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#### A VISUAL APPROACH TO

BEATING THE FINANCIAL MARKETS USING EXCHANGE TRADED FUNDS

# JOHN J. MURPHY

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## TRADING WITH INTERMARKET

#### ANALYSIS

A Visual Approach to Beating the Financial Markets Using Exchange-Traded Funds

## John J. Murphy



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To chartists everywhere.

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#### **INTRODUCTION**

My first book on this subject, entitled Intermarket Technical Analysis: Trading Strategies for the Global Stock, Bond, Commodity, and Currency Markets (Wiley & Sons), was published in 1991. The reason I wrote the book was to demonstrate that all global financial markets are closely linked and have an impact on each other. The book's main thesis was that technical analysts needed to broaden their chart horizon to take these intermarket relationships into consideration. Analysis of the stock market by itself, for example, was incomplete without taking into consideration existing trends in the dollar, bond, and commodity markets. That first book suggested that financial markets could often be used as leading indicators of trends in related markets or, at the very least, could provide confirmation (or nonconfirmation) of other existing trends.

Because the message of that earlier text challenged the *single market* focus of the technical community, some professional chartists questioned whether this newer and broader intermarket approach had any place in the technical field. Many questioned whether intermarket relationships existed at all or, if they did, whether they were consistent enough to provide any forecasting value. A paper on the subject that I once submitted to the Market Technicians Association (MTA) was rejected due to lack of proof. The seemingly revolutionary idea that all global markets are linked, and that American analysts could gain some edge by following trends in foreign markets, was also viewed with skepticism. How things have changed in the two decades since then.

Twenty years later, *intermarket analysis* is considered a branch of technical analysis and an increasingly popular one. A poll taken by the *Journal of Technical Analysis* asked the membership of the Market Technicians Association to rate the relative importance of various technical disciplines. Of the 14 technical disciplines included in the poll, intermarket analysis ranked fifth. In addition, my second book on the subject, entitled *Intermarket Analysis: Profiting from Global Market Relationships* (Wiley Trading, 2004), is now required reading for the MTA's Chartered Market Technician (CMT) program—the very program that rejected my earlier paper on the same subject. (The Chartered Market Technician program is a three-step certification process administered by the Market Technicians Association (mta.org) in which candidates are required to demonstrate proficiency in technical analysis. Successful candidates are awarded the professional designation of Chartered Market Technician.) It is certainly gratifying to see intermarket analysis come such a long way in the last two decades and to finally become such an accepted part of technical market analysis. After reading this book, I hope you'll agree with me that intermarket analysis has also become an increasingly indispensable part of it.

My first intermarket book (1991) reviewed the hyperinflationary decade of the 1970s ending with the bursting of the commodity bubble in 1980, which, in turn, led to major upturns in bonds and stocks in the early 1980s and ushered in two decades of *disinflation* and bull markets in bonds and stocks. It also analyzed the 1987 stock market crash, which, for me, turned intermarket theory into reality. It ended with a description of global events leading up to the start of the first Persian Gulf War as 1990 drew to a close. My second book on that subject (2004) took up where the first book left off and drew comparisons between the first Iraq war during 1990–1991 and the second war 13 years later, in 2002–2003. The actual start of both wars helped launch new bull markets in stocks during 1991 and 2003. The second book also described market trends in the 1990s, which included the *stealth* bear market during 1994, which offered another lesson in intermarket relationships. A huge spike in the price of oil was a big contributing factor to that year's losses in bonds and stocks.

Two watershed events took place during the 1990s that helped introduce a new word into the financial commentary: *deflation*. The collapse of the Japanese stock market in 1990 and the Asian currency crisis during 1997–1998 raised deflation concerns for the first time since the 1930s. My 2004 book described how the threat of deflation as the 1990s ended changed some important intermarket relationships, and contributed to the bursting of the Nasdaq bubble as the new century started. Many of those changes are still in effect more than a decade after that first market top of the new millennium. The 2004 book ended with the start of a new bull market in stocks during the spring of 2003 (caused partially by a collapse in oil prices at the start of the second Iraq war).

