

Sentiment, Herding Behavior, and Price Trends

United-ICAP

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Table of Contents

List of Charts

Introduction	3	Corn	6, 7
Consensus Opinion	8	S&P 500 Index	11, 13, 36, 37
Collective Behavior	10	US Dollar	18, 19, 35, 39
Sentiment and news	14	RBOB	33
The Herding Instinct	20	WTI	34, 50, 51
		Wheat	40
Sentiment and Wave Analysis	24	Coffee	41
Sentiment Divergence	32	Long Bond	42, 43, 44
Sentiment Indicators	38	Copper	45, 46
Sentiment Profiles	55	Gold	47, 48, 49
Bull vs. Bear Etymology	64	Natgas	52, 53
		Canadian Dollar	54

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United-ICAP the technical advisory service for traders and investors

"We find that whole communities suddenly fix their minds upon one object, and go mad in its pursuit: that millions of people become simultaneously impressed with one delusion, and run after it, till their attention is caught by some new folly more captivating than the first." Charles Mackay, from the 1852 Preface to Extraordinary Popular Delusions and the Madness of Crowds

Summary

The market is an omniscient intelligence. Unlocalized in space and time it remembers the past and knows the future and it maintains this memory without the benefit of a centrally located physical nervous system. Created by the interaction of the awareness, thoughts, emotions, and opinions of all its participants, the market yet has its own mind and its own emotions. Price trends reflect the shifting hopes and fears of this collective consciousness that we call 'the market.'

The more broad based the market the more broad based the collective mood that market will reflect. For example price trends in the S&P 500 index will clearly provide a more accurate reflection of the mood of the collective mass psychology than price

trends in the stock of a small company. However whether a market reflects the collective mood of a nation or the collective mood of a narrow market segment, the relationship between price trends and sentiment is the same.

The emotional content of the market dictates the price trends. The emotional content of the market decides what is news and what is not. And when the collective emotional content of the market reaches an extreme of bullish optimism or an extreme of bearish pessisim, a major price trend reversal becomes inevitable. As emotions rule the market, an indicator that tracks the emotional content of a market is well worth adding to ones portfolio of analytical techniques. It is the emotional content of the market that is the subject of this report.

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Lao Tsu, Tao Te Ching

That which shrinks

Must first expand.

That which fails

Must first be strong.

That which is cast down

Must first be raised.

OCTOBER: This is one of the peculiarly dangerous months to speculate in stocks in. The other are July, January, September, April, November, May, March, June, December, August, and February. - Pudd'nhead Wilson's Calendar - Mark Twain

Is there a way to make the financial markets less dangerous? Our answer to this question is "yes" and the path that we take to dealing with the danger is knowledge, knowledge of what drives the financial markets.

The main point to make in this regard is that the financial markets are a display of collective human behavior. What all markets across all ages have in common is that they are the creation of human beings and it is the collective interaction of these human beings that sustains the markets. So all markets, modern, or ancient, regulated or 'OTC', commodities or real estate, equities or bonds all markets will display the nature of human nature. And by the way, if the science of economics had begun with this simple observation it would have undoubtedly developed into a much more useful and practical science.

Our goal here is to identify and recognize what it is about human nature that makes the financial markets a dangerous place and then see if this new found knowledge can be applied in a practical and useful way to make the markets less dangerous. Insanity in individuals is something rare - but in groups, parties, nations, and epochs it is the rule.

- Beyond Good and Evil - Freidrich Nietzsche - 1886

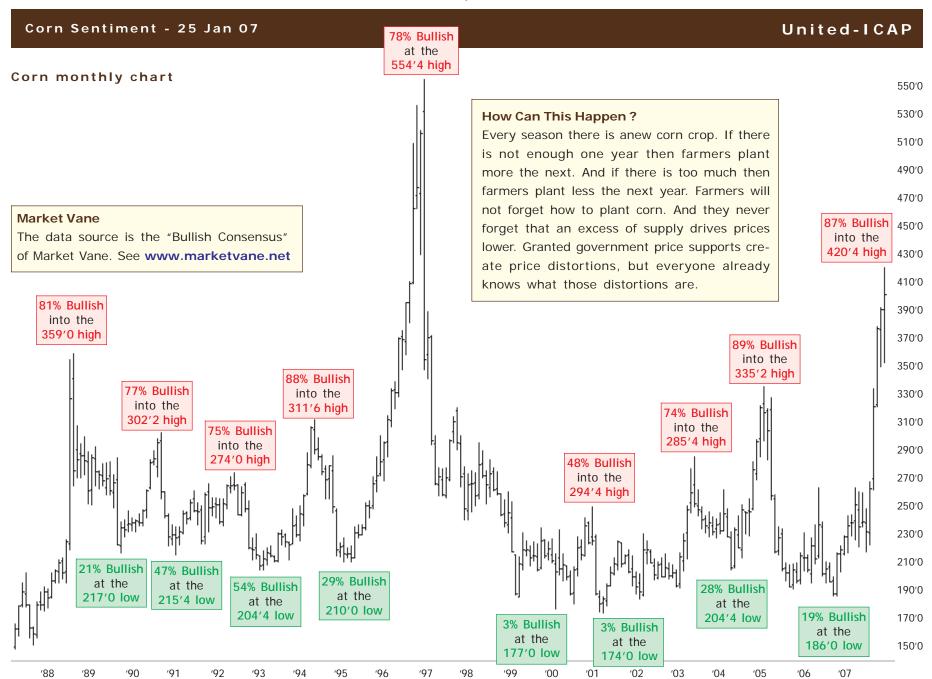
Men, it has been well said, think in herds. It will be seen that they go mad in herds, while they only recover their senses slowly, and one by one.

- Extraordinary Popular Delusions - Charles MacKay - 1841

on a rally in the market: Somebody must know something. I had better buy. - anonymous

Taken together the three quotations cited above well summarize the point of this essay and the value of a sentiment indicator. A steady, sustained increase in the price of any market is the rise in the bullish outlook for that market. And as the following charts make unmistakeably clear, the higher the price rallies the more people become bullish on that market. This is herding behavior. And this means that a market will have the greatest number of people long and bullish right at the top of an up trend. Similarly a sustained bear market will have the greatest number of people bearish and short right at the bottom of the market. Hence the danger in the markets that Mark Twain and countless others are well aware of.





Point #1: The Market Price is a Consensus Opinion

The single most important thing that I have learned from the markets is that the market price is a consensus opinion. I must be a slow learner because it took me about twenty years to fully grasp the implications of this point. The market price is neither right nor wrong. It is neither accurate nor imprecise. It is a collective opinion and as such the expression of the collective mood of the market. And the market swings from one emotional extreme to the other. And these price swings are not news driven. It is the herding instinct that drives the emotional swings that determines what is newsworthy and what is irrelevant. It is this collective opinion nature of the market price that makes it so highly responsive to any changes in the collective mood. And like anyone with strongly held opinions it is futile to argue with the market.

This last point is very important to really understanding what drives a price trend. The market are driven by the collective mood but the markets are not moody. Once a collective opinion takes hold, whether bullish or bearish, it grows and grows until an unsustainable emotional extreme is reached. And while a bullish sentiment is growing in the market it is futile to argue that the market is ignoring bearish news. That is because the trend of the market makes it own news. And it is similarly futile to argue that a growing bearish mood of the market is ignoring bullish news. How many times have we seen the market exhume an earlier bullish story well after the price trend has turned down?

Point #2: A Price Trend is a Trend in Consensus Opinion

As we just noted, it is a waste of time to try and debate someone who is highly opinionated. They see what they want to see and disregard the rest. It is the same thing with the market. In this light let us look at that proverb "the market can remain irrational longer than you can remain solvent." It is our contention that this proverb is nothing more than the lament of someone and anyone who has ever tried to argue with the market. As the market trends, the collective opinion becomes only more entrenched, more widespread, and more unshakable. This behavior is neither rational nor irrational. It is our contention that this behavior is pre-rational. And this brings us to our next point.

Point #3: Price Trends are Pre-Rational

Assuming that the market price is a collective opinion, why is it that the collective strength of that opinion is rarely static? Why is it that the collective opinion grows stronger and stronger until an unsustainable emotional extreme is reached? What drives this process? It is no answer to say that human beings tend toward extreme. We know that the market is the play and display of human nature. That is not the question. What drives the collective emotion that drives the price trends in the market? The answer is the herding instinct. And the herding instinct is neither rational nor irrational. Its dynamic is pre-rational or instinctive. Markets instinctive trend. Let us look at this herding phenomena.

