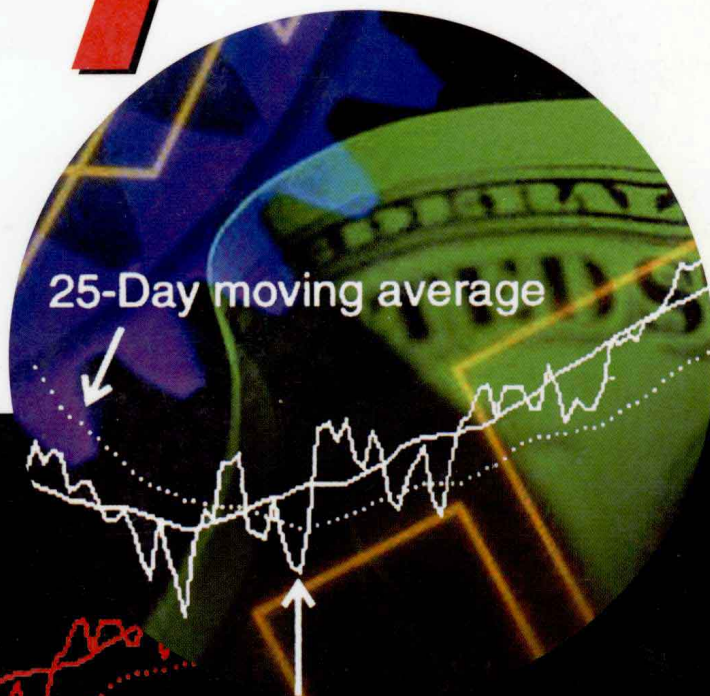


MARTIN J. PRING ON  
TECHNICAL ANALYSIS

# *How to Select Stocks Using* **Technical Analysis**



**A Unique  
CD-ROM and  
Workbook Tutorial**



**MARTIN J. PRING**

# **How to Select Stocks Using Technical Analysis**

**Martin J. Pring**

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The year 2002 will see the publication of eight of my books by McGraw-Hill. Six of these form part of the Martin J. Pring on Technical Analysis Series, a series of multi-media CD-ROM/workbook tutorials. None of this would have been possible without the help of several key people.

In particular I would like to thank Jimmie Sigsway, my wonderful mother-in-law, whose support of our busy family allowed both me and my wife, Lisa, to allocated sufficient time to work on this project.

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Above all, a special thanks goes to my wife, Lisa, who, despite multiple pressures from major domestic construction work, minding the kids (including me), cooking the meals, and maintaining our Web site at [pring.com](http://pring.com), was still able to deliver the artwork for this book on time.

# Preface

This book forms part of the series *Martin J. Pring on Technical Analysis*. Like all the others in the series, its main value lies in the CD-ROM enclosed in the back cover. This little disk contains a complete multi-media presentation of the subject matter contained in the workbook.

Years ago I published videos on technical analysis, but the CD\_ROM format is far superior. Not only does each chapter play as a continuous presentation but also the need to fast forward or rewind is eliminated. Instead, the user can click on any subject matter in the contents and move instantly there. This format also allows for an interactive quiz, so the user can quickly move through multiple choice questions or chart examples, all of which are scored at the end. In this way, you can easily discover any area that needs brushing up. The only title in the series that does not contain a quiz is *How to Select Stocks Using Technical Analysis*.

The series itself is designed to expand on several of the subjects covered in the fourth edition of *Technical Analysis Explained*. Each of the book/CD-ROM combinations takes the reader into greater depth on the individual subjects. Diagrams and theoretical concepts are explained and then adapted to practical marketplace examples. It is normal in presentations of this nature to indicate the strong points of any indicator or concept, but these presentations also advise you of any known weaknesses or pitfalls they may have.

