

## Fibonacci & The Fan Principle

by Lan H. Turner



## Relative Strength Index

by Kent Kofoed

***Editor in Chief:***

Lan H. Turner

***Managing Editor:***

Heather Rich

hrich@pitnews.com

***Assistant Designer:***

Marlene Sampson

***National Sales Manager***

Erik Akins

***Controller:***

Joseph Chambers

***Webmaster:***

Jacob Anawalt

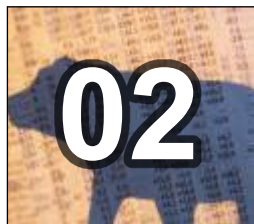
***Website:***

www.PitNews.com

***Email:***

magazine@pitnews.com

## In this issue...



### **Fibonacci & The Fan Principle**

*by Lan H. Turner*



### **Relative Strength Index**

*by Kent Kofoed*

# Fibonacci & The Fan Principle

By Lan H. Turner

**A**ny serious market technical analyst should be able to give you a complete run-down on the history and uses of the infamous Fibonacci Ruler. Basically, we all know that the Fibonacci sequence was named after Leonardo Pisa, a mid-evil mathematician who lived between 1170 and 1250 and of course that the Fibonacci ratio starts with a simple math formula where a series of numbers are added one to the other, giving us the now famous Fibonacci series: 0,1,1,2,3,5,8,13,21,34,55,89,144...etc, where in the preceding two numbers are added together to get the third number, i.e.  $0+1=1$ ,  $1+1=2$ ,  $1+2=3$ ,  $2+3=5$  and so on and so on.

This famous mathematical formula is also known as the golden ratio, or as the Greek letter Phi.

So, what does all this have to do with me and how can it be used to make more money in the financial markets? Mathematicians have long studied the

usefulness of the Fibonacci sequence and numbers, and have found that one of its many uses is to bring order to chaos. In that regard, many market analysts will tell you that the financial markets and their price fluctuations are a perfect example of chaos, having no structure or reason, but driven by immeasurable market forces and human emotion and intervention. This is where the use of chaos theory, our Fibonacci sequence, or Golden Ratio comes into play. We use Fibonacci to help bring sense to chaos. Take a look at the following chart on the next page.



Introducing...

## TradeMiner

Stocks, Futures & Forex

**A New Technological Breakthrough  
In Computing Market Trends!**

**[www.TradeMiner.com](http://www.TradeMiner.com)**



To make use of Fibonacci mathematics in trading, we first apply the formula to a simple ruler. Notice that we lay the further most left point of our Fibonacci ruler in line with the bottom of the new rising trend. The correct placement is key to the accuracy of this tool. We then stretch the tool to the utmost top of the prevailing trend. These two points are identified on the ruler by the horizontal parallel lines A & B. We then see the market price reflected along the left column of the Fibonacci Ruler, and the corresponding Fibonacci ratios along the right column.

One of the most useful methods of trading the financial markets is through the identification of reoccurring price patterns, and using the Fibonacci ruler is the simplest way of identifying one of our

most powerful reoccurring price patterns, known as the Fibonacci retracement.

In this example, you can see that our price of gold completed the initial advancing forward wave at 669, where prices began to break down, giving back to the market some of its earlier gains. One of the highest degrees of commonalities that we find in the financial markets is through the use of and measurement of the Fibonacci ruler through multiple price levels established by the natural ebb and flow of the markets wave action. We have found that markets have a tendency to use these Fibonacci levels as areas of support and resistance. One such retracement level that we as technical analysts watch for, more than any other level, is the 61.8% level, which is where we find a much higher likelihood that a market will retrace

