

The THREE SECRETS
to TRADING
MOMENTUM
INDICATORS

A candlestick chart on a yellow grid background. The chart shows price movement with red and black bars. A semi-transparent red rectangular box is overlaid on the lower portion of the chart, containing the author's name.

David Penn

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MOMENTUM
INDICATORS

DAVID PENN



MARKETPLACE BOOKS

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Preface

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Introduction

I've started writing this book more times than I care to remember. And that's probably because it took me awhile to fully realize what it was I wanted to say about technical analysis in general, and [momentum indicators](#) specifically.

There are three things about [technical analysis](#) and momentum indicators that many traders either are not aware of, or continue to ignore. These three “secrets” of momentum indicators are what this book is all about. In some ways, these three secrets will support conventional wisdom about price action, momentum, and technical trading. In other ways, I think these secrets will come as a surprise to many market technicians—and will be a worthwhile introduction for newcomers.

In either event, my hope is that by revealing and discussing these secrets, the average chartist and trader will be able to make better use of momentum indicators and become a more confident and profitable market technician.

Here are the three secrets of momentum indicators:

1. The best indicator of momentum is price action. And the best way to read price action is by way of Japanese [candlestick charting](#).
2. Some of the most popular momentum indicators—such as the [stochastic](#) oscillator—are far more effective when used differently from the way most traders use them.

3. “Trend sensitive” indicators such as moving average trios, the [moving average convergence-divergence histogram](#) (MACDH) indicator, and the triple-smoothed exponential moving average (TRIX) are among the most valuable tools for the momentum technician.

These are the three secrets that this book will share. I will also spend some time talking about the origins of momentum indicators like rate of change, as well as how some of the standard momentum indicators such as the [Relative Strength Index](#) (RSI) are traditionally used.

Most of the book, however, will be spent on the above three secrets that can help momentum technicians make the most out of the momentum trading opportunities that develop every day, every hour, and every minute in the financial markets—from stocks and bonds to futures and international currencies.

Traditionally, momentum indicators have been in a tricky position. The standard criticism of technical indicators is that they lag price action and thus tend to provide trading signals that are too late. This, for example, explains the widespread preference for exponential moving averages, which weigh recent price action more heavily than older price action, over simple moving averages, which treat all price action equally.

Momentum indicators, on the contrary, are generally regarded as leading indicators. By leading, the inference is that momentum indicators are better able to anticipate price than other indicators, such as trend indicators (i.e., moving averages). Momentum indicators are said to anticipate prices by letting technicians know when a given market is overbought or oversold and likely to reverse.

Unfortunately, the traditional use of overbought and oversold conditions as trading signals is a complicated one. As I will show later in the sections on stochastics and RSI, the way that most technicians use these indicators actually works against the capacity of the indicators to lead prices. In other words, it is not so much that momentum indicators do a poor job

as leading indicators. Rather, the problem is that too many technicians allow the momentum indicator to lead them in the wrong direction!

All of this builds to the most important conclusion of this book: **there is no faster trading signal than price action properly interpreted.** And for the momentum trader who looks to maximize reward versus risk (to be long on the up days and short or out on the down days), the sooner the signal is received, then the sooner the high reward/low risk trade can be made.

This is true whether or not the trader is looking to exploit a surge in momentum by buying a breakout or selling a breakdown. This is true whether or not a trader is looking to exploit a temporary drop in momentum by buying a dip or selling a bounce. This is true whether or not a trader is looking to exploit the exhaustion of momentum by buying a bottom or selling a top.

This is why I am making a big deal out of Japanese candlestick charting. While it is true that there is much more familiarity with Japanese candlesticks today in 2009 than there was ten years ago, it remains the case that many technicians use candlesticks sloppily or inaccurately. It probably would not be too much to say that too many traders have become as lazy with Japanese candlesticks as they have with their momentum indicators!

Japanese candlesticks are powerful tools for market technicians—arguably, they represent the “best thing since sliced bread” of technical analysis. But used incorrectly, Japanese candlesticks can be just as destructive to accurate analysis and trading as any other technical tool. In fact, it might be the case that misusing Japanese candlesticks is more dangerous because their apparent simplicity can lead technicians to think they know more than they do about how to use and not use Japanese candlesticks.

I've already warned that some of the most popular momentum indicators are being used in ways that do not maximize their utility as momentum indicators. The primary problem, to put it bluntly, is a tendency to panic when momentum indicators reach "extreme" levels of overbought and oversold. While I will present a completely different way for momentum traders to think about overbought and oversold market conditions in the course of this discussion, I also want to point out here that many of the problems of momentum indicators are solved by working back toward the way that moving average-based indicators, typically considered "trending indicators," inform traders about price.

