# Commodity Trader's Classroom

A collection of commodity trading lessons from Jeffrey Kennedy's renowned Trader's Classroom Series









#### Dear trader,

In 1999, Bob Prechter asked me to edit a new service: *Monthly Futures Junctures* was designed to find and recommend the best opportunities in commodity markets. I accepted the position and immediately loved it. Like many analysts, I enjoy the challenge of finding the clearest wave patterns among dozens of markets.

But soon I found myself needing to scratch another itch — teaching.

I began my career as a small trader, so I know firsthand how hard it is to get simple explanations of methods that consistently work. In the 15-plus years since my early trading days, I've learned many lessons: but, I don't think that they should have to be learned the hard way.

That's why I decided to write the *Trader's Classroom* sections for *Monthly Futures Junctures*. The response has been great. Now I'm pleased to present to you this collection of trading lessons taken from my *Trader's Classroom*. Please remember that while these excerpts show examples from commodity markets, the lessons they teach are *universal* and can be applied to any and all markets.

Welcome to the Commodity Trader's Classroom,

Jeffrey Kennedy

Senior Commodity Analyst Elliott Wave International

[Editor's Note: Jeffrey has many more valuable lessons available in his *Trader's Classroom Collection* of eBooks. He also teaches a new *Trader's Classroom* lesson in each issue of *Monthly Futures Junctures*.]

You can learn more about these products and services by following these links: Trader's Classroom Collection: http://www.elliottwave.com/wave/classroombooks

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#### EWI eBook

## **Commodity Trader's Classroom**

By Jeffrey Kennedy, Elliott Wave International

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#### I. How To Make Yourself a Better Trader

From The Trader's Classroom Collection: Volume 1

#### Define Yourself: What Kind of Trader Are You?

As a trader, it is imperative that you define your approach to the markets. For instance, do you follow the trend or do you like to play breakouts? Are you a commodity trader or an index trader at heart? What's your trading time frame, five minutes or five weeks? Moreover, how do you analyze markets, fundamentally or technically? Do you prefer using a black box type trading system or making your own calls?

My trading style is to trade with the trend. Specifically, I like to buy pullbacks in uptrends and sell bounces in downtrends. My markets are commodities, and my time frame is three to five days. If I catch a trade that has some legs to it, and it lasts a little longer, that's fine with me. Bottom line, though, I'm a take-the-money-and-run kind of guy. This is who I am as a trader.

In addition to the Wave Principle, I include basic chart reading and bar patterns in my analysis. While I do use a few select technical studies in arriving at my decisions, I have always believed that "price" is the ultimate indicator and that everything else is secondary.

Remember, success in trading comes from the consistent application of a proven methodology. If you don't define your methodology, then your trading style could change with each new issue of Stocks and Commodities magazine. Trying a variety of analytical techniques rather than consistently following one is a problem for traders, and it's also a great way to lose your trading account.

[September 2004]

## Why Emotional Discipline is Key to Success

To be a consistently successful trader, the most important trait to learn is emotional discipline. I discovered this lesson the hard way — trading full-time a few years ago. I remember one day in particular. My analysis told me the NASDAQ was going to start a sizable third wave rally between 10:00-10:30 the next day ... and it did. When I reviewed my trade log later, I saw that several of my positions were profitable, yet I exited each of them at a loss. My analysis was perfect — it was like having tomorrow's newspaper today. Unfortunately, I wanted to hit a home run, so I missed hitting singles and doubles.

I now call this emotional pitfall the "Lottery Syndrome." People buy lottery tickets to win a jackpot, not five or ten dollars. It is easy to pass up a small profit in hopes of scoring a larger one. Problem is, home runs are rare. My goal now is to hit for singles and doubles, so I don't let my profits slip away.

Since learning that lesson, I've identified other emotional pitfalls that I would like to share. See if any of these descriptions sound familiar.

#### 1. Inability to Admit Failure

Have you ever held on to a losing position, because you "felt" that the market was going to come back in your favor? This behavior is the "Inability to Admit Failure." No one likes being wrong, and for traders, being wrong usually costs money. What I find interesting is that many of us would rather lose money than admit failure. I now know that being wrong is much less expensive than being hopeful.





#### 2. Fear of Missing the Party

Another emotional pitfall that was especially tough to overcome is what I call the "Fear of Missing the Party." This one is responsible for more losing trades than any other. Besides encouraging overtrading, this pitfall also causes you to get in too early. How many of us have gone short after a five-wave rally just to watch wave five extend?

The solution is to use a time filter, which is a fancy way of saying, wait a few bars before you start to dance. If a trade is worth taking, waiting for prices to confirm your analysis will not affect your profit that much. Anyway, I would much rather miss an opportunity then suffer a loss, because there will always be another opportunity.

This emotional pitfall has yet another symptom that tons of people fall victim to — chasing one seemingly hot market after another. For instance, because metals have been moving the past few years, everyone wants to buy Gold and Silver. Of course, the worst time to get into a market is usually when everyone is talking about it. To avoid buying tops and selling bottoms, I have found that it's best to look for a potential trade where (and when) no one else is paying attention.

#### 3. Systems Junkie

My own biggest, baddest emotional monster was being the "Systems Junkie." Early in my career, I believed that I could make my millions if I had just the right system. I bought every newsletter, book and tape series that I could find. None of them worked. I even went as far as becoming a professional analyst — guaranteed success, or so I thought. Well, it didn't guarantee anything really. Analysis and trading are two separate skills; one is a skill of observation, the other is a skill of emotional control. Being an expert auto mechanic does not mean you can drive like an expert, much less win the Daytona 500.

I am not a psychologist or an expert in the psychology of trading. These lessons are just a few I've learned along the way ... at quite a cost most times. But if you are serious about trading, I strongly recommend that you spend as much time examining your emotions while you are in a trade as you do your charts before you place one. What you discover may surprise you.

Recommended reading: *The Disciplined Trader* and *Trading In The Zone* by Mark Douglas [February 2004]







## II. How the Wave Principle Can Improve Your Trading

From The Trader's Classroom Collection: Volume 2

Every trader, every analyst and every technician has favorite techniques to use when trading. But where traditional technical studies fall short, the Wave Principle kicks in to show high probability price targets. Just as important, it can distinguish high probability trade setups from the ones that traders should ignore.

#### Where Technical Studies Fall Short

There are three categories of technical studies: trend-following indicators, oscillators and sentiment indicators. Trend-following indicators include moving averages, Moving Average Convergence-Divergence (MACD) and Directional Movement Index (ADX). A few of the more popular oscillators many traders use today are Stochastics, Rate-of-Change and the Commodity Channel Index (CCI). Sentiment indicators include Put-Call ratios and Commitment of Traders report data.

Technical studies like these do a good job of illuminating the way for traders, yet they each fall short for one major reason: they limit the scope of a trader's understanding of current price action and how it relates to the overall picture of a market. For example, let's say the MACD reading in XYZ stock is positive, indicating the trend is up. That's useful information, but wouldn't it be more useful if it could also help to answer these questions: Is this a new trend or an old trend? If the trend is up, how far will it go? Most technical studies simply don't reveal pertinent information such as the maturity of a trend and a definable price target — but the Wave Principle does.

## **How Does the Wave Principle Improve Trading?**

Here are five ways the Wave Principle improves trading:

#### 1. Identifies Trend

The Wave Principle identifies the direction of the dominant trend. A five-wave advance identifies the overall trend as up. Conversely, a five-wave decline determines that the larger trend is down. Why is this information important? Because it is easier to trade in the direction of the dominant trend, since it is the path of least resistance and undoubtedly explains the saying, "the trend is your friend." Simply put, the probability of a successful commodity trade is much greater if a trader is long Soybeans when the other grains are rallying.

#### 2. Identifies Countertrend

The Wave Principle also identifies countertrend moves. The three-wave pattern is a corrective response to the preceding impulse wave. Knowing that a recent move in price is merely a correction within a larger trending market is especially important for traders, because corrections are opportunities for traders to position themselves in the direction of the larger trend of a market.

#### 3. Determines Maturity of a Trend

As Elliott observed, wave patterns form larger and smaller versions of themselves. This repetition in form means that price activity is fractal, as illustrated in Figure 2-1. Wave (1) subdivides into five small waves, yet is part of a larger five-wave pattern. How is this information useful? It helps traders recognize the maturity of a trend. If prices are advancing in wave 5 of a five-wave advance for example, and wave 5 has already completed three or four smaller waves, a trader knows this is not the time to add long positions. Instead, it may be time to take profits or at least to raise protective stops.