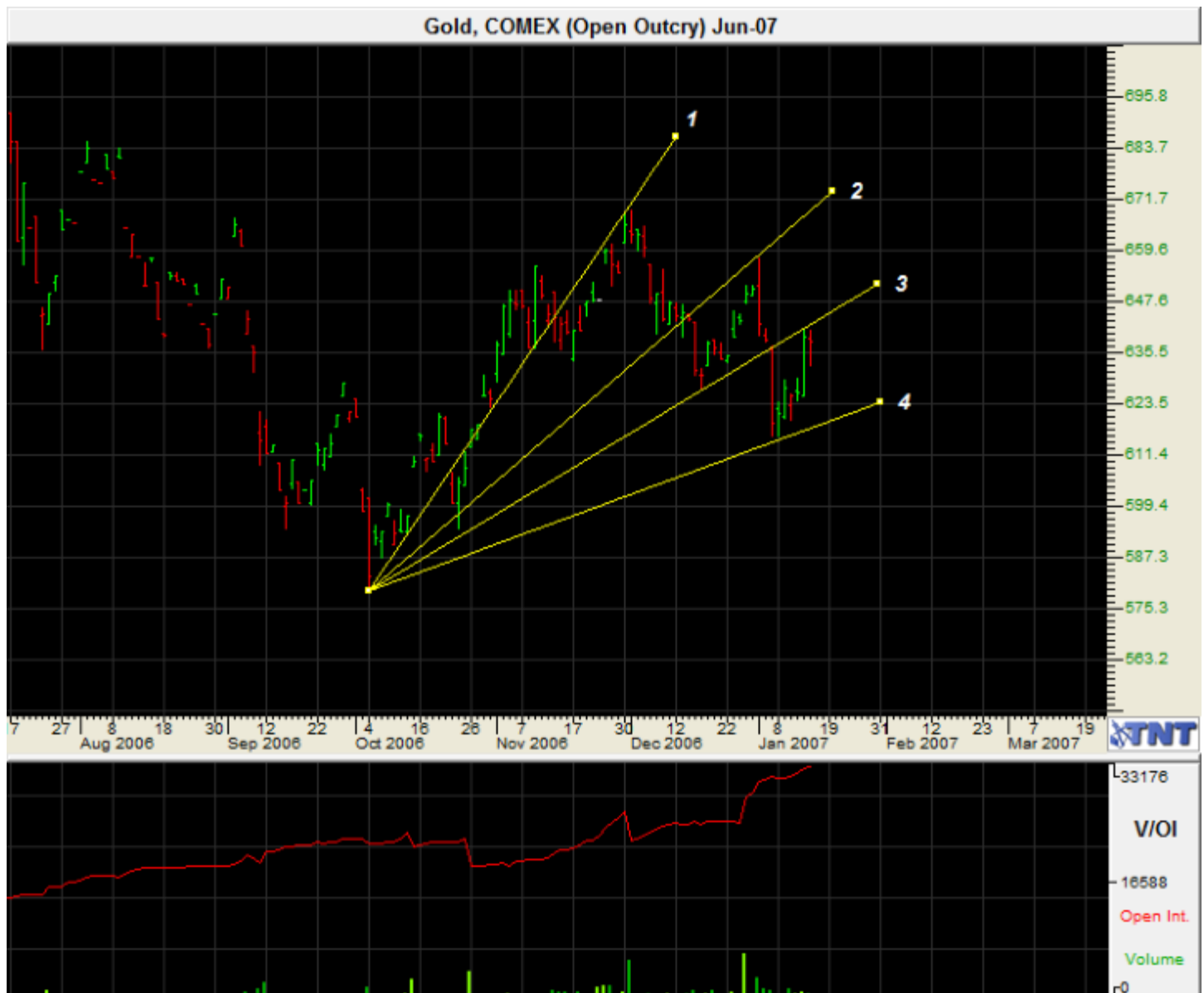


back to this level before continuing on in a forward price advance. Note that in our gold chart, this market made a perfect retracement back to the 61.8% level before advancing forward once again.

Being able to project out into the future and making estimates as to where we might anticipate markets rising to, and when in time they might arrive at those projected prices, has long been a strong point of interest to traders. Through the use of the Fibonacci ruler, and the corresponding speed fan principle of support and resistance, we can combine and make use of these two tools to give us a forward looking projection of where prices might be headed.

The traditional speed fan principle would have us lay our fan tool over the top of the corresponding

market in much the same way we started our Fibonacci Ruler; the initial starting point being that of the lowest point in price and time of the newly established trend. We then extend the necessary fan extensions up through and beyond the price levels as dictated by the market. As it makes its way through price and time, we realize that the market has a tendency to use previous levels of support and resistance as new levels of support and resistance. Because we find that markets have a tendency to use the same levels of support and resistance time and time again, we are then able to make sense from what seems to be mere market noise and chaos; this is done through the use of tools specifically designed to count and measure the markets dynamic price structures as they are being built.