From the Sunday New York Times "Week in Review" section

from the week ending 25th October 1987



Just a normal day at the nation's most important financial institution...



- Insects Swarm
- Fish Swim in Schools
- Birds Fly in Flocks
- Animals Migrate in Herds
- Financial Markets Trend

And all for the same reason. In a Predator - Prey dynamic the prey finds safety in numbers.

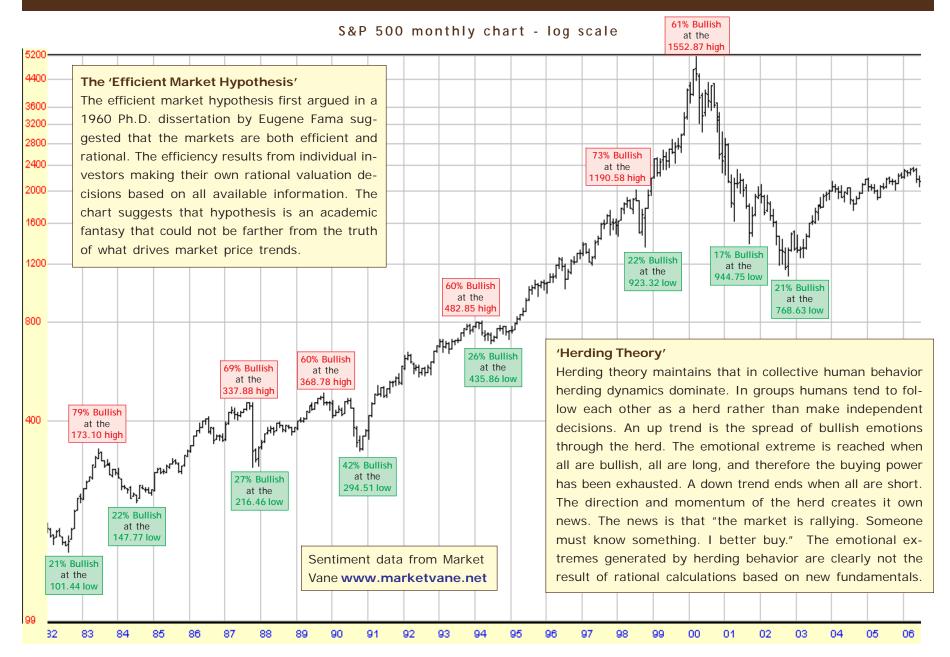
For hundreds of millions of years those who were tired of following the herd quickly became lunch for the predators.

- In the markets the last buyer in an up trend is lunch for the bears.
- The last seller in a down trend becomes lunch for the bulls
- Bulls are the prey in a down trend
- Bears are the prey in an up trend
- Herding: "the market just rallied. Someone must know something. I better buy."



S&P 500 - 22 Jun 06

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"The Bullish Consensus"

There are many ways to monitor the sentiment levels in the various markets. The general economy has the Conference Board "Consumer Confidence Index" and the University of Michigan "Consumer Sentiment Index." The stock market has the Put-Call Ratio and the Volatility Index (VIX). The futures markets in the United States have the CFTC "Commitment of Traders" reports. And then there is Market Vane, a firm whose sole focus is sentiment.

Market Vane began as a contrarian indicator way back in 1964. Starting in 1964, Market Vane conducted a weekly sentiment survey of the metals. It began covering the currency markets in 1980, heating oil in 1981, the stock market in 1982, and gasoline and crude oil in 1983. It became a daily survey in 1988 and added natural gas to the survey in 2001. Who is being surveyed, and how? Quoting from the Market Vane web site at **www.marketvane.net**:

The "Bullish Consensus" is compiled daily by tracking the buy and sell recommendations of leading market advisers and commodity trading advisers relative to a particular market. The advice is collected by: 1. Reading a current copy of the market advisers' market letter. 2. Calling hot lines provided by advisers. 3. Contacting major brokerage houses to learn what the house analyst is recommending for the different markets. 4. Reading fax and E-mail sent from advisers. The buy and sell recommendations from each adviser are tracked during the day to verify the entry and exit of each trading position. The "Bullish Consensus" is compiled at the end of the day to reflect the open positions of the advisers as of that day's market close.

The underlying theory of any contrarian or sentiment indicator is that by the time everyone has turned bullish the trend is likely very close to completing its up trend. And by the time everyone has turned bearish the market is likely very over sold and due for a rebound if not a major trend reversal higher.

S&P 500 Index - 11 May 08

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Facts + Collective Sentiment = News

Out of all the events that occur every day why do some events become "news" while other events are ignored. Any long time observer of the relationships between events and news can attest to the fact that process by which events become news is neither straightforward, nor consistent, nor rational.

Careful observation of the markets reveal that it is the direction of the price trend that determines the content of the news. Bearish events are simply not seen as relevant during an up trend. Bearish tidings do not make the cut as news in a bull market. And a bull market ignores bearish developments. Bullish events are not news during a down trend in prices. The market selects as news only those events that justify the mood of the price trend. A bullish mood creates an up trend in prices and a bearish mood creates a down trend in prices. The stronger and more enduring the mood of the market, the more enduring the price trend. And the longer lasting the price trend the more one-sided the news.

The emotional content of the market is primary. The content of the news is secondary. In other words the emotional content of the market is the cause and the content of the news is the effect. It is therefore much more important to track the mood or emotional content of the market than it is to simply read the news reports. How to gauge sentiment? One can note what events the market ignores and what events the market seizes on as news.

Sentiment = News - Facts

It is possible to gauge the market sentiment by analyzing the difference between the facts of the market and the content of the news. However this is a very time consuming process as we will see in the next two pages. Is there a short cut method for gauging market sentiment? There are two indicators with reliable track records of signalling major sentiment extremes as lead indicators of long term price trend reversals. The first indicator is the "Bullish Consensus" and is complied by a firm called "Market Vane." The second indicator is Elliott wave analysis. We will show that these two indicators can be used together to great effect.

However before we examine the technique of using Elliott wave analysis with the "Bullish Consensus" we will show how the emotional content of the market selects news from events. There are two aspects to this selection process. For the bull market one aspect is the total disregard of bearish events. The other aspect is the phenomena in which old, preexisting situations are revived as news events. As an example of this process at work we will look to the crude oil market going into the mid August of 2004.

Sentiment Selects the News

On the following pages we examine the four major news items that dominated the headlines of the day into mid-August 2004 and then we compare these "news events" to the underlying facts of the market.

Market News

Let us examine what the market selected as the key news items going into mid-August while crude oil was rallying to new highs. A old proverb states that "a bull market climbs a wall of fear." What are the fear based news items that the market has put forward to accompany the rally to new all time highs into mid-August.

News Subject: Venezuela

News item:

Uncertainty over the fate of the Chavez recall referendum due on Sunday 15th August drives crude oil prices higher. Background:

The Venezuela situation has been unstable since Chavez launched a failed coup attempt in February 1992. Going into mid-August Chavez was widely expected to win the referendum. Whether Chavez won or lost the referendum did anyone really think that major changes in Venezuela oil exports would occur anytime soon? Conclusion:

Pre-existing, long standing uncertainty regarding Venezuela was seized upon by the bullish sentiment and repackaged into a "news event" to help justify the rally to new all time highs.

News Subject: Russia

News item:

Uncertainty over the fate of Yukos drives crude oil prices higher. Background:

The Russian situation has been unpredictable since the failed coup attempt against Gorbachev - Yelstin in August 1991. The unpredictable path of the Russian experiment with free enterprise gained renewed uncertainty with the arrest of Khodorkovsky in October 2003. Since that October 2003 event Russia has been slowly increasing the pressure on Yukos.

Conclusion:

A pre-existing, long standing situation, that is unlikely to change anytime soon that has been enlisted by the bullish sentiment as a "news item" to justify the up trend in prices.

News Subject: Iraq

News item:

Uncertainty over Iraqi self rule drives crude oil prices higher. Background:

Saddam suspended all oil exports indefinitely on 1st December 2000, again on 2nd June 2001, and yet again on 8th April 2002. June 2003 marked the first of many instances of insurgents bombing Iraqi oil export facilities.

