

EXPLOSIVE  
STOCK TRADING  
STRATEGIES

**DR. SAMIR ELIAS**

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# **EXPLOSIVE STOCK TRADING STRATEGIES**

**BY  
DR. SAMIR ELIAS**

Published June 2011

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Printed in the United States

ISBN 13: 978-0-9846387-0-3

ISBN 10: 0-9846387-0-9

Published by: Lovoc Group Inc

P.O. Box 12974

Wichita KS 67277

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# INTRODUCTION

The question I get asked often is: can anyone learn how to become a successful trader? My answer to this question is both yes and no. Not everyone has the personality traits to be a successful short term trader but everyone can learn how to make money trading the market.

If this statement appears contradictory to you, I recommend you read the Market Wizards book series by Jack Schwager in which he profiles several highly successful traders. The only common characteristic amongst these traders is their high level of success. Other than that they are quite different in the markets they trade, the time frames they trade in, and the trading vehicles they use. Some are fundamental long term traders, others are short term scalpers, some trade stocks, others bonds and some trade futures. In essence each uses a trading system that fits their personality and style and has unwavering faith in their system to the point where they “perceive” it as a sure winner over a period of time.

The key here is the trader’s perception of the system or approach they use. While no trading system is one hundred percent profitable, the trader’s perception that the system is a sure winner is more likely to give them the confidence to pull the trigger rather than hesitate and sit and watch.

In my years of leading a local trade group, I have noticed that certain traders are able to pick up a system I present, add their own slight modifications to it, trade it and do very well. On the other hand, some traders are, for some reason, unable to be profitable using the same exact system. This observation peaked my interest especially since the ideas were presented to both at the same time in a similar manner.

I wondered whether the successful group had more experienced, more educated, or mathematically oriented members; but I found out that both groups had experienced and inexperienced traders with varying backgrounds and education levels.

I have concluded after working one on one with selected struggling traders that the reason they are unable to succeed is

their desire to be “safe”. This is manifested by their purchase of stocks they perceive to be “sure winners” where the success story is already known to everyone.

Their argument is usually as follows “ I want to buy a fundamentally strong company so that in case I am wrong and the stock goes down, I can hold on since the fundamentals will bring the stock back up”.

What I learned is that strong fundamentals mean different things to different traders. Some perceive P/E ratio as the key, others consider revenue or earnings growth, others debt ratio among many other factors.

To have the correct attitude towards the market you will need to develop winning habits. You do this not by winning every trade, but by embracing the risk and realizing that you can capitalize on market opportunities by using sound strategies. You probably heard the saying “Success breeds more success”. The best way to become a winning trader is to put yourself into a state of mind that will reward you again and again. The way to do this is by making money over and over again through rewarding yourself with taking profits as a stock moves higher. This will minimize the hesitation to take a trade because of the fear of losing.

Remember that the psychological factors are the most important aspects of trading. When you see an opportunity, do you freeze and decide to watch the stock for a period of time, taking action after the move has started?; or do you follow your system and instincts and take on the risks that the crowd is running away from? Remember what I said often, “the crowd is wrong most of the time, especially at major turns”.

Actually these statements are not new and that is why many traders buy books on trading psychology to change their losing ways. However, from my experience with the struggling traders I worked with, these books offered little help except for the temporary motivational pick me up that disappeared with the first loss.

I have experienced this first hand when working with traders who struggled to achieve profitability using the systems I presented; even though others were able to be highly profitable us-

ing the same system. For example one trader will not pull the trigger unless the price to earnings ratio of the stock meets his criteria. For that reason he hesitates and waits since he does not perceive the trade as a sure winner unless it meets his criteria of the right P/E. In essence a trader is likely to have a perception of a certain characteristic a winning stock must possess and for that reason, he hesitates to trade stocks that do not fit these parameters.

This observation prompted me to conduct an experiment to see if by changing the trading methodology into one that fits the style of the struggling group of traders, I can improve their profitability. It was my observation, after talking to the majority of struggling traders in my group, that there is quite a bit of hesitation to take a trade usually because it does not meet all of their requirements of what they perceive to be a winner. In addition, they were hesitant to enter a trade since they felt a high level of anxiety in determining when to exit. This anxiety is likely to have been brought on by previous market losses that damaged their confidence. My conclusion was that this group of traders is likely to feel more comfortable with longer holding times and fundamentally sound stocks. The longer holding times will remove the anxiety of having to exit quickly and the fundamental strength of the stock will give the trader the perception of having a “sure winner”. I thus formed a new group focusing on “technofundamental” trading with a holding period of few months and up to a year. In this group we implemented a simple combination of technical and fundamental criteria to take positions after a stock’s earnings release. The fundamental aspects are based on the RESHE system I introduce in chapter 12, in combination with three chart patterns that tend to appear near earnings.

As a result of using this system, the change in traders level of confidence was phenomenal. They pulled the trigger without hesitation as soon as the technical signal appeared on the chart, since they perceived the stock as a “sure winner” due to its fundamental strength and the strict entry criteria. In addition, the anxiety of knowing when to get out was removed since they knew they would not have to exit until few months later in most cases.

In the few instances the trade did not work, they had a clear stop as well as an exit strategy included in the system.

Thus, by changing the trading method to one that fits these traders personality and style better, the anxiety and hesitation were replaced by confidence that grew with each winning trade. This experiment was so successful that I kept this group going parallel to the original one. Using the methods in Chapter 12 we were able to identify huge winners such as FFIV, APKT, CRM, TSL, GMCR, ISLN, ARUN, and many more.

This book offers a broad spectrum of trading techniques that fits the style of almost any type of trader. These methods were selected based on their exceptional results, ease of application and diversity of approach. I have used these methods in my local trade groups with great success and was encouraged to write this book by group members whose friends wanted to benefit from these trading systems but were unable to join these groups due to limited space.

Your success as a trader highly depends on your ability to develop a system that fits your own personality and trading style. If you prefer to merge fundamental with technical parameters in your trading then Chapters 1 and 12 are for you. Chapter 1 makes use of simple information such as insider ownership, share float etc., while Chapter 12 uses more elaborate balance sheet information. These fundamental criteria are then combined with technical indicators to complete the trading system.

For traders whose objective is to scalp in short time frames, I have included several chapters that employ price bar sequences to determine entry and exit points in and out of a trade. These include: Chapter 6 (signal price bars), Chapter 7 ( Small price bars), Chapter 8 (Price Spikes), and Chapter 9 (Reverse price swings). The focus of these chapters is to use open and close prices, price bar ranges, and bar sequences to scalp in short term time frames between few days to a couple of weeks. Price bar formations are also used to determine stops and exit points.

If your preferred trading style is exclusively using technical indicators, I have included several chapters that focus on special setups using unique combinations of technical signals that can

deliver explosive profits. These include : Chapter 2 (Consolidation pattern breakouts), Chapter 3 ( Divergent Signals), Chapter 5 (Momentum Shifts), and Chapter 11 ( Falling Knives). These chapters focus on setups that are well known to deliver big profits, and then shows you how to recognize the pattern and time the entry within a short period from an explosive move.

For those traders who are fascinated by chart patterns and geometrical shapes such as triangles, rectangles, wedges, etc, I have included two chapters: Chapter 4 (Chart patterns) and Chapter 10 (Price bar patterns). The first chapter focuses on geometrical shapes such as falling rectangles, single and multiple wedges, ascending and reverse ascending triangles and many other powerful not so common shapes. The chapter on price bar patterns discusses powerful major bullish and bearish price pattern sequences and the minor patterns embedded within them.

One of my trading group members came up with an idea to use price bar patterns as a litmus test to predict whether a geometrical shape chart pattern is likely to result in a price move as expected. For example if you see a bullish ascending triangle pattern, but a bearish micro price bar pattern is embedded within the macro chart pattern, failure of the ascending triangle is very likely. This idea was so successful that I decided to use in my own trading and was able to reduce geometrical shape failures from over 30 percent to below 10 percent.

One of the members in my original group had a problem trading stocks he did not perceive as “cheap”. He focused on finding stocks that have fallen precipitously, hoping to take a position just before they reversed delivering substantial profits. Unfortunately he racked up one loss after another until his confidence was damaged to the point where he could not pull the trigger. He would watch the stock, sit and wait for it to get cheaper, just to see it reverse before he established a position. Essentially, this person was trying to catch a falling knife.

After trying without success to convince him to trade with the trend, I decided to put together a system that fits his trading style. This is summarized in Chapter 11 “Explosive profits trading

falling knives”, and it involves using three technical indicators. It introduces an interesting concept of a narrow channel formation between two of the indicators giving clear entry and exit signals when combined with the third indicator. This method had clear entry and exit criteria and it delivered consistent profits, but most importantly it fit the trader’s style by requiring that the stock has dropped at least forty percent from its last peak. This allowed the trader to stay within his comfort zone of trading “cheap” stocks. After using this approach for few months, the trader’s confidence improved significantly, due to the consistent profits delivered by this approach.

To benefit from this book, I recommend you become proficient in the concepts that fit your own trading style and comfort zone. Learn these concepts well, first by paper trading, and then by trading them in real market conditions.



## Chapter 1

---

### **Explosive Volume Based Breakouts**

Most traders are aware of the importance of volume as a trading tool. A price increase accompanied by heavy volume is seen as an indication of potential further uptrend. Unfortunately, in most cases, volume increases are temporary as are accompanying price increases. How then can we tell whether a volume spike accompanied by a price increase is a sign of a short term sustainable uptrend?

