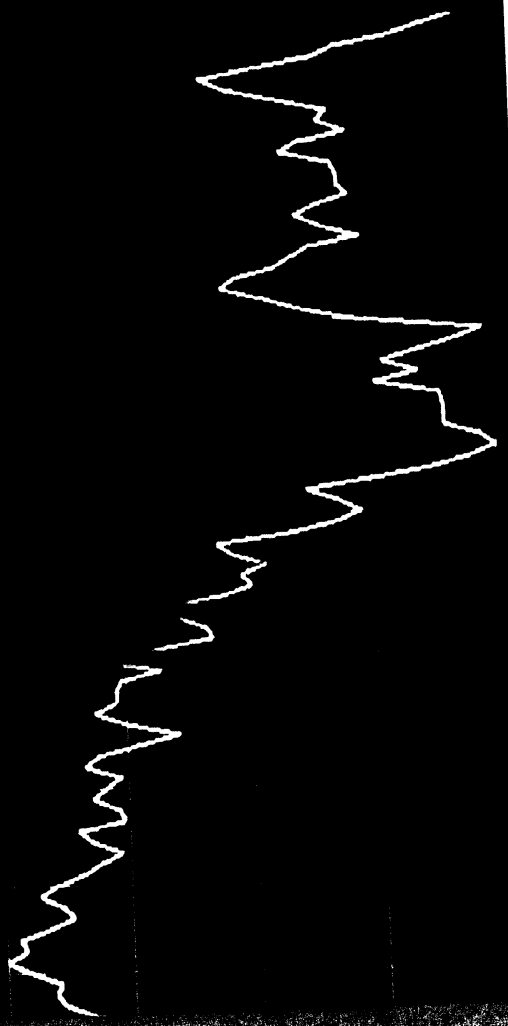


The Technical Analyst

# TECHNICAL ANALYSIS & BEHAVIOURAL FINANCE

DISCUSSIONS WITH INVESTMENT MANAGERS AND ANALYSTS



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*Do you keep an eye on volume levels and if so, how do you use them in your decisions?*

Less and less I have to say. I think volume figures are getting less and less reliable with the growth of alternative trading platforms and dark pools of liquidity used by institutional investors.

*How much importance do you attach to stock market cycles and statistics? For example, the January Effect and Sell in May. Do you actually trade on them?*

I sometimes look at them, take notice but do not trade on them.

## Chapter 7

### BARCLAY LEIB

#### PRINCIPAL AND FOUNDER

#### SAND SPRING ADVISORS

*Barclay Leib founded Sand Spring Advisors in 1999, a financial advisory firm based in New Jersey that offers trading analysis and fractal commentary to hedge funds. He began his career at J.P. Morgan where he ran commodity and FX derivatives trading. In 1987 he became head of proprietary trading and arbitrage within PaineWebber's Fixed Income Department. He later worked for J. Aron Goldman Sachs where he was a senior member of their global currency and commodity option trading team. Barclay moved into strategy and hedge fund sales work between 1993 and 1998 working first as a vice president in FX options trading at Barclays and then later at Societe Generale.*

## USING TA FOR TRADE AND INVESTMENT DECISIONS

*Can you explain your basic investment style?*

I have a strong belief that markets move with clearly defined fractal rhythms. Elements of so much importance in the physical world of geometry - concepts such as *pi* (3.141) and *phi* (the so-called Golden Ratio of .618 and 1.618) - are also of similar importance in the more abstract world of markets. My approach focuses on a hidden order, perhaps geometric or fractal in nature, hiding behind the chaos of daily market trading.

Phi ratios inherent in Fibonacci retracement bands may be stretched to anticipate 'complete' market rhythms, where multiples of *pi* and *phi* are important in anticipating cyclical market turns. All the little jiggles of a given market must eventually 'fit' a geometrically defined pattern of some sort before they reverse in trend.

Not every chart pattern yields obvious analysis, so the trick is to search for those where a clear missing high or low may be seen on a fractal basis, and to focus on those select situations. I like to be patient for a clear chart pattern where I feel I have a discernable edge

with my fractal methods and feel no compulsion to become involved in marginal situations. I like to wait for low hanging fruit, only attacking when a set-up looks obvious, but then generally retreating early when my fractal edge may disappear or becomes less unidirectional in its implications.

The second part of my approach is to be aware of important cyclical turn dates where a shift in overall market or sector sentiment is to be anticipated. The combination of cycle and fractal analysis is like having a market roadmap, and knowing where you are in terms of general risk-reward of a given trend.

*Can you explain how and to what degree you use TA in making investment decisions?*

At the end of the day, I know that the world must reflect fundamentals and they will rule in the long-term. It is thus nice to trade with the fundamentals at your back. You don't want to sell cheap stocks, nor do you want to get caught long playing in some overhyped go-go situation that suddenly falls from grace. To this extent, I start my approach to the financial world with a value bias. I then add into this equation a dose of sector thematics and macro thinking to define the areas where I might expect to find opportunities.