My next book, entitled *The Visual Investor, Second Edition* (Wiley Trading, 2009), covered market events surrounding the 2007–2008 financial meltdown, which was caused in no small part by the worst housing collapse since the Great Depression. That book showed how to combine traditional charting techniques with intermarket

principles to get a complete picture of what was happening. As this book is being written nearly five years later, many of the effects of that global meltdown are still being felt.

This book will review events since 2000 with a view toward demonstrating that the threat of deflation throughout the past decade has dominated most intermarket relationships, as well as Federal Reserve policy. The start of the commodity boom during 2002 was the direct result of the Fed's devaluation of the U.S. dollar in an attempt to stem deflationary pressures (a technique that was also tried during the 1930s). One of the most important intermarket changes that will be described has to do with the changing relationship between bonds and stocks, which *decoupled* in the years after 1998. In the decades before 1998, rising bond prices supported rising stock prices. Starting in 1998, however, rising bond prices hurt stock values, which was a new phenomenon that became painfully evident from 2000 to 2002 during the worst stock plunge since the Great Depression, and again during the 2008 financial collapse.

A second intermarket change has been the increasingly close linkage between stock and commodity prices since the bursting of the housing bubble during 2007, which was also reminiscent of the deflationary 1930s. Since 2008, stocks and commodities have trended pretty much in lockstep. That's because both are tied to global economic trends. The events surrounding the 2008 market meltdown reinforced another economic lesson having to do with the link between markets and the economy. The stock market is a leading economic indicator. Stocks usually peak and trough ahead of the economy. The Great Recession following the housing collapse started in December 2007 (three months after stocks peaked) and ended in June 2009 (three months after stocks bottomed). It was also the longest and deepest economic downturn since the Great Depression of the 1930s. No wonder the Fed started to use the same playbook that was used back in that earlier era.

In my view, three major deflationary events have occurred over the last 20 years. The first was the peak in Japanese stocks starting in 1990, which turned into a deflationary spiral in the world's second biggest economy (at that time). The second was the Asian currency crisis during 1997–1998. The third event was the housing collapse during 2007. Those three deflationary events led to a *new normal* in intermarket relationships that exists as we enter the second decade of the new century. Explaining what those new normal relationships are, and how you can take advantage of them, is the purpose of this book.

Intermarket analysis is very visual. Although the relationships described herein are based on sound economic principles, and are backed up by correlation statistics, my approach relies heavily on being able to see those relationships on price charts. As a result, you're going to see a lot of charts. The use of color graphics in this edition will make those comparisons a lot easier to see and a lot more striking. Rest assured that you won't have to be a chart expert to understand the charts. All you'll need is the ability to tell up from down. And an open mind.

PART I	

### THE OLD NORMAL

#### **CHAPTER 1**

# Intermarket Analysis: The Study of Relationships

This chapter covers the main points of intermarket analysis, starting with the observation that all markets are related. It will also introduce asset allocation and sector rotation strategies at various stages of the business cycle, and explain how stocks peak and trough before the economy. Other points include the important role played by crude oil, how exchange traded funds have revolutionized intermarket trading, the advantage of using charts, why viewing the big picture is important, intermarket implications for technical analysis, how its adds a new dimension to technical work, why it's an evolutionary step, and why relationships change. It will end with a recap of intermarket principles.

## All Markets Are Related

As the name implies, *intermarket analysis* is the study of how various financial markets are related to each other. This is a departure from prior forms of market analysis, which relied primarily on a *single-market* approach. Stock market analysts, for example, used to spend their time analyzing the stock market, which included market sectors as well as individual stocks. Stock traders didn't have much interest in what was happening in bonds, commodity markets, or the dollar (not to mention overseas markets). Fixed-income analysts and traders spent their time analyzing the bond market without worrying too much about other markets. Commodity traders had their hands full tracking the direction of those markets and didn't care much about other asset classes. Trading in currency markets was limited to futures specialists and interbank traders.

