between academics and practitioners regarding the efficiency of financial markets and the merit of technical analysis. This background information is especially useful to those who are new to technical analysis and those who are studying the subject in an educational setting. For those with more experience with the field or with little interest in the academic arguments about market efficiency, a quick reading of this first part will probably suffice.

In the second part of the book, we focus on markets and market indicators. Chapter 5, “An Overview of Markets,” provides a basic overview of how markets work. Market vocabulary and trading mechanics are introduced in this chapter. For the student who is unfamiliar with this terminology, a thorough understanding of this chapter will provide the necessary background for the remaining chapters. Our focus in Chapter 6, “Dow Theory,” is on the development and principles of Dow Theory. Although Dow Theory was developed a century ago, much of modern-day

technical analysis is based on these classic principles. A thorough understanding of these timeless principles helps keep the technical analyst focused on the key concepts that lead to making money in the market. In Chapter 7, “Sentiment,” we focus on sentiment; the psychology of market players is a major concept in this chapter. In Chapter 8, “Measuring Market Strength,” we discuss methods for gauging overall market strength. Chapter 9, “Temporal Patterns and Cycles,” focuses on temporal tendencies, the tendency for the market to move in particular directions during particular times, such as election year cycles and seasonal stock market patterns. Because the main fuel for the market is money, Chapter 10, “Flow of Funds,” focuses on the flow of funds. In this chapter, we look at measures of market liquidity and how the Federal Reserve can influence liquidity.

The third part of the book focuses on trend analysis. In many ways, this part can be thought of as the heart of technical analysis. If we see that the market is trending upward, we can profitably ride that trend upward. If we determine that the market is trending downward, we can even profit by taking a short position. In fact, the most difficult time to profit in the market is when there is no definitive upward or downward trend. Over the years, technical analysts have developed a number of techniques to help them visually determine when a trend is in place. These charting techniques are the focus of Chapter 11, “History and Construction of Charts.” In Chapter 12, “Trends—The Basics,” we discuss how to draw trend lines and determine support and resistance lines using these charts. In Chapter 13, “Breakouts, Stops, and Retracements,” we focus on determining breakouts. These breakouts will help us recognize a trend change as soon as possible. We also discuss the importance of protective stops in this chapter. Moving averages, a useful mathematical technique for determining the existence of trends, are presented in Chapter 14, “Moving Averages.”

The fourth part of this book focuses on chart pattern analysis—the item that first comes to mind when many people think of technical analysis. In Chapter 15, “Bar Chart Patterns,” we cover classic bar chart patterns; in Chapter 16, “Point-and-Figure Chart Patterns,” we focus on point-and-figure chart patterns. Short-term patterns, including candlestick patterns, are covered in Chapter 17, “Short-Term Patterns.”

Part V, “Trend Confirmation,” deals with the concept of confirmation. We consider price oscillators and momentum measures in Chapter 18, “Confirmation.” Building upon the concept of trends from earlier chapters, we look at how volume plays a role in confirming the trend, giving us more confidence that a trend is indeed occurring. We also look at oscillators and indexes of momentum to analyze other means of confirming price trend.

Next, we turn our attention to the relationship between cycle theory and technical analysis. In Chapter 19, “Cycles,” we discuss the basic principles of cycle theory and the characteristics of cycles. Some technical analysts believe that cycles seen in the stock market have a scientific basis; for example, R. N. Elliott claimed that the basic harmony found in nature occurs in the stock market. Chapter 20, “Elliott, Fibonacci, and Gann,” introduces the basic concepts of Elliott Wave Theory, a school of thought that adheres to Elliott’s premise that stock price movements form discernible wave patterns.

Once we know the basic techniques of technical analysis, the question becomes, “Which particular securities will we trade?” Selection decisions are the focus of Chapter 21, “Selection of Markets and Issues: Trading and Investing.” In this chapter, we discuss the intermarket relationships that will help us determine on which market to focus by determining which market is

most likely to show strong performance. We also discuss individual security selection, measures of relative strength, and how successful practitioners have used these methods to construct portfolios.

As technical analysts, we need methods of measuring our success. After all, our main objective is making money. Although this is a straightforward objective, determining whether we are meeting our objective is not quite so straightforward. Proper measurement of trading and investment strategies requires appropriate risk measurement and an understanding of basic statistical techniques. The last couple of chapters help put all the tools and techniques we present throughout the book into practice. Chapter 22, “System Design and Testing,” is devoted to developing and testing trading systems. At this point, we look at how we can test the tools and indicators covered throughout the book to see if they will make money for us—our main objective—in the particular way we would like to trade. Finally, Chapter 23, “Money and Risk Management,” deals with money management and avoiding capital loss.

For those who need a brushup in basic statistics or want to understand some of the statistical concepts introduced throughout the book, Richard J. Bauer, Jr., Ph.D., CFA, CMT (Professor of Finance, Bill Greehey School of Business, St. Mary’s University, San Antonio, TX), provides a tutorial on basic statistical techniques of interest to the technical analyst in Appendix A, “Basic Statistics.”

For those who are unfamiliar with the terms and language used in trading, Appendix B, “Types of Orders and Other Trader Terminology,” provides brief definitions of specific order types and commonly used terms in order entry.

As with all skills, learning technical analysis requires practice. We have provided a number of review questions and problems at the end of the chapters to help you begin thinking about and applying some of the concepts on your own. The extensive bibliography will direct you to further readings in the areas of technical analysis that are of particular interest to you.

Another way of honing your technical skills is participating in a professional organization that is focused on technical analysis. In the United States, the Market Technicians Association (MTA) provides a wide variety of seminars, lectures, and publications for technical analysis professionals. The MTA also sponsors the Chartered Market Technician (CMT) program. Professionals wanting to receive the prestigious CMT designation must pass three examinations and adhere to a strict code of professional conduct. More information about the MTA and the CMT program may be found at the Web site: www.mta.org. The International Federation of Technical Analysts, Inc., (IFTA) is a global organization of market analysis societies and associations. IFTA, and its member associations worldwide, sponsor a number of seminars and publications. IFTA offers a professional certification, the Certified Financial Technician, and a masters-level degree, the Master of Financial Technical Analysis. The details of these certifications, along with contact information for IFTA’s member associations around the world, can be found at their Web site: www.ifta.org.

Technical analysis is a complex, ever-expanding discipline. The globalization of markets, the creation of new securities, and the availability of inexpensive computer power are opening even more opportunities in this field. Whether you use the information professionally or for your own personal trading or investing, we hope that this book will serve as a stepping-stone to your study and exploration of the field of technical analysis.

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