Since the Wave Principle identifies trend, countertrend, and the maturity of a trend, it's no surprise that the Wave Principle also signals the return of the dominant trend. Once a countertrend move unfolds in three waves (A-B-C), this structure can signal the point where the dominant trend has resumed, namely, once price action exceeds the extreme of wave B. Knowing precisely when a trend has resumed brings an added benefit: It increases the probability of a successful trade, which is further enhanced when accompanied by traditional technical studies.

#### 4. Provides Price Targets

What traditional technical studies simply don't offer — high probability price targets — the Wave Principle again provides. When R.N. Elliott wrote about the Wave Principle in Nature's Law, he stated that the Fibonacci sequence was the mathematical basis for the Wave Principle. Elliott waves, both impulsive and corrective, adhere to specific Fibonacci proportions, as illustrated in Figure 2-2. For example, common objectives for wave 3 are 1.618 and 2.618 multiples of wave 1. In corrections, wave 2 typically ends near the .618 retracement of wave 1, and wave 4 often tests the .382 retracement of wave 3. These high probability price targets allow traders to set profit-taking objectives or identify regions where the next turn in prices will occur.

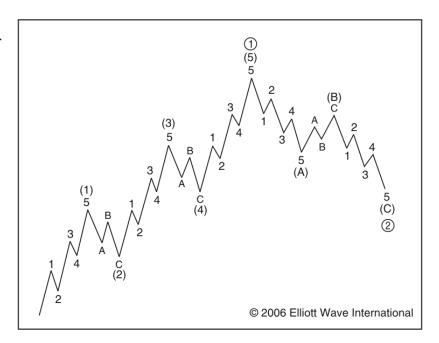


Figure 2-1

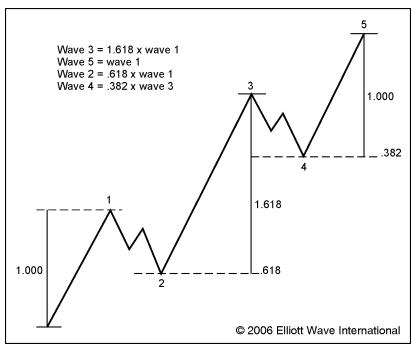


Figure 2-2

#### 5. Provides Specific Points of Ruin

At what point does a trade fail? Many traders use money management rules to determine the answer to this question, because technical studies simply don't offer one. Yet the Wave Principle does — in the form of Elliott wave rules.

- **Rule 1:** Wave 2 can never retrace more than 100% of wave 1.
- **Rule 2:** Wave 4 may never end in the price territory of wave 1.
- **Rule 3:** Out of the three impulse waves 1, 3 and 5 wave 3 can never be the shortest.



A violation of one or more of these rules implies that the operative wave count is incorrect. How can traders use this information? If a technical study warns of an upturn in prices, and the wave pattern is a second-wave pullback, the trader knows specifically at what point the trade will fail — a move beyond the origin of wave 1. That kind of guidance is difficult to come by without a framework like the Wave Principle.

## What Trading Opportunities Does the Wave Principle Identify?

Here's where the rubber meets the road. The Wave Principle can also identify high probability trades over trade setups that traders should ignore, specifically by exploiting waves (3), (5), (A) and (C).

Why? Since five-wave moves determine the direction of the larger trend, three-wave moves offer traders an opportunity to join the trend. So in Figure 2-3, waves (2), (4), (5) and (B) are actually setups for high probability trades in waves (3), (5), (A) and (C).

For example, a wave (2) pullback provides traders an opportunity to position themselves in the direction of wave (3), just as wave (5) offers them a shorting opportunity in wave (A). By combining the Wave Principle with traditional technical analysis, traders can improve their trading by increasing the probabilities of a successful trade.

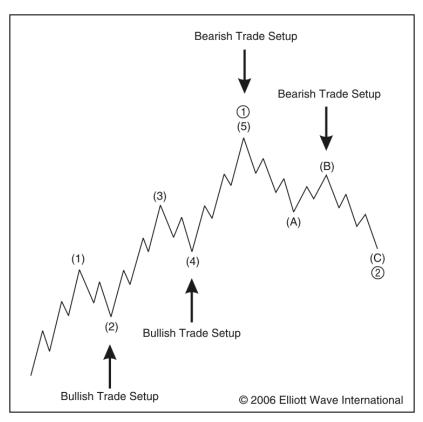


Figure 2-3

Technical studies can pick out many trading opportunities, but the Wave Principle helps traders discern which ones have the highest probability of being successful. This is because the Wave Principle is the framework that provides history, current information and a peek at the future. When traders place their technical studies within this strong framework, they have a better basis for understanding current price action.

[July 2005]





## III. Ready, Aim ... Fire: Knowing When To Place a Trade

From The Trader's Classroom Collection: Volume 4

A very important question you need to answer if you are going to use the Wave Principle to identify high-probability trade setups is, "When does a wave count become a trade?"

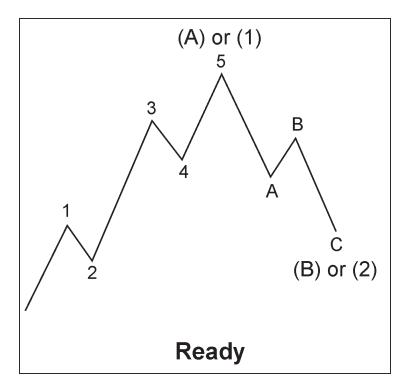
To answer this question, let me draw upon the steps required to fire a firearm:

Step 1 (Ready) — Hold the rifle or pistol still ... very still.

Step 2 (Aim) — Focus and align your sights.

Step 3 (Fire) — Pull the trigger without tensing your hand.

If you follow these steps, you should at least hit what you're aiming at, and, with a little practice, you should hit the target's bull's-eye more often than not.



As an Elliottician and a trader, I employ a similar three-step approach to decide when to place a trade. Figure 1 shows a schematic diagram of a five-wave advance followed by a three-wave decline — let's call it a Zigzag. The picture these waves illustrate is what I call the *Ready* stage.

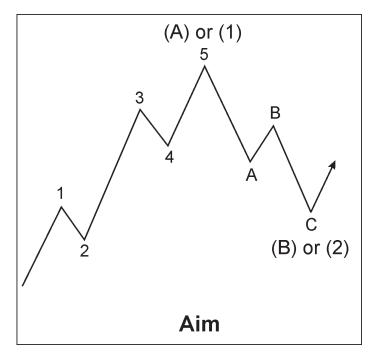
In Figure 2, prices are moving upward as indicated by the arrow. At this stage, I begin to *Aim* as I watch price action to see if it will confirm my wave count by moving in the direction determined by my labeling.

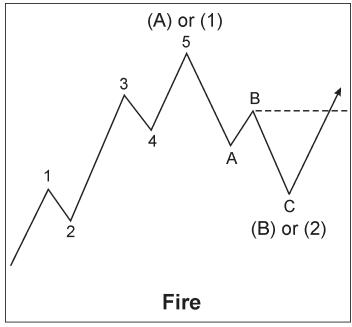
Once prices do indeed begin to confirm my wave count, I then determine the price level at which I will pull the trigger and *Fire* (that is, initiate a trade). And, as you can see in Figure 3, that level is the extreme of wave B.

Why do I wait for the extreme of wave B of a Zigzag to give way before initiating a position? Simple. By waiting, I allow the market time to either prove or disprove my wave count. Moreover, once the extreme of wave B is exceeded, it leaves behind a three-wave decline from the previous extreme. As you know, three-wave moves are corrections according to the Wave Principle, and as such, are destined to be more than fully retraced once complete. An additional bonus of this approach is that it allows me to easily and confidently determine an initial protective stop, the extreme of wave C.

Remember, all markets have a wave count; however, all wave counts don't offer a trading opportunity. So the next time you think you have a wave count, rather than just blindly jumping in, first steady yourself, wait while you aim, and then — if price action does indeed confirm your wave count — pull the trigger. Also, it is important to note that this is my way of applying the Wave Principle practically, but it's by no means the only way.