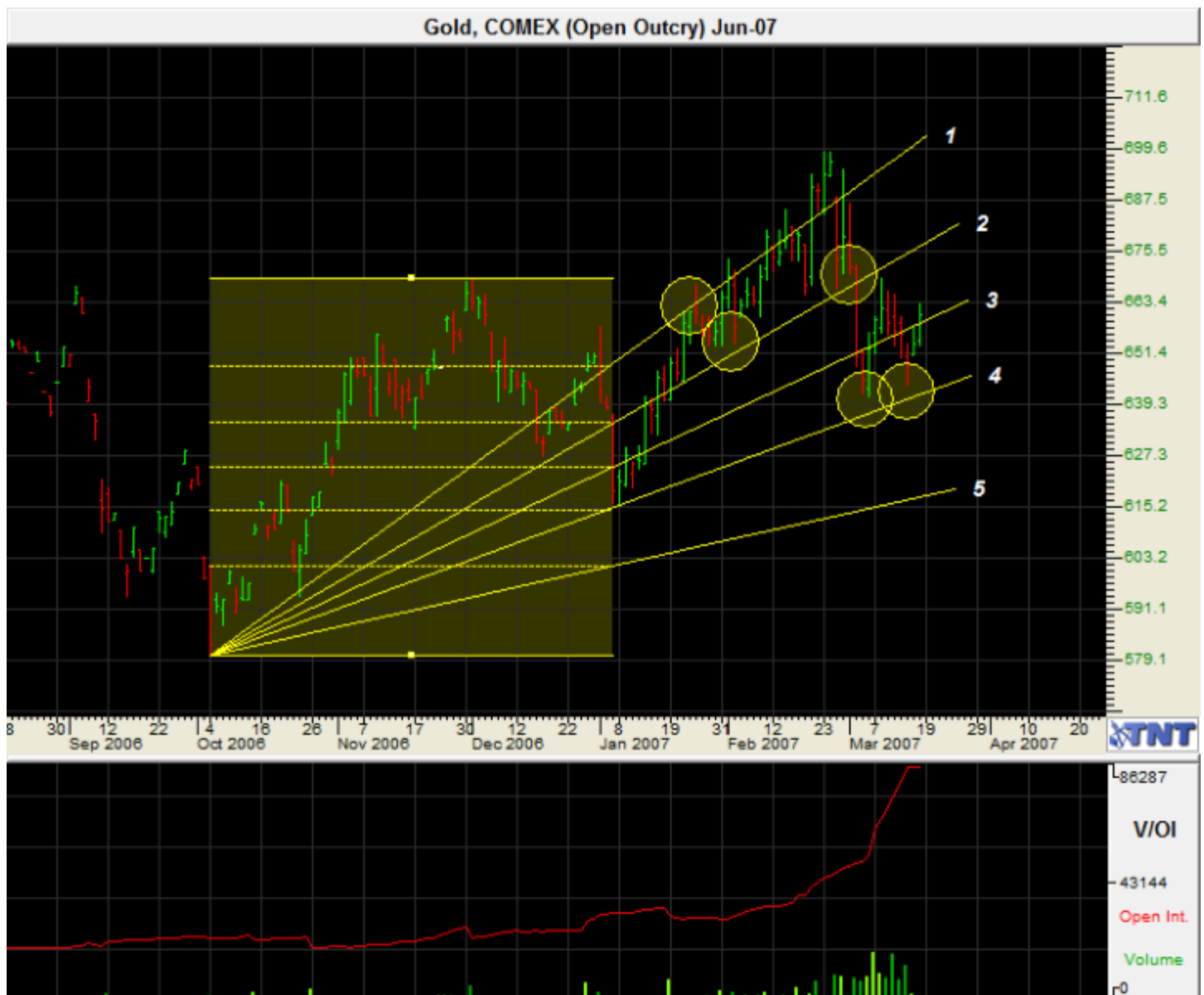


Combining these two tools, which have been specifically designed to help us measure market dynamics, gives us one very powerful forward looking tool, allowing us to see "into the future" of the markets potential price and time.