My experience has shown that one of the most important factors is the behavior of the stock before a volume spike occurs. It is essential that the stock shows a flat price and volume behavior before the spike. This is an indication that the stock drew little attention until the volume spike signaling an imbalance between buy and sell interest. This is where my favorite saying in stock market language “from small bars come big moves” comes from.

The main reason why most traders miss big moves is that they are asleep not watching when a stock is listless until a sudden move occurs, at which point they believe they have missed the boat and take no action. While in many cases this may be the right decision, in others, when the right technical and fundamental conditions are present, such a move may just be the tip of the iceberg.

In this chapter I will present the conditions that are required for a volume spike to be considered as a real precursor to a coming short term move. Some of the conditions I will present are based on logic while others are based on experience.

Fundamental requirements can be justified by common sense while technical conditions are mostly based on my trading experience. I will thus explain the reasons behind some, while I will ask that you trust others based on the extensive actual trading over a long period of time.

When a stock is under the radar trading low volume with little price movements, there is no way to tell when a high level of interest occurs until a volume spike appears. It is thus not wise to enter a position before such a spike occurs since you can never tell when or if it ever will. The focus of this chapter is to answer whether and under what conditions an entry is justified.

### **Fundamental and “technofundamental” requirements**

Many traders follow insider buying and selling as a guide to which stocks to trade on either the long or short side. This technique has become quite prevalent to the point where some advisory services are dedicated to following insider moves and then giving recommendations accordingly. The problem with this strategy is twofold:

- (1) Insiders can at times be wrong and
- (2) Insiders have a much longer time frame than the average trader.

Having said that, insider participation is still important and we factor that into our criteria by requiring that 10% or more of the company shares are held by insiders. We thus do not care who buys or sells as long as insiders maintain at least a 10% ownership in the 3 months before the volume spike. This is the one purely fundamental requirement necessary for an explosive volume breakout trade.

For sudden buying interest to significantly move a stock, there has to be what we call a “share squeeze”. In other words there isn’t enough available shares to buy when sudden interest develops, so the price has to be bid up to entice holders to sell. This necessitates that the company has a small number of shares available to trade or a “low float”; ideally the float should be below 35 million shares.

A sudden move in a stock on large volume is on occasion

a result of news; good earnings report, drug approval, buyout rumors, or analyst upgrade. In most cases smart money has bought before the news and is likely to sell after the news at least resulting in a temporary correction. We thus prefer that the volume spike occurs on no news and is a result of hidden interest by big players in anticipation of things to come.

In summary, the fundamental and “technofundamental” requirements are:

- (1) Insider ownership of 10% or more of the company’s shares.
- (2) Low float of no more than 35 million shares.
- (3) Volume spike occurring on no news.

### **Technical Requirements**

The effectiveness of this system lies in its simplicity since most indicators are volume and price related with no complex technical signals used. Thus even beginners can apply this system with the help of a basic scanning software.

For sudden buying interest to result in a volume spike that is a precursor to a continued advance, it is essential that any resistance above the spike is low volume. In other words “low overhead” resistance. We require that there is no overhead resistance with volume higher than twice the 50 day simple moving average during the last 12 months. We also require that the volume spike results in a price higher than the high in the last 60 days. This is necessary to insure that any significant resistance in the short term is broken.

To facilitate the satisfaction of the two conditions above we require that the stock trades low volume, so that even a moderate amount of buying will result in a significant volume increase and a price break above the 60 day high. It is preferred that the 50 day moving average of volume before the spike is below 300,000 shares. Such stocks are usually of little interest to big market players, and the only reason they will buy into them is an expectation of a major move as a result of an anticipated change to company fundamentals. This can be in the form of a new product, a major alliance, coming drug FDA approval or other reasons.

In such stocks with low liquidity it is impossible for big players to buy without showing their hand and alerting savvy small traders on what is to come.

In summary the technical requirements discussed up to this point are:

- (1) Low overhead resistance in the past 12 months with maximum traded volume no more than twice the 50 day moving average.
- (2) Price on spike day above 60 day price high.
- (3) 50 day volume moving average is 300,000 shares or less.

Other technical volume and price requirements listed below are based on my experience trading this pattern for over 4 years with great success, these are:

- (4) Closing price on spike day is above the opening price on the same day.
- (5) Closing price on spike day is above the closing price on the day before the spike.
- (6) Closing price on spike day is above \$2.00.
- (7) Closing price on spike day is below \$25.
- (8) Volume after the spike is at least three times the volume traded the day before the spike.
- (9) 50 day exponential moving average of the volume traded before the spike day is no more than 50% higher than the simple 50 day moving average of that volume.

**ALERT1:** Condition (9) points to a gradual volume increase in most recent days before the spike. This increase was not enough to push the stock above the 60 day high, nonetheless it indicated increased interest in the stock. This assures us that once a volume spike occurs it is unlikely to be temporary due to the build up of buying interest in the recent days. The heavier weighting placed on the most recent time frames is the reason for using the exponential moving average.

**ALERT2:** When scanning for “explosive volume breakout stocks” use your scanning software to narrow the field as much as pos-

sible by entering as many of the criteria as the software will allow. Then check each stock and pick the one that satisfies most of the criteria which should be easily done since most of the requirements are straightforward.

### **Practical Applications**

First let me stress that stocks that meet all the required conditions do not appear often. In a strong up trending market you can expect to find a solid candidate every couple of weeks, while in a weak market, you may come across only one stock every couple of months. This is why it is critical that you run the screen on daily basis when the market is up trending, while in a downtrend you can use a different scan.

The scan I ran on September 15, 2009 produced one ideal candidate namely Clearfield (CLFD). This was picked from around 10 stocks that came up. Although all of them satisfied the scan parameters, this was the only one that satisfied all fundamental requirements too. I will thus use this stock to illustrate how this setup is traded under real market conditions. I will also demonstrate how to pick your entry point and when to exit the trade.

### **Trade Candidate (CLFD) Data**

Shares Float: 8,210,000 (less than 35 million)

Total shares outstanding: 11,983,131

Percent owned by insiders: 25.92% (above 10%)

Percent owned by institutions: 10.10%

Average daily volume traded: 70,500 (less than 300,000)

Volume traded day before spike: 90,163

Volume traded spike day: 1,787,182 (more than 3 times 90,163)

50 Day volume exponential moving average: 105,000 (less than 1.5 times 90,163)

60 day price high: \$3.46 on 9/2/2009

12 month overhead resistance after spike: None

Open price day of spike: \$3.17 on 9/15/2009

Closing price day before spike: \$3.09 on 9/14/2009

Closing price on spike day: \$4.11 on 9/15/2009. (This is greater

than \$3.46 which is the 60 day high. It is also greater than the opening price \$3.17 and the closing price the day before \$3.09)  
Price high on day of spike: \$4.55 on 9/15/2009  
Mid point on day of spike:  $(\$3.17 + \$4.55) / 2 = \$3.86$  on 9/15/2009

### **Entry Strategy**

As can be seen from the chart on page 7 the spike occurred on September 15, 2009 and is marked by an **X**.

If as we believe this spike is a precursor to a strong short term move the stock should remain under accumulation. This implies that even an intraday drop should not push the stock much below the middle of the price range on the day of the spike. The best way to get a reasonable entry into the stock without “chasing” it is to place a limit at 5% above the mid point of the price range on the spike day. This order should be kept open for 3 days.

**ALERT1:** You are probably thinking why not wait for a pullback to a lower price. The stock just moved from \$3.17 to above \$4 in one day which is a large move by any standard. This in fact is why this trade is called an “explosive volume breakout”. There is little resistance above the spike and even an intraday pullback much below the midpoint is unlikely. Considering that such trades are rare and have a high reward to risk ratio, an entry 5% above the midpoint of the spike insures we get a fill without chasing the stock.

With the mid point on spike day at \$3.86 we will thus place a limit buy order the next day at 5% above this point or at \$4.05. This order was executed on 9/16/2009 or the day after the spike.

As common with heavy volume breakouts, the advance continues few days after the spike followed by a correction.

In this case CLFD moves above \$6 on an intraday spike, and then falls into a corrective pattern. It is thus important to exit the trade while the momentum is pushing the price higher even though we may not exit at the top. For this reason I am proposing the exit strategy below.

**CLFD (Clearfield Inc.) Nasdaq GM**

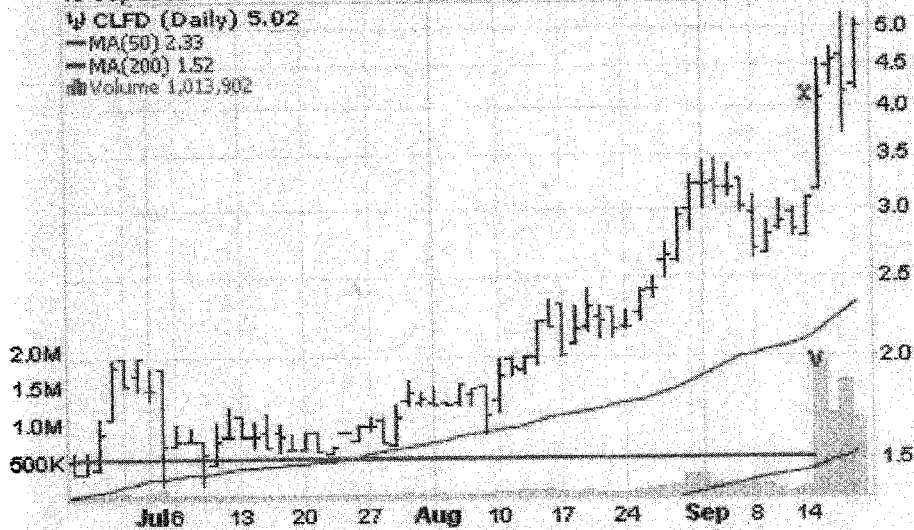
18-Sep-2009 **O 4.24 H 5.10 L 4.20 C 5.02 V 1.0M Chg +0.84 (+20.10%)**

CLFD (Daily) 5.02

MA(50) 2.33

MA(200) 1.52

Volume 1,013,902



## **Exit Strategy using technical indicators**

Exiting volume based breakout trades is tricky since this is in essence a momentum play. Such trades can reverse quickly with profit dwindling and often turning into a loss.