Conclusion:

The unreliable nature of Iraqi oil exports is clearly a long standing situation. It can hardly be considered as news. And yet the market claimed it as news to help justify the fact that the bullish sentiment that was creating new all time highs in crude oil prices.

News Subject: China

News item:

Chinese demand drives crude oil prices higher. Background:

From a May 2004 report the IEA estimates that Chinese demand for oil will grow 13.6% over 2003 levels. This sounds scary huge but a close examination reveals a far less traumatic situation. The Facts:

That May 2004 IEA report estimates year on year oil demand increases of plus 13.6% for China, plus 5.1% for other Asia, plus 4.9% for the Mid-East, plus 1.7% for Latin America, plus 1.6% for North America, and plus 1.5% for Europe. And what does this really mean? It means that total Chinese oil imports for May were only 2.856 mbd. Meanwhile the IEA pegs total world demand at 81.3 mbd, and total US demand at a whopping 20.4 mbd. Of this US demand a never mentioned fact is that the oil consumed by America cars is estimated to be 8.2 mbd or virtually the entire OPEC quota of Saudi Arabia.

Conclusion:

Once we move past the attention grabbing headlines we find the China is not the out of control 800 pound gorilla the news items that claim it is. Chinese demand is still a very small part of world oil demand. When it comes to world oil demand the United States is still the 800 pound gorilla and this is hardly news. This is a long standing situation that is unable to change any time soon.

News Analysis

Of the four major news items that the market made constant and repeated reference to as crude oil prices rallied to new highs into mid-August 2004 not one news item was an actual new event. In every single case the supposed news event was a reference to a long standing, pre-existing condition. Neither was the conjunction of these pre-existing conditions a new phenomena. And what is more, just below the surface of each of these supposedly bullish news items are rather bearish facts.

Bearish Factors

- Inventories of crude oil, distillate, gasoline, and natural gas are all above year ago levels.
- Crude oil over 35\$ has always contributed to a global recession and global recessions always decrease global oil demand.
- In Venezuela more than 80% of export earning are supplied by oil exports. Whoever is in power in Venezuela will desperately need to continue exporting oil.
- The same can certainly be said for Russia where oil and gas still account for more than 50% of export earnings.
- For Iraq oil exports represent 100% of export earnings. Oil exports will therefore clearly be the priority of whomever happens to be in power at the time.
- China presently has a real estate bubble that completely dwarfs the magnitude of the Japanese real estate bubble of the 1980's. What will happen to the Chinese economy when this bubble deflates? How about the Japan deflation times ten.

Sentiment drives Price Trends

The market as of mid-August 2004 is completely and totally dismissing every one of the bearish market factors just cited on the previous page. Not one of these bearish factors is news. How can this be? If the actual key market factors are as much bullish as they are bearish then the news is clearly not really the motive force driving prices higher. If it is not the news that is driving the price trend then what is the motive force driving the markets?

This situation is certainly not unique to the energy markets. It is endemic to every market at all times. Bull markets ignore bearish factors until after the trend turns down. Then the bear market ignores bullish factors until well after the trend turns higher. The content of the news does not drive price trends. The news is a lagging indicator. In fact the content of the news is itself a sentiment indicator and any careful analysis of any market will confirm this statement.

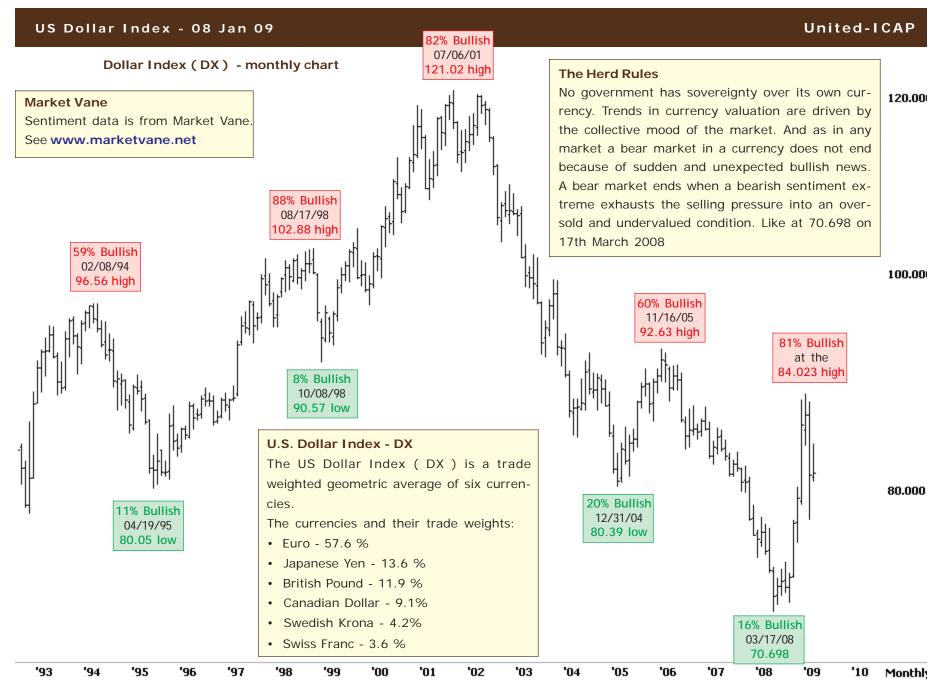
The news at a major market low is only and always bearish. The news becomes bullish only after the trend has turned higher. The news at a major market peak is only and always bullish. The news only turns bearish after the price trend has reversed lower.

What is the dynamic at work here and how can we profit from it? The dynamic is the ancient herd instinct at work. The ruler is the mass psychology and the logic is that of the madness of crowds.

A Different Paradigm

The topics that we are about to cover and not part of any formal education in economics yet they are the dynamics that rule the markets. The efficient market hypothesis take no account of the emotional content of the market, yet we are human beings, not Vulcans like the Spock of "Star Trek" fame. The statistical analysis of market risk makes no attempt to gauge the emotional content of the market yet the emotional content of the market is the source of all price risk.

The knowledge of classical economic theories and a familiarity with the most modern statistical methods of risk assessment give one no preparation for the insights into the deep relationship market sentiment and price trends. Fasten your mental seat belts.





Sentiment

Anyone taken as an individual is tolerably sensible and reasonable. As a member of a crowd, he at once becomes a blockhead. - Friedrich von Schiller

The Herd

The school of fish turns as one mind. Hundreds of fish pivot as one, single, self aware organism. The school wheels and darts as one. The contrast between the complete synchrony of motion and the total absence of a visible directing force is astounding. The sight of a school of fish whirling and swooping as a single life form stirs something primal in us. A similar striking contrast between a perfection of collective behavior and the obvious lack of central control can be seen in the action of a flock of birds. The shape and form is constantly changing but not the density or the volume. It is a magic show with an invisivble magician.

How does the group remain cohesive while the shape and the direction of movement is constantly shifting and reversing? Many social organisms exhibit seemingly coordinated patterns of mass behavior that are far too complex to be learned. We see this in the collective motion of insects, fish, and birds, in migrating herds of mammals, in patterns of flow in human crowds.

Self organizing complex collective behavior is seen in organisms as simple as E coli bacteria and slime molds. Insects move in swarms. Fish swim in schools. Birds fly in flocks. Animals move in herds. Yet however radically different the nature of the individuals that compose these groups, these complex, spacially extended systems of collective behavior all share one common motivation: survival. "If everyone is thinking alike, someone isn't thinking."

- General George Patton Jr

The flocking behavior in all of these systems is driven by the need of prey to avoid predators. In every case the complex collective behavior is driven by the same simple strategy. There is safety in numbers. Individuals that become separated from the herd become breakfast, lunch, or dinner for the predator. The only hope for survival is to merge with and submerge into the crowd. For this strategy to be successful the potential prey must suspend any tendency toward individuation during any period of maximum predator risk. To the extent that the potential prey is capable of autonomous behavior that behavior must be suspended if the organism is to increase its odds of surviving an attack by a predators.