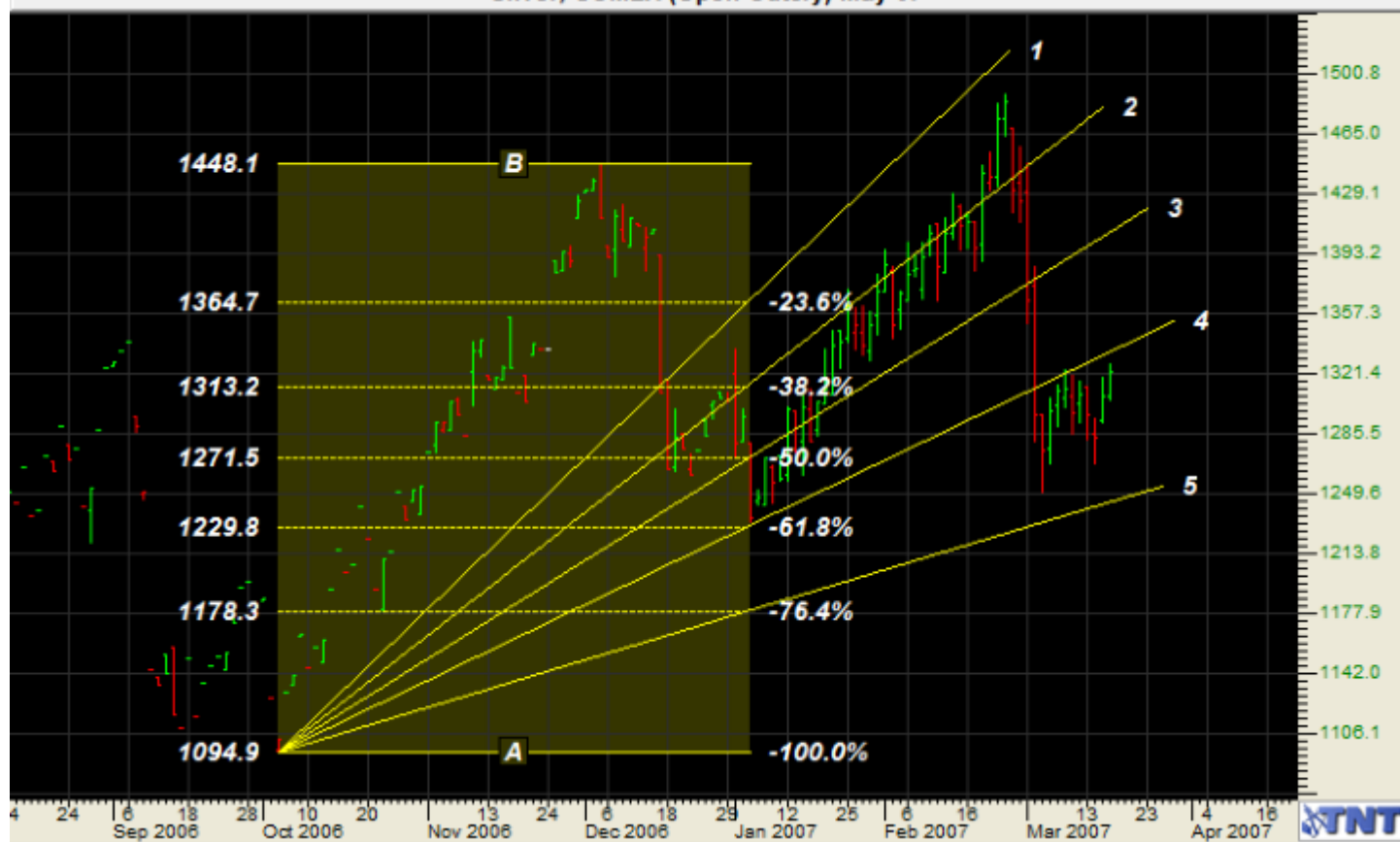
In the following three examples (see page 6), you can see we've placed the Fibonacci ruler over the top of the corresponding market. We've established a full retracement back to the 61.8% level, where we now anticipate a continuation of the overall market trend. It is at this point that we combine these two fascinating tools together to establish future price and time projections. By intersecting the speed fan lines with the horizontal and vertical crossover axis of the Fibonacci ruler, we create a Fibonacci Fan, which basically gives us a roadmap or guide as to where we can anticipate forward looking price projections.