One example of a very effective moving average-based momentum indicator is the triple-smoothed exponential moving average, or TRIX. This indicator, developed by trader and founder of *Technical Analysis of Stocks & Commodities* magazine, Jack K. Hutson, has both of the key advantages that a quality momentum indicator must have.

One important condition is that the momentum indicator must alert traders to momentum opportunities while momentum is still increasing rather than cresting. The second important condition is that the momentum indicator must allow the trader to remain in the trade when there are drops in momentum that are not necessarily reflected in price.

The [TRIX indicator](#) (more will be discussed in a later chapter) takes an exponential moving average (A), then takes an exponential moving average of that initial moving average (B), and then takes an exponential moving average of that already twice-averaged moving average (C). The trader then takes a one-day rate of change measurement of C.

As Hutson wrote of his indicator nearly 30 years ago (1982):

While this oscillator is not the answer to all our trading prayers, it certainly is an improvement over many. It contains two essential ingredients required in stock or commodity trading: a filter of random market noise, and a positively timed signal.

The TRIX does more than this. In a follow-up article (1983), Hutson noted that:

TRIX reacts very fast and displays occasional leading divergence from daily price highs and lows. This is because TRIX may also be thought of as a smoothed-out one-day momentum (indicator).

As you may already notice, the TRIX indicator takes into account trend characteristics by way of the exponential moving averages of price, and momentum characteristics by way of the rate of change adjustment. This is part of what makes TRIX—and other momentum indicators that are either similarly constructed (such as the moving average convergence divergence indicator) or similarly interpreted—so valuable to momentum technicians.

Although arguably one of the best examples of what I mean by momentum and moving average based indicators, the TRIX is far from the only example. In addition, much of what technicians need to do when using momentum indicators can be done with traditional momentum indicators like the stochastic. And, indeed, many of the traditional methodologies for using such indicators, such as locating the sort of divergences from price that often anticipate reversals, are still important and must be considered by technicians looking to make maximum usefulness of momentum and momentum indicators.

But because traditional momentum indicators, and traditional ways of using them, have often failed traders during certain market conditions such as strongly trending markets, it becomes important for momentum traders to discover other ways that the “bugs” of momentum indicators can be turned into “features” when viewed and used properly. Again, the stochastic oscillator will be the chief witness for my prosecution of this particular case.

Lastly, it is important to remember that all technical indicators are derivatives of price. Indicators can reveal aspects of price that may not be readily apparent. But, believe me, the information is there. This, again,

is why I am including a discussion of Japanese candlesticks and chart patterns in this larger discussion about momentum indicators and technical analysis.

The sooner a technician is able to observe momentum in a price chart, however much that observation may be confirmed or clarified by the right technical tools, the more time he or she will have to analyze the market to make the best, most timely, trading decision possible. Recognizing basic candlestick patterns and the environments in which they appear is a fundamental part of developing this ability to “see” momentum.

There are a few things this book is not. This book is not an encyclopedia of momentum indicators, nor is it a scholarly text on technical indicators. This is first and foremost a book about using technical indicators to analyze momentum. And, as far as I’m concerned, the simpler the technical tool, the better.

I have never been impressed by the tendency among some technicians to complicate technical analysis. Every time I come across a new, complex mathematical model for trading, I remind myself that traders were making good money in the markets long before the advent of artificial intelligence or computers. And until the markets are moved by something other than human nature, the old-time trading religion of fear and greed is good enough for me.

Computers are an invaluable tool for the 21st century trader. But technicians, like everyone else, need to be wary of the capacity of technology to dazzle and distract attention from the task at hand. One of the saddest things to see is a technical trader so obsessed with calculating the number of angels on the head of an oscillator, that he loses track of the fact that the point of all that calculus was to trade.

So in the following pages I will talk about what momentum is and why traders look to exploit it. I will talk about three different ways of looking at momentum trading: breakout trading, reversal trading, and swing trading. I will talk about the most basic tool of the momentum trader:

the candlestick chart. I will talk about what is arguably the most popular momentum indicator, the stochastic oscillator, and how it can be used in ways more effective than those commonly practiced.

Last, I will talk about how momentum traders can effectively use “trend-sensitive” technical indicators like TRIX, the moving average convergence-divergence histogram (MACDH), and the moving average trio.

While this book is not a book about money management, trade examples will highlight aspects of both trade and money management that are important for momentum traders to keep in mind. Additionally, while the methods described here are most accurately referred to as (to borrow a phrase from Market Wizard, Linda Bradford Raschke) “systematic discretionary methods,” many techniques, such as the BOSO method using the stochastic oscillator, are very much amenable to inclusion in an automated trading system.