But at the end of this initial fundamental and macro thematic filtering process, I want to be comfortable with a given chart pattern before I trade it. I want to see certain attributes in that pattern implying a real edge. This takes us back to Fibonacci.

I like to use the following Fibonacci settings which are arithmetic and geometric functions of each other: .618, .382, 0.50, and 0.23 ( $= 0.382 \times 0.618$ ), 0.764 ( $= 1 - 0.236$ ), 0.0901 ( $= 0.382 \times 0.236$ ), 0.9099 ( $= 1 - 0.0901$ ). With these ratios in hand, one is finally ready to examine a chart pattern. In doing so, it is important to start with as much data as possible by using a weekly or even a monthly chart. Get the big picture straight first, and then drill down to shorter time intervals. If the asset being examined has been in a major uptrend, one must locate the last significant major low and pull Fibonacci bands up from that point to a recent major high. If an asset has been in a major down move, one needs to go back to the last major high and pull the bands down to the last major low.

I then look to see if the bands fit the intervening price action that took place between the high and the low that I have chosen, with each (or at least most) minor highs and lows along the way touching an intervening Fibonacci band. If they do, then I am likely looking at a

'complete rhythm', and one can likely expect a trend reversal to transpire into a subsequent trading range. However, if the bands do not fit the pre-existing price action, then the existing trend is likely not yet over, and one must stretch the bands to a price level where the bands will fit the price action. Once this is done on a weekly basis, I then drill down and repeat this process on a daily chart, and then on a 60-minute or even a 5-minute chart. The goal is to find similar price levels where each chart is happy completing its fractal movement.

*Can you give an example of how you might trade a fractal rhythm?*

Let me go back to a late 2007 example of a chart to more specifically illustrate this. Using the approach above, one might have seen a long-term Fibonacci target on a weekly chart of the stock Nvidia (NVDA) popping out as a complete rhythm at around \$39.50-\$40.00, as I did when it touched \$39.67 in mid-October 2007. Figure 1 shows how well that level fit earlier highs in terms of the bands touching. Several lows also hit, but fitting highs is always more important to me than fitting lows.

To confirm this level, the next step is to move to a shorter time interval, perhaps a more recent low and a daily chart basis, to see if the fractal rhythm of NVDA to \$39.67 a share was also satisfied on that basis. Figure 2 is a repeat of the weekly chart, but with new Fibonacci bands drawn between the more minor July 2006 low in NVDA and the \$39.67 level where the weekly chart appears complete.

Figure 3 shows these same lines zoomed in on a daily basis, with yet another set of Fibonacci lines drawn between the March 2007 low and the \$39.67 high. On both we see the rhythm looks complete again, and the daily bands pick out many of the same Fibonacci lines as the more major weekly chart. The double hit at the minor \$25.70 high in December 2006 is particularly pleasing. I refer to such an occurrence as a 'double vibration' fractal hit.

As a next step, on the daily chart, we will start to pull some Fibonacci bands lower from the \$39.67 high to try to fit the price action since that time. Using the beginning part of the NVDA decline, we obtained a harmonic vibration fit at \$22.57 which was my actual initial target exit price on the short sale of NVDA that I executed.

I then moved to one last step and pulled bands down again to ask the question: "If NVDA were to break \$22.57, what would be the next obvious harmonic vibration stopping point?" To do this, I stretch some bands to the next level where the recent minor high-low price action would be captured between the lines and where we may already

have a cluster of other Fibonacci bands. The obvious target was between \$18.30-\$18.90.

By using Fibonacci bands I thus developed three useful opinions over time:

October 19<sup>th</sup> 2007: NVDA was likely to experience a trend reversal between \$39.50 and \$40. The actual \$39.67 high was a great 'natural attractor' level to take profits on longs and reverse to being short.

October 19<sup>th</sup> 2007 through mid-January 2008: NVDA was in clear downtrend mode to an initial target of \$22.57. I took initial profits there.

Mid-January 2008 onward: NVDA moved to being in a range with a \$29 top and a possible new 'missing low' target down at \$18.30-\$18.90. Which side of this range would be touched first was less clear at the time. My approach at this juncture was to generally look for other more compelling chart patterns in other equities where a clearer fractal pattern could be found, or at least until my \$18.30-\$18.90 NVDA support zone was reached for a countertrend long trade. It is an approach of consistently hitting singles, and occasionally missing doubles and triples.

In this instance, NVDA did subsequently reach a closing weekly low in late March 2008 at \$18.52 (exactly in its expected fractal support zone), and then promptly rallied to \$25.32 again. At this juncture, more data had accumulated on the chart and on a weekly basis one could start discerning that NVDA had an extrapolated 'missing low' (using stretched bands) all the way down at \$3.90 somewhere in the future. It was time to start trading from the short side again in the mid-\$20's range.

NVDA subsequently fell as low as \$5.75 and bounced once again to around \$10.85. In my mind, a \$3.90 'missing low' eventually still beckons. As more data emerges, the nature of that data often provides additional information about the future. The astute technician moves forward one step at a time. An initial vision that NVDA would fall to \$22.57 eventually gets expanded to the potential for NVDA to reach \$3.90. But a good trader ends up trading NVDA both short and long in between leaning against known fractal support and resistance when these levels are first touched for the inevitable short-term technical reversals.

