

INDICATORS THAT *MOVE* MARKETS



FORECASTING FUTURE
MARKET MOVEMENTS FOR
PROFITABLE INVESTMENTS



UL KASRIEL AND KEITH SCHAP

Seven Indicators That Move Markets

**Forecasting Future
Market Movements for
Profitable Investments**

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Keith Schap**

McGraw-Hill

New York Chicago San Francisco
Lisbon London Madrid Mexico City
Milan New Delhi San Juan Seoul
Singapore Sydney Toronto

Library of Congress Cataloging-in-Publication Data

Kasriel, Paul L.

Seven indicators that move markets / Paul L. Kasriel, Keith Schap.

p. cm.

ISBN 0-07-137013-7

1. Investment analysis. I. Schap, Keith. II. Title.

HG4529.K37 2001

332.6—dc21

2001044616

McGraw-Hill

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3 4 5 6 7 8 9 0 AGM/AGM 0 9 8 7 6 5 4 3 2

ISBN 0-07-137013-7

This book was set in Palatino by Kim Sheran and Joanne Morbit of McGraw-Hill Professional's Hightstown, N.J., composition unit.

Printed and bound by Quebecor World/Martinsburg.

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Preface

The genesis of this book was a chart in the *Wall Street Journal* back in 1984 that Kasriel happened on during his morning train commute. This chart showed the relationship between the Treasury-bond–Treasury-bill yield spread and the stock market.

Kasriel, then an economist at the Federal Reserve Bank (FED) of Chicago, could hardly wait to call this chart to the attention of one of his Fed colleagues, Bob Laurent. The moment Kasriel entered Laurent's office, and before Kasriel could say a word, Laurent asked, "Did you see that chart in this morning's *Journal*?"

The reason for their excitement over this chart was that it was consistent with their view of how monetary policy works. At the same time, a mutual friend of theirs, Bob Keleher, who was then an economist at the Atlanta Fed, had been doing research on the use of market prices as a guide to monetary policy decisions.

Keleher's work had sensitized Laurent and Kasriel to this alternative approach to monetary policy decision making. And when Kasriel left the Fed for the "real world" of Fed watching at the Northern Trust Company, he used this market-indicators approach in assessing both the prospects for Fed policy actions and the effects of such actions. He incorporated the use of market indicators in weekly commentaries and speeches that he made.

Schap first heard Kasriel speak about the utility of market indicators early in 1990 at a conference he was covering for *Futures* magazine. This led to an article later that year and a continued use of these insights in a whole series of economic and market outlook articles.

Ultimately, Schap developed the volatility indicator on the basis of well-known option market information and put it together with

the yield spreads and commodity index readings as key features of a “Market Insights” page that became a regular *Futures* department.

Later, as part of his work at the Chicago Board of Trade, Schap began to track the fed funds futures spreads. Over and over, these spreads have helped readers anticipate Fed policy changes. Indeed, this indicator proved useful enough that several publications picked it up and have continued to feature it.

With the passage of time, two things about the market indicators became more and more obvious. The market indicators provide information that allows forecasters and investors to anticipate general market events most of the time. Indeed, since November 1996, the Conference Board has included a variation of the yield spread as one of the components of its index of leading economic indicators. The average person can learn to use these indicators even without having had formal training in economics. Schap, after all, has had no course work in this field.

Because these indicators are based on data that anyone can find in newspapers or online, any investor who cares to spend a few hours reading this book and then a few hours more using this conceptual framework to study the markets can master them. In a relatively short time, the average investor should discover that study and use of the market indicators will enhance his or her ability to plan and implement investment strategies.

At a time when more and more people are taking responsibility for their retirement savings and other investments, these seem potentially valuable tools to make available. Hence this book.

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1

Market Indicators for a New Investment Era

Investing has changed—at least insofar as market access and responsibility for decision making are concerned. Two factors seem to account for most of the change.

The gradual switch from defined-benefit corporate pension plans to defined-contribution employee savings plans shifted much of the investment choice from professional investment managers to individual investors. With choice comes responsibility for decision making about where to put the money. As 401(k) and other such defined-contribution plans have gained popularity, sponsors have increased the choices to the point where participants face some complex decisions.

At the same time that all this was going on, the increasing popularity of discount brokerages and, especially, Internet-based brokerages has caused transaction costs to dwindle. This puts “playing the market” well within the reach of more people than ever before. The most publicized, and probably most troubling, aspect of this development is that, for the first time, small-scale investors can feasibly day trade.

As with the shift from defined-benefit to defined-contribution plans with regard to retirement savings, the shift in the delivery of brokerage services assumes that investors will make their own investment decisions. Of course, the lower cost of trading online or through a discount broker is part of a trade-off in which investors pay less to invest but forgo access to the kind of

research information and investment advice that full-service brokers provide.