To properly establish a forward looking Fibonacci fan, follow these five simple steps:

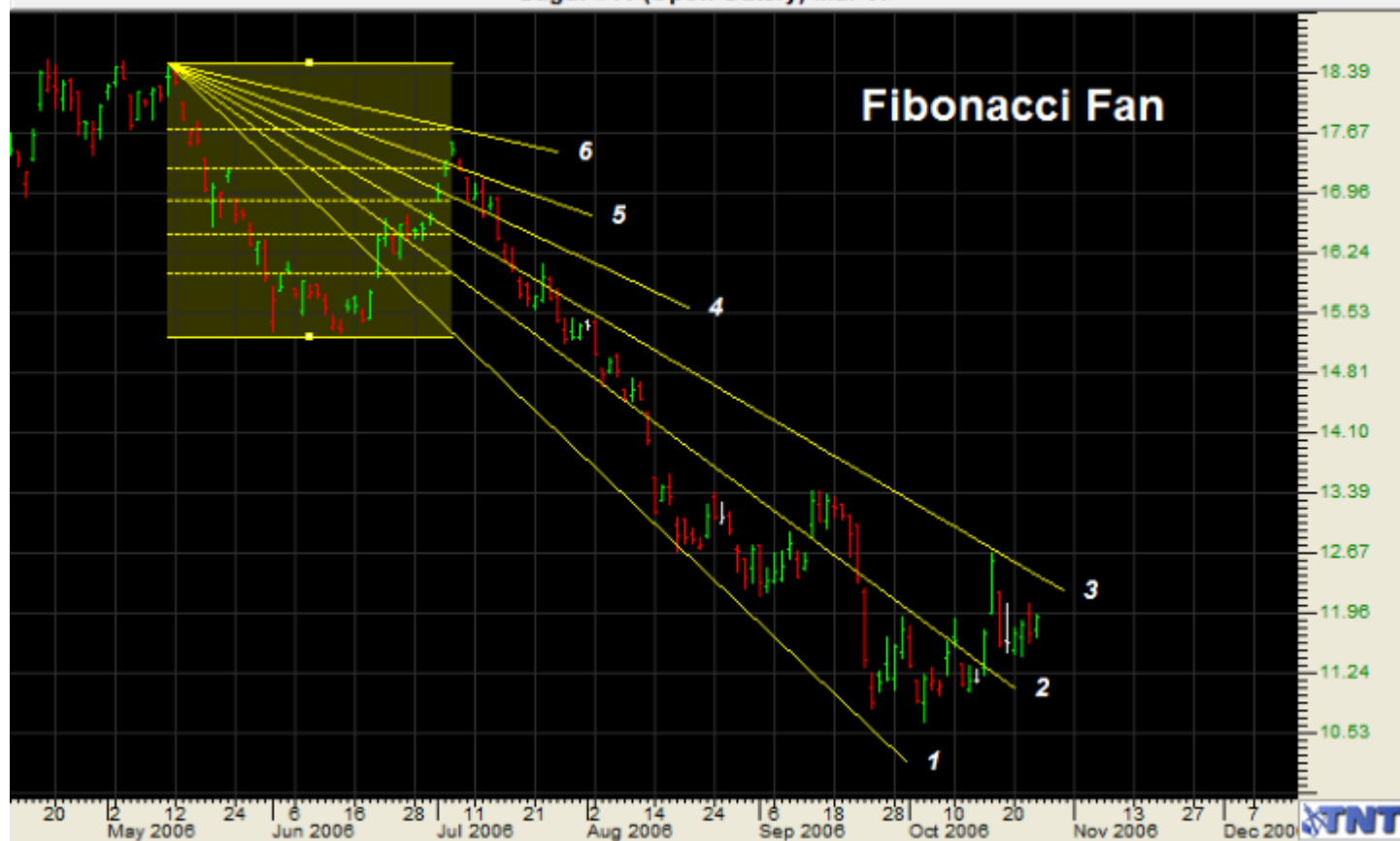
1. Place the Fibonacci ruler over the chart as indicated in the above example; locate and establish the lowest/highest point of a new trend then place the horizontal A line at the corresponding price level.
2. Watch for and establish the first peak of the initial market wave, which is where we place the corresponding horizontal line labeled B of the Fibonacci ruler.
3. As the market retraces back down the Fibonacci scale, you will need to continually move the vertical right edge of the ruler to match the right most price bar.