*How does all of this tie in to your work with pi cycles?*

While Fibonacci ratios may rule the amplitude of market moves, I have come to believe over time that another magic mathematical constant, pi, is a more dominant force when looking for rhythms in markets across time.

The circumference of a circle can be measured by the equation  $2\pi r$  (r equalling the circle's radius). If this equation measures a full circle or cycle in the physical world, maybe  $2\pi r$  might hold significance in the financial world. To this I apply the Base 10 system of 10, 100, and 1000, using  $2\pi 1000 = 6282$  days, or 17.2 years.

The August 1982 equity market low was exactly 17.2 years in front of the first quarter 2000 equity market high. This was a boom period. But 17.2 years prior to August 1982 was late May 1965, which for a long while, was the all-time high in the DJIA in real terms before Johnson-era inflation set in. 1965-1982 as a whole was a period of stagnating markets, war, inflation, and political scandal. But go back another 17.2 years from May 1965 and you come to March 1948. 1948-1965 ended up being, of course, post-War boom years. However, the 17.2-year period prior to this encompassed the difficult 1931-1948 depression era and WWII years. Do you see the pattern?

The immediate implication is that the boom high left in early 2000 ushered in 17.2 years of general market stagnation, unpopular presidents, and war that will stretch to 2017. In other words, we're just more than half done in a general period of pain. As an investor you need to approach this type of environment very differently than boom periods. During boom 17.2-year cycles, you basically want to buy and hold. During the current type of market cycle, you need to be a good market timer and trader to make much money.

There are likely several different overlapping pi cycles. The one I describe above is just one. Martin Armstrong also focused on a high-to-high pi cycle of just pi x 1000 (3141 days or 8.6 years). Using this cycle, he correctly forecast that July 20 1998 would be a significant high in global equity markets. That date marked the exact high point before the LTCM and Russian ruble crisis of 1998 transpired. Exactly 3141 days prior to this day was December 13, 1989, which was within spitting distance of the all-time high of the Nikkei in Japan and just in front of the nasty 1990-1991 period of S&L and banking distress in the U.S.

*Why did you originally choose to use TA? What made you convinced it works?*

I started my career at JP Morgan in 1980, and after a few days having watched how flow traders reacted to fundamental news and customer order flow, I decided that there had to be a better way to trade and invest. I basically thought their flow information was too anecdotal and partial to be that important, and I saw the impact of news as often being most perverse and hard to interpret. I was fortuitous enough to then stumble across a copy of Edwards and Magee's classic text, '*Technical Analysis of Stock Trends*', and concluded that using technical analysis was the way that I wanted to trade and invest.

When I knew TA really worked hit in August of 1982 when I found a reverse head-and-shoulders bottom in gold around the \$330 level. Everything was perfect in the pattern including diminished volume on the second inverted shoulder. With an inverted head down at \$300, and a neckline at \$360, the minimum target was \$420. Five days later, Fed Chairman Paul Volcker started cutting interest rates, and gold exploded to the upside. I sold my gold at \$420 the following week.

Gold subsequently moved as high as \$510, and using a variety of technical tools, I caught portions of that move. Then I started watching the Bullish Consensus figures zoom above 90% bullish for gold, and also looking at negative divergence on certain momentum oscillators. I expected the run was over and we'd likely retrace. Gold fell dramatically in the early spring of 1983. It was a wonderful and powerful first experience using TA.

While over time, I came to appreciate a variety of tools, it was the ability of Fibonacci bands – properly used and often 'stretched' to price levels that would fit pre-existing highs and lows in a chart pattern – that led me to believe in an inherent fractal rhythm to financial markets. Over a 29 year period, using these bands on a combined weekly, daily, hourly, and five-minute chart basis, I have simply seen them locate zones of important resistance and reversal far too often, and far too easily, for it to have been random happenstance.

As a general approach, one needs to watch for self-reinforcing technical signals that may happen one after another (as opposed to concomitantly); i.e. the RSI becomes overbought at or near a Fibonacci fractal target, momentum oscillators show divergence and sentiment numbers become too extreme. On top of this volume patterns may change, trendlines break and perhaps lastly, a moving average crossover occurs. In such an example, it is the combined

weight of the technical evidence that cumulatively foretells a trend shift.

*How does your application of TA differ for short, medium and long-term time scales?*

The shorter the time scale, the more random a market becomes. Thus applying technical analysis to a 1-minute chart is inherently more dangerous than applying it to a 5-minute chart; the 5-minute chart is more prone to spurious noise compared to the 60-minute chart which in turn is less reliable than a daily chart, etc. But each does have a fractal rhythm, and when they all point to a similar level in the market they are very powerful. Most good Fibonacci technicians start with the big picture monthly and weekly rhythms and then work downward in time.