This is wonderful. You're responsible for your own investment choices, but, while transaction costs have dwindled, you have fewer resources available to help you make such choices.

Or do you?

Few people have the resources and training the professional portfolio managers have in terms of an education in economics and finance. Yet this need not be a counsel of despair. Futures markets, as well as a number of similar market-like phenomena, serve as open-ended information generators. With small effort, you can learn to "read the markets" in a way that will help you derive a great deal of information that can be extremely useful in making investment decisions.

Who

If any of this description of the current investment climate fits your situation, you will find this book helpful. Even if the sum of your investment decision making involves no more than which of a half dozen or so mutual funds to route your 401(k) contributions into, this book can help you make those decisions on the basis of a good understanding of what the U.S. economy is likely to do in the coming months and how that might affect your retirement savings.

If, over the years, you have put together a private portfolio of mutual funds or individual stocks or are just getting started on such a project, you will find this book even more helpful. As you learn to use the futures markets to predict what the Federal Reserve (Fed) might do at its next several meetings and interpret the messages of the various yield curves, credit spreads, and commodity indexes and price arrays, you will begin to establish a basis for filtering the other information you use and for deciding which asset classes make more or less sense given your expectations for the economy. You will find ways to judge whether now is the time for growth or value stocks, small cap or large. Finally, considerations of volatility and other options-based information can help you plan shorter-term moves. If analysts are recommending buying on dips, you can use these probability-driven tools to estimate what constitutes a likely dip.

If you are planning a short-term trade, for whatever reason, these volatility tools can help you define the potential of the trade in probabilistic terms.

In short, any person who is serious about preparing a sound financial future and who enjoys thinking about what is going on in the economy, what is likely to happen next, and how to shape an investment strategy that will help him or her benefit from these expectations will find the discussions of this book intriguing and helpful.

The one category of person who will not find this book of interest is the group looking for a magic formula that will lead to instantaneous success on a staggering scale. We know of no such formula. The search for it reminds us of the legends about the search for untold riches that led explorers to the deserts of the American Southwest. The gold wasn't there, and the searchers ended up thirsty and, in many cases, dead.

The Legendary Perfect Trade

The personal finance magazines are full of stories about people making exactly the right move at exactly the right time and reaping untold riches. It seems a good idea to view these stories with more than slight skepticism.

There's a story that surfaces around the Chicago markets from time to time about a trader in the index option pits who made enough money during the 1987 crash to provide for a life of ease. This came about because he had managed to be long a huge number of puts on Standard & Poor's (S&P) 500 futures. A *put* is an option that gains in a down market, and the October S&P 500 market was real down.

Yet there's more to this story than meets the eye on first telling. It turns out that this man wasn't the least bit prescient. Rather, going into that fateful day, he'd been short a bunch of puts (that is, he'd sold them), which would have been ruinous in a down market. In his panic over the situation he saw developing that day, he tried to offset it, but he accidentally went long a large multiple of the number he meant to. When the smoke cleared, he found his mistake had made him a wealthy man.

The details of this trade have never surfaced, but here is one way it could have played out. The S&P 500 dropped 58 index

points on October 19, 1987. Suppose that the value of the option contract that man was trading changed 40.91 option points. To find the cash-equivalent value of this change, multiply the point change by \$250 to learn that one contract would gain or lose \$10,227.50 ($40.91 \times \$250 = \$10,227.50$). A position short 1,000 options contracts would have lost roughly \$10.23 million that day. By inadvertently saying 10,000 instead of 1,000, this trader offset that loss, but he had 9,000 extra contracts that would have gained a total of \$92.05 million ($\$10,227.50 \times 9,000 = \$92,047,500$).

The frightening part of this situation, to the trader, was that he hadn't known what he was doing. He'd made a lucky mistake, but it could just as easily have gone the other way. Had he said 100 instead of 1,000 in his panicky state, 900 of his original 1,000 contracts would have remained in effect. He would then have lost \$9.2 million ($\$10,227.50 \times 900 = \$9,204,750$).

Needless to say, making such a \$9.2 million mistake right would have posed a serious problem. After thinking this over and realizing how easily the outcome could have been tragic rather than happy, this trader took his money and ran. He gave up trading.

Patience, Persistence, and Probability

The people who seem to do the best, year in and year out, are the ones who are patient, persistent, and base what they do on their attempts to use high-probability strategies.

The agricultural schools impart a homely bit of advice to future farmers: "Plan your farm, and then farm your plan." The implicit message here is to stick with the plan. Don't listen to the siren songs that try to lure you into this or that can't-miss deal. Such songs too often lure you onto a rocky shore. When a strategy for investing has resulted from careful study and thought, be patient. Give it a chance to work.