In formulating an exit strategy for such trades, it is critical to keep it simple so a quick decision can be made. Even if some profit may be left on the table, it is better to get out while momentum is on our side rather than risk a violent reversal.

## **Technical Indicator Signals**

After experimenting with several technical indicators, I found that the Commodity Channel Index (CCI) divergent signals are best in deciding when to exit an explosive volume breakout trade.

The Commodity Channel Index (CCI) is a momentum indicator that measures the location of price in relation to its moving average. The formula for CCI is:

$$\text{CCI} = (\text{NP} - \text{SMANP}) / (0.15 * \text{MD})$$

**Where:**

**NP = Normalized Price = (High + Low + Close)/3**

**SMANP = 20 period simple moving average (SMA) of Normalized price**

**MD = Mean Deviation =  $\sum_{n=1..20} (\text{Abs}((\text{SMANP})_n - (\text{NP})_n)) / 20$**

**Where: Abs = absolute value**

**n = period 1 to 20.**

Imagine that the price and its moving average are connected by a rubber band. When the price deviates significantly from the moving average due to a strong momentum move, the rubber band becomes over stretched and is likely to snap back.

When the CCI moves above +200 the rubber band is over stretched, meaning that the price has deviated significantly from its moving average. Thus a down reversal in price to bring it closer to its moving average is likely. On the other hand when the CCI drops below -200, the rubber band is over stretched to the downside and a reversal to the upside is likely thus snapping back the price closer to its moving average.

When the price moves to a higher peak but the CCI forms



a lower peak, a negative divergence has taken place.

As the price moves higher and deviates away from its moving average, the numerator of the CCI equation becomes larger. If the value of the CCI is to be lower, this requires higher values of the MD. This implies that the sum of the 20 period difference between the simple moving average of the normalized price and the price has a higher value. In other words the price has to be moving closer to its moving average or the over stretched rubber band has to snap back.

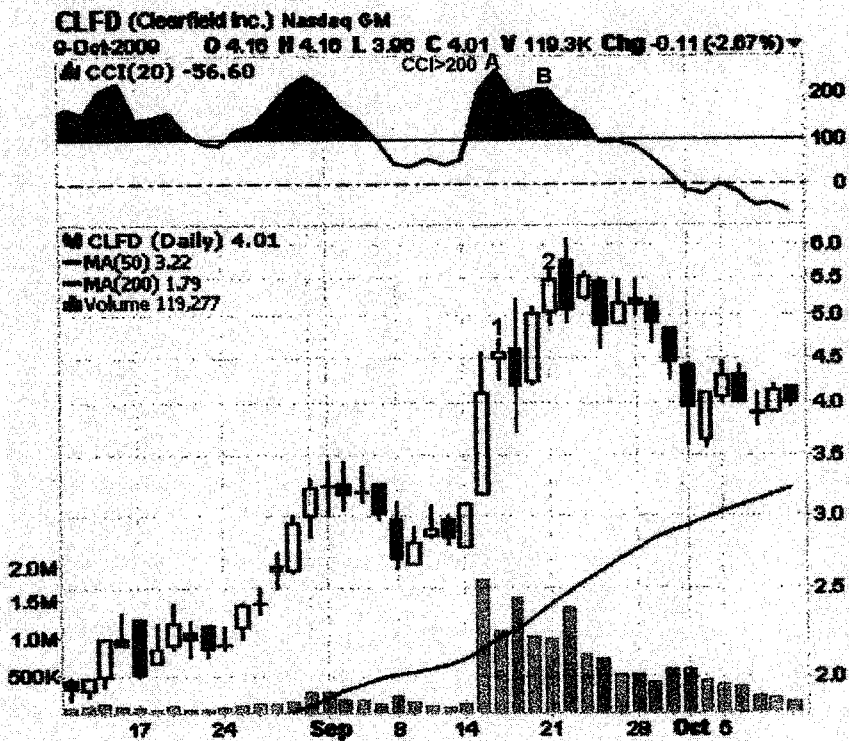
As you will see in the following examples, CCI divergences are effective exit indicators for momentum trades since they are able to point to a coming price drop before it takes place.

### **Example 1: Clearfield (CLFD) exit strategy 1**

As discussed in the entry strategy section, we bought CLFD the day after the spike at \$4.05. This was on 9/16/2009, the day after the volume breakout occurred marked by an X on the chart page 7. The CCI / price chart on page 10 clearly demonstrates a negative divergence between CCI and price. Notice that as the price moves from point **1** to point **2** forming a new high, the CCI moves from corresponding point **A** to point **B** forming a lower high. Pay attention also to the fact that at point **A**, CCI > 200 signaling an overbought condition and a possible reversal. Our exit should be made the day after a negative CCI divergence occurs at point **B**. Using this timing technique would have allowed us to sell over \$6.00 for a profit over 50%.

### **Example 2: Biotime (BTIM)**

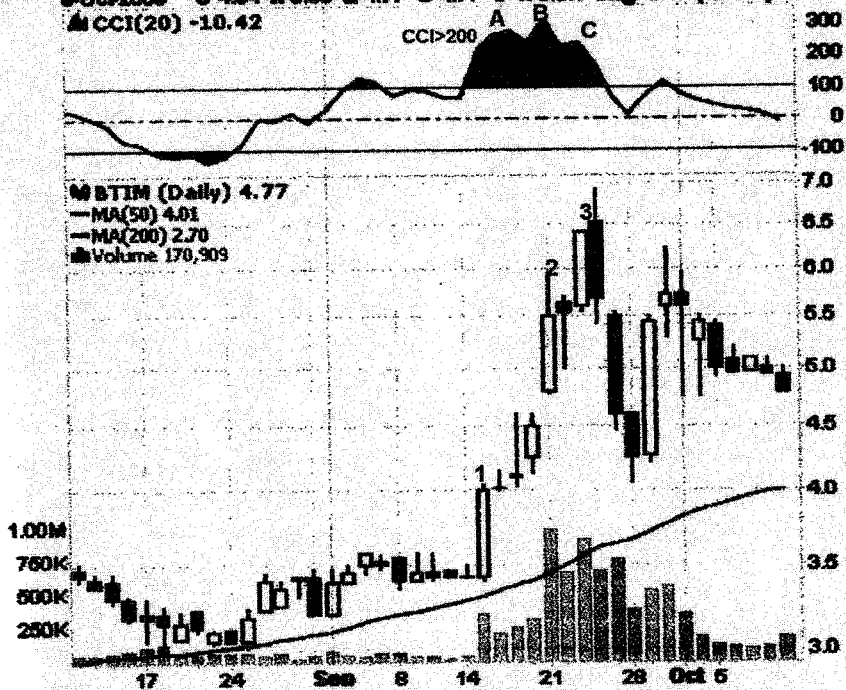
By studying the CCI / price chart on page 11, it can be seen that the price moved higher from point **1** to point **2** and to an even higher peak at point **3**. The price move from point **1** to point **2** was accompanied by a confirming move in the CCI from point **A** to a higher point **B**. On the other hand the price move from point **2** to the price peak at point **3** resulted in a CCI negative divergence between points **B** and **C**. This is an indication that the price at point **3** has diverged enough from the moving average signaling a likely coming correction.



**BTIM (BioTime, Inc.) Nasdaq BB**

9-Oct-2000 O 4.94 H 5.00 L 4.77 C 4.77 V 170.9K Chg -0.17 (-3.44%)

▲ CCI(20) -10.42



An entry at around \$4.00 on a heavy volume breakout and a sell after the CCI divergence signal at around \$5.50 would have resulted in a profit of around 40%.

Please note that this example was not used as a candidate in this chapter since all the required criteria were not met. My reason for using it is to demonstrate the effectiveness of the CCI divergence based exit strategy on momentum trades.

### **Exit strategy using trend indicators**

In my book “Generate thousands in cash on your stocks before buying or selling them” I have presented the three day difference of the five day oscillator as a method to measure short term strength and direction of a price move of a stock. In this section I will demonstrate the utility of this method in exiting momentum type trades.

**ALERT:** I may be repeating some material from the aforementioned book in this section. The reason for this is that my intention is for this book to stand alone, and a trader should not be required to buy the other book just to learn this concept.

Momentum trades are notorious for changing direction quickly with profit turning into a loss if a momentum trade is not exited in a timely manner. To avoid getting caught in an often quick and violent pullback, a reliable method for measuring the short term strength and the directional move of a stock is needed.

This is where the five day oscillator and its three day difference come into play. The five day oscillator generates numbers between zero and 100. Results between zero and 30 are bearish, 30 and 70 are neutral and above 70 are bullish.