*During the recent market turbulence in 2008 has TA performed better or worse than usual?*

I thought TA worked very well across the early part of 2008. The decline into late March 2008 (Bear Stearns day) found a low near a minor pi cycle date window, and the bounce into early May 2008 was an obvious rally to be sold. The reversal in energy and commodity stocks in July 2008 was also pretty well ear-marked technically and cyclically, even though many hedge fund managers got caught by it.

*Are some asset classes more technically driven than others?*

People tend to apply TA more regularly to the world of commodities and currencies, maybe because the fundamentals of these markets are often harder to get your hands around. That said, some of the analysis involving soft and energy commodities gets complicated because of data adjustments for contract roll-overs.

Applying TA to a futures contract (where the active front-month contract keeps changing every few months) is never quite as clean as it is to a stock that has been trading for 20 years. Thus, I would argue that the strength of one's convictions can likely be higher applying TA to a good old fashioned equity than to a futures contract.

*In what way does the application of TA differ when using it to pick individual stocks as opposed to analysis of the index?*

There is obviously more noise around a single stock than an index of stocks. You will get more jump moves related to earnings releases and occasional takeover events that may or may not always be easy to anticipate using traditional TA. In addition, you will get sudden technical short-covering squeezes when the borrow for a given stock evaporates. Individual stocks thus tend to be inherently more volatile than equity indices, so overall, added caution must always be taken using TA for positioning in a single equity compared to positioning in an equity index.

*Does TA have anything useful to say about portfolios and diversification?*

Properly applied, TA should allow an adroit hedge fund manager to rotate the position sizing of his portfolio components to continually overweight the best risk-reward opportunities, while harvesting positions which are at (or fast approaching) technical support. This process should in the end improve not only absolute returns, but also the risk-adjusted path of those returns.

*Do you think TA and quants are closely related?*

No. The quant is far more dangerous than the technician partly because his approach naturally requires high leverage and continuous exposure and trading in the market. A good technician only steps into the market when the risk-reward of a market situation at hand is deemed to be on his side. Otherwise stated, as a weapon of choice, the quant yields a shotgun but the technician may be viewed as using a more precise stiletto.

*How easy is it to use TA? Do you think training is required? Are any techniques misused or misunderstood?*

Using TA adroitly is akin to learning chess or backgammon. The goal in all instances is to reach sound conclusions that have a higher probability of success than failure, and one definitely becomes better at this with both time and experience.

As previously discussed, there are different branches of TA; some straight quantitative techniques, and other more artistic and pattern-oriented approaches. It is important to choose a repertoire of tools

that fits one's own proclivities and mental temperament. The bottom line to trading success is to get to know what your own psyche tends to be good at, and to pick technical tools that fit that psyche.

## **INDICATORS AND STRATEGIES**

*What is your reaction when the charts show a very obvious technical pattern such as a head-and-shoulders or a double top?*

Circa 1980-1985, I would have believed the pattern and traded the obvious implications of it. Circa 2005-2009, I have become more attentive to the fact that everyone now has charting software and obvious patterns sometimes need one last gut-wrenching misdirectional move before they work.

To handle this possibility, I might commit half of my ultimate desired position size to an obvious situation, but keep the other half in reserve for the potential stop-out affair of weak hands. Being short a triple top in sterling in 1991 comes to mind here. The British pound was up at \$1.97 and felt very top heavy both fundamentally and technically. But alas, there had to be one last stop-out session where the pound traded up to \$2.015. It was only after this final misdirectional move that the pound then collapsed. Some weak-handed person had been stopped, and only after such an event was the market free to go down.

*What is the best method for measuring price momentum in the market?*

An oscillator built around the 5-day and 35-day moving averages is a nice tool. Divergence versus price on a 13-day RSI indicator is another basic indicator.

*How can TA be used in making sector rotation and asset allocation decisions?*

As discussed above, TA can be vital in this regard. Not overstaying one's welcome in a given sector is always a tough timing decision to make, but TA may easily provide an objective tool to shift sector exposures. It is also a key tool to use in the setting of equity stops. Gross investedness and beta bias may also be adjusted to be more aggressive when a technical setup is clear, while conversely prompting less exposure when the charts temporarily turn muddy.

*Does technical analysis have a role when shorting the market?*

Technical analysis is crucial, especially to shorting. Shorting by itself is one of the hardest parts of portfolio management. But if TA can reveal entry times and prices that have a non-random special edge for establishing a short position, the overall angst and risk of selling short can be substantially reduced. When a given equity becomes technically oversold, it may then be time to harvest this position and rotate exposure into another less washed-out situation.

*How do you use moving averages? If so, which periodicities do you use and do you use them directly to generate trade signals?*

I like to watch a short-term 5-day moving average and its relationship to a more intermediate term 30-day or 40-day moving average. I also always want to know where the 100-day and 200-day moving averages reside. On 'first touch' of the 200-day moving average, there is almost always a short-term reaction reversal in the opposite direction of the trend. It is good for a fast trade, even if the 200-day may eventually be broken and thereby suggest a more major trend change.