[July 2007]









## IV. How To Identify and Use Support and Resistance Levels

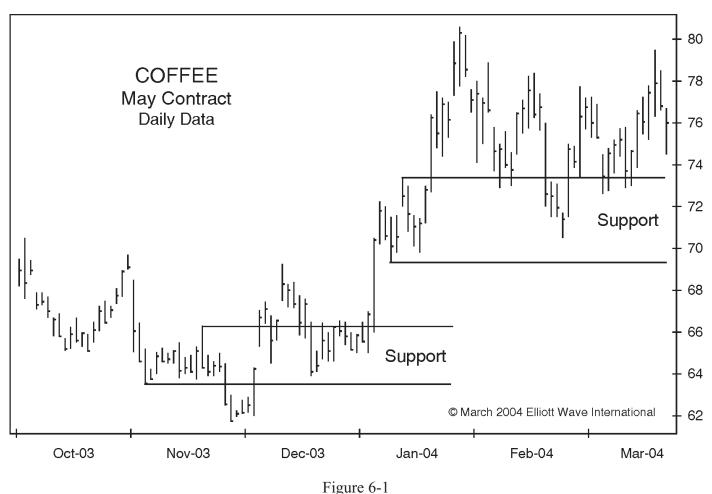
From The Trader's Classroom Collection: Volume 1

In a recent Daily Futures Junctures, I mentioned "structural" support and resistance. Since then, I've received a few requests for more details and possibly some examples ... So — here we go!

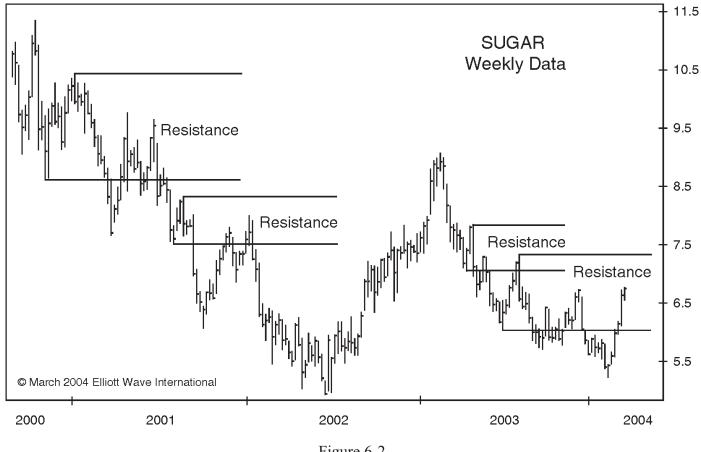
Structural support and resistance is a catch-all phrase for significant areas and levels that serve to identify possible turning points in price. Think of support as a "price floor" and resistance as a "price ceiling." As prices decline, they encounter support or a "price floor" and react by turning up. Conversely, as prices rise, they encounter resistance or a "price ceiling" and turn down. I don't rely on these tools alone, but I do use them to supplement to my normal Fibonacci analysis.

## Congestion

"Congestion" is my term for sideways price movement or range trading. And the Elliott wave pattern that best fits this description is a triangle. Those of you who have held a position during these periods know that it's not fun. But the upside is that congestion often provides support or resistance for future price movements regardless of when it occurs. In May Coffee (Figure 6-1), notice how the brief period of congestion that occurred in early November 2003 acted as support for the December pullback. This happened again when the January selloff fell into listless trading for the rest of the month. The weekly chart of Sugar (Figure 6-2) shows how these periods can also act as resistance.



And if you think about it, the tendency of congestion phases to act as support or resistance is right in line with the Elliott wave guideline on fourth wave retracements: support for a fourth wave pullback is the previous fourth wave extreme of one lesser degree.

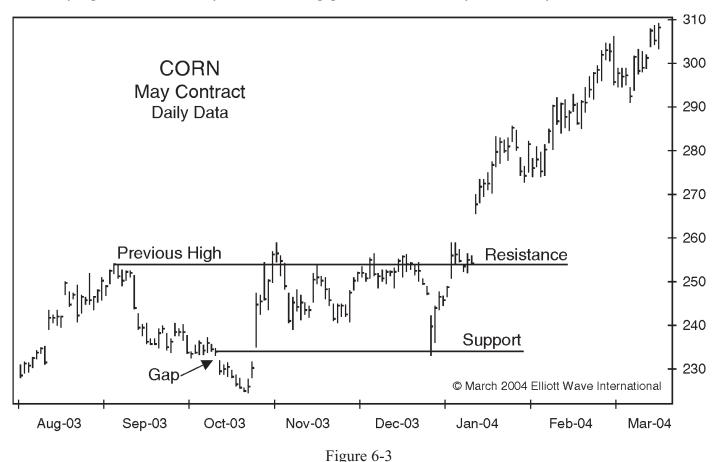






## Highs, Lows and Gaps

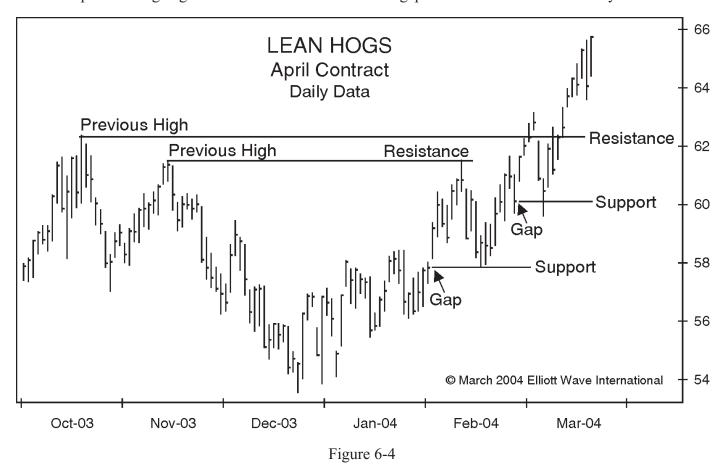
Other areas to watch for price reversals are previous highs and lows and also gaps. You can see on the chart of May Corn (Figure 6-3), for instance, that the September 2003 high was a significant hurdle for prices to overcome. For three months, each attempt to break through this level failed to produce a sizable decline. Also notice the small gap that occurred in early October. The December selloff closed this gap, and in doing so, introduced the subsequent rally. I have mentioned before how gaps often attract prices like magnets at first. Then they repel them — literally. Prices fill the gap and flee the scene, you could say.







The April chart of Lean Hogs (Figure 6-4) gives us two examples of the same setup: The February advance failed at the previous high made in November 2003, and then fell back to close the late January gap. Prices failed at a previous high again in March and then closed the gap that occurred in late February.

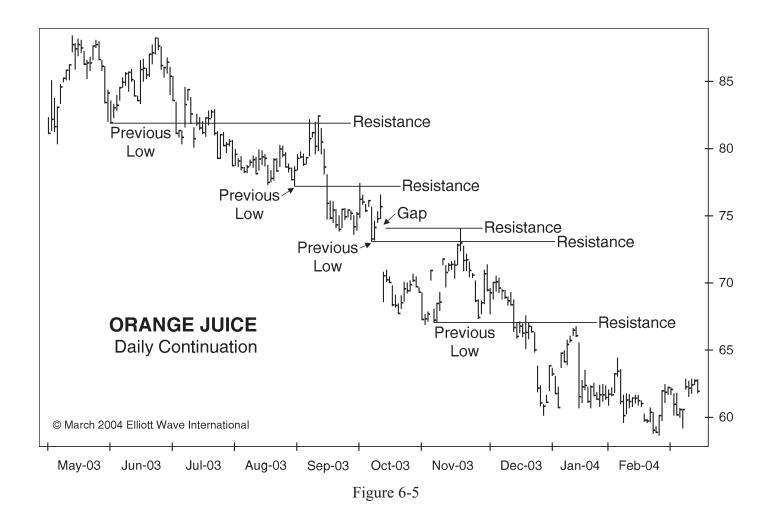






This last chart for Orange Juice (Figure 6-5) offers one example of how previous lows can provide resistance. Each bounce within the last ten months in OJ has met resistance at or near a previous low.

[March 2004]







## V. How To Apply Fibonacci Math to Real-World Trading

From The Trader's Classroom Collection: Volume 2

Have you ever given an expensive toy to a small child and watched while the child had less fun playing with the toy than with the box that it came in? In fact, I can remember some of the boxes I played with as a child that became spaceships, time machines or vehicles to use on dinosaur safaris.