Technical analysis is the art of identifying trend reversals at a relatively early stage and riding on that trend until the weight of the evidence shows or proves that the trend has reversed. The objective of this series is to present a substantial amount of that evidence in the form of indicators and concepts, so that readers of the workbooks and viewers of the CD-ROMs will be in a stronger position to identify such trend reversals. Please take note of

the fact that technical analysis deals in probabilities, *never* certainties. Armed with the information in this series, the probabilities should now move heavily in your favor.

With that in mind, good luck and good charting!

Martin J. Pring  
Sarasota, Florida

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# Introduction

During the big bull market of the 1990s, most traders and investors found the process of stock selection to be very easy, especially in the technology sector. Tales of quick doubling, tripling, quadrupling, or more, of price, were commonplace in cocktail party chatter. The climate was not dissimilar to 1929, when bellhops and taxi drivers were available for instant investment advance, as if they had been in the business for years. More recently, the 1990 top in the Japanese market drew similar instant experts. Such stock parties are fun while they last, but once they are over, the hangover can last for many, many years. *A bull market is defined as an environment in which most stocks advance in price most of the time.* Normally, they last for one or two years, not for the unprecedented period of the 1990s. As a result, traders and investors got spoiled, and as the environment changed at the turn of the century, they ignored the stock selection process to their peril. Since reality has begun to set in, there has been a growing desire to learn more about techniques for selecting stocks. This book has been written to address these needs through the use of technical analysis.

Applying technical analysis to the stock selection process can be done in a number of different ways. Here, I will concentrate on what is commonly called the *top-down approach*. This will involve a little bit of elementary business cycle theory as it applies to the interrelationship of stocks, bonds, and commodities. The universe of stocks and mutual funds is huge, running into the tens of thousands. Consequently, it is an immense task to page through, or even scan for, such a huge quantity of stocks. The top-down approach attempts to accomplish this task in a systematic way. First, establish that the market itself is in a positive long-term trend, that is, a primary bull market. Then, examine the technical position of the 80 or so industry groups, then select several attractive ones. The final step is to zero in on the individual

stocks contained within that industry. One important question that needs to be answered when selecting any stock is that of time horizon. Are you an investor with a long-term, say, 9 months or more, timeframe? Are you more interested in playing the intermediate moves, that is, 6 weeks to 9 months? Or are you a short-term, 2–6-week, or even shorter, person? *The answer to this question has a great deal to do with the kind of indicators you might want to use.*

At the outset, there is one extremely important point that needs to be made. Whatever timeframe is used, it is mandatory to have a good understanding of direction of the main or primary trend. That is the bull or bear market lasting from 9 months to 2 years, or more. The reason for this is that *the direction of the primary trend dominates the magnitude of short-term moves and, therefore, affects the success or failure of your trading potential.* A rising tide lifts all boats, so it is safe to trade from the long side in a bull market. However, rallies in bear markets are very deceptive and are associated with far more whipsaws. It is, therefore, a wise policy to stand aside in a bear market, however bullish you may be over the short run. I will have a lot more to say on that subject later on.

Stock prices, like any other freely traded entity, move in trends. That is nice to know but would not have any significance whatsoever, were it not for the fact that trends, once underway, tend to perpetuate. The first part of this book will introduce several technical tools that will help in determining trend reversals at a relatively early stage.

Then it is possible to ride on the trend until the weight of the evidence, that is, the technical indicators, show or prove that the trend has reversed. To those new to the subject of technical analysis, a note of caution. The text assumes that you already have some basic technical knowledge of price patterns, trendlines, moving-average techniques, and so forth. If you sense a need for the basics, I refer you to my *Introduction to Technical Analysis*<sup>1</sup> or *Technical Analysis Explained*<sup>2</sup> book CD-ROM course.

A substantial part of this book will concentrate on the top-down approach and the group rotation cycle process, but I will spend some time on flagging some technical tools that can help in scanning huge databases of stocks. However, it is now time to begin, and our first part will describe the tools required to do the job. The first is the concept of "relative strength."