*If prices reach a major support level do you wait until it has broken through before buying or selling?*

I love to trade the first touch of a major support or resistance zone. I don't wait for anything because I know that against such a level there will almost always be some sort of short-term bounce/reversal. This is the type of high probability short-term outcome that I like. But after a given level has been knocked against for a while, I become less comfortable positioning against the pre-existing trend. Support and resistance levels don't last forever.

*If the market is being driven by emotion, is this entirely reflected in the technicals?*

In general terms, I would say yes. TA arguably works best in a period of market stress. The nice part of stressful markets is that they tend to move quickly, and thereby yield much instant gratification for an astute trader. Think of a ping-pong ball moving quickly and clearly between clearly defined walls. The problem with bull markets is that they tend to be slower moving with less clear momentum. In bull

markets, imagine more a small tugboat chugging against the wind and the waves.

*How do you judge if a market is overbought or oversold?*

I always have an eye on the Bullish Consensus measure and other mechanical sentiment indicators (put/call ratio, RSIs, oscillators) and try to spot divergences. I also look for volume spikes and abatements. But my key indicator revolves around stretched Fibonacci bands which highlight key price levels to expect resistance.

*How inefficient do you believe markets to be? Are some asset markets more inefficient than others?*

I will go out on a limb here and say that I believe markets have become less and less efficient over time. The slow demise of the NYSE Specialist system to negligible importance today means markets are more thin and volatile than they used to be. Fair price levels are constantly getting overshoot.

*Do you keep an eye on the academic research that is being done on technical analysis? Are there any themes in TA academic research that interest you?*

I believe that it is just a matter of time before someone wins the Nobel Prize in Economics for adroitly explaining the fractal manner in which financial markets truly behave. At present, there are at most a handful of possible candidates. These include geo-physics UCLA Professor Didier Sornette who in 2003 applied super-parabolic sine wave rhythms to financial markets in his text '*Why Stock Markets Crash*'. Edgar Peters who has penned some highly mathematical tomes on chaos theory as applied to fractal market analysis, and more recently Benoit Mandelbrot in his text '*The (Mis) Behaviour of Markets*'.

The list likely may also include Yale-educated Robert Prechter, who after being regarded largely as a non-academic Elliott Wave newsletter writer, has in recent years made a substantive push to become more academic in the defence of his methodologies and approach. Prechter has actually branded a whole new name for his studies, '*Socionomics*'. Maybe that buzzword will eventually catch on and Prechter will get credit for it.



*Can you explain your approach to risk and money management?*

I like to be as lightly invested as possible as much as possible, but then step up to the plate with a directional view or a relative value view between securities, commodities and currencies. I do this when the technical outlook looks most compelling, for example, going into an expected pi cycle date. When I am actively trading, I like to end up with a portfolio averaging 5-15 positions, with each position sized in the 3%-10% of portfolio region.

If I start losing money, then I reduce the number of positions and the sizing of the positions. I re-examine the positions on a daily basis and question whether what I thought I saw yesterday in a chart pattern still appears valid today, or whether some intervening piece of price action has made my original view more or less probable.

I try to stay reasonably unemotional about my positions, and occasionally book out positions too soon, sometimes out of boredom when I have not achieved some modicum of instant gratification. I like to invest in the direction of a clear long-term trend, but then hardly ever have the patience to actually ride that entire trend. Instead, I will be in and out of a given asset at singular moments of the trend that appear to offer the easiest set-ups for trading success. I hardly ever overstay my welcome in a market, but more regularly do sometimes enter a position too early and/or also exit positions too early.

When an anticipated pi cycle turn date is at hand, particularly a major one, and other TA techniques confirm a potential major shift in a given market, it is an exciting moment. It is a time when I tend to increase my bet size somewhat from normal levels and play the turn. But once a market has turned by 10%-15%, you have to be more careful. The relevance of that pi cycle turn may last for 1-2 years, but it says less about what may happen over the coming few days or even weeks. In addition, you have to be attentive to having misinterpreted a market turn in the wrong sector, as I initially did in February 2007. The pi cycle date that hit February 24, 2007 basically worked, but it ended up being a more important turn in the credit markets than in equity markets. You could have still lost a great deal of money if you had stubbornly remained short stocks between March and October 2007. Stocks didn't really start to turn down until 8.6-months later in November 2007.

On an overall basis, having some technical basis for a stop is in my mind highly superior to using some arbitrary distance away from original cost.

*What annual return do you generally look for in your trading? How do you adjust this for risk?*

25%-30% returns per annum are certainly possible given my active trading approach. I trade with a prop trader's mind, and simply never let my P&L fall consecutively over more than a day or two without taking some sort of defensive action, including just making a simple retreat.

*How do you decide on which position size to take? How much of your capital are you prepared to risk at any one time?*

I take 3%-10% positions weighted by strength of my starting conviction, the distance to stop, and the natural volatility of the asset. The greater the volatility of a given stock, the smaller I will generally trade it in terms of position size. The goal is to never let any given position clip your portfolio as a whole for more than 1%, with a pre-disposition to start cutting positions in half when they may have cost the portfolio between 25-50 basis points.