In many ways, Fibonacci math is just like the box that kids enjoy playing with imaginatively for hours on end. It's hard to imagine a wrong way to apply Fibonacci ratios or multiples to financial markets, and new ways are being tested every day. Let's look at just some of the ways that I apply Fibonacci math in my own analysis.

#### Fibonacci Retracements

Financial markets demonstrate an uncanny propensity to reverse at certain Fibonacci levels. The most common Fibonacci ratios I use to forecast retracements are .382, .500 and .618. On occasion, I find .236 and .786 useful, but I prefer to stick with the big three. You can imagine how helpful these can be: Knowing where a corrective move is likely to end often identifies high probability trade setups (Figures 7-1 and 7-2).



Figure 7-1

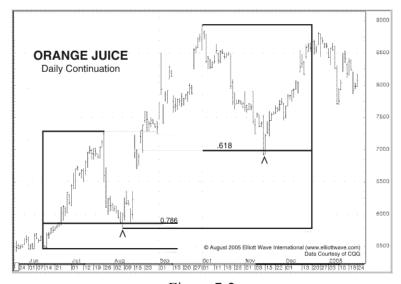


Figure 7-2

#### **Fibonacci Extensions**

Elliotticians often calculate Fibonacci extensions to project the length of Elliott waves. For example, third waves are most commonly a 1.618 Fibonacci multiple of wave one, and waves C and A of corrective wave patterns often reach equality (Figures 7-3 and 7-4).

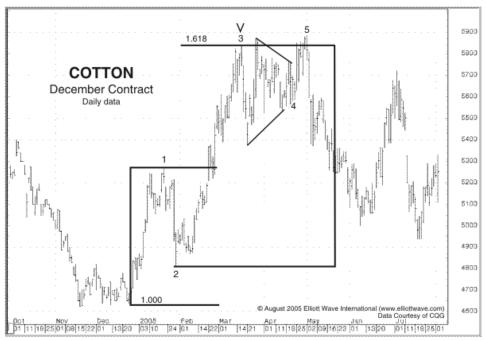


Figure 7-3

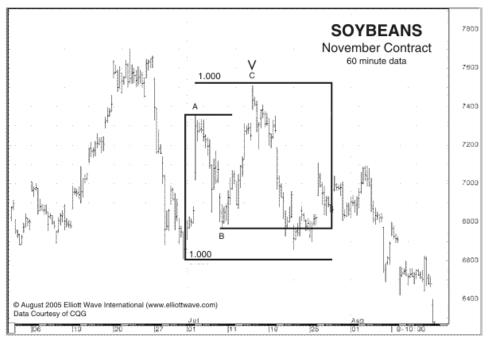
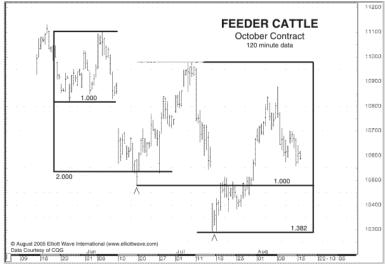


Figure 7-4

One approach I like and have used for a number of years is a "reverse Fibonacci" application, which uses primarily 1.382 and 2.000 multiples of previous swings to project a price target for the current wave (see Figure 7-5). I have found that this method has a lot of value, especially when it comes to identifying trade objectives.



#### Figure 7-5

#### **Fibonacci Circles**

Fibonacci circles are an exciting way to use Fibonacci ratios, because they take into account both linear price measurements and time. Notice in Figure 7-6 how the January 2005 advance in Cotton ended right at the 2.618 Fibonacci circle or multiple of the previous swing. Again in Figure 7-7, we see how resistance created by the 2.618 multiple of a previous swing provided excellent resistance for the February rally in Wheat. Moreover, the arc created by this Fibonacci circle provided solid resistance for price action during July and August of that year as well.

Fibonacci circles are an exciting way to use Fibonacci ratios, but they come with a word of warning: because this technique introduces time into the equation, it is scale-sensitive, meaning that compression data will sometimes distort the outcome.

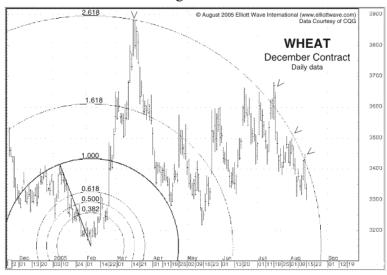


Figure 7-6

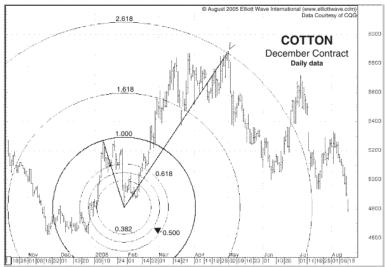


Figure 7-7

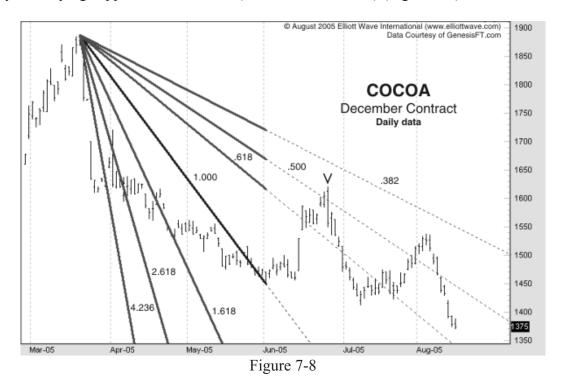


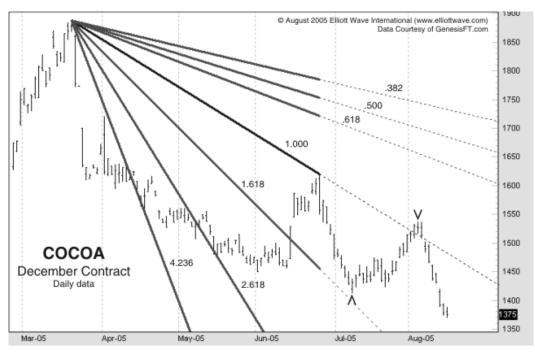




#### Fibonacci Fan

The Fibonacci fan is another exciting approach using Fibonacci retracements and multiples that involve time. Notice how the .500 Fibonacci fan line in Figure 7-8 identified formidable resistance for Cocoa in June 2005. A Fibonacci fan line drawn from the March and June peaks came into play in July and again in August by identifying support and resistance (i.e., 1.618 and 1.000) (Figure 7-9).





Commodity

#### Fibonacci Time

And, finally, there is Fibonacci time. Figure 7-10 illustrates probably the most common approach to using Fibonacci ratios to identify turning points in financial markets. As you can see, it simply requires multiplying the distance in time between two important extremes by Fibonacci ratios and projecting the results forward in time. This timing approach identified two excellent selling points in Pork Bellies, one of which was the market's all-time high, which occurred at 126.00 in May of 2004.

Another way to time potential turns in financial markets is to use the Fibonacci sequence itself (i.e., 1, 1, 2, 3, 5, 8, 13, 21, etc.). In Wheat, beginning on March 15, 2005 it is easy to see how this approach successfully identified several significant turns in price (Figure 7-11). Also notice how this methodology points to early October as potentially important. [Editor's note: Wheat prices made two-month highs with a double top on September 30 and October 12, then fell 14% into late November.]

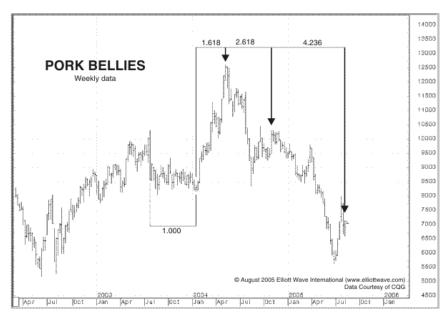


Figure 7-10

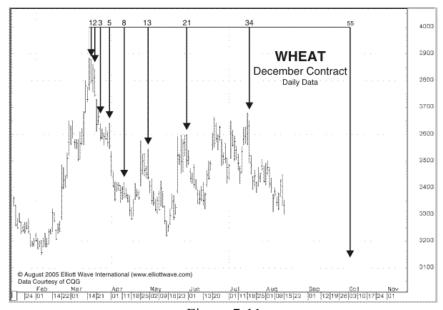


Figure 7-11

A pioneer in the research of Fibonacci relationships in time is Christopher Carolan of Calendar Research. To acquaint yourself with his ground-breaking research into this field, check out his website, www.calendarresearch.com.