A portfolio manager for a money management firm once pointed out to a neophyte reporter that he didn't get paid for being right about the markets. He got paid for being fully invested. For those of us operating on a smaller scale, this translates into sticking with the markets. A 401(k) plan enforces this for us. Every pay period, a certain amount of money gets invested. It doesn't always have to go to

the same investments. At times, it makes sense to give more weight to one asset class than to another. But it should go somewhere.

Further, the professionals are no more sure of what will happen than any of the rest of us. They use all the information they can get to reduce the guesswork. They try to make moves that give them a relatively high probability of success. In one of his Hornblower novels, C. S. Forester has two of his characters say this about luck:

“My heartiest congratulations on your success.”

“Thank you,” said Hornblower. “I was extremely lucky ma’am.”

“The lucky man,” said Lady Barbara, “is usually the man who knows how much to leave to chance.”

Our goal in this book is to help you reduce how much you have to leave to chance.

Concrete, Public, and Forward-Looking

This isn’t magic. While the U.S. government compiles and shares mountains of data about the U.S. and world economies, those data arrive after a considerable delay and are frequently revised. Even the most important statistics, such as the Consumer Price Index (CPI) or initial jobless claims, undergo revisions.

Almost any day you look you can find reports that include comments such as these:

- U.S. consumer prices rose 0.1 percentage point more than previously reported from December to August because the Bureau of Labor Statistics *erred in calculating* the cost of housing [italics added].
- August’s orders by U.S. companies for domestic and imported machine tools totaled an estimated \$480 million compared with a *revised* estimate of \$453 million in July [italics added].

This makes these data hard to use for anyone, even those with extensive training and experience.

Public auction markets such as the futures markets, in contrast, establish market-clearing prices every day. These may change, too,

but only because the situation has changed or people's perceptions of the situation have changed. These prices do not change because data were miscounted or erroneously calculated.

In addition, commodities trade in multiple contract months. While individual prices typically defy historical interpretation, the relationships between cash and futures prices—in market jargon, the *basis*—and between nearby and deferred futures prices—in market jargon, the *spread*—often reveal interesting and useful insights into the supply-demand dynamics of that market. Financial futures spreads can provide similarly useful information. These market indicators typically signal changing economic conditions well before other sources.

Reasons for this are not hard to find.

Futures markets are public places. Take fed funds. Only bank members of the Federal Reserve System can trade in the actual fed funds market. In contrast, anyone who can open a futures account can trade fed funds futures at the Chicago Board of Trade. The other futures markets, all over the world, are similarly open to investors with opinions and the money to back them.

As a result of this democracy of access, these markets attract people with different needs and different bits of information. No one person can know all there is to know about, say, the copper market. Manufacturers of wire or automotive components might have one piece of the knowledge puzzle. People with business connections in South America might have another piece.

A brief example shows how this can shape the prices you see on the quotation pages of a newspaper or on a computer screen. Consider a greatly simplified marketplace peopled only by Traders 1, 2, 3, and 4. Exhibit 1-1 shows the business focus of each trader, his or her special knowledge about the copper situation, his or her supply-demand expectation, and his or her market stance. The exhibit implies a causal sequence as you read from left to right.

These four people will adjust their bids and offers according to what they know and how that shapes their expectations relative to copper prices.

The bullish traders might be willing to pay up a bit at present because the current price might look reasonable compared with what they expect in a few months. As sellers, they may decide to

Exhibit 1-1 How Markets Bring Together Information

Trader	Connections	Special knowledge	Supply-demand expectations	Market view
1	Midwestern commercial real estate, construction	Numerous big projects on the drawing boards with firm tenant commitments	Emerging demand	Bullish
2	Business connections in Chile	Political pressures are easing	Supply surge	Bearish
3	Does business in Asia	Economies on the upswing, manufacturing heating up	Demand surge	Bullish
4	East Coast residential construction	Regional economy slow, little new housing in the pipeline	Shrinking demand	Bearish

wait for the higher prices they expect in the future. Either way, the bulls' actions will exert upward pressure on prices.

The bearish traders may be willing sellers now because they expect prices to drop in the future. They may also defer buying or buy for future delivery to take advantage of the lower prices they expect to see in a few months. Either choice will drive prices lower.

The schematic diagram of Exhibit 1-2 shows how the market activity of each trader will contribute to the shaping of the futures price that ultimately emerges as a result of this process.

The actual markets multiply these four traders by many thousands, of course, each with his or her own bit of information. The futures price that emerges results from a process of factoring all this together. Allowing for all these factors and views, the result is the market-clearing price for this moment. Additional news can motivate revisions.

Economists classify economic indicators as *leading*, *coincident*, and *lagging*. Obviously, only a leading indicator has utility for

Exhibit 1-2 Feeding Knowledge into the Futures Market