*What level of drawdown are you prepared to tolerate?*

Approximately -10%.

*How do you deal with false signals?*

If I don't get immediate satisfaction on a position, I generally blow it out and move on to another situation. I don't have as much patience as I'd like.

*How do you decide where to place stop-losses?*

Stops are an integral part of my approach, and technical levels such as the 200-day moving average, prior minor highs/lows, and trendlines are levels beyond which a stop will typically be placed.



*How do you deal with volatility? How does very high volatility affect the efficacy of your preferred strategy?*

The more volatile a market, the better I tend to do. Fractal targets appear, get reached, and positions get quickly harvested and rotated. Slow moving markets give one too much time to think and agonize over an exposure.

## **COMBINING WITH OTHER NON-TA INFORMATION**

*What sentiment indicators do you look at?*

Market Vane's Bullish Consensus statistics have always been a primary tool that I look at to gauge sentiment, followed by TRIN, put/call ratios, volume, advance-decline ratios, RSIs, and moving average oscillators in order to judge internal market momentum along with sentiment.

*Generally speaking, how do you come to a decision when to trade? To what extent is it based on technical and/or fundamental factors?*

In an ideal world, you enter a position only when both the fundamentals and technicals line up. If the fundamentals are there but the technicals aren't then you wait. If the fundamentals aren't necessarily supportive of the technical view I might still trade a very small token position, but I also would have a very tight stop-loss on it.

*Do you often find yourself at odds with the market and/or your fundamentally-based colleagues?*

I am something of a contrarian at heart, so yes I do find myself at times reacting to the market's excessive swings with some incredulosity. These excessive swings are of course the source of much trading opportunity, but sometimes I can be a tad early and it takes a while to break a pre-existing trend. Differentiating when you may simply have been early and when you are simply wrong is perhaps the hardest part of TA. It requires great psychological skill to make the mindset shift when evaluating these two possible paths.

*What impact has automated trading systems and black box trading had on the charts?*

The equity trading day typically can be broken down into three sections: Towards the opening, you tend to have a fair amount of retail order flow. Toward the end of the day, you may have more institutional or professional order flow. In between, you increasingly have a great deal of algorithmic trading. Institutional clients will set up electronic programs to participate in the trading of a stock as a percentage of its traded volume or the passage of time, or a combination of these two factors. This middle part of the day is somewhat unnatural in my mind as it does not tend to exhibit the same type of human-induced rhythm as you may see at the opening or towards the close. You can literally watch the slow ripple of VWAP, TWAP, and Percent Participation orders gently driving a stock in a steady fashion in the direction of least resistance. It is something just to be aware of.

There are other instances where intermediate term trend followers (i.e. Commodity Trading Advisors) may all flip their exposures in a given asset because of a momentum change or moving average crossover type of event. These are more important types of days to try to recognize as they tend to be non-reversing breakout affairs, at least for that one day. Occasionally, when the players in a given market are too large relative to available liquidity, these moves can be quite large and dramatic. CTAs tripping into a given market in undue size get front-run by the investment banks and the combination can result in outsized moves well beyond any fundamental news of a given trading day. To a certain extent, these breakout days represent a clustering of changing market emotions as channelled by black boxes. They are worth trying to spot.

*Do you keep an eye on volume, and if so, how do you use it?*

I try to use volume in a common sense 'Edwards & Magee' type manner. For example, a second shoulder of a head-and-shoulder top should ideally be marked by low volume. If it's not, then maybe the pattern is something other than a second shoulder. Upside breakouts should transpire on high volume. RSI divergence across three subsequent thrusts should see diminishing volume on the last rally attempt. The apex of a pennant should exhibit very low volume just before the pattern resolves itself into a higher volume breakout.