Across 3.8 billion of years of evolution from bacteria to insects to animals and primates the survival of prey populations has depended on the instinctive ability to engage in the self-organizing collective behavior of swarms, schools, flocks, and herds. As this flocking behavior pre-dates high level cognitive abilities by hundreds of millions of years it is clear that this flocking skill is inherited, not learned. This skill set was long ago hard wired into prey nervous systems as an instinctual, pre-rational intelligence. For humans this flocking or herding behavior still triggers the complete suspension of critical thinking and still induces a total surrender to the directional whims of the crowd. As being left out or being left behind has for millions of years meant being eaten there are clearly evolutionary limits to the advantages of independent thinking.

Sentiment

Insanity in individuals is something rare but in groups, parties, nations and epochs, it is the rule.

- Friedrich Nietzsche

The Madess of Crowds

The price action in the financial markets are the innocent reflections of our collective hopes and fears. These hopes and fears create the price trends. Major price peaks after extended up trends reflect extremes of collective optimism. Major panic lows after extended down trends reflect extremes of collective pessimism and negativity. When an individual is constantly swinging from emtional extremes of optimism to pessimism and back again they are diagnosed with a manic - depressive bipolar disorder. Yet the financial markets routinely swing from emotional extremes of pessimism to emotional extremes of optimism and back again. It is not regarded as anything unusual. That is what markets do.

To thrive in the financial markets one must become an objective observer of the collective herding instinct that drives the markets from panic tops to panic lows and back again. One must keep one's head when all others are losing theirs. One must make the pre-rational herding instinct that drives the financial markets the subject of an on-going and impartial analysis. To surrender to the collective mood of the market is set oneself up for a loss.

From the dawn of collective behavior survival has depended on the seamless alignment of individual action with the behavior of the collective. The ability to profit from price trends in the financial markets depends on the ability act in opposition to collective behavior at the moments of the most intense collective emotion. If it has to choose who is to be crucified, the crowd will always save Barabbas.

- Jean Cocteau

At the top of an up trend in the financial markets the news is always and only bullish. The collective emotional content of the market at major tops is maximum bullish. The collective conclusion in the final stages of an up trend is that there is no resistance. Much higher prices are forecast. At the bottom of a down trend the news is always and only bearish. The collective emotional content of the market into a major low is maximum bearish. The collective conclusion in the final stages of a down trend is that there is no support. Much lower prices are forecast.

We feel compelled to emphasize the point about news and sentiment trends once again. A bull market will 'create' bullish news to justify the upsurge of optimism in the collective mood. Bullish news that was ignored by the preceding down trend are exhumed and anointed as relevant and thrust on the front page. The fate of a bearish development is a down trend is that it is either relegated to the back pages that nobody reads of completely exiled from publication. A bear trend will create bearish news and exile bullish developments to the back pages.

How can one avoid getting caught up in the emotions of the herd? How can one maintain perspective and objectivity? How can one know when the emotional content of the market is reaching extremes consistent with a major price trend reversal? That is the value and role of a sentiment indicator.

You cannot reason a person out of a position he did not reason himself into in the first place.

- Jonathan Swift

Trend Reversals

The price trend of a market does not reverse direction because the available evidence convinces cool headed traders that the logical thing to do is to reverse their position. An up trend never ends with a bearish news event. In fact the bullish sentiment of an up trend will rarely even allow a bearish news story.

Bull to Bear

The typical up trend ends as very bullish news fails to sustain new highs. Why the failure? The sentiment can move only one way from the bullish extreme. The reaction of the bulls is that if bullish news fails to rally the market then what will happen when bearish news arrives? This is a shock to the prevailing bullish sentiment and the bulls now feel compelled to reduce their long positions. Since there is typically an enormous speculative long position after an extended up trend a collective movement among the bulls to make a slight reduction in length can quickly turn into a rush for the exits. As the fear of loss is a much stronger motivator than the desire for gain a trickle of long liquidation in a very over bought market can quickly become a flood of sell orders that cascades the market lower through a series of protective sell stops. Once everyone has become bullish then who if left to buy the dips? A very high bullish consensus signifies that everyone is already holding their maximum long position. This means that the buy pressure in the market has been largely exhausted and what remains is a very high level of potential sell pressure.

It has been said that man is a rational animal. All my life I have been searching for evidence which could support this.

- Bertrand Russell

Bear to Bull

The typical down trend ends as very bearish news events fail to sustain new lows. Why the failure? The sentiment can move only one way from the bearish extreme. The reaction of the speculative shorts is that if bearish news fails to sell off the market then what will happen when bullish news arrives? This is a shock to the prevailing bearish sentiment and the bears now feel compelled to reduce their short positions. Since there is typically an enormous speculative short position after an extended down trend a collective movement among the bears to make a slight reduction in shorts can quickly turn into a rush for the exits. Because the fear of loss is a much stronger motivator than the desire for gain a trickle of short covering from a very over sold market can quickly become a flood of buy orders that cascade the market higher through a series of protective buy stops. Once everyone has become bearish then who is left to sell rallies? A very low bullish consensus means that everyone is maximum short. This means that the sell pressure in the market has been largely exhausted and what remains is a very high level of potential buy pressure.

With this ground work let us now study the intersection of the "Bullish Consensus" and Elliott Wave Analysis.

Price Patterns

For a pattern to repeat itself with enough reliability to be recognized as a law of nature it must be a self-organizing process capable of absorbing and surviving minor variations. Once such a pattern has begun it moves inexorably through all intermediate stages into final completion. The dynamics of the process do not allow for an alternate outcome. The seasonal cycle is obvious example of such a pattern. The sequence of spring to summer to autumn and then to winter is not an optional outcome. It is a law of nature. In the price action of the free markets there are two such laws of nature - the five wave move and the ABC pattern. In this section we will explore the sentiment dynamics that creates these price patterns.

Summary

There are two primary factors that determine whether a price trend unfolds into a five wave type move or an ABC type pattern. The first factor is the position of the price trend in the larger pattern. The second factor is the intensity of the emotional extreme that precedes the start of the price trend. In general the more extreme the emotional intensity of the bullish or bearish condition the more likely the development of a five wave pattern. The more mild the market sentiment at the start the more likely an ABC pattern will emerge. The only intervening factor is the position of the price trend within the larger price pattern.

Sentiment Creates the Trend

We will now detail the dynamics of the market sentiment responsible for each of the basic Elliott wave patterns. The causal relationship between the market sentiment and the Elliott wave patterns is not a theory. It is an established and observable phenomena as the examples on the previous pages have amply demonstrated. The text on the next few pages simply detail the relationships observed in the markets.

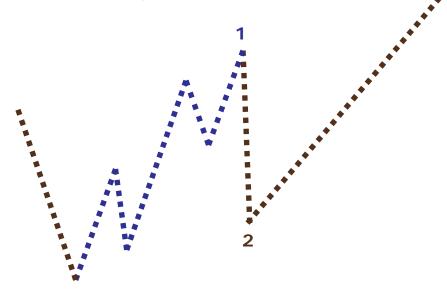
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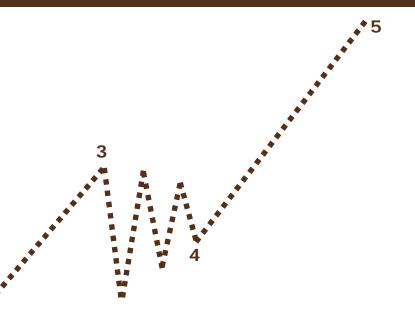
The Wave One Up

A sharp, powerful and relatively brief rally develops from a long standing down trend. While the most recently arrived shorts are quickly stopped out the longer term players are all scaled up sellers. The down trend has persisted for some time and the largest profits have come from scaled up sell strategies. This rally is presumed to be yet another bear market correction. However this rally is larger in extent than any recent bear market correction. Many of the longer term scaled up sellers are stopped out.

Clues

Look for bullish RSI divergence and major candlestick reversal patterns up from the lows. Most importantly look for a five wave rally from the low.





Wave One Sentiment

The wave one up of a large scale five wave rally typically begins from an extreme of bearish sentiment. The wave one up typically begins from a market where the news has been only and always bearish for some time. The common wisdom at the start of the wave one rally is that there is no support. The consensus forecast is that much lower prices are still ahead. The more extreme the bearish sentiment at the start of the wave one up the larger will likely be the wave degree of the rally. In fact the extent of the bearish sentiment generally provides an excellent guideline to the wave degree of the rally.