#### Conclusion

In the end, just as there is no wrong way to play with a box, there is no wrong way to apply Fibonacci analysis to financial markets. What is even more exciting, there are ways of applying Fibonacci to market analysis that haven't been revealed or discovered yet. So take your Fibonacci box and have fun, and, remember, you are limited only by your imagination. If you find something new, let me know.

[August 2005]



## Who Was Fibonacci and Why Is He Famous?

For a brief history on the Fibonacci sequence, here's an excerpt from Section V of *Trader's Classroom Collection: Volume 1* (pp. 20-21):

"Leonardo Fibonacci da Pisa was a thirteenth-century mathematician who posed a question: How many pairs of rabbits placed in an enclosed area can be produced in a single year from one pair of rabbits, if each gives birth to a new pair each month, starting with the second month? The answer: 144.

"The genius of this simple little question is not found in the answer but in the pattern of numbers that leads to the answer: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, and 144. This sequence of numbers represents the propagation of rabbits during the 12-month period and is referred to as the Fibonacci sequence.

"The ratio between consecutive numbers in this set approaches the popular .618 and 1.618, the Fibonacci ratio and its inverse. (Other ratios that can be derived from non-consecutive numbers in the sequence are: .146, .236, .382, 1.000, 2.618, 4.236, 6.854...)

"Since Leonardo Fibonacci first contemplated the mating habits of our furry little friends, the relevance of this ratio has been proved time and time again. From the DNA strand to the galaxy we live in, the Fibonacci ratio is present, defining the natural progression of growth and decay. One simple example is the human hand, comprising five fingers with each finger consisting of three bones. [Editor's note: In fact, the August 2005 issue of *Science* magazine discusses Fibonacci relationship on the micro- and nano- level.]

"In addition to recognizing that the stock market undulates in repetitive patterns, R.N. Elliott also realized the importance of the Fibonacci ratio. In Elliott's final book, *Nature's Law*, he specifically referred to the Fibonacci sequence as the mathematical basis for the Wave Principle. Thanks to his discoveries, we use the Fibonacci ratio in calculating wave retracements and projections today."

#### Note:

Find the rest of this lesson in Volume 1 of *Trader's Classroom Collection*: www.elliottwave.com/subscribers/traders\_classroom/





## VI. How To Integrate Technical Indicators Into an Elliott Wave Forecast

From The Trader's Classroom Collection: Volume 2

## **How One Technical Indicator Can Identify Three Trade Setups**

I love a good love-hate relationship, and that's what I've got with technical indicators. Technical indicators are those fancy computerized studies that you frequently see at the bottom of price charts that are supposed to tell you what the market is going to do next (as if they really could). The most common studies include MACD, Stochastics, RSI and ADX, just to name a few.

#### The No. 1 (and Only) Reason To Hate Technical Indicators

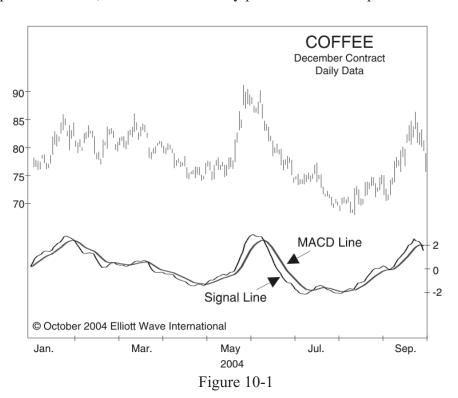
I often hate technical studies because they divert my attention from what's most important — PRICE.

Have you ever been to a magic show? Isn't it amazing how magicians pull rabbits out of hats and make all those things disappear? Of course, the "amazing" is only possible because you're looking at one hand when you should be watching the other. Magicians succeed at performing their tricks to the extent that they succeed at diverting your attention.

That's why I hate technical indicators; they divert my attention the same way magicians do. Nevertheless, I *have* found a way to live with them, and I *do* use them. Here's how: Rather than using technical indicators as a means to gauge momentum or pick tops and bottoms, I use them to identify potential trade setups.

#### Three Reasons To Learn To Love Technical Indicators

Out of the hundreds of technical indicators I have worked with over the years, my favorite study is MACD (an acronym for Moving Average Convergence-Divergence). MACD, which was developed by Gerald Appel, uses two exponential moving averages (12-period and 26-period). The difference between these two moving averages is the MACD line. The trigger or Signal line is a 9-period exponential moving average of the MACD line (usually seen as 12/26/9 ... so don't misinterpret it as a date). Even though the standard settings for MACD are 12/26/9, I like to use 12/25/9 (it's just me being different). An example of MACD is shown in Figure 10-1 (Coffee).

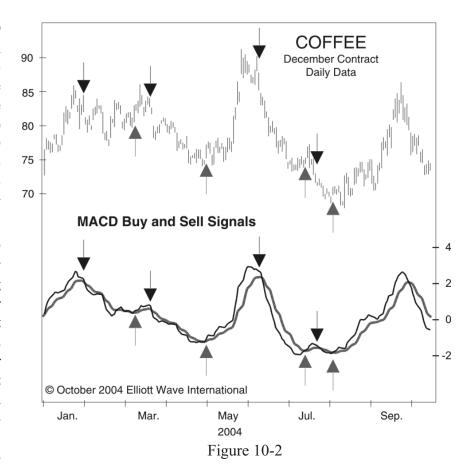


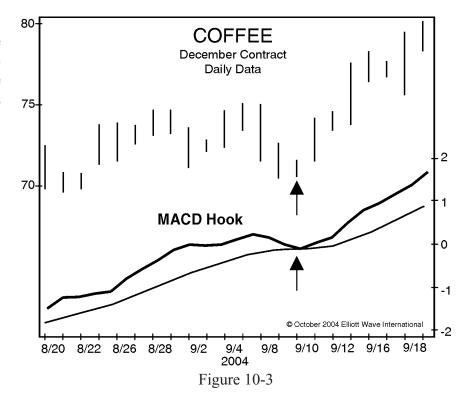
The simplest trading rule for MACD is to buy when the Signal line (the thin line) crosses above the MACD line (the thick line), and sell when the Signal line crosses below the MACD line. Some charting systems (like Genesis or CQG) may refer to the Signal line as MACD and the MACD line as MACDA. Figure 10-2 (Coffee) highlights the buy-and-sell signals generated from this very basic interpretation.

Although many people use MACD this way, I choose not to, primarily because MACD is a trend-following or momentum indicator. An indicator that follows trends in a sideways market (which some say is the state of markets 80% of time) will get you killed. For that reason, I like to focus on different information that I've observed and named: Hooks, Slingshots and Zero-Line Reversals. Once I explain these, you'll understand why I've learned to love technical indicators.

#### Hooks

A Hook occurs when the Signal line penetrates, or attempts to penetrate, the MACD line and then reverses at the last moment. An example of a Hook is illustrated in Figure 10-3 (Coffee).

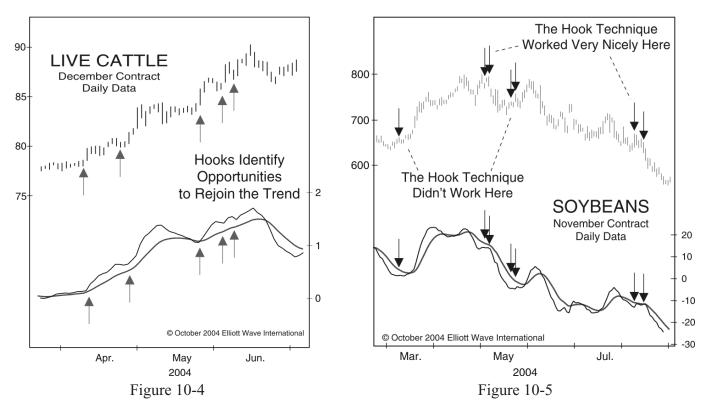




I like Hooks because they fit my personality as a trader. As I have mentioned before, I like to buy pullbacks in uptrends and sell bounces in downtrends (See p. 5 of *Trader's Classroom Collection: Volume I*). And Hooks do just that — they identify countertrend moves within trending markets.