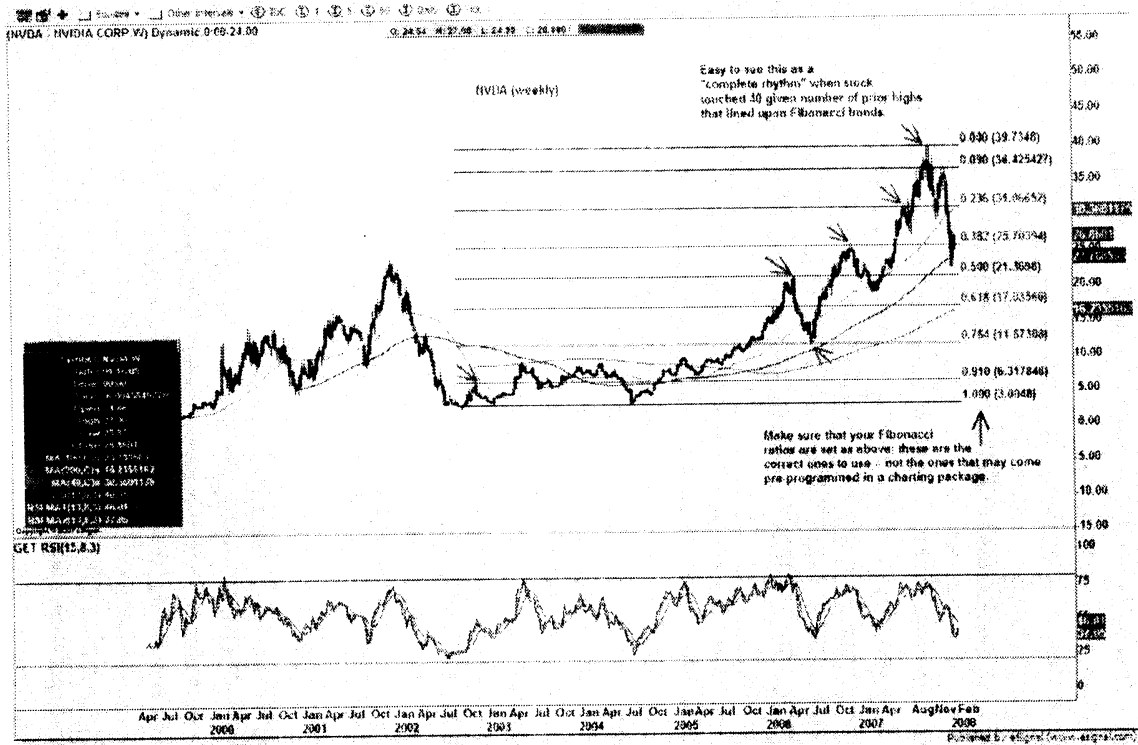


Figure 1 - Weekly chart for NVDA showing long-term Fibonacci target

Source: eSignal

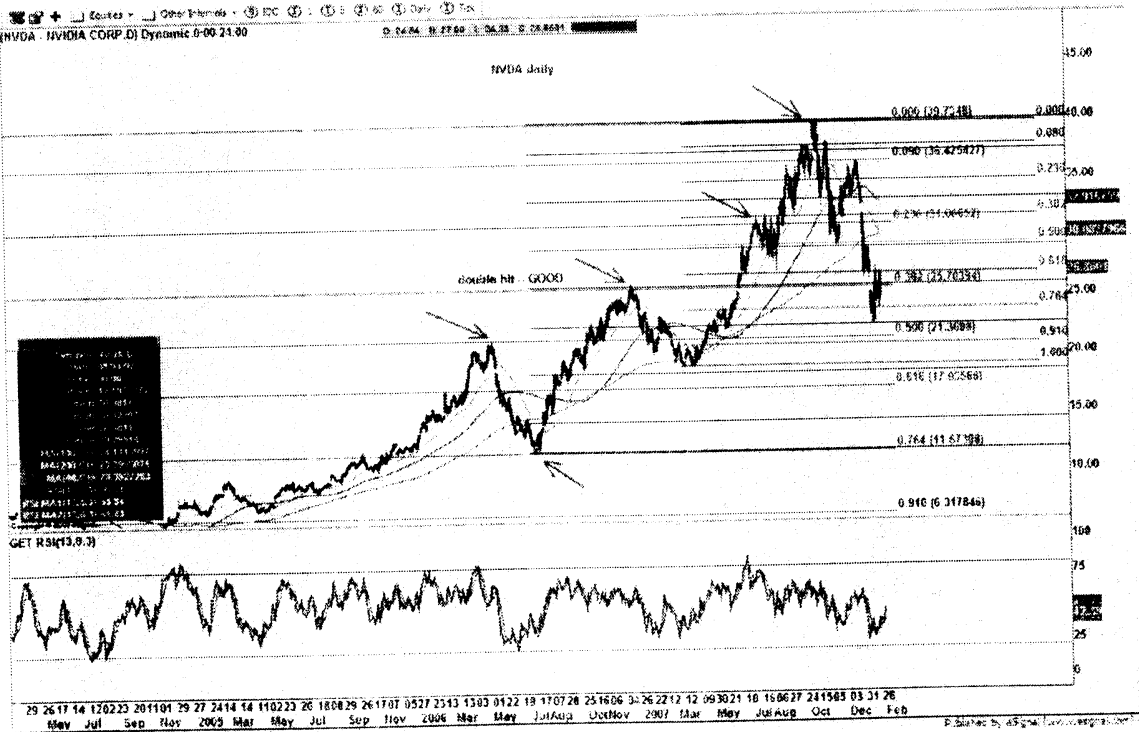


Figure 2 - Weekly chart for NVDA showing new Fibonacci bands