<sup>1</sup>McGraw-Hill, 1998

<sup>2</sup>McGraw-Hill, Fourth Edition, 2002

# 1

# The Concept of Relative Strength

## The Concept

*Relative strength (RS) is a very important technical concept that measures the relationship between two securities.* Incidentally, I will be using the term *security* throughout this book to include any freely traded entity, be it a market, stock, currency, commodity, and so forth. This way we avoid unnecessary repetition. It is important to note that relative strength, as we will be using it here, has nothing to do with Wells Wilder's relative strength indicator, or the *RSI*, as it is commonly called. The *RSI* is an indicator that measures a security's price relative to itself over a specific period. It is plotted as an oscillator and is a form of rate-of-change indicator.

Relative strength, as discussed here, is comparative relative strength, where one security is divided by another and the result is plotted as a continuous line. There are several ways in which relative strength can be used. The first approach uses RS to compare one asset to another, to decide which one to buy or to better understand an inter-market relationship. In this case, we might compare gold to bonds, to see whether the gold price is in a rising trend relative to bonds. If so, this could mean that an inflationary trend is unfolding.

Another possibility might arise when a review of the technical position indicates that both the U.S. and the Japanese stock markets are in a bullish trend. Analyzing the trend of RS between the two would show which market was likely to outperform the other.

In commodity trading, a *spread* is a form of relative strength. A spread involves the relationship between one commodity and another, such as corn to hogs. Alternately, a spread captures the relationship between a distant contract and a nearby one. In this instance, traders are attempting to discover relationships that have diverged from the norm and are riding on the spread until the two contracts come back into line.

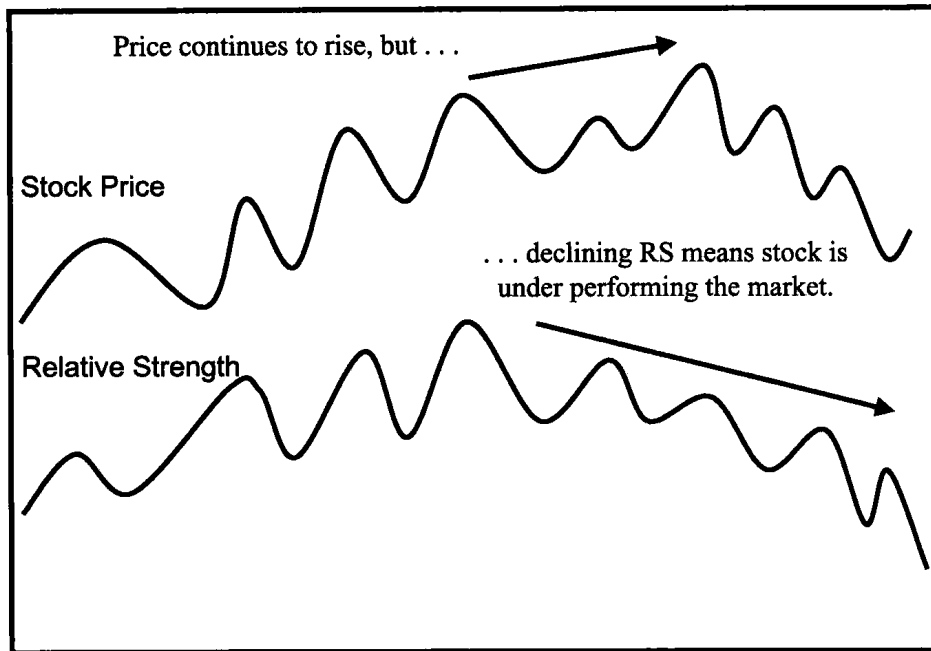
A currency is really an RS relationship, when you think about it. For example, there is no such thing as the “U.S. dollar” in an external sense, because each currency is really a relationship between itself and other currencies. The dollar-euro cross, or the euro-yen cross, and so forth, represent other examples.

The most common use of RS is the relationship between a stock or industry group and the overall market, as measured by the S&P Composite, the NASDAQ, and so forth. When it is used in this way, RS becomes a very powerful concept for individual stock selection.