In addition to identifying potential trade setups, you can also use Hooks as confirmation. Rather than entering a position on a cross-over between the Signal line and MACD line, wait for a Hook to occur to provide confirmation that a trend change has indeed occurred. Doing so increases your confidence in the signal, because now you have two pieces of information in agreement.

Figure 10-4 (Live Cattle) illustrates exactly what I want this indicator to do: alert me to the possibility of rejoining the trend. In Figure 10-5 (Soybeans), I highlight two instances where the Hook technique worked and two where it didn't.



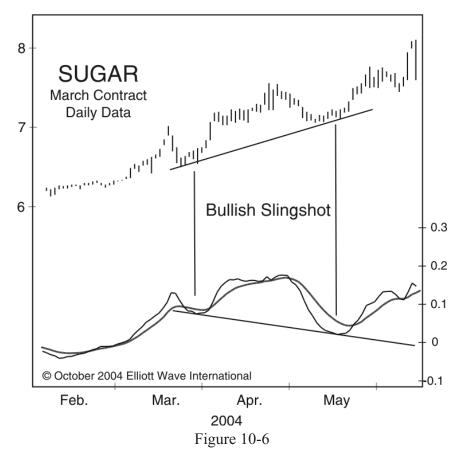
But is it really fair to say that the signal didn't work? Probably not, because a Hook should really just be a big red flag, saying that the larger trend may be ready to resume. It's not a trading system that I blindly follow. All I'm looking for is a heads-up that the larger trend is possibly resuming. From that point on, I am comfortable making my own trading decisions. If you use it simply as an alert mechanism, it does work 100% of the time.

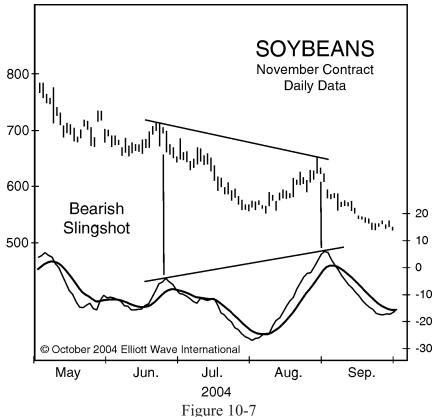
#### Slingshots

Another pattern I look for when using MACD is called a Slingshot. To get a mental picture of this indicator pattern, think the opposite of divergence. Divergence occurs when prices move in one direction (up or down) and an indicator based on those prices moves in the opposite direction.

A bullish Slingshot occurs when the current swing low is above a previous swing low (swing lows or highs are simply previous extremes in price), while the corresponding readings in MACD are just the opposite. Notice in Figure 10-6 (Sugar) how the May low was above the late March swing low. However, in May, the MACD reading fell below the level that occurred in March. This is a bullish Slingshot, which usually identifies a market that is about to make a sizable move to the upside (which Sugar did).

A bearish Slingshot is just the opposite: Prices make a lower swing high than the previous swing high, but the corresponding extreme in MACD is above the previous extreme. Figure 10-7 (Soybeans) shows an example of a bearish Slingshot.









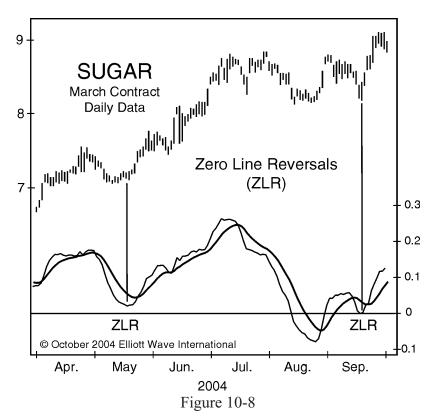
#### Zero-Line Reversals

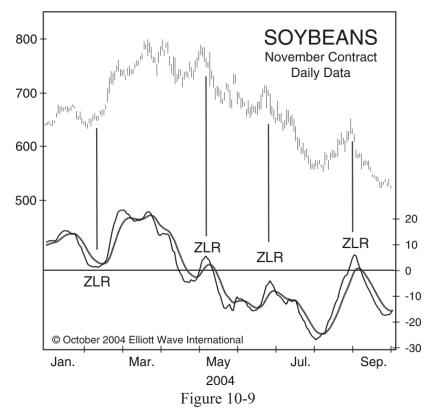
The final trade setup that MACD provides me with is something I call a Zero-Line Reversal (ZLR). A Zero-Line Reversal occurs when either the Signal line or the MACD line falls (or rallies) to near zero, and then reverses. It's similar in concept to the hook technique described above. The difference is that instead of looking for the Signal line to reverse near the MACD line, you're looking for reversals in either the Signal line or the MACD line near zero. Let's look at some examples of Zero-Line Reversals and I'm sure you'll see what I mean.

In Figure 10-8 (Sugar), you can see two Zero-Line Reversals. Each time, MACD reversed above the zero-line, which means they were both bullish signals. When a Zero-Line Reversal occurs from below, it's bearish. Figure 10-9 (Soybeans) shows an example of one bullish ZLR from above, and three bearish reversals from below. If you recall what happened with Soybeans in September 2005, the bearish ZLR that occurred early that month was part of our bearish Slingshot from Figure 10-7. These combined signals were a great indication that the August advance was merely a correction within the larger sell-off that began in April. That meant that lower prices were forthcoming, as forecast in the August and September issues of Monthly Futures Junctures.

So there you have it, a quick rundown on how I use MACD to alert me to potential trading opportunities (which I love). Rather than using MACD as a mechanical buy-sell system or using it to identify strength or weakness in a market, I use MACD to help me spot trades. And the Hook, Slingshot and Zero-Line Reversal are just a few trade setups that MACD offers.

[October 2004]







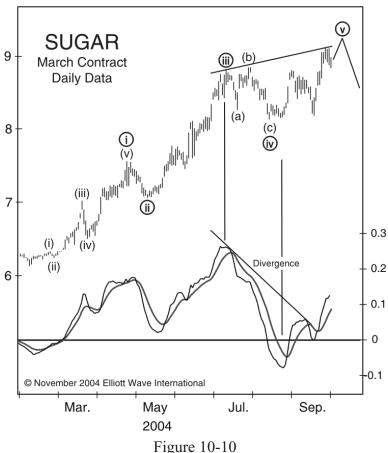
#### **How To Use Technical Indicators To Confirm Elliott Wave Counts**

#### **Top Reason To Love Technical Indicators**

The previous lesson points out one of the redeeming features of technical studies: You can identify potential trade setups using MACD to find Hooks, Slingshots and Zero-Line Reversals (ZLR). In this lesson, I'm going to continue our examination of MACD, and I've saved the best for last. The No. 1 reason to love technical indicators is that you can use one like MACD to count Elliott waves. Let me count the ways (and the waves):

#### You Can Count Impulse Waves and Identify Wave 3 Extremes

Often, an extreme reading in MACD will correspond to the extreme of wave three. This correlation appears when MACD tests zero in wave four, prior to the development of wave five. During a typical wave five, the MACD reading will be smaller in magnitude than it was during wave three, creating what is commonly referred to as divergence. An example is illustrated in Figure 10-10 (Sugar).



In this chart, you can see how the extreme reading in MACD is in line with the top of wave three, which occurred in July. MACD pulled back to zero in wave four before turning up in wave five. And though sugar prices were higher at the end of wave (v) than at the end of wave (iii), MACD readings during wave (v) fell far short of their wave (iii) peak.

So remember that within a five-wave move, there are three MACD signals to look for:

- 1. Wave three normally corresponds to an extreme reading in MACD.
- 2. Wave four accompanies a test of zero.
- 3. Wave five pushes prices to a new extreme while MACD yields a lower reading than what occurred in wave three.

Figures 10-11 and 10-12 (Pork Bellies and Soybeans) show important variations on the same theme. Notice how wave four in Pork Bellies coincided with our Zero-Line Reversal, which I discussed in the previous lesson. Figure 10-12 (Soybeans), shows a five-wave decline that's similar to the five-wave rallies shown in Figures 10-10 and 10-11. Together, these charts should give you a good sense of how MACD can help you count Elliott impulse waves on a price chart.

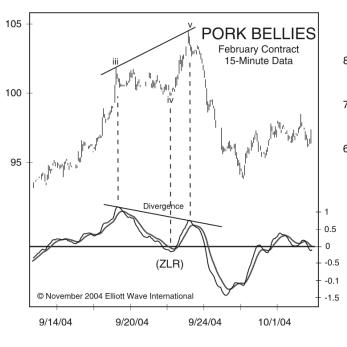


Figure 10-11

## SOYBEANS 800 November Contract Daily Data 700 600 10 -10 -20 Divergence © November 2004 Elliott Wave International -30 Apr. May Jun. Jul. Sep.