Source: eSignal

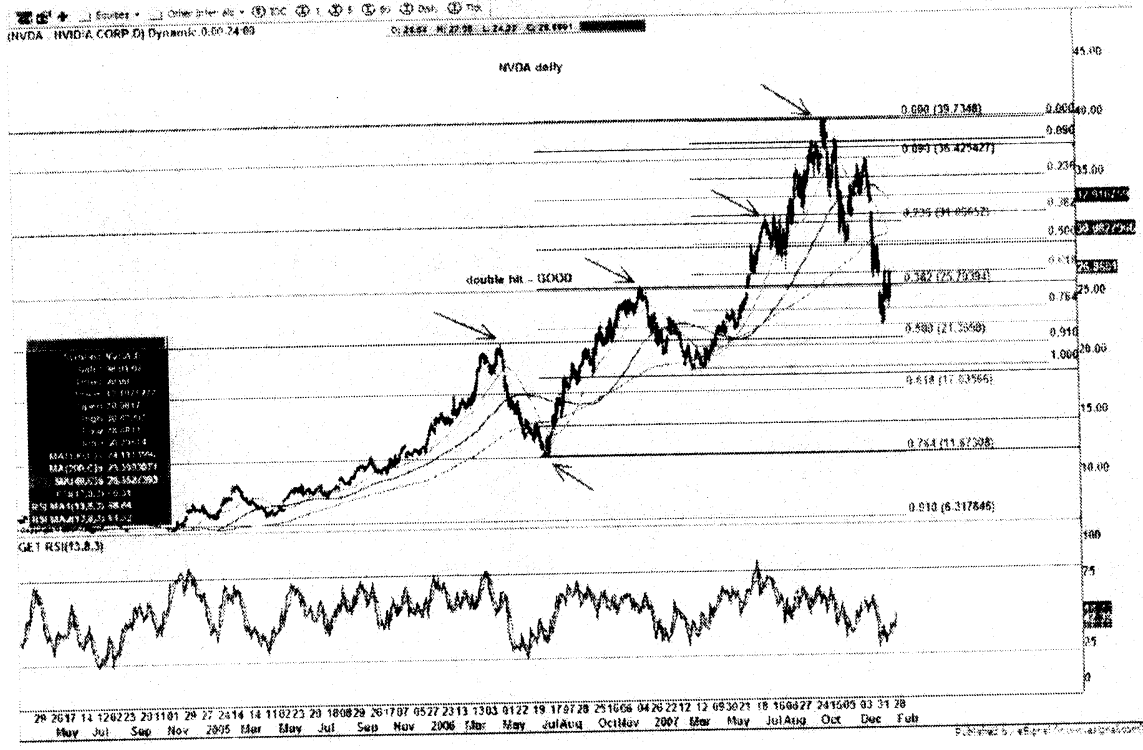


Figure 3 - Daily chart for NVDA showing new Fibonacci lines Source: eSignal

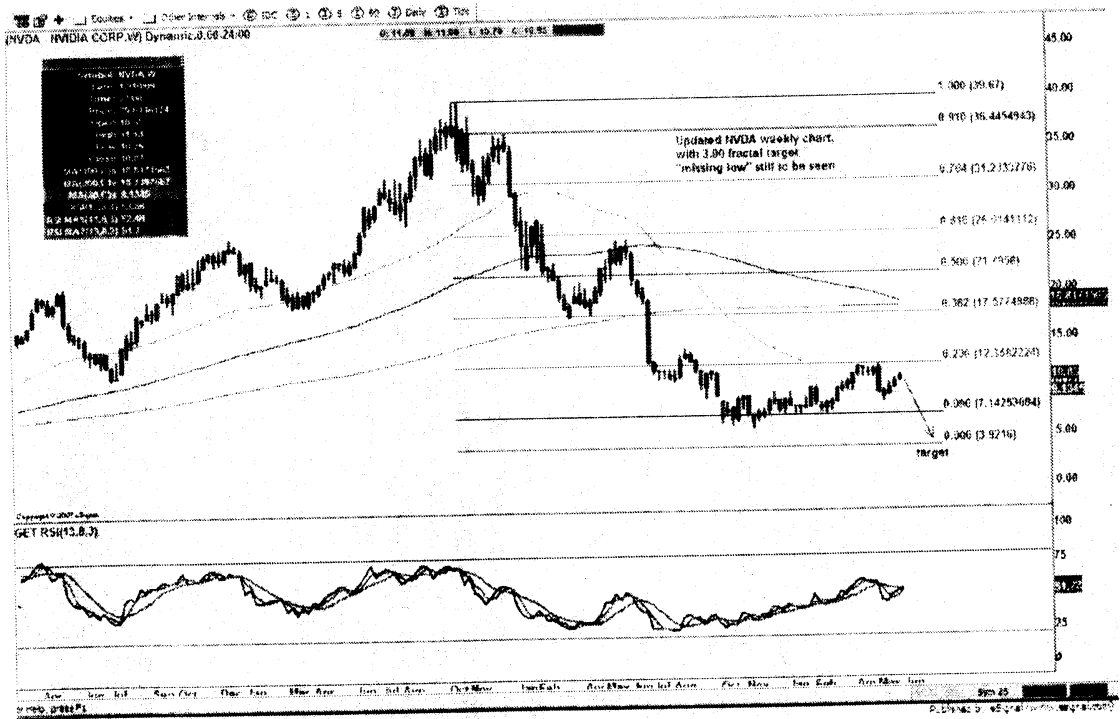


Figure 4 - Weekly chart for NVDA showing fractal target Source: eSignal