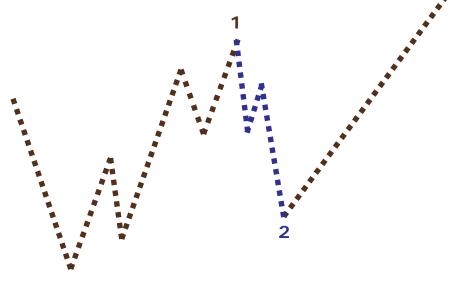
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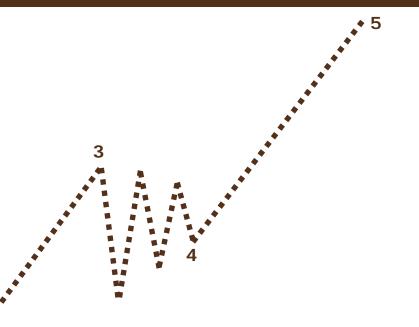
The Wave Two Correction

The wave two down is typically a very powerful, steep, and brief decline. The wave two down typically breaks below the .618 of the wave one up and reaches the .7862 retracement of the wave one. This wave two down gets it selling power from those who stopped themselves out of their short positions into the preceding rally. Determined to make their losses back and then some the bears are typically extremely aggressive sellers into this retreat, convinced that the long term trend is still down and that new lows are still ahead.

Clues

Look for a steep ABC type decline from the previous high that fails to make a new low.





Wave Two Sentiment

The wave one up moderate somewhat the extreme bearish sentiment that marked the start of the rally. While the sentiment is less bearish at the top of a wave, one up than it was at the start of the wave, one is the sentiment is still quite bearish.

The wave two down typically takes the bearish sentiment back to levels very near the extremes that marked the low tic at the start of the wave one up. The wave two down is all about revenge. Those bears stopped out in the wave one up pile on an even larger short position into the wave two down.

25

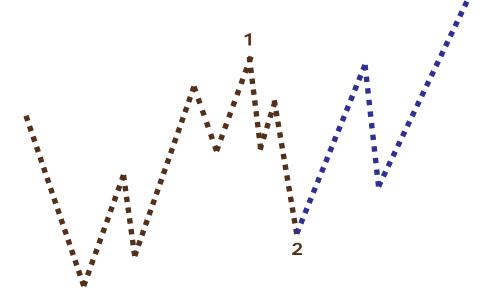
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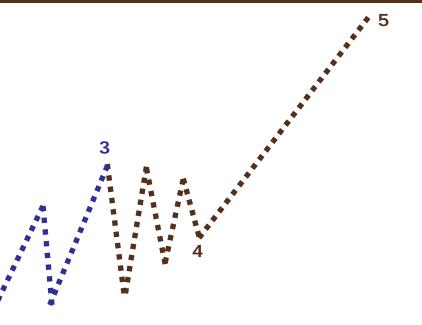
The Wave Three Up

The most powerful rallies do not occur because everyone suddenly turns bullish and wants to quickly build a large long position. The most powerful rallies are driven by short covering. Traders adding to length typically buy dips. Traders exiting losing short positions typically buy at the market into new highs. The wave three up is the power phase of the five wave move and it gets its power from the very large short position that marks its start.

Clues

Look for a powerful five wave rally that carries well beyond the extent and duration of the wave one up. In fact the wave three is typically a Fibonacci extension of the wave one up.





Wave Three Sentiment

During the course of the wave three rally the sentiment swings from the bearish extreme of 'there is no support, to the bullish extreme of 'there is no resistance.' In fact the bullish sentiment is typically higher at the wave three peak than it is at the peak of the final wave five up.

In terms of the CFTC "Commitment of Traders" a larger degree wave three rally typically starts with a very high non-commercial short open interest and the wave three rally typically ends with a very high non-commercial long open interest.

The Wave Four Correction

The wave three rally is usually considerably larger than either the wave one and wave five rallies. The top tic of an extended wave three typically yields the highest RSI value of the entire five wave move and the most bullish sentiment reading of the entire five wave move. The wave four corrects the wave three by flushing out weak longs and luring in top picking bears.

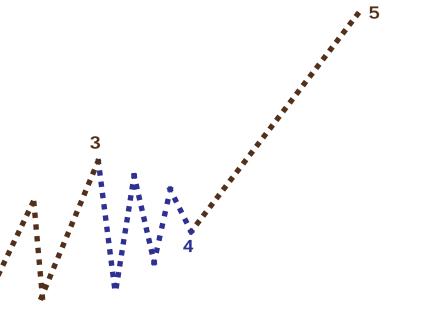
Clues

Look for a triangle pattern that corrects anywhere from .236 to .382 to an occasional 50% of the wave three up.

1 2

Wave Four Sentiment

The emotional content of a wave four correction can be described by two words - confusion and frustration. As an alternation of rallies that fail to make new highs and declines that fail to make new lows the triangle is the expression of a confused and frustrated market. Over the course of this period of confusion the extreme bullish sentiment that marked the wave three peak is much reduced. The wave four corrects the powerful wave three advance in terms of both the price action and the emotional content of the market.



The Wave Five Rally

By the end of a wave four correction new shorts have entered the market based on the conviction that the trend has peaked and now points down. As the decline from the wave three peak has been a very choppy retreat these new shorts have none of the conviction that only an extended down trend can generate. Into this bearish but vulnerable market psychology an unexpected news event invariably intrudes. The confidence of the shorts is deeply shaken. That the news story usually has little or nothing to do with long term fundamentals is besides the point. The event is unexpected and with little conviction and no financial cushion the bears exit their short positions. This short covering creates the final wave five rally.





Wave Five Sentiment

The final wave five rally is typically driven by short covering in the fact of an unexpected event. As a result the wave five does not have the staying power of a wave three extension and the new highs of a fifth wave typically generate bearish RSI divergence signals. The bullish sentiment in a fifth wave rarely reaches the bullish extremes of the wave three. It is the rally of a tired old bull. In the face of waning momentum, sentiment divergence, and fundamentals of dubious importance, the fifth wave is a final opportunity to exit length. The fifth wave is a scale up sale.

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B Α The "A" Wave Decline An ABC decline in the inevitable result of the bullish excesses created by a five wave rally. The "A" wave down of an ABC decline is driven by long liquidation. It is not driven by bears adding to short positions.

"A" Wave Sentiment

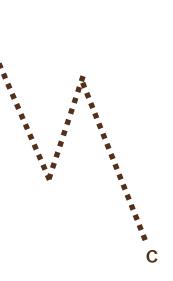
Over the course of the typical "A" wave down of an ABC decline that follows a major scale five wave rally the very high bullish sentiment that characterised the top of the market typically erodes to near 50% bulls and 50% bears.

C

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В Α The "B" Wave Recovery The "B" wave recovery that follows the "A" down is corrective is nature. As the "B" leg of an "ABC" it is actually the correction of the correction. "B" Wave Sentiment

The characteristic sentiment of the typical "B" wave is 50% bullish or a neutral sentiment reading. The motor of the price action in the "B" leg of an ABC pattern is not the correction of a sentiment extreme. The "B" leg is driven by the sentiments of confusion and of uncertainty. Reflective of this emotional condition the volume and open interest of the market typically declines during the "B" wave.



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С

В Α The "C" Wave Decline As the final leg down in an ABC corrective retreat the purpose of the "C" wave is to wring every last drop of bullish sentiment out of the market so the next major advance can begin. This final leg down begins being driven by long liquidation and ends as the bears complete building a massive short position..

"C" Wave Sentiment

The final "C" wave down typically begins from a level close to 50% bullish and ends with an extremely low bullish sentiment and an extremely high level of bearish sentiment.

Sentiment

Nobody goes there anymore. It's too crowded.

- Yogi Berra, on a popular restaurant

At the top of a rally the market is crowded with bulls and the headlines are crowded with bullish news stories. One can certainly tell when the market is crowded with bulls and with bullish news. One can reference the CFTC "Committment of Traders" reports, the Market Vane "Bullish Consensus" readings, the position of the wave count, and the headlines. But how can one be certain that the final high tic has been reached?

There are three types of market indicators.