Figure 10-12

#### You Can Count Corrective Waves and **Time Reversals**

MACD also helps to identify the end of corrective waves. In Figure 10-13 (Live Cattle), you can see a three-wave decline. If you examine MACD, you'll see that although wave C pushed below the extreme of wave A in price, the MACD reading for wave C was above the wave A level.

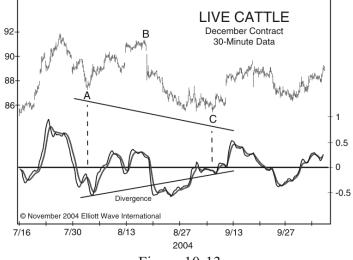


Figure 10-13

Commodity

Figure 10-14 (Corn) illustrates another example. As you can see, the MACD reading for wave C is below that which occurred in wave A, creating a small but significant divergence. Since it can be difficult to see corrective waves while they're happening, it helps to use MACD as a back up.

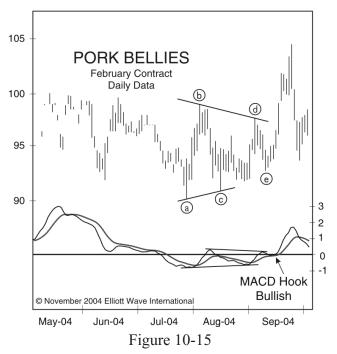
#### You Can Identify Triangles

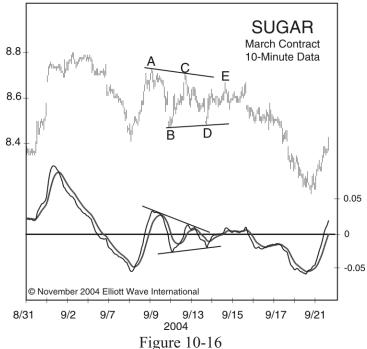
MACD can also help you identify triangles. In Figures 10-15 and 10-16 (Pork Bellies and Sugar) you'll see contracting triangle wave patterns. MACD traces out similar patterns that are concentrated around the zero-line. In other words, triangles in price often correspond to a flattened MACD near zero.

Overall, my love-hate relationship with technical indicators like MACD has worked out well, so long as I've remembered not to get too caught up in using them. I hope that you will find some of your own reasons to love them, too, but I do want to caution you that you can get burned if you become too enamored with them. Remember, it's price that brought you to this dance, and you should always dance with the one that brung you.

## CORN 245 **December Contract** 5-Minute Data 240 235 230 Divergence 225 © November 2004 Elliott Wave International 8/25 8/26 8/27 8/30 8/31 9/1 9/2 9/3 9/7 2004 Figure 10-14

## [November 2004]





## **How Moving Averages Can Alert You to Future Price Expansion**

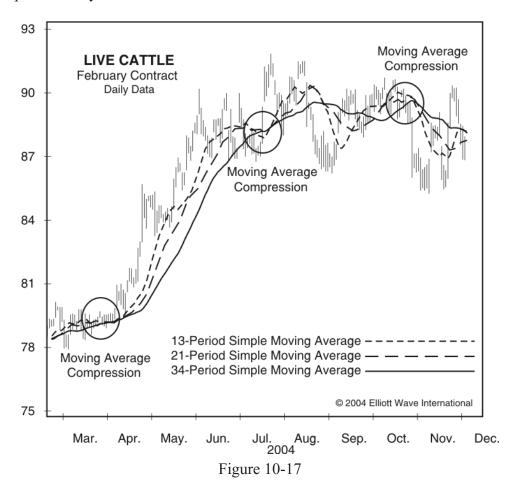
I want to share with you one of my favorite trade set-ups, called Moving Average Compression (MAC). I like it because it consistently works, and you can customize it to your individual trading style and time frame.

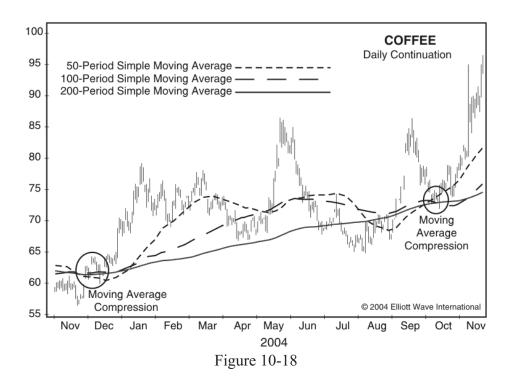
MAC is simply a concentration of moving averages with different parameters, and when it occurs on a price chart, the moving averages appear knotted like tangled strands of Christmas tree lights.

Let's look at Figure 10-17 (Live Cattle). Here, you can see three different simple moving averages, which are based on Fibonacci numbers (13, 21 and 34). The points where these moving averages come together and seemingly form one line for a period of time is what I refer to as Moving Average Compression.

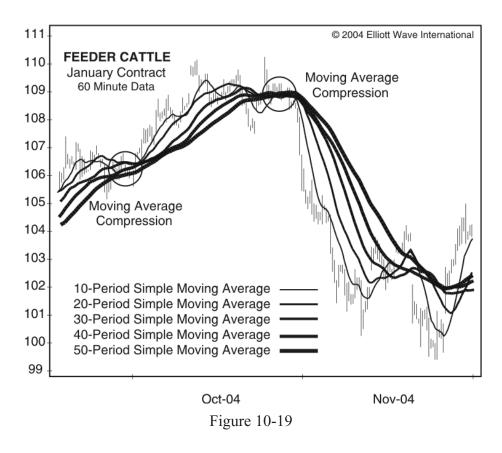
Moving Average Compression works so well in identifying trade set-ups because it represents periods of market *contraction*. As we know, because of the Wave Principle, after markets expand, they contract (when a five-wave move is complete, prices retrace a portion of this move in three waves). MAC alerts you to those periods of price contraction. And since this state of price activity can't be sustained, MAC is also precursor to *price expansion*.

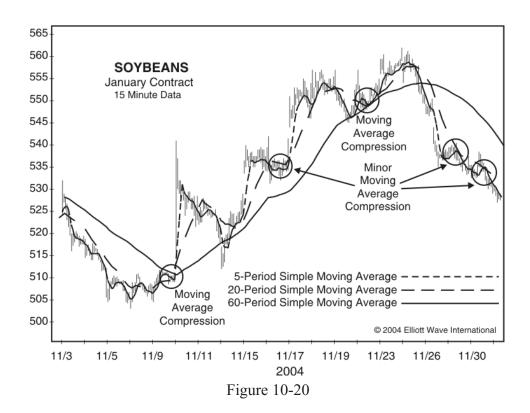
Notice early April in Figure 10-17 (Live Cattle), when the three simple moving averages I'm using formed what appears to be a single line and did so for a number of trading days. This kind of compression shows us that a market has contracted, and therefore will soon expand — which is exactly what Live Cattle did throughout the months of April and May.





I also like MAC because it is such a flexible tool — it doesn't matter what parameters you use. You can use very long-period moving averages as shown in Figure 10-18 (Coffee) or multiple moving averages as shown in Figure 10-19 (Feeder Cattle), and you will still find MAC signals.





It also doesn't matter whether you use simple, exponential, weighted or smoothed moving averages. The end result is the same: the averages come together during periods of market contraction and move apart when the market expands. As with all my tools, this one works regardless of time frame or market. Figure 10-20 (Soybeans) is a 15-minute chart, where the moving averages compressed on a number of occasions prior to sizable moves in price.

I would love to say the concept of Moving Average Compression is my original idea, but I can't. It is actually my variation of Daryl Guppy's Multiple Moving Average indicator. His indicator is visually breathtaking, because it uses 12 exponential moving averages of different colors. I first encountered Guppy's work in the February 1998 issue of *Technical Analysis of Stocks and Commodities* magazine. I highly recommend the article.