The formula for the five day oscillator is:

$$\text{Oscillator} = [(A+B)100]/[(\text{highest price} - \text{Lowest Price})2]$$

**Where:**

**A = Highest price in 5 days – Open 5 days ago**

**B = Last Day’s close – Lowest price in 5 days**

To time our exit from a momentum trade accurately, we need to know the direction and speed of the coming move. This is where

the three day difference of the 5 day oscillator proves its usefulness.

The formula for the three day difference is:

**Three day difference = value of the five-day oscillator today – value of the oscillator three days ago.**

A positive value of the three-day difference indicates that the price momentum is still positive while a negative number indicates negative momentum. A large number indicates that a substantial move is likely to occur in the future, the direction of which depends on whether the three-day difference is negative or positive.

A high positive number decreasing in magnitude as the days pass, indicates that the rally is slowing down and the likelihood of the stock entering a consolidation pattern or reversing direction. A warning signal is given when the three-day difference changes from positive to negative. A sell signal is given with a second negative reading of the three day difference.

**ALERT:** With momentum trades it is possible that few days of moderate strength are left in the stock after the first negative reading occurs. Often you will see low number positive readings for a day or two after the first negative three day difference number is produced. For this reason, and to take advantage of a further moderate price advance, we will wait for a second negative reading before executing the sell order.

The use of this method will be clearer by studying the following example.

### **Example 3: Clearfield (CLFD) exit strategy 2**

As indicated in a previous section of this chapter we entered the trade on 9/16/09 at \$4.05. To calculate the three-day difference of the five-day oscillator for that day we will need oscillator data starting 9/14/09. This in turn requires price data starting five days before or on 9/08/09.

The table below shows price data starting on this date:

<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
9/08/09	2.97	3.11	2.63	2.69
9/09/09	2.66	2.91	2.66	2.80
9/10/09	2.86	3.08	2.84	2.90
9/11/09	2.97	3.00	2.79	2.84
9/14/09	2.78	3.09	2.78	3.09
9/15/09	3.17	4.55	3.17	4.11
9/16/09	4.49	4.72	4.25	4.55
9/17/09	4.60	5.20	3.71	4.18
9/18/09	4.24	5.10	4.20	5.02
9/21/09	5.05	5.64	4.89	5.48
9/22/09	5.75	6.09	4.90	5.09
9/23/09	5.24	5.58	5.21	5.52
9/24/09	5.45	5.49	4.60	4.88
9/25/09	4.91	5.48	4.90	5.16

The first step after our entry into the stock is to calculate the five-day oscillator and the three-day difference after the market closes on the trade entry day.

**Date: 9/16/09**

$$A = 4.72 - 2.86 = 1.86$$

$$B = 4.55 - 2.78 = 1.77$$

$$\text{Oscillator} = (1.86 + 1.77)100 / (4.72 - 2.78)^2 = 93\%$$

As you can see this is a bullish reading .

The next step is to calculate the three-day difference for the day of interest. This requires oscillator readings for 9/14/09 and 9/15/09

**Date: 9/14/09**

$$A = 3.09 - 2.97 = 0.12$$

$$B = 3.09 - 2.63 = 0.46$$

$$\text{Oscillator} = (0.12 + 0.46)100 / (3.09 - 2.63)^2 = 63\%$$

**Date: 9/15/09**

$$A = 4.55 - 2.66 = 1.89$$

$$B = 4.11 - 2.66 = 1.45$$

$$\text{Oscillator} = (1.89 + 1.45)100/(4.55 - 2.66)^2 = 88\%$$

This provides the data to calculate the three-day difference of the five day oscillator for the day of interest or 9/16/09:

**Three day difference for 9/16/09 = 93 – 63 = 30**

We will repeat the above calculation for each closing day after 9/16/09 while we are holding the stock. We will watch for the three day difference moving below 10 or turning negative which is our signal to get ready to exit.

**Date 9/17/09**

$$A = 5.20 - 2.97 = 2.23$$

$$B = 4.18 - 2.78 = 1.40$$

$$\text{Oscillator} = (2.33 + 1.40)100/(5.20 - 2.78)^2 = 77\%$$

**Three day difference for 9/17/09 = 77 – 88 = -11**

**Date: 9/18/09**

$$A = 5.20 - 2.78 = 2.42$$

$$B = 5.02 - 2.78 = 2.24$$

$$\text{Oscillator} = (2.42 + 2.24)100/(5.20 - 2.78)^2 = 96\%$$

**Three day difference for 9/18/09 = 96 – 93 = 3**

**Date 9/21/09**

$$A = 5.64 - 3.17 = 2.47$$

$$B = 5.48 - 3.17 = 2.31$$

$$\text{Oscillator} = (2.47 + 2.31)100/(5.64 - 3.17)^2 = 97\%$$

**Three day difference for 9/21/09 = 97 – 77 = 20**

**Date 9/22/09**

$$A = 6.09 - 4.49 = 1.60$$

$$B = 5.09 - 3.71 = 1.38$$

$$\text{Oscillator} = (1.60 + 1.38)100/(6.09 - 3.71)^2 = 62\%$$

**Three day difference for 9/22/09 = 62 – 96 = -34**

**Date 9/23/2009**

$$A = 6.09 - 4.60 = 1.49$$

$$B = 5.52 - 3.71 = 1.81$$

$$\text{Oscillator} = (1.49 + 1.81)100/(6.09 - 3.71)^2 = 69\%$$

$$\text{Three day difference for 9/22/09} = 69 - 97 = -28$$

We can represent the data in the following table :

<b>Date</b>	<b>5 Day oscillator</b>	<b>3 day difference</b>
9/14/09	63	
9/15/09	88	
9/16/09	93	+30
9/17/09	77	-11
9/18/09	96	+3
9/21/09	97	+20
9/22/09	62	-34
9/23/09	69	-28

Notice that the first negative reading was registered on 9/17/09 giving a warning signal to be ready to sell after another negative reading occurs. For two consecutive days after that we had a positive reading indicating that there is still carry over momentum strength likely to push the price higher. However on 9/22/09 the three day difference turned highly negative giving us a confirmed sell signal on 9/23/09. Assuming we exited at the day's average price, our exit would have been at \$5.40 which is a 33% profit from our entry point at \$4.05 in 6 trading days.



## Chapter 2

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### **Explosive Consolidation Pattern Breakouts**

Everything good must come to an end and it is no different with stocks. A trending stock is likely to eventually run out of steam and reverse or settle into a non trending or consolidation pattern. It is these patterns that offer the astute trader a significant profit opportunity. Breakouts from consolidation patterns are usually quite powerful and last for a good amount of time.

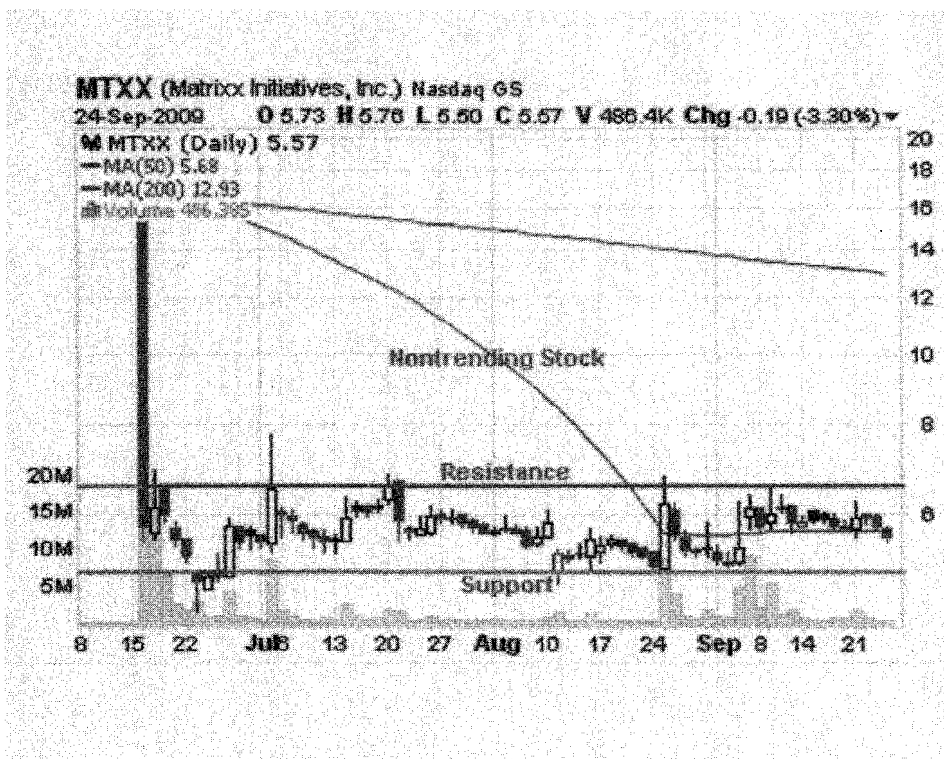
The key to profiting from consolidation pattern breakouts is dependent on being able to predict the direction and timing of the move. A consolidation pattern can be a pause before the previous trend continues or a warning of a reversal and start of a new trend. Furthermore, a stock can remain in a consolidation or basing pattern for weeks or months before any significant breakout occurs.

In this chapter I will present a combination of technical indicators that can predict the timing and direction of an impending breakout with a high degree of accuracy.

#### **Introduction**

It is essential for this approach to work that the stock be in a non trending state. In other words it should continually oscillate between support and resistance never breaching them by any significant amount.