- 1. A lagging indicator like moving average predicts the past. They inform one of what has already taken place in a previous state of the market.
- 2. A coincident indicator is a market factor that varies directly and simultaneously with the business cycle, thus indicating the current state of the market.
- 3. A leading indicator gives advanced warning. It signals an impending market development. It gives a window into the future.

At first glance one might peg the "Bullish Consensus" as a coincident indicator. After all it reveals what the speculators are thinking about the market that day. However a trend tends to stay in force unless acted upon by a larger counter force. In other words markets have momentum. In this case that means the bullish consensus tends to peak in advance of major market tops and bottom in advance of major market lows. This gives it the status of a leading indicator. The art of prophecy is very difficult, especially with respect to the future.

- Mark Twain

Lead Time

What is the typical lead time between a very high "BUllish Consensus" reading and the final high tic of an up trend? It varies. We can give some examples of various lead times from the past. In reality the multiple systems approach gives the best chance of nailing a major top or a major bottom.

In an ideal market the final high tic of an up trend will be marked by the following conditions

- Based on the CFTC "Committment of Traders" report, a very high percentage of the open interest is "Non-Commercial" length.
- "Bullish Consensus" divergence. The price makes a new high but the "Bullish Consensus" fails to make a new high.
- RSI divergence. The price makes a new high but the RSI fails to make a new high.
- Wave Count Completion. The new high fulfills the wave count target of several wave degree patterns.
- Candlestick Reversal. The price pattern on the daily candlestick is a classic reversal pattern and as the topping pattern unfolds the weekly and then the monthly candlestick patterns become major, reliable, trend reversal patterns.

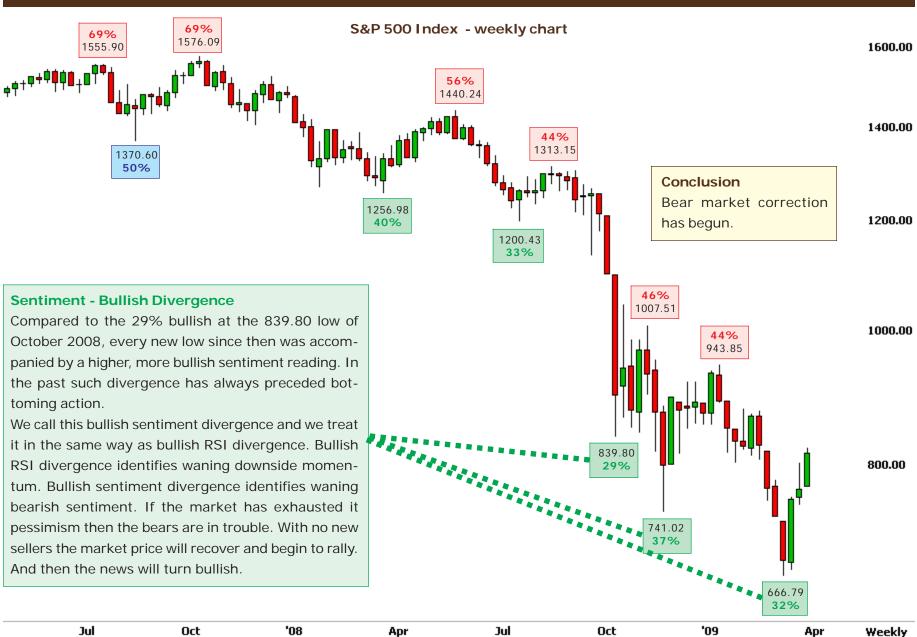
On the next few pages we expand on the very important concept of sentiment divergence.

United-ICAP **RBOB - 16 Nov 08 RBOB** daily chart - log scale -24% Bullish 31% Bullish at the as of the 1.5800 high 1.6000 1.5372 high 27% Bullish at the 1.4000 1.3373 high 25% Bullish at the 17% Bullish 20% Bullish 1.2405 high into the at the 17% Bullish 1.2050 high 1.3535 low at the 1.1673 high 1.2000 24% Bullish 1.0000 22% Bullish at the at the 12% Bullish 1.0397 low 1.0231 low into the .9870 low **Bullish Sentiment Divergence** 11% Bullish at the One ignores sentiment divergence at great peril. .8950 low This sentiment divergence is as significant as it **Bullish Sentiment Divergence** 0.8000 is rare and reliable. Note how quickly the market New lows in price but with figured out that it has run out of sellers. And sena less extreme bearish sen-13% Bullish timent divergence was the big tip-off. timent reading. at the .7850 low 23 Nov 20 Dec 15 '09 15 Feb 19 11 20 13 Daily Mar Apr





S&P 500 Index - 24 Mar 09



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S&P 500 Index - 22 Jun 09

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Sentiment Rules

There is no market immune to the role that sentiment plays in driving price trends. In fact we would say that there is no market anywhere where price trends are not driven by swings in the collective sentiment. The range of markets covered on the following pages makes this point quite clear.

Market Vane versus the DSI

Our ability to prove this point about the universal role that sentiments plays in all markets is limited only by a sentiment indicator for that market. And some sentiment indicators are better than others. We much prefer sentiment indicators like the 'Market Vane' 'Bullish Consensus and the Daily Sentiment Index (DSI) to a more traditional sentiment indicator like the 'Put-Call Ratio' for a very important reason. That fact that the 'Market Vane' has sentiment history going to back to 1969 makes it for us a superior indicator compared to the DSI. This additional history makes it easier to identify overbought and oversold sentiment extremes.

The 'Put-Call Ratio'

Both Market Vane and the DSI track the smaller traders and investors - those that typically lose money in the markets. Puts and Calls are as much an institutional hedging vehicle as a trading vehicle for smaller investors. That compromises the ability of the 'Put-Call Ratio' to reflect the small investor sentiment that is such a necessary ingredient for a contrarian indicator.

CFTC Report

In theory the CFTC 'Commitment of Traders' report can also be employed as a sentiment indicator by following "Non-Commercial" positions. However we see it as quite obvious that the smallest traders are not trading futures or options on futures. They are buying and selling the stocks of Gold producers or energy ETF's or the new batch of treasury ETF's. So the CFTC report does not capture the sentiment of the smallest traders that give a good contrarian indicator its contrarian nature. Another negative for the CFTC report is that it does not come out every day like the 'Market Vane' service or the DSI. If one is going to go through the trouble of tracking sentiment then one must have a reading every day. The financial consequences of missing a sentiment divergence reversal signal are quite serious.

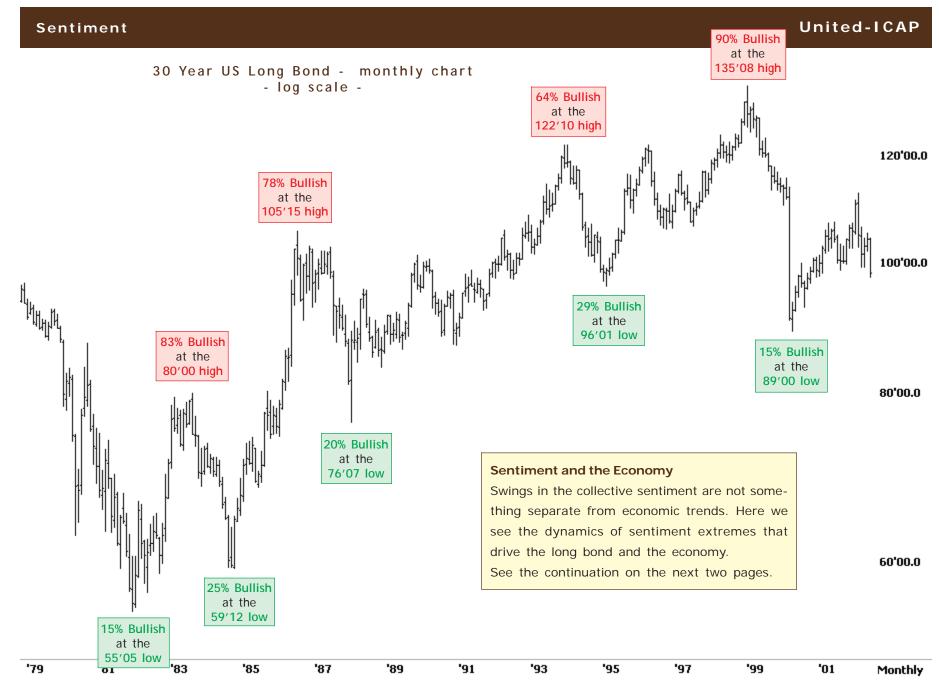
Real Estate

The one market not represented in any of these charts is the Real Estate market. That there is no direct sentiment indicator for the real estate market at first seems rather ironic. To make the largest purchase one will ever make, knowing full well that it will take thirty years to pay off - such a purchase is arguably a supremely optimistic move. So in the case of real estate things like housing starts and first time purchases are direct sentiment indicators. No one builds or buys a house that is not extremely optimistic about the future. Otherwise houses would neither be built or bought.