That is no longer the case. Traditional chart analysis has taken a major evolutionary step over the last decade by adopting a more universal intermarket approach. I like to think that my two earlier books on intermarket analysis (published in 1991 and 2004) helped move things in that direction. It would be unthinkable today for a trader in any one of those four asset classes not to study trends in the other three.

#### JOHN'S TIPS

The four asset classes involved in intermarket work are bonds, stocks, commodities, and currencies.

Some understanding of how the different asset classes interact with each other is important for at least two reasons. First, such an understanding helps you appreciate how other financial markets influence whichever market you're primarily interested in. For example, it's crucial to know how bonds and stocks interact. If you're trading stocks, you should be watching bonds because bond prices usually trend in the opposite direction of stocks. In many cases, turns in the bond market actually precede turns in stocks. Bond yields are inversely correlated with bond prices. That being the case, falling bond yields (rising bond prices) can be a negative warning for stocks.

Figure 1.1 compares the yield on the 10-year Treasury note to the S&P 500 during 2000. After peaking that January (first arrow), the bond yield started falling a lot faster than the stock market. By that spring, the bond yield had fallen to the lowest level in a year while the S&P 500 was still trending sideways (although the Nasdaq peaked that spring). The S&P 500 didn't start falling until the fourth quarter of that year (second arrow) and entered a major bear market that lasted for more than two years. That's a pretty dramatic example of falling bond yields giving early warning that the stock market was in trouble. It demonstrates how the bond market usually changes direction before stocks at major turning points and is often a leading indicator of the stock market. Figure 1.1 also demonstrates why it's so important for stock analysts to take trends in the bond market into consideration.

If you're a bond trader, you should be watching trends in commodity markets. A jump in commodity prices, for example, is usually associated with a drop in bond values. In another illustration of how one market impacts on another, a falling U.S.

dollar usually results in rising commodity prices. And, as you'll see later in the book, the direction of the U.S. currency helps determine the relative attractiveness of foreign stocks compared to those in the United States.



FIGURE 1.1 Drop in bond yield during 2000 warned of stock peak

### **Asset Allocation Strategies**

A second reason why it's important to understand intermarket relationships is to help with the *asset allocation* process. There was a time not too long ago when investors' choices were limited to bonds, stocks, or cash. Asset allocation models were based on that limited philosophy. Over the last decade, however, investment choices have broadened considerably. Since 2002, for example, commodities have been the strongest asset class and are now recognized by Wall Street and the investing public as a viable alternative to bonds and stocks. The emergence of exchange-traded funds (ETFs) has had a lot to do with the increasingly popularity of commodity trading. The same is true for foreign currency markets, which have also had a strong run since 2002.

Consider the relative performance of those four asset classes since the start of 2002 when the U.S. dollar started a major decline that eventually took it to a record low. During the 10-year span starting in 2002, commodity prices gained 64 percent. By comparison, bond prices gained 23 percent, while U.S. stocks experienced a relatively modest gain of 9 percent. The main catalyst in the commodity upturn was a 32 percent drop in the U.S. dollar. That's because the dollar and commodities trend in opposite directions. A falling dollar results in higher commodity prices.

#### JOHN'S TIPS

Commodity prices and foreign currencies trend in the same direction and in the opposite direction of the U.S. dollar.

Figure 1.2 compares the trend of the U.S. Dollar Index to the CRB Index of commodity prices between 2000 and 2008. It's clear that the two markets trended in opposite directions. It can also be seen that the major upturn in commodity prices began during 2002 (up arrow) at the exact same time that the dollar started dropping (down arrow). The inverse relationship between the dollar and commodity markets is one of the most consistent and reliable relationships in intermarket work.