An example of a trendless stock is MTXX with the chart shown on page 18. Notice that after a large gap down, the stock settled between two lines, defining support and resistance. It is also worth noting that the stock has been stuck in this pattern for



over three months. This emphasizes the importance of a reasonably accurate timing tool to avoid your trades turning into dead money for a while.

In addition, the conditions I present in this chapter are sufficient but not necessary for a breakout to occur. In other words a breakout can materialize without these technical signals being present, however, a consolidation pattern breakout will almost certainly take place if these signals are triggered.

In the last chapter I showed how a trader can capitalize on breakouts from a non trending base by recognizing and trading volume spike breakouts. While this is a useful technique it does have inherent limitations. These are:

(1) Breakouts that occur without a volume spike are completely missed. Considering such breakouts are common, it is important for any serious trader to be prepared to capitalize on them.

(2) Volume based breakouts decrease the time spent in a trade and thus offer the advantage of quicker profits. This, however, comes at a cost of giving up a percentage of the return which can be at times quite high.

(3) the number of candidates found is limited due to the highly restrictive fundamental and technical conditions imposed. While these conditions are essential to avoid getting into a false volume breakout, they tend to significantly limit the number of trading opportunities.

The techniques in this chapter can spot non volume based breakouts and thus offer more trading opportunities. This comes at the price of having to stay a few weeks longer in the trade. Thus the strategies in this chapter should be viewed as an addition to your trading arsenal and complementary to the volume based breakout discussed earlier, rather than a replacement for it.

To be a successful trader you need as many arrows in your trading arsenal as possible, to be able to identify trading opportunities in any kind of market. You should keep this in mind as you continue reading the remaining chapters in this book.

## Technical Indicators

As I discussed previously, to successfully trade consolidation breakouts we need to:

(1) Accurately predict the direction of the breakout and (2) Predict timing of the breakout within a reasonable time window, preferably within no more than few weeks of its occurrence.

It is logical to assume that as more and more money flows into a stock in a consolidation pattern; it is more likely that a breakout of the pattern to the upside will occur. The flow of money is the product of price and volume and shows the demand of a security at a certain price. There are several types of money flow indicators including: Chaikin Money Flow (CMF), Money Flow(MF) and Money Flow Index ( MFI) among others.

Based on my trading experience the technical indicator most useful in assessing the direction of the breakout from a consolidation pattern is the Money Flow Index (MFI).

The MFI is a volume weighted relative strength index. It compares today's average price to yesterday's average price then weights the average price by volume to calculate the money flow. The ratio of the cumulative positive and negative money flows are then normalized to be in a scale of 1 to 100.

The Money Flow Index MFI formula is:

**$MFI = 100 - (1/(1+MR))$  Where MR= Money Ratio**

**MR = Positive Money Flow / Negative Money Flow**

Where:

**Positive Money Flow = Sum of money flow for the specified periods where the normalized price increased.**

**Negative Money Flow: Sum of money flow for the specified periods where the normalized price decreased.**

**Normalized Price = (( Day high + Day open + Day Close)) / 3**

The MFI is available on most stock trading software and on many free stock charting websites. The technique I use is an MFI trend line break signaling a reversal. This will be clearer as you read the trade examples later in this chapter.

One of the most difficult challenges a trader faces is to be

able to predict the timing of a move before it actually occurs. Stock movements are never one hundred percent predictable and they will never be as long as peoples' emotions are involved. What I will present here is a timing indicator that has demonstrated its effectiveness in predicting consolidation pattern breakouts within few weeks of their occurrence. This indicator is especially potent when combined with the MFI as a directional signal.

The indicator of choice is the Mass Index (MI) which is the 25 day moving sum of the ratio of two moving averages. The first moving average is an exponentially smoothed moving average of the daily close. The second is the first moving average smoothed a second time. Values over 25 indicate a widening range while values below 25 indicate a narrowing range. The calculations for the Mass Index (MI) are as follows

$$\text{MI} = \sum_{n=1 \dots 25} (\text{Rn}/\text{Ln})$$

**Where**

$$\text{Rn} = 0.8(\text{Rn}-1) + 0.2(\text{PR})$$

$$\text{Ln} = 0.8(\text{Ln}-1) + 0.2(\text{Rn})$$

$$\text{PR} = \text{Today's price high} - \text{Price Low}$$

$$\text{Rn}-1 = \text{Yesterday's Rn}$$

$$\text{Ln}-1 = \text{Yesterday's Ln}$$

The mass index measures the narrowing and widening of the average range between the high and low prices. When the value of daily ranges begins to increase the value of the numerator increases faster than the denominator and the ratio will be larger than 1. The 25 day moving sum will then become larger than 25. As the range narrows the opposite happens and the denominator increases faster than the numerator allowing the summation to start moving below 25. Thus as the range widens the MI increases, and it decreases as the range narrows.

A "reversal bulge" occurs when a 25 period MI moves above 27 and then falls below 26.5. The signal of an approaching trend reversal is triggered when the MI moves below 26.5 after the formation of the bulge.

Combining the Mass Index timing signal with the Money flow index directional signal, permits the trader to anticipate the direction and timing of breakouts from consolidation patterns with

reasonable degree of accuracy.

A trading signal is usually triggered within few days to few weeks of an explosive move allowing the trader profits of more than 50%-300%+ in a relatively short time.

I do realize that this combination of technical indicators may not be common, however, I have used it in my trading for many years with highly profitable results. As a result I strongly recommend you add this strategy to your trading arsenal.

## **Practical Applications**

Before discussing specific trade applications, it is important to re-emphasize two points I discussed earlier in this chapter:

(1) Breakout from consolidation patterns can still take place without the signals discussed in this chapter being triggered.

(2) After a trade signal is triggered, the breakout may materialize within few days to few weeks of trade entry. In most cases the high reward to risk ratio, as well as the significant profits achieved justify the wait.

One way to find such stocks is to program the Mass Index and Money Flow Index trigger conditions into a scanning software. Unfortunately, except for few selected screening programs, such capabilities are not readily accessible.

An easier way, which is the one I use, is to place any stocks you find in your scan that are in a non trending pattern on a watch list. Once the conditions in this chapter are satisfied, you can enter your trade.

## **Three Easy Steps to a trade**

### **(1) Get ready**

Once you find a stock in a consolidation pattern for more than 15 trading days place it on your watch list. The chart for stocks on this list should be revisited every other trading day.

### **(2) Get Set**

When the Mass Index (MI) crosses over 27, place the stock on a daily watch. Look for the formation of the characteristic "reversal

bulge” and the subsequent MI crossing below 26.5

### **(3) Trade or drop**

Once the MI drops below 26.5 after forming the “reversal bulge” check if the Money Flow Index (MFI) has broken above its downtrend line. If that occurred, then enter the trade otherwise look for another candidate.

These steps will be clearer once you study the following examples.

#### **Example 1 : Clearfield (CLFD)**

I have intentionally picked the same example used in the previous chapter to demonstrate volume based breakouts. This will permit comparing the two trading strategies and highlighting the features of each.

The chart on page 24 shows the price in the middle section with the Mass Index (MI) on the top part and the Money Flow Index (MFI) on the bottom part. To time trade entry we will follow the three easy steps outlined in the previous section.

**Get Ready:** The stock is obviously a good candidate since it has been in a non trending pattern for at least 15 trading days. Dependent on when the stock was identified, it could have been placed on a watch list anytime from the beginning of May to late June 2009.

**Get Set:** The Mass Index (MI) crossed over 27 early July at point **A**, at which time the stock should be placed on a daily watch. Few days later the “reversal bulge” formed at point **B**. A couple of weeks later around the middle of July, the stock crosses MI=26.5 near point **C**. At this point the Mass Index conditions have been satisfied and the attention should shift to the Money Flow Index.

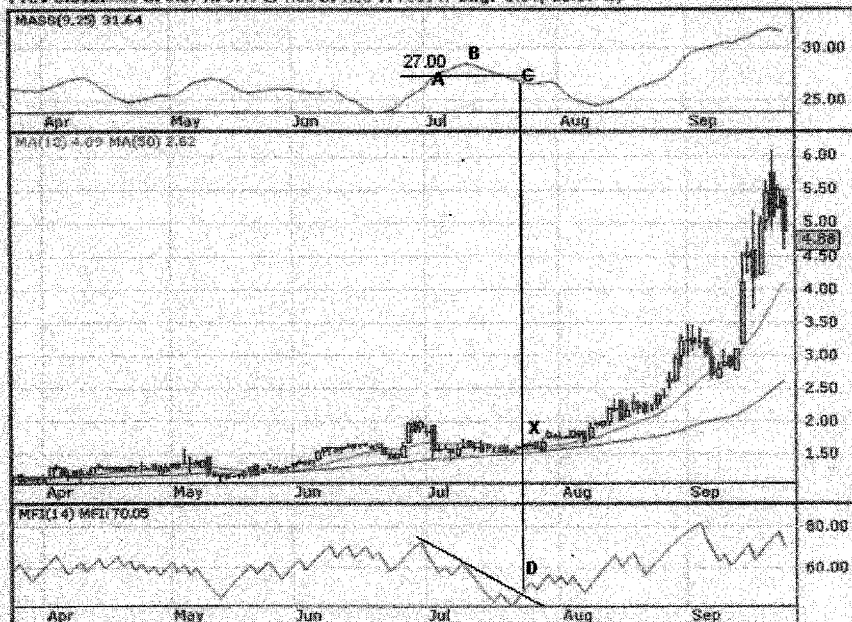
**Trade trigger:** The Money Flow Index (MFI) downtrend line was broken at point **D** which occurred right after the Mass Index (MI) crossed below 26.5. This triggers a trade at the corresponding price **X** near the end of July. Our entry point is at \$1.65.