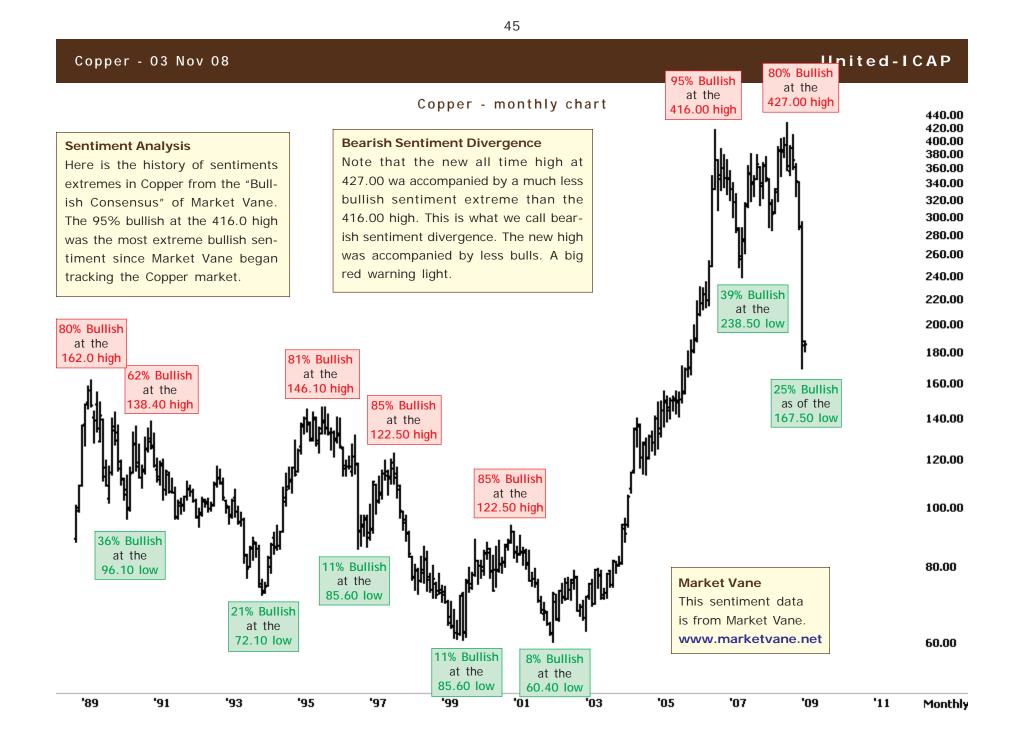
















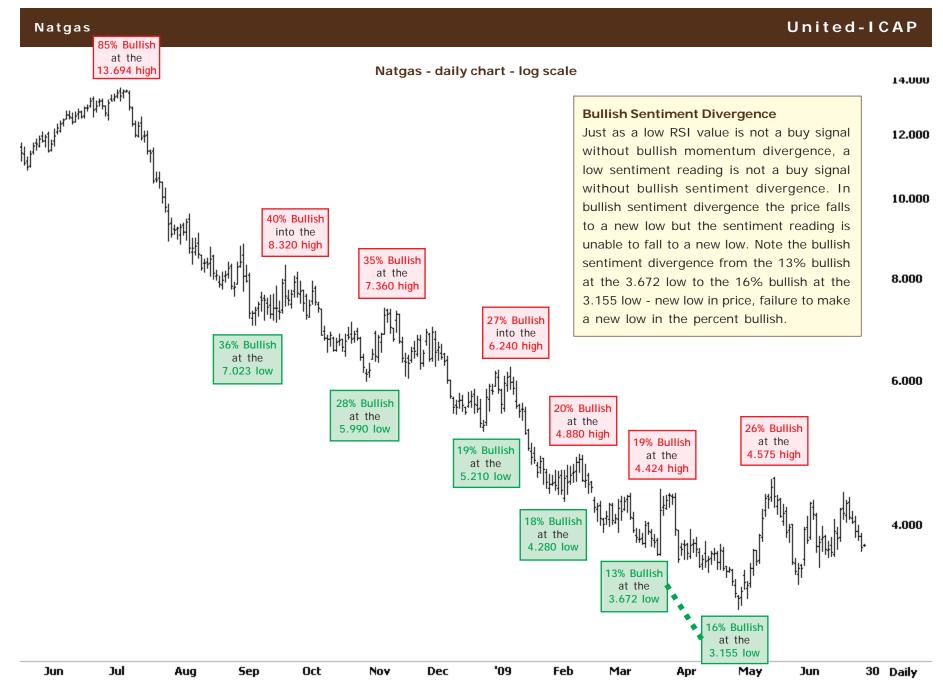














Sentiment

The Market Vane 'Bullish Consensus'

The Market Vane 'Bullish Consensus' is designed to capture the sentiment of those who typically lose money in the markets - the smaller investors and traders. This sentiment index is not designed to register the sentiment of the commercial traders and hedgers that typically make money in the markets. This sentiment indicator began coverage of the major markets as a weekly indicator back in January of 1969 and became a daily indicator in 1988. This indicator records the percent of advisors bullish on the various markets.

Most technicians look to the sentiment readings on a sector by sector basis - for example the energy complex or the grains. However we have found that sentiment coverage of all the markets together can provide an indication of unsustainable extremes in expectations for inflation and deflation. We call this big picture sentiment coverage of the financial markets as a whole a 'sentiment snapshot' or sentiment profile.

The following pages detail various sentiment profiles of the market at large. These are the major highs and lows since 1980.

Top Ten Main Points

- From 1980 into 2000 whenever inflation fears were at maximum everyone was bullish on commodities and bearish on Treasuries. A classic example of this was the peaking of Gold in September 1980. See page 58.
- 2. At this 1980 inflation fear peak the major currencies were not aligned. The sentiment was bullish on the Pound, bearish on the Dmark, and neutral on the Swiss Franc.
- 3. The same divide between commodities and treasuries was seen when fears of an imploding economy were at maximum. Perhaps the ultimate example of this was seen at the bottoming of Crude Oil in December 1998. See page 59. Everyone was then bearish on commodities and bullish on Treasuries.
- 4. At the US Dollar peak in July 2001 shown on page 60, everyone was bearish on commodities but also on T-Bonds and T-Notes. What was in the bearish column? It was the US Dollar.
- 5. The bottoming of Crude Oil in December 1998 from page 59 created the same sentiment profile in the world market as the peaking of the US Dollar in July 2001 from page 60. This is a very important point for energy traders.
- 6. The October 2007 peak in the US stock market on page 61 shows the opposite sentiment profile to the peaking of the US Dollar on page 60. At the stock market peak everyone was bearish on the US Dollar and bullish on everything else. What defines July 2001 and October 2007 as opposites is the collective perception of the purchasing power of the US Dollar.
- 7. Now let us look at the stock market low of 6th March 2009 shown on page 63. Once again the US Dollar is involved. In fact since 2001 an extreme in the US Dollar can be seen as the key to every major reversal in the world markets.

- 8. Each of the sentiment extremes on pages 58 to 63 marked a long term trend reversal. The question is, was the sentiment profile of 06 March 2009 a bearish enough extreme to mark a long term low in the world markets?
- 9. The March 2009 profile was less bearish than the sentiment extremes of either 1998 or 2001.
- The world market bearish sentiment extreme of March 2009 was a less bearish extreme than either July 2001 when the US Dollar was peaking, or December 1998 when Crude Oil was bottoming.