Silver, COMEX (Open Outcry) May-07



Sugar #11 (Open Outcry) Mar-07




4. Once the retracement level has been established, optimally the 61.8% level, line up the right most column of the Fibonacci ruler with the lowest retracing price bar.

a. 61.8% level is optimal, but other Fibonacci retracement levels are acceptable and have been found to be very effective as well.

5. Draw in the Speed Fan tool over the top of the Fibonacci ruler, starting the speed fan at the same point as the Fibonacci ruler A point. Drag each speed fan trend line across the vertical Fibonacci axis of the ruler, extending the trend fan lines out into future levels of price and time.

*Mr. Turner is the President of PitNews Press, Editor In Chief of PitNews Magazine, and CEO of Gecko Software, Inc., and chief design architect of the line of Track 'n Trade LIVE trading platforms, and charting software applications. Mr. Turner has been working in the financial industry for over 19 years, and has taught his Stocks, Futures & Forex trading ideas and concepts to clients, professional traders, and brokers from around the world.*

**TRACK'N TRADE®**  
STOCKS, FUTURES, FOREX TRADING SOFTWARE

Track 'n Trade's Proprietary  
**Red Light, Green Light** Trading System


# Bulls 'n Bears

In Depth  
Video Education

Whipsaw-Eliminating  
Advantage Lines

Many Other  
Additional Filters

To Learn More Visit:  
**[www.TracknTrade.com/bnb](http://www.TracknTrade.com/bnb)**  
For Questions or to Place an Order Call  
**1.800.862.7193 Ext. 2**






Chart without Bulls 'n Bears


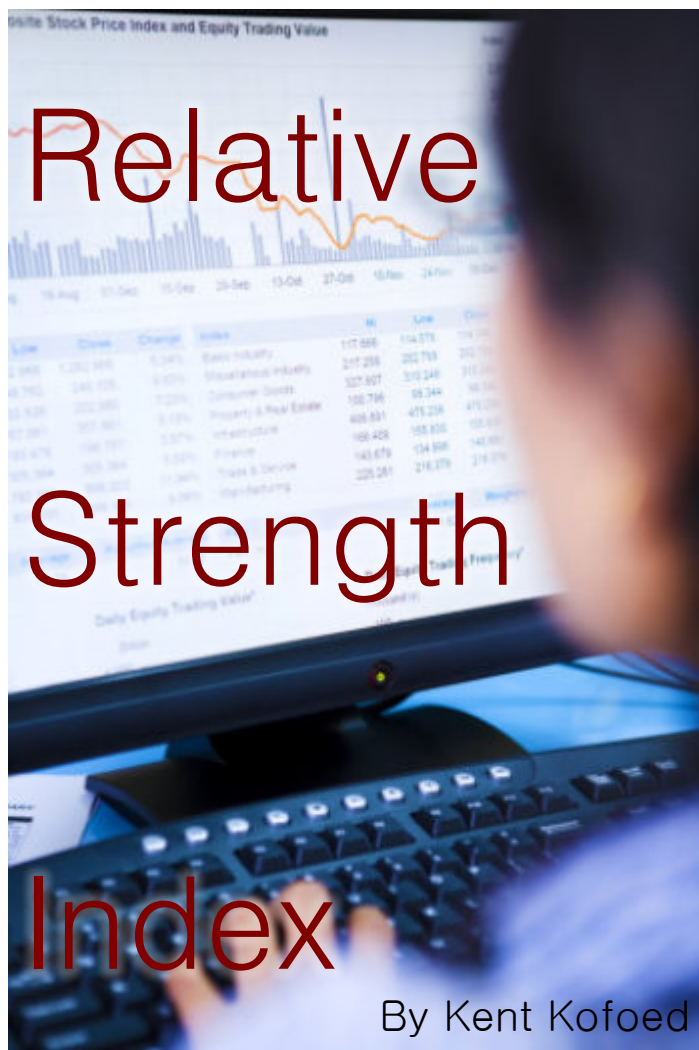


Chart with Bulls 'n Bears

GREEN = BULLISH MARKET  
YELLOW = NEUTRAL MARKET  
RED = BEARISH MARKET  
BLUE = TRAILING STOP

Bearish Signal  
Calculated Auto-Trailing Stop  
Re-Entry Sell Signal  
Bullish Signal  
Calculated Auto-Trailing Stop