As you can see the stock took almost 30 days to get to

Clearfield(CLF0) 125ms

24-Sep-2009 Thursday

Prev Close: 5.52 D: 5.39 H: 5.49 L: 4.60 C: 4.88 V: 708947 Chg: -0.64 (-11.59 %)





\$2.50, but then the advance accelerated quickly and the stock eventually hit \$6.00 before pulling back.

**ALERT1:** This clearly shows the trade off between the method described in the last chapter and this one. Using the volume based breakout we entered around \$3.85 with a move to \$6 in four days. Using the concepts in this chapter we entered at \$1.65 but had to wait almost two months to get to \$6.00.

**ALERT2:** Remember that the strategies in this chapter can identify consolidation pattern breakouts that DO NOT show a volume spike. In such cases the strategies discussed in the first chapter will fail to identify such moves and thus limit the choice to strategies discussed here.

### **Example 2: Dataram Corp (DRAM)**

This example was chosen to demonstrate the high degree of reliability of this trading strategy. As this example will demonstrate, the Money Flow Index (MFI) can oscillate between positive and negative after our trade entry without affecting the outcome of the trade. As long as you stick to the rules of entry you will be in a high reward to risk trade.

The chart on page 26 shows the price in the middle section with the Mass Index (MI) on the top part and the Money Flow Index (MFI) on the bottom part. To time trade entry we will follow the three easy steps outlined in the previous section.

**Get Ready:** The stock was stuck in a trading range bound by defined support and resistance starting the beginning of May and until middle of June. It is a good candidate to place on our watch list within this time frame.

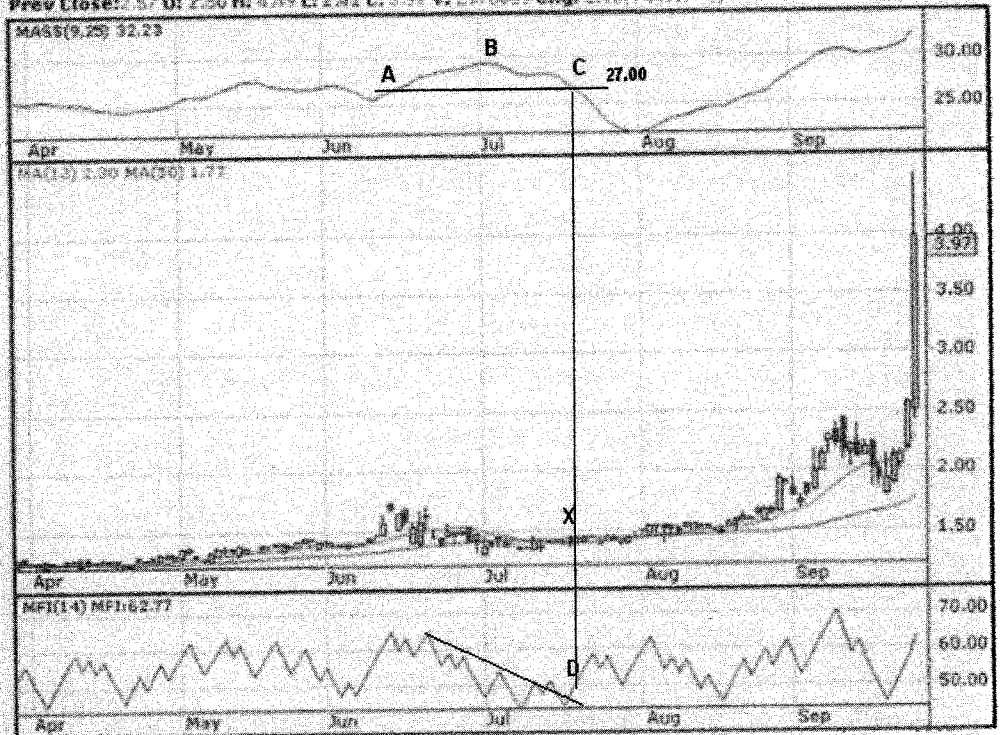
**Get Set:** The mass Index (MI) crossed 27 at point **A**, at which time the stock should be placed on daily watch. The “reversal bulge” was formed at point **B**, and subsequently the MI crossed below 26.5 near point **C**. This satisfies all MI conditions for the trade setup and our focus should now shift to the Money Flow Index.

**Trade Trigger:** The money flow index (MFI) broke the downtrend

Dataram Corporation(DRAM) 125ms

25-Sep-2009 Friday

Prev Close: 2.57 D: 2.50 H: 4.49 L: 2.41 C: 3.97 V: 2378609 Chg: 1.40(+54.47 %)



line few days before the point **D**. It is important however to wait until the MI crosses the 26.5 mark (just below the 27 line) to take the trade. For this reason our entry point is few days after the MFI trend line was broken. Our entry point is at the corresponding price **X** around \$1.50 in mid July.

Again as you can see we had to wait 45 days for the price to move to \$2.50. As occurred in the previous example the price advance accelerated moving above \$4 within a couple of weeks after that. From our initial entry in mid July at \$1.50 until the stock moved above \$4 required that we stay in the trade for 9 weeks. While this may seem long if you are a swing trader, in most cases the profits realized are well worth it. I bet many traders will wish they can find few trades that can deliver a 250% profit in 9 weeks. Notice that after our entry the money flow went through a couple of up and down cycles. The price however was not affected much and the price advance continued. This is a testimony to the high level of reliability of this strategy.

I am sure you are wondering whether this strategy is 100% reliable. As I said before there are no holy grails in the market and this is no different.

If the Money flow index breaks an uptrend line after trade entry, this is only a sell signal if the Mass Index has passed through 27.00 formed a reversal bulge and then crossed the 26.5 mark. If you have entered a trade and see this then you should exit. Notice however, that in our second example, the two occasions DRAM breaks the MFI uptrend line were not accompanied by the MI reversal bulge described above. This dictated that we stay in the trade and the result was a profit of over 250%.

In my experience trading this pattern for many years, I have come across no more than a handful of situations where an exit was necessary.

## **Momentum Driven Breakouts**

As indicated in the beginning of this chapter, a consolidation pattern is essentially flat with the bottom defined by a horizontal trend line. While prices may be higher for few days and lower for few others, they are essentially confined to a trading range

within a boundary limited by two flat horizontal trend lines. In essence, the desire to own a stock by some investors is balanced by the unwillingness of others to sell unless the price reaches the upper boundary. Conversely, the desire to sell the stock by some participants is matched by others unwillingness to buy unless the price is close to the lower boundary.

An early indication that a stock may be a momentum driven breakout trade candidate, is a steady accumulation as prices rise slowly resulting in a trend line slope change. The trend line previously flat is now climbing steadily at around a 30 degree angle indicating that smart money believes that some good news is on the horizon. This is the accumulation phase and can last from as little as a week to as much as a year. As accumulation continues and the rise slowly accelerates, momentum players enter propelling the stock higher. This is usually triggered by news of better earnings, drug approval, or an important business deal. The trend line turns up with a steeper angle of ascent at 45 to 60 degrees on heavy volume. This is usually the start of the momentum driven consolidation pattern breakout.

As short to intermediate level traders, entering during the accumulation phase, while profitable, may require a long time in the trade before a significant rise occurs. Our goal is to enter the trade as soon as an imminent signal of a momentum based breakout appears on the chart. This is usually indicated by a significant increase in volume with a pull away from the original trend line eventually establishing the 45-60 degree angle trend line previously alluded to. We should enter the trade on a pull back from the initial momentum spike to the newly established trend line.

As any trader knows, momentum trades tend to be highly rewarding since the profits are usually quick after entry. This is the case as long as the profits are taken before a momentum shift against the trade takes place. It is thus essential to have a simple exit strategy to get out with near maximum possible profits. During my experience trading momentum moves, I have found that using a simple exit technique with three parallel trend lines serves this purpose well. Even though a trader is not likely to catch the

high, exit is usually signaled within few percent of the high giving the trader the bulk of the profits.

The first trend line is drawn at the beginning of the formation and often coincides with the 45-60 degree sloping trend line during the initial stages of the momentum break out phase. The second trend line is drawn parallel to the first by connecting two of the highest price points before the major momentum spike occurs. These points occur within the first quarter of the formation due to initial small price spikes after which the trend line is tested. The third trend line, also known as the sell signal line, is drawn above the second trend line and parallel to it. The distance between the third or sell signal line and the second should be the same as that between the second and the first. Note that the third line is determined by just measuring the distance between the first two lines, extrapolating it from the second line, and then drawing a parallel line. This is independent of what price points the sell line intersects.

The sell signal is given when strong momentum drives the price above the third, or sell signal line, and then back towards it.

Trading momentum based consolidation breakouts will be clearer when studying the following examples.

### **Example 3 : Clearfield Inc (CLFD)**

This is the third time I have used this example to show that when a stock is likely to make a strong move, there are many ways an astute trader can recognize the potential and enter the trade. In this case recognizing a likely momentum breakout would have allowed an entry at the early stages of the advance resulting in a handsome profit.