FIGURE 1.2 Dollar peak in 2002 led to major commodity upturn



Foreign currencies also benefit from a falling dollar. That's especially true for currencies tied to countries that export commodities like Australia and Canada. During the 10 years starting in 2002, the Aussie dollar (boosted by rising commodity prices) gained 101 percent versus 50 percent for the euro. It's clear that investors have benefited from the ability to expand their asset allocation choices beyond bonds and stocks. Exchange-traded funds are a big reason why.

# ETFs Have Revolutionized Intermarket Trading

Exchange-traded funds have had a lot to do with expanding those choices into alternate assets like commodities and currencies. In fact, the explosive popularity of ETFs has revolutionized the world of intermarket trading and has made it increasingly easy to implement global intermarket strategies. During the 1990s, for example, the ability to incorporate commodities and currencies into one's portfolio was almost impossible outside of the futures markets. The growing availability of ETFs has made investing in commodity and currency markets as easy as buying a stock on a stock exchange. Exchange-traded funds can be used for virtually any asset class anywhere in the world. Mainly for that reason, we'll be relying very heavily on ETFs throughout this book to show how markets interact and how to take advantage of those interactions. Another place where ETFs have become extremely popular is in implementing sector rotation strategies.

# Sector Rotation and the Business Cycle

Intermarket analysis plays an important role in *sector rotation* strategies. The U.S. stock market is divided into market sectors (which are further subdivided into industry groups).

#### JOHN'S TIPS

The stock market has 10 sectors and approximately 90 industry groups.

Exchange-traded funds are available that cover all market sectors (and most industry groups). That greatly facilitates the movement into and out of various market sectors at different stages of the business cycle. I'll show you later in the book how to use intermarket principles (and some simple charting techniques) to spot leading and lagging market sectors for the purpose of ensuring that you're in the leaders and out of the laggards. You'll also learn how tracking sector rotation offers valuable insights into the direction of the stock market and the economy.

Near the start of a new bull market in stocks, economically sensitive groups like consumer discretionary stocks (which include retailers) usually do better than most other stocks. So do technology and transportation stocks, which are tied to the business cycle. Small-cap stocks also lead at market bottoms. Near market tops, those very same groups usually turn down first. Energy stocks (which are tied to the price of oil) have a tendency to become market leaders near the end of a bull market in stocks. Energy leadership is almost always a dangerous warning sign for the stock market. One of the ways to tell that the stock market is peaking is when money starts to flow out of energy stocks and into defensive sectors like consumer staples, health care, and utilities. I'll show you how to spot those rotations and how to take advantage of them. And what they mean.

# Stocks Peak and Trough before the Economy

Important tops in the stock market usually lead to periods of economic weakness (or recessions). The 2000 stock market top, for example, led to a recession the following spring. The October 2007 market top led to a recession that December. The same is true at market bottoms. The ending of the last two recessions during 2003 and 2009 followed market upturns a few months earlier. When the stock market weakens, money tends to rotate out of stocks and into bonds. At market bottoms, the opposite happens. Money rotates out of bonds and back into stocks. Fortunately, it's pretty easy to spot those shifts in investor sentiment, which we'll demonstrate later in the book. It's hard to separate trends in financial markets from trends in the economy. Intermarket analysis sheds light not only on market direction but the economy as well. You'll also see later in the book that bonds, stocks, and commodities have a history of peaking and troughing in a predictable order during turns in the business cycle.

#### JOHN'S TIPS

Bonds usually change direction first at tops and bottoms, stocks turn second, and commodities third.

That knowledge will help you determine where to be at different stages of the business cycle. It will also help you determine whether the business cycle is turning up or turning down.

## The Role of Oil

Rising oil prices from the beginning of 2007 preceded a stock market downturn later that year. Oil's role in the 2007 market top wasn't an aberration. In fact, it was very normal. Rising oil prices have contributed to every U.S. recession in the last 40