Sentiment Profiles

If one only follows one or two sectors of the world market one can work under the illusion that each sector of the world market operates independently of other sectors and of the larger market. For example, one might think that Crude Oil fundamentals keep Crude Oil price trends largely isolated from price trends in other markets. While this might be true some of the time, the previous pages indicate this is not true all of the time. In fact it tends to not be true at the most important times - the times of major, long term trend reversals. The previous pages argue that at the longer term trend reversals all the markets tend to peak and reverse together. We introduce the concept of a sentiment profile as a tool to help assess the probability that a market turn is a longer term reversal. The more extreme the sentiment profile, the greater the likelihood of a major, longer term reversal.

And what exactly makes a sentiment profile more or less extreme?

Extreme Sentiment Profiles

The most moderate or neutral sentiment profile would be one in which the green, blue, and red boxes were all about the same size. In other words, when the sentiment all the various markets are roughly one third bullish, one third neutral, and one third bearish, then the chances of a major long term trend reversal would be extremely low.

In contrast the page 61 sentiment snapshot is an entirely different story. When virtually every major world market is showing a major bullish sentiment extreme then any reversal lower is likely to be a major, longer term trend reversal. Why? Because everyone will have been caught very long in every market. And when virtually every major world market is showing a major bearish sentiment extreme then any reversal higher is likely to be a major, longer term trend reversal higher because everyone will have been caught very short in every market.

Sentiment and Long Term Reversals

Was the sentiment profile from 6th March 2009 a bearish enough sentiment extreme to mark a major extreme of deflation? In other words could the world markets in March 2009 have reached the depth of the Kondratieff winter? In other words might the worst case have already been discounted in market prices? Might the onset of the economic cycle movement into a Kondratieff spring have already begun?

Preliminary Conclusion

If we just stick with the content of this chapter on sentiment it would seem unlikely, and even shocking, if the bearish sentiment of the world markets at the lows of this Kondratieff cycle were less bearish than at 1998 or 2001. We must emphasize here that we are not talking about the stock market here. We are talking about all the various world markets taken together.

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Sentiment Divergence?

There is however one factor that is a refuge for the bulls and that is the phenomena we call 'bullish sentiment divergence.' In bullish sentiment divergence, a market makes a new all time low in its down trend but the sentiment fails to make a new low. The equivalent to this phenomena in momentum is bullish RSI divergence. In both sentiment and momentum divergence the failure to confirm the new lows in price indicates an exhaustion of the down trend and the imminence of a sustained reversal higher. But does bullish sentiment divergence exist on a Kondratieff scale? And if it does is that what occurred on 6th March 2009? These are questions which only further price action can begin to answer. 23 Sep 1980 Gold peaks at 729.0

Peaking of Inflation Fears

Sentiment Snapshot of the Market data from Market Vane 'Bullish Consensus'

Neutral Sentiment S Franc 47% C Dollar 53% Bearish Sentiment Oats 28% Corn 33% T Bills 39% T Bonds 39% Coffee 39% D Mark 40% Lumber 45%

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Market Vane This sentiment data is from Market Vane. www.marketvane.net

Note

In 1980 the Market Vane was not yet covering energy. However given the events of 1980 we include energy in the list of markets with bullish sentiment extremes.

Bullish Sentiment Gold 91% Wheat 88% Soybeans 88% Bean Meal 88% Silver 87% Platinum 84% Sugar 81% Copper 75% Orange Juice 75% **British Pound 72%** Bean Oil 71% Cocoa 71% Cotton 70% Japanese Yen 58% Crude Oil Heating Oil Gasoline



Market Vane This sentiment data is from Market Vane. www.marketvane.net Silver 26% **Gold 28%** US Dollar 34% 05 Jul 2001 the DX peaks at 120.99

Peaking of Deflation Fears

Sentiment Snapshot of the Market data from Market Vane 'Bullish Consensus'

Bullish Sentiment DX 82% B. Meal 73% Beans 68% T-Bills 60%

Neutral Sentiment Gold 48% Lumber 50% C Dollar 53%

(data source www.marketvane.net)

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Bearish Sentiment Cotton 9% Yen 10% S. Franc 10% **D** Mark 17% **B. Pound 18%** Euro 18% Wheat 18% Coffee 18% Natgas 19% Copper 19% Silver 19% Oats 24% **O. Juice 30%** Corn 30% Bean Oil 31% #2 Oil 33 % Unleaded 35% Crude 36% Platinum 39% T Bonds 40% Sugar 40% Stocks 40% Cocoa 42%

11 Oct 2007 S&P 500 peaks at 1576.09

> **Bullish Sentiment** Canadian Dollar 93% Platinum 92% Euro fx 91% Gold 91% Bean Oil 90% Crude Oil 89% Swiss Franc 70% British Pound 87% Soybeans 87% Heating Oil 84% Bean Meal 84% Wheat 82% Cocoa 82% Oats 77% Copper 75% Silver 73% **RBOB 70%** Treasury Bonds 65% Coffee 64% Cotton 64% Treasury Notes 61% Corn 61%

Peaking of Inflation Fears

> Sentiment Snapshot of the Market data from Market Vane 'Bullish Consensus'

Neutral Sentiment Sugar 34% Bearish Sentiment Lumber 17% US \$ Index 19% Natural Gas 29%

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(data source www.marketvane.net)

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Bullish Sentiment Euro fx 96% Gold 93% Swiss Franc 92% Heating Oil 87% Silver 86% Treasury Notes 83% Crude Oil 82% Corn 79% Cocoa 79% Bean Oil 74% Copper 73% Treasury Bonds 73% Bean Meal 71% Wheat 70% Soybeans 69% Oats 69% Platinum 69% **RBOB 69% British Pound 68%** Canadian Dollar 66% Coffee 57% Cotton 56% Natural Gas 56%

Peaking of Inflation Fears 17 Mar 2008 WTI peaks at \$111.80 Gold peaks at \$1033.9

Sentiment Snapshot of the Market data from Market Vane 'Bullish Consensus'

Neutral Sentiment Sugar 49% Bearish Sentiment US \$ Index 17% Lumber 17%

(data source www.marketvane.net)

06 March 2009 S&P 500 Index bottoms at 666.79

Peaking of Deflation Fears ?

Sentiment Snapshot of the Market data from Market Vane 'Bullish Consensus'

Bullish Sentiment Gold 79% T-Notes 74% DX 72% T Bonds 63% Yen 62% Neutral Sentiment Silver 53% Cocoa 53% Sugar 49% S. Franc 48% B. Meal 47%

(data source www.marketvane.net)

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Bearish Sentiment Natgas 14% Cotton 21% #2 Oil 24% Lumber 25% Oats 25% **O. Juice 25%** Crude 26% B. Pound 28% Unleaded 28% Platinum 31% SPX 32% Copper 32% C Dollar 33% Coffee 34% Wheat 36% Corn 37% Euro 38% Bean Oil 39% Beans 42%

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Bears

Bears are pessimistic, expecting lower prices, Bulls are upbeat, expecting higher prices. Bears "sell short," betting that the future will bring lower prices. They are betting that by the time they will need to actually buy back and or deliver what they have sold, the market prices will be lower. They will then will book a profit from the difference between what they sold and what they later bought. Bulls bet that in a rising market they will be able to sell what own at a higher price in the future, whether that be a commodity, a share of stock, or whatever.

One theory about how market pessimists got their name as 'bears' relates to an old English proverb "Don't sell the bearskin before the bear is caught." But that is of course what short sellers do. In the 18th century short sellers were known as "bearskin jobbers." By the time of the South Sea Bubble of 1721, the term bear was the label for short sellers. Guess it is just much easier to call someone a 'bear' than a 'bearskin jobber.'

Bulls

The On-line Etymology Dictionary identifies word "bull" as denoting to "inflate or swell", and dates its stock market usage back to 1714

Another possible origination of the association of the word 'bull' with market optimism is from the word "bulla" which means bill or contract. When a market is in an up trend, holders of contracts for future delivery of a commodity - bills - enjoy the value of their bills or contracts increasing. However in a falling market, the counter-parties—the "bearers" of the commodity to be delivered, win because they have locked in a future delivery price that is higher than the current price.

Yet another origin of the current usage of the term 'bull' if from an obsolete meaning of the word 'bully' meaning 'excellent'.

Yet one more contrast between the financial terms 'bull' and 'bear' refers to the way that the animals attack. A bull attacks upwards with its horns while a bear swipes downwards with its paws. Also bulls are thought to charge at a very aggressive, high speed while bears are thought of as being more retiring and much more cautious.