As can be seen on the chart page 30, the slow accumulation phase defined by the lowest trend line lasted for almost three months. Suddenly a volume spike V on the chart resulted in a price spike to point **2** and a subsequent pullback. Another volume spike in early June with a pullback took place followed by a third volume spike in late June resulting in a price move to point **8** and a retest of the new steeper trend line. This trend line has a



steeper angle of ascent than the original line indicating the start of a momentum move.

Our entry point will be on a pullback from the spike at point **8** to the trend line defined by points **1, 4** or at around \$1.50 in early July.

It is important to note that the volume spikes defined by points **V** on the chart may seem small, but they are significant as a percentage of the volume traded on the prior day. As an example, the volume traded on June 24 was 3900 shares, but on June 26 it was 36,780 shares and on June 29 it was 31,501 shares, which is almost a 900% increase. This is a clear indication that there is something about this stock, that normally trades only few thousand shares a day, attracting buyers. Days of low volume followed by days of higher volume then a pullback to the trend line with low trading volume again, are a clear sign of accumulation by smart money.

The new trend line **1, 4** now defines the momentum advance phase. The second trend line shown as **2, 8, 5** is drawn connecting points **2** and **8**, which are the price advances resulting from the corresponding volume spikes. These sudden price moves are followed by a retest of the new trend line **1, 4**. The third or sell signal line is drawn parallel to the line **2, 8, 5** with the distance from point **2** to point **3** equal to that from **1** to **2**. The sell signal is activated as the price passes the sell line at point **6** and then reverses back towards it. This takes place near point **7** at a price of around \$4.50 for a profit of 300%. While we did not get out at the top near \$6.00 we made a handsome profit using a very simple sell strategy. If we have held the stock not knowing when to get out, most of our profits would have evaporated since as of the day of writing this section the price was around \$2.60.

Many traders shy away from such low volume stocks since they believe that these stocks are easily manipulated by big institutions. While this is true in some cases, trading such stocks can be highly profitable if you can recognize legitimate signs of accumulation by smart money. This kind of accumulation is characterized by multiple volume spikes with accompanying price increases followed by pullbacks to an established positive sloping

trend line. This is smart money's way of slowly accumulating shares without being detected.

On the other hand, extreme volume increases with a parabolic price spike is usually a trap to get small investors to buy into a stock while smart money is selling. It is thus advisable not to trade such stocks on the long side and wait for a pullback. If this is a setup to distribute shares to unsuspecting small investors, the pullback is likely to break below the pre established trend line. In such cases the trade is better avoided.

### **Volatility Driven Breakouts**

Another approach to trading consolidation pattern breakouts is by recognizing the changes in volatility and the ensuing breakout. When a stock settles into a consolidation pattern, a significant reduction in volatility is evident. Volatility increases as a potential breakout gets closer.

A common indicator that measures volatility is the Average True Range (ATR) which is briefly discussed below.

### **Average True Range (ATR)**

Average true range (ATR) is the average of true ranges (TR) over a specified period. The true range for a specified period is defined as the greatest of the following:

(1)  $(H)_p - (L)_p$

(2)  $Abs[(H)_p - (C)_{p-1}]$

(3)  $Abs[(L)_p - (C)_{p-1}]$

**Where H = high, L = low, C = close, P = current period, Abs = Absolute Value**

In cases (2) and (3) it was necessary to use absolute values to insure a positive number. Such situations arise with either a gap down or up, whereby the previous close is greater than the current high in case of a gap down or lower than the current low in case of a gap up.

The Average True Range (ATR) reflects the volatility of a stock which usually decreases during a consolidation period, but does not provide information on the direction or timing of the break.



To be able to predict the direction of the break we will use Chaikin Money Flow (CMF). For a bullish breakout we require that the Chaikin Money Flow show the following properties:

- (1) CMF remains above the zero line for at least seventy five percent of the duration of the consolidation period.
- (2) CMF shows a clear uptrend starting at the beginning of the consolidation period and until the breakout occurs.
- (3) CMF is at 0.1 or higher at the breakout point signifying heavy accumulation.

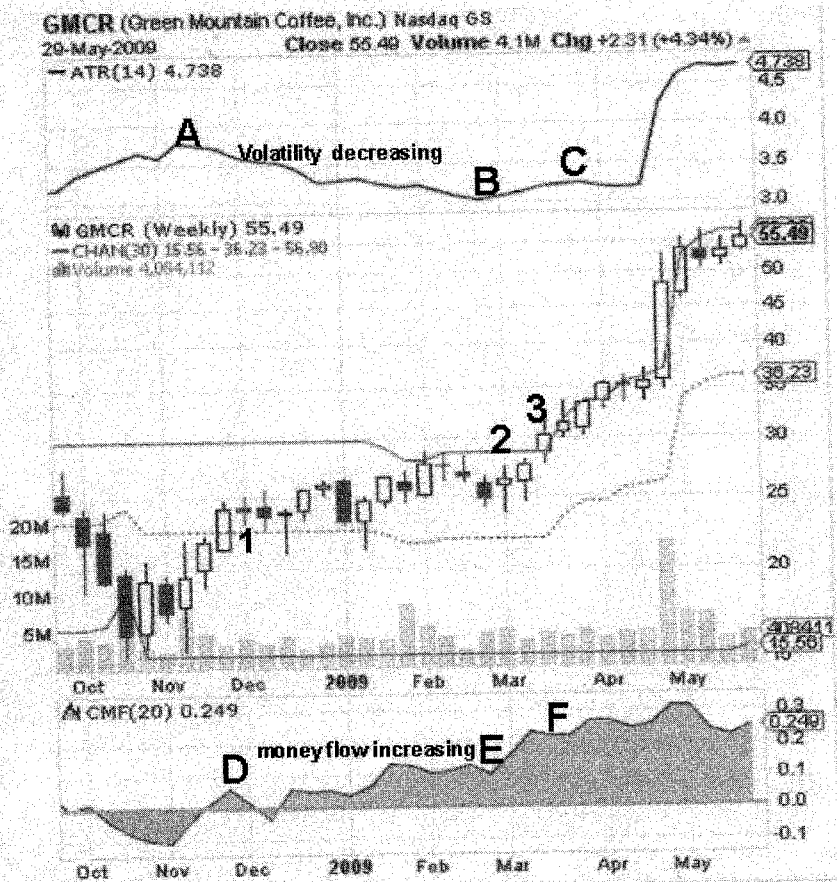
As indicated previously, the volatility as measured by the Average True Range (ATR) trends downward during the major part of the consolidation period. At some point during the latter stages of consolidation, the ATR starts trending higher indicating a nearing breakout. This is the first signal that a viable trade entry is close.

The final trigger is given when the price breaks above the 30 period price channel with CMF at or above 0.1. The trade is taken on the first close above the channel assuming the ATR and CMF conditions are also satisfied.

Trading consolidation pattern breakouts using volatility shifts is best used in cases where the consolidation pattern is more likely to be in a pause before the previous trend resumes. Based on my trading experience this method is less effective in cases where the consolidation pattern is more likely to be a trend reversal. Also this strategy is more likely to yield significant and sustainable profits when utilized in the longer or weekly time frame. As will be demonstrated in the following example, profits of more than one hundred percent are often possible.

#### **Example 4: Green Mountain Coffee Inc (GMCR)**

By examining the chart page 34, it can be clearly seen that volatility as represented by the Average True Range (ATR) is trending down between points **A** and **B** corresponding to price points **1** and **2**. Notice that the chart between points **1** and **2** falls within the 30 week price channel defining the consolidation pattern. While the volatility was trending lower, the money flow as represented by the Chaikin Money Flow (CMF) was moving high-



er between points **D** and **E** corresponding to the consolidation pattern.

Between points **B** and **C** corresponding to price points **2** and **3**, the ATR started trending higher indicating an increase in volatility signaling that a price breakout from the 30 week channel is imminent. The breakout from this channel on closing basis occurs at point **3** with CMF reading around 0.2 at corresponding point **F**. This gives the final signal to pull the trigger at around \$30. As with such types of trades, the stock moved quickly to \$55 and kept moving steadily higher, although at a lower pace. At the time of this writing (1/6/2010), the stock is trading at \$83.



## Chapter 3

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### Explosive Profits Trading Divergent Signals

Technical indicators are divided into two major kinds: price based indicators and volume based indicators.

Price based indicators include simple and exponential moving averages (SMA and EMA), Moving average convergence divergence (MACD) and its histogram, Average directional Movement (ADX), Stochastics (STO) and Relative strength index (RSI) among several others.

Most of these type indicators involve some form of mathematical manipulation of price and/or its moving averages.

Volume based indicators include Chaikin Money Flow (CMF), Williams accumulation/distribution (A/D), On Balance Volume (OBV), Finite elements volume indicator (FVE), and Money flow index (MFI) among others. These are usually a mathematical representation of intraday or from one day to the next price volume relationship.

Price based indicators are themselves divided into two major types: Ones that use some form of the Simple moving average in their formulas such as Stochastics (STO), and others that are based on exponential moving average such as Moving average convergence divergence (MACD) and its histogram.

Volume indicators are also divided into two major classifications: One that uses intraday price action in combination with volume to decide whether money is flowing in or out of a stock. Such indicators include Chaikin money flow (CMF), Williams accumulation distribution (A/D) and Finite elements volume indicator (FVE). The other types of volume indicators use price variations

from one day to the next in combination with volume to decide the direction of money flow. Such indicators include On balance volume (OBV) and Money flow index (MFI) among others. In essence these indicators use today's price relative to yesterday's to decide whether money is flowing in or out of a security, while ignoring intraday price fluctuations.