[December 2004]





# Appendix A: A Capsule Summary of the Wave Principle

The Wave Principle is Ralph Nelson Elliott's discovery that social, or crowd, behavior trends and reverses in recognizable patterns. Using stock market data as his main research tool, Elliott isolated thirteen patterns of movement, or "waves," that recur in market price data. He named, defined and illustrated those patterns. He then described how these structures link together to form larger versions of those same patterns, how those in turn link to form identical patterns of the next larger size, and so on. In a nutshell, then, the Wave Principle is a catalog of price patterns and an explanation of where these forms are likely to occur in the overall path of market development.

## **Pattern Analysis**

Until a few years ago, the idea that market movements are patterned was highly controversial, but recent scientific discoveries have established that pattern formation is a fundamental characteristic of complex systems, which include financial markets. Some such systems undergo "punctuated growth," that is, periods of growth alternating with phases of non-growth or decline, building fractally into similar patterns of increasing size. This is precisely the type of pattern identified in market movements by R.N. Elliott some sixty years ago.

The basic pattern Elliott described consists of *impulsive waves* (denoted by numbers) and *corrective waves* (denoted by letters). An impulsive wave is composed of five subwaves and moves in the same direction as the trend of the next larger size. A corrective wave is composed of three subwaves and moves *against* the trend of the next larger size. As Figure A-1 shows, these basic patterns *link* to form five- and three-wave structures of increasingly

larger size (larger "degree" in Elliott terminology).

In Figure A-1, the first small sequence is an impulsive wave ending at the peak labeled 1. This pattern signals that the movement of one larger degree is also upward. It also signals the start of a three-wave corrective sequence, labeled wave 2.

Waves 3, 4 and 5 complete a larger impulsive sequence, labeled wave (1). Exactly as with wave 1, the impulsive structure of wave (1) tells us that the movement at the *next* larger degree is upward and signals the start of a three-wave corrective downtrend of the same degree as wave (1). This correction, wave (2), is followed by waves (3), (4) and (5) to complete an impulsive sequence

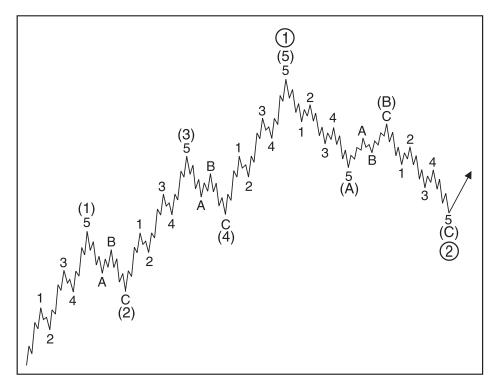


Figure A-1

of the next larger degree, labeled wave ①. Once again, a three-wave correction of the same degree occurs, labeled wave ②. Note that at each "wave one" peak, the implications are the same regardless of the size of the wave. Waves come in degrees, the smaller being the building blocks of the larger. Here are the accepted notations for labeling Elliott wave patterns at every degree of trend (see Figure A-2):

Wave Degree	<b>5</b> s	Wit	h the	Trend		3s Against the Trend			
Grand Supercycle	(I)	(II)	(II)	$\overline{\text{(IV)}}$	(V)	(a)	(b)	(c)	
Supercycle	(I)	(II)	(III)	(IV)	(V)	(a)	(b)	(c)	
Cycle	I	II	III	IV	V	a	b	c	
Primary	1	2	3	4	(5)	A	$^{\odot}$	(C)	
Intermediate	(1)	(2)	(3)	(4)	(5)	(A)	(B)	(C)	
Minor	1	2	3	4	5	A	В	C	
Minute	(i)	(ii)	(iii)	(iv)	$\bigcirc$	a	<b>b</b>	c	
Minuette	(i)	(ii)	(iii)	(iv)	(v)	(a)	(b)	(c)	
Subminuette	i	ii	iii	iv	V	a	b	c	

Figure A-2

Within a corrective wave, waves A and C may be smaller-degree impulsive waves, consisting of five subwaves. This is because they move in the same direction as the next larger trend, i.e., waves (2) and (4) in the illustration. Wave B, however, is always a corrective wave, consisting of three subwaves, because it moves *against* the larger downtrend. Within impulsive waves, one of the odd-numbered waves (usually wave three) is typically longer than the other two. Most impulsive waves unfold between parallel lines except for fifth waves, which occasionally unfold between converging lines in a form called a "diagonal triangle." Variations in corrective patterns involve repetitions of the three-wave theme, creating more complex structures that are named with such terms as "zigzag," "flat," "triangle" and "double three." Waves two and four typically "alternate" in that they take different forms.

Each type of market pattern has a name and a geometry that is specific and exclusive under certain rules and guidelines, yet variable enough in other aspects to allow for a limited diversity within patterns of the same type. If indeed markets are patterned, and if those patterns have a recognizable geometry, then regardless of the variations allowed, certain relationships in extent and duration are likely to recur. In fact, real world experience shows that they do. The most common and therefore reliable wave relationships are discussed in *Elliott Wave Principle*, by A.J. Frost and Robert Prechter.

## **Applying the Wave Principle**

The practical goal of any analytical method is to identify market lows suitable for buying (or covering shorts), and market highs suitable for selling (or selling short). The Elliott Wave Principle is especially well suited to these functions. Nevertheless, the Wave Principle does not provide *certainty* about any one market outcome; rather, it provides an objective means of assessing the relative *probabilities* of possible future paths for the market. At any time, two or more valid wave interpretations are usually acceptable by the *rules* of the Wave Principle. The rules are highly specific and keep the number of valid alternatives to a minimum. Among the valid alternatives, the analyst will generally regard as preferred the interpretation that satisfies the largest number of *guidelines* and will accord top alternate status to the interpretation satisfying the next largest number of guidelines, and so on.

Alternate interpretations are extremely important. They are not "bad" or rejected wave interpretations. Rather, they are valid interpretations that are accorded a lower probability than the preferred count. They are an essential

aspect of investing with the Wave Principle, because in the event that the market fails to follow the preferred scenario, the top alternate count becomes the investor's backup plan.

## Fibonacci Relationships

One of Elliott's most significant discoveries is that because markets unfold in sequences of five and three waves, the number of waves that exist in the stock market's patterns reflects the Fibonacci sequence of numbers (1, 1, 2, 3, 5, 8, 13, 21, 34, etc.), an additive sequence that nature employs in many processes of growth and decay, expansion and contraction, progress and regress. Because this sequence is governed by the ratio, it appears throughout the price and time structure of the stock market, apparently governing its progress.

What the Wave Principle says, then, is that mankind's progress (of which the stock market is a popularly determined valuation) does not occur in a straight line, does not occur randomly, and does not occur cyclically. Rather, progress takes place in a "three steps forward, two steps back" fashion, a form that nature prefers. As a corollary, the Wave Principle reveals that periods of setback in fact are a requisite for social (and perhaps even individual) progress.

## **Implications**

A long-term forecast for the stock market provides insight into the potential changes in social psychology and even the occurrence of resulting events. Since the Wave Principle reflects social mood change, it has not been surprising to discover, with preliminary data, that the trends of popular culture that also reflect mood change move in concert with the ebb and flow of aggregate stock prices. Popular tastes in entertainment, self-expression and political representation all reflect changing social moods and appear to be in harmony with the trends revealed more precisely by stock market data. At one-sided extremes of mood expression, changes in cultural trends can be anticipated.

On a philosophical level, the Wave Principle suggests that the nature of mankind has within it the seeds of social change. As an example simply stated, prosperity ultimately breeds reactionism, while adversity eventually breeds a desire to achieve and succeed. The social mood is always in flux at all degrees of trend, moving toward one of two polar opposites in every conceivable area, from a preference for heroic symbols to a preference for antiheroes, from joy and love of life to cynicism, from a desire to build and produce to a desire to destroy. Most important to individuals, portfolio managers and investment corporations is that the Wave Principle indicates in advance the relative magnitude of the next period of social progress or regress.

Living in harmony with those trends can make the difference between success and failure in financial affairs. As the Easterners say, "Follow the Way." As the Westerners say, "Don't fight the tape." In order to heed these nuggets of advice, however, it is necessary to know what is the Way, and which way the tape. There is no better method for answering that question than the Wave Principle.

To obtain a full understanding of the Wave Principle including the terms and patterns, please read *Elliott Wave Principle* by A.J. Frost and Robert Prechter, or take the free *Comprehensive Course on the Wave Principle* on the Elliott Wave International website at www.elliottwave.com.





#### EWI eBook

## **Commodity Trader's Classroom**

By Jeffrey Kennedy, Elliott Wave International

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