(a simple moving average, as well as any other type of moving average, can also be used), and the value of the indicator ranges from 0% to 100%. The idea behind this indicator is that when prices rise very rapidly over a short period of time, it is likely that the asset will become overbought, and, similarly, when prices fall very quickly over a short period of time, it is likely that the asset will become oversold (either way, the assumption is that when prices move quickly in one direction, it is likely that a reversal is looming).

In Figure 1-1, you can see the RSI indicator, which is located below the price chart. The typical overbought value for the RSI indicator is 70% and the typical oversold value is 30%, and both of these values are represented with the blue lines in the indicator window. I have circled both the indicator arrows and the value of the RSI when a particular signal was given. This first circle includes three different indicator arrows, with each signal telling you to sell, and each of these sell signals occurred as prices continued to move higher. It might not make a whole lot of sense for an indicator to keep giving you the same sell signal, but this is actually pretty typical and the way that you need to think about it is that the indicator is only telling you that prices are simply becoming overbought (i.e., it isn't telling you that prices have reached their peak, it is simply telling you that prices have moved really far, really quickly). The second set of circles shows you where prices became oversold and a resulting sell signal was produced. Similarly, the third and fourth set of circles show you where prices became overbought and oversold, respectively, each producing a buy or sell signal.

As is the case with most indicators, the RSI indicator works much better when combined with other types of indicators (i.e., each of the indicators is used to produce a combined buy, or sell, signal). For example, instead of simply selling when the first RSI signal occurs, you could wait for another indicator to provide a similar signal (e.g., when the Bulls 'n Bears indicator went from green to yellow) and use the combined signal as your sell signal.

In summary, the RSI indicator is a technical indicator that tells you when prices are either in an overbought territory or an oversold territory (or somewhere in between). It compares the velocity (speed) and momentum (distance) of prices, for both up and down price movements over a given time period, and provides a signal when prices are

**T**he relative strength index (RSI) is a momentum oscillator (i.e., it is a momentum-based technical indicator that measures the up and down price action of an asset in order to determine if that asset is overbought or oversold) and it measures both the velocity and magnitude of directional price movements. And just in case that first sentence didn't make a whole lot of sense, I'll provide a quick example. If you were driving a car, velocity would be the speed that the car is going and magnitude would be how far the car has gone. Similarly, the RSI indicator measures the rate of change of an asset (i.e., its velocity), as well as its total price movement (i.e., its magnitude), and it uses both of these to determine the relative strength of the current directional price trend (i.e., it compares the strength of the upward price movements to the downward price movements).

The RSI indicator typically uses an exponential moving average that averages prices over 14 periods



Figure 1-1

relatively overbought or relatively oversold. Lastly, since the RSI indicator is a momentum indicator, combining its signal with signals from other types of indicators (e.g., trend indicators, volume indicators, volatility indicators, etc.), can improve results significantly, when compared to relying solely on one type of indicator.

*Kent Kofoed is a technical analysis specialist, as well as an individual trader, who has a Bachelor's degree in Business Administration from Utah State University and a Masters of Security Analysis and Portfolio Management degree from Creighton University. Additionally, Kent is a level II candidate in the CFA program, a graduate student in the Masters of Science in Predictive Analytics program at Northwestern University and a contributing author for PitNews Magazine.*



Welcome to the PitNews.com Estore.

Below are products featured from the online store, click on them to learn more.

## Charting Software



### Track 'n Trade Forex Live

**FREE 14 Day Trial**

**Price:** \$297

**Data:** Free (Active Traders)

Trade the currency market with the best tools and the easiest order placement available! Free data for active traders.

[Learn More](#)



### Track 'n Trade Futures Live

**FREE 14 Day Trial**

**Price:** \$297

**Data:** \$39.95/month

This amazing charting software package gives you the ability to analyze commodity markets technically with various tools, unique market calculators, and customizable indicators.