Most traders are familiar with complete basic divergent signals which occur when a technical indicator is trending in the opposite direction to that of price. A bullish divergence takes place when the indicator is forming higher lows or shallower valleys, while the corresponding price is forming lower lows or deeper valleys. A bearish divergence occurs when the indicator is forming lower highs or shallower peaks, while the corresponding price is forming higher highs or higher peaks. Thus when the price makes a new high but the indicator forms a lower high, this indicates a pending down reversal. An impending upward reversal is signaled when the price establishes a new low but the indicators form a higher low.

In addition to the above well recognized divergences, there are partial basic divergences and full as well as partial complex divergences that offer profitable trading opportunities but are not often recognized by the average trader. The following section touches on such divergent signals.

### **Partial basic divergences**

The two conditions below signal a down reversal after an advance:

- (1) Price makes a new high but the indicator forms a double top, where the indicator's new peak is equivalent in height to the prior peak.
- (2) Price forms a double top but the indicator forms a lower high rather than a double top or a higher high.

The two conditions below signal an upward reversal after a decline:

- (1) Price makes a new low but the indicator forms a double bottom. The indicator's new valley is equivalent in

depth to the prior valley.

(2) The price makes a double bottom but the indicator forms a higher low rather than a double bottom or a lower low.

A schematic of Partial Basic Divergences is presented on page 40.

## **Complex Divergences**

As in the case of basic divergences, there are complete as well as partial complex divergences. Some of these divergences are commonly encountered while others are uncommon or rarely seen.

### **Common complex divergences**

(1) The price makes triple new highs while the indicator makes a double top then a lower third high. This is a signal that the advance is about to come to an end and reversal is in the cards.

(2) The price makes triple new lows while the indicator forms a double bottom followed by a third higher low. This is an indication of an ending decline phase and likely upward reversal.

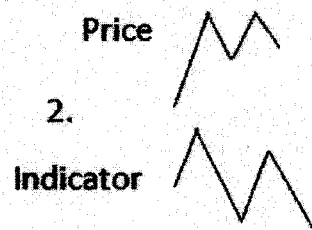
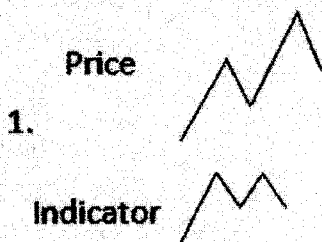
(3) The price makes a first new high followed by a higher double top while the indicator forms three lower highs. This is an indication that the uptrend is becoming exhausted with potential downward reversal.

(4) Price makes a first new low followed by a double bottom while the indicator forms three lows with each forming a higher valley than the one before. This is an indication that sellers are getting exhausted and an upward reversal is likely.

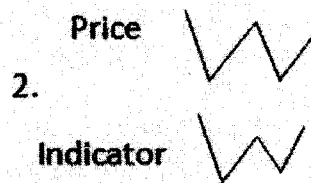
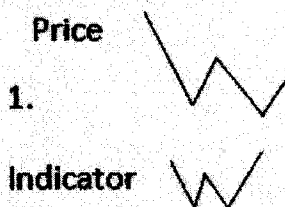
(5) Price makes a first new high followed by a double top while the indicator forms a first double top followed by a lower high. This is a warning of a possible down reversal.

(6) Price makes a first new low followed by a lower double bottom while the oscillator forms a double bottom

## Partial Basic Divergences



**Bearish**



**Bullish**



followed by a higher valley. This is an indication of a potential upward reversal.

A schematic of Common Complex Divergences is presented on page 42.

### **Uncommon Complex Divergences**

(1) Price forms three new highs while the indicator forms three lower highs resulting in a triple negative divergence. This is an indication of a strong bearish trend reversal.

(2) Price forms three new lows while the indicator forms three higher lows resulting in a triple positive divergence. This is an indication of a possible strong bullish reversal. Triple positive and negative divergences are very powerful reversal signals as will be demonstrated in the examples later in this chapter. This is especially the case when such divergences are seen in both price and volume based indicators for the same stock.

(3) Price makes three new highs while the indicator forms three peaks of the same height or a triple top. This is an indication of a likely bearish reversal.

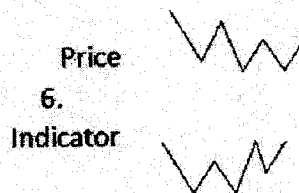
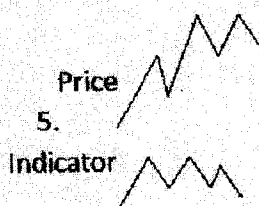
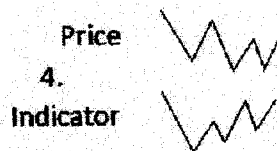
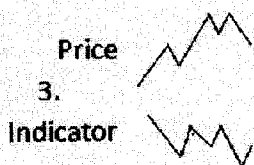
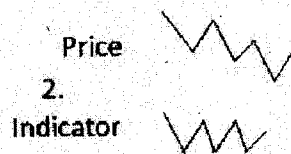
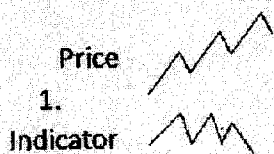
(4) Price makes three new lows while the indicator forms three valleys of the same depth or a triple bottom. This is a signal of a likely bullish reversal.

(5) Price forms three new highs while the indicator forms a new high followed by a lower double top. This is an indication that the advance is getting over extended and is likely to reverse.

(6) Price forms three new lows while the indicator forms a new low followed by a higher double bottom. This is a signal that the price decline is nearing an end and a potential advance is in the cards.

Conditions 3-6 occur very infrequently but if you recognize them when they do, you are likely to be rewarded with a handsome profit.

## Common Complex Divergences



**Bearish**

**Bullish**

A schematic of uncommon complex divergences is presented on page 44.

Many different books discuss such divergences, each focusing on a specific indicator often claiming that it gives more reliable divergent signals than others. On many occasions such claims are expected to be taken at face value without being substantiated with logical explanations and supported using real trading examples.

This chapter focuses on how to appropriately select combinations of technical indicators to insure a high probability of explosive profits. In addition the importance of using multiple divergences within the same indicators to avoid false signals are discussed.

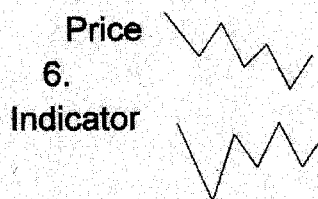
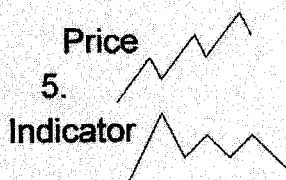
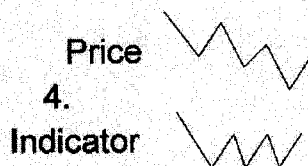
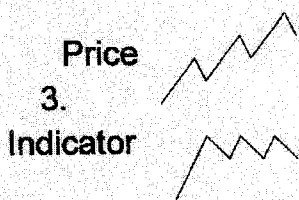
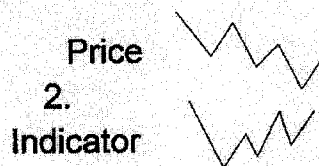
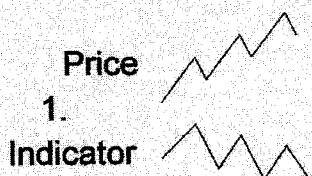
### **Guidelines to trading divergences for explosive profits**

As I indicated previously, many books discuss using divergences of selected indicators as trading tools. In this chapter the focus is on appropriately selecting the right combinations to zero in on trade setups that insure a high degree of profitability while at the same time minimizing whipsaws and false signals.

The guidelines below are derived from my trading experience using divergences for many years. Not surprising these guidelines are supported by logical interpretations of the indicators used. Follow these rules and you will increase your batting average significantly trading divergences:

- (1) Trade when two appropriately selected indicators trend in an opposite direction to that of price. One indicator divergences are prone to false signals and using a well selected second confirming indicator significantly reduces such occurrences.
- (2) When using price based indicators trade only triple divergences where both indicators form three consecutive peaks or valleys trending in the opposite direction to that of price. Double divergences are notorious for failures often resulting in a third divergence. Remember the “rule of threes” mentioned in my previous book “generate thousands in cash on your stocks before buying or

## Uncommon Complex Divergences



**Bearish**

**Bullish**

selling them, Third edition“. A similar argument can be made here in that it is very unlikely a triple divergence will fail resulting in a fourth divergence. Although triple divergences do not occur often, trading them will result in an extremely high reward risk ratio and a high probability of a significant amount of profit.

(3) When using volume based indicators look for trend divergence from price. Most volume based indicators do not form well defined peaks and valleys as price based indicators do, so your goal is to find the indicator trend line moving in the opposite direction of the price trend line. A bullish divergence is formed when a price downtrend line is countered by a volume indicator uptrend line. A bearish divergence is formed when a price uptrend is countered by a down trending indicator.

(4) Do not use volume based indicators alone in trading divergences. To avoid false signals, combine a volume based indicator such as Chaikin Money Flow (CMF) with a price based indicator such as MACD histogram. First look for a trend line in the volume indicator opposite to that of price, then use the triple price divergence as confirmation.

(5) Avoid using indicators that give similar information. As an example, Stochastics (STO), Williams %R, and Relative strength index (RSI) are permutations of the same kind of indicator. It is thus important when selecting indicators to review the mathematical formulas to be sure you are not in effect using the same indicator twice. Although there are scores of indicators, many