## The RS Line

An RS line is obtained by dividing the price of one item by another. The numerator is usually a stock and the denominator a measurement of “the market” (for example, the NASDAQ or the S&P 500). The concept can also be expanded to the commodity area by comparing the price of an individual commodity, such as corn, to a commodity index, such as the Commodity Research Board (CRB) Composite, and so on. In Fig. 1-1 the price of the stock is featured in the upper panel and its RS in the lower one. When the line is rising, it means that it is outperforming the market. In this case, the denominator is the S&P Composite, so a rising line means that the stock is outperforming the S&P. Later on, it continues to rally, but the RS line peaks out. This means that it is now underperforming the market. Another possibility might involve the comparison of an individual country’s stock or index to a global indicator, such as the Morgan Stanley World Stock Index. As long as the appropriate currency adjustments are made, the principles are the same.

*The key thing about relative strength is that it moves in trends*, just like the absolute price. This means that RS lends itself to trend-reversal techniques, such as price patterns, trendlines, and MA crossovers. The interpretation of trends in RS is subject to exactly the same principles as that of the price itself. It is important to note that an RS indicator is just what its name implies—relative. A rising line does not mean that an item, such as a stock, is advancing in price, but merely that it is outperforming the market or rising relative to it. For example, the market, as measured by the S&P



**Figure 1-1** Price versus relative strength.

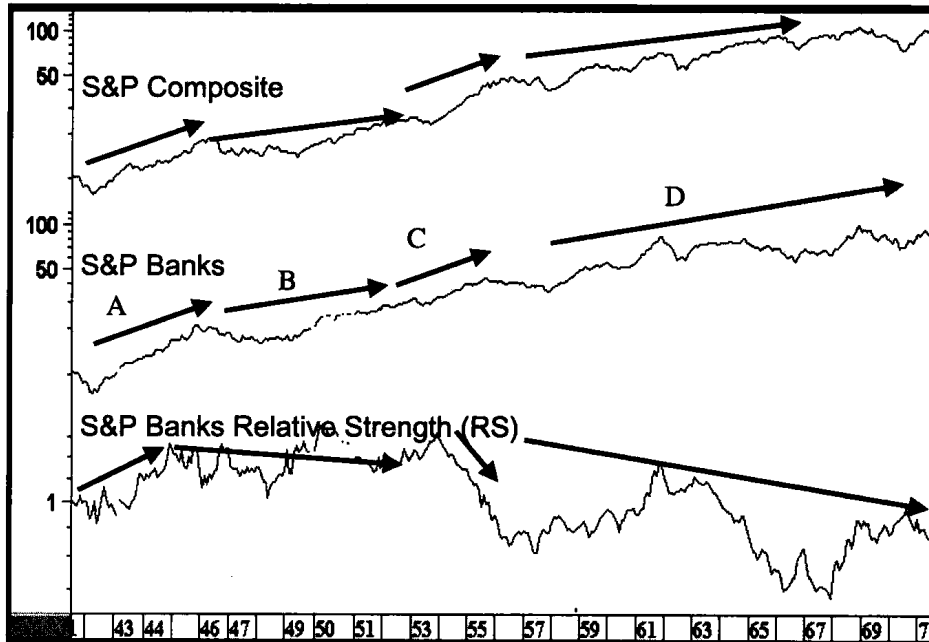
Composite, may have fallen by 20 percent and the stock by 10 percent. Both have lost value, but the RS line would be rising because the stock retreated less than the market.

## Why Relative Strength Is Important

When we look at a chart of a rising price, we may say to ourselves that this is a good thing and that exposure to that security would have made sense. That is true as far as it goes, but if we watch the trend of relative strength, we can do even better.

Chart 1-1 shows the S&P Composite at the top and the S&P Banks in the middle panel for the period between 1941 and 1971. Everything looks pretty good because both series are in a rising trend until 1946 (arrow A). The RS line in the bottom panel is also in a positive trend, thereby indicating that the banks were outperforming the S&P, an ideal situation. Then, for the next 7 years or so (arrow B), the banks and S&P rise, but the RS line was trading more or less sideways. This horizontal trading action of the RS line

**Chart 1-1** S&P Composite, S&P Banks and Banks relative strength, 1941–1971. (Source: *pring.com*)



tells us that the bank's performance was on a par with that of the market as a whole.

In 1953 both the banks and the S&P begin what looks to be a nice rally (arrow C), but the RS line falls like a stone, clearly demonstrating that what looks good on the surface does not necessarily correspond to good relative performance. Finally, the rest of the chart, covered by arrow D, indicates that the satisfactory performance of the absolute price of the banking group was not telling the complete picture, since the relative line continued to underperform. In this situation, even though the banks would have made money, the declining trend of relative strength told us that there were other sectors where our capital could have earned a far greater return.

# 2

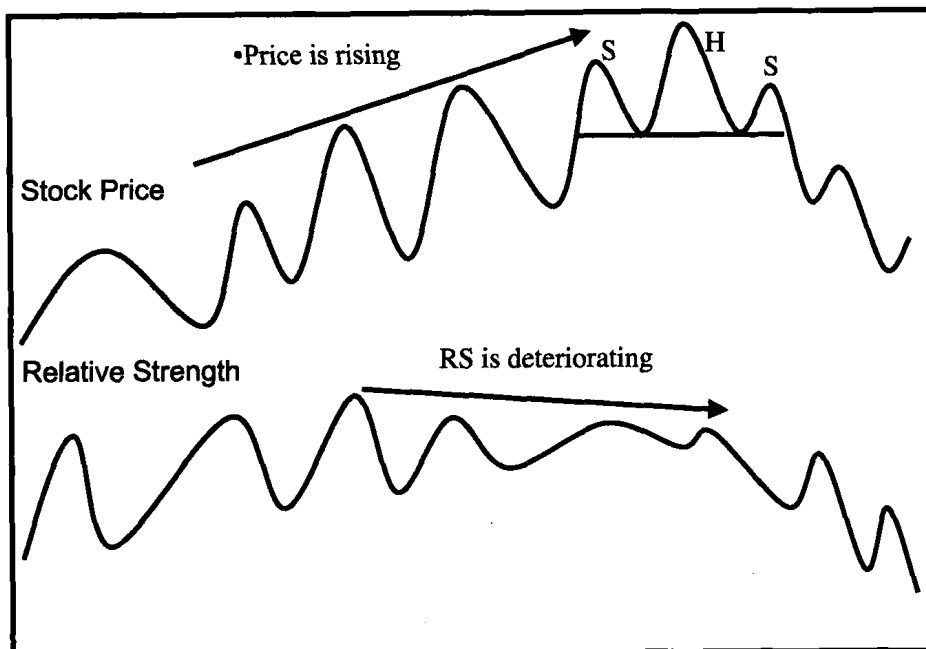
## How to Interpret Relative Strength

There are various ways in which relative strength can be interpreted, but perhaps the most common are its positive and negative divergences, so let's begin with them.

### **Positive and Negative RS Divergences**

When both the price and the RS are rising, they are said to be *in gear*. Important trends usually begin with both series acting in concert, but eventually the RS line fails to confirm new highs being set by the price itself (Fig. 2-1). This type of situation indicates that the odds favor the stock beginning a period of underperformance against the market. Weakness in RS, though, is not an absolute sell signal, that is, one indicating that the price will go down; it is merely a relative signal, that is, one implying a switch from an issue that has started to go out-of-favor to one that is coming into favor.

However, a divergence or series of divergences between the price and RS often provides an early warning sign of trouble, which is later confirmed by a trend-reversal signal in the price itself. Look at Fig. 2-1, for instance. The two are in gear at the start, but later on, the RS line diverges negatively with the price on three occasions. Finally, the price itself completes a top and declines. The top completion in this case confirmed the negative RS divergence.