[Learn More](#)



### Track 'n Trade 5.0

**Free 14 Day Trial**

**Price:** \$197

**Data:** \$19.95/month

\*Get Advanced Tools Plug-in FREE when you buy TNT 5.0

This amazing charting software package gives you the ability to analyze commodity markets technically with various tools, unique market calculators and customizable indicators.

[Learn More](#)

## Charting Software



### TNT High Finance

**FREE 14 Day Trial**

**Price:** \$197

**Data:** \$29.95/month

Track 'n Trade High Finance Stock Trading package allows a trader to monitor, track and chart the popular stock market, giving the trader intra day snapshots and price activity throughout the day.

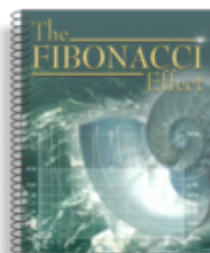
[Learn More](#)

## Trading Education



It seems that we spend 90% of our time studying and trying to figure out the best timing techniques for market entry, but we spend very little time actually learning the techniques of exiting the market. Getting into a market is easy, but getting out of the market, with a profit, is the true test of a traders skill.

[Learn More](#)



Learn how, and what to count, and how and what to measure, and how to read each new setup, and how to set up a trigger, then how to follow through with the final exit strategy. Stop watching your portfolio shrink, and start doing something about it? Learn what you can do, in the next 10 days, to protect your wealth!

[Learn More](#)



Accurately identify trends and market cycles with TradeMiner! Get above average market returns with significantly lower average risk by only taking the highest probability trades!

[Learn More](#)



Welcome to the Classified Section of the PitNews.com Magazine. All listings below are "clickable".

## FX Trading Platform



### Track 'n Trade Forex Live

**Company:** Gecko Software  
**Website:** [www.TracknTrade.com](http://www.TracknTrade.com)  
**Market:** Forex Trading  
**Phone:** (800) 862.7193

Trade the currency market with the best tools and the easiest order placement available! Free data for active traders.

[Click Here for a FREE 14 Day Trial](#)  
[www.TracknTrade.com](http://www.TracknTrade.com)

## Futures Software



### Track 'n Trade Futures Live

**Company:** Gecko Software  
**Website:** [www.TracknTrade.com](http://www.TracknTrade.com)  
**Market:** Futures  
**Phone:** (800) 862.7193

This amazing charting software package gives you the ability to analyze commodity markets technically with various tools, unique market calculators, and customizable indicators.

[Click Here for a FREE 14 Day Trial](#)  
[www.TracknTrade.com](http://www.TracknTrade.com)

## Educational Websites



### PerosnallInvestorsHr.com

[www.PersonalInvestorsHr.com](http://www.PersonalInvestorsHr.com)  
 Phone: (800) 862.7193  
 Listen and learn from the best in the business!  
[Click Here](#)



### ThePitMaster.com

Phone: (800) 862.7193  
 Great site for beginning futures and options traders. Free education on option strategies and more!  
[Click Here](#)

## Educational Websites



### GeckoSoftware.com

Phone: (800) 862.7193  
 Six time winner of Stocks & Commodities Readers Choice Award. Take a FREE Trial!  
[Click Here](#)



### ChartBook.com

Phone: (800) 862.7193  
 Free Forex Quotes and Charts online. Apply indicators easily, great charts, check it out!  
[Click Here](#)



### PitNews.com

Phone: (800) 862.7193  
 Get all your current Forex, Futures and Stocks news in one Place!  
[Click Here](#)



### CommitmentofTraders.com

Phone: (800) 862.7193  
 Learn to apply Commitment of Traders reports to your trading. Examples using Track 'n Trade.  
[Click Here](#)



### StockAnnual.com

Phone: (800) 862.7193  
 StockAnnual.com was designed to discover and exploit recurring historical market patterns.  
[Click Here](#)



### TheWall.PitNews.com

Phone: (800) 862.7193  
 Open forum for traders, visit today to share your trading ideas and post charts.  
[Click Here](#)



### WhyTradeFutures.com

Phone: (800) 862.7193  
 Learn why you would want to trade futures market. Compare the Futures market to the Stock market.  
[Click Here](#)