**Figure 2-1** Relative strength negative divergence.

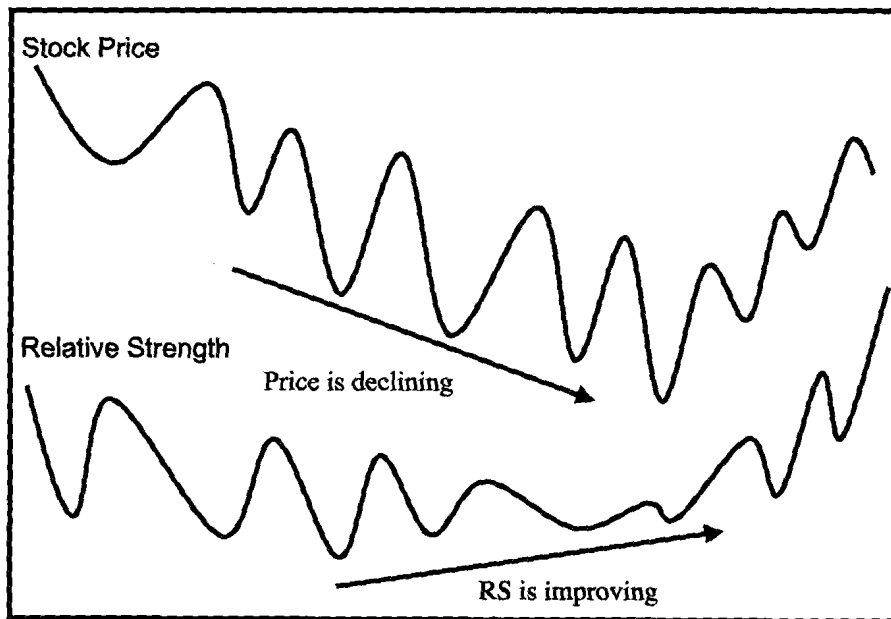
The opposite set of circumstances holds true in a declining market, in which an improvement in RS ahead of price is regarded as a positive sign (Fig. 2-2). Quite often, bear market lows in the equity market are preceded by an RS improvement in interest-sensitive stocks, such as utilities. This is because they are early leaders as a new bull market gets under way. This idea is discussed at greater length later.

## Trend-Reversal Signals

### Moving-Average Crossovers

Sometimes, it is a good idea to run a moving average through the price, using the crossovers as legitimate signals of a change in trend (Fig. 2-3). We can also do the same thing for the relative strength line. That is the theory. However, Fig. 2-4 is closer to reality because moving-average crossovers can prove to be extremely frustrating in practice, resulting in numerous whipsaws. In my experience, these whipsaws are even more prevalent with the RS line because it often contains a substantial amount of random noise. This





**Figure 2-2** Relative strength positive divergence.

is especially true for short-term trends, but even long-term moving averages, such as a 40-week or 65-week exponential, often result in misleading or whipsaw signals far more often than we might like. Chart 2-1 features General Electric. The RS line versus the S&P Composite is shown in the lower panel. GE is a relatively stable stock, but just look at the whipsaws generated from a 25-day MA crossover!

Now, if we extend the timeframe to weekly data (Chart 2-2), there are far fewer whipsaws. This time, I am featuring a 65-day EMA for both the price and the RS line. There is a concentration of whipsaws in 1994, but by and large, there are relatively few false signals in the 8-year history of the chart.

I mentioned that GE is a relatively stable stock. Now, if we turn our attention to another G-stock, this time GM (Chart 2-3), you can see that General Motors is far more volatile, even on this weekly chart. Once again, the two smoothings are 65-week EMAs. As you can see, the 1996–1998 period was particularly vicious.

Chart 2-4 just shows the *relative* action. This time, though, I have introduced an additional EMA. The dashed line is the 65-week EMA, but the solid one is a 10-week smoothing of the 65-week series. We are still left with a couple of whipsaws from their crossovers, but the 1996–1998 pounding of whipsaw signals is totally avoided, as the 65-week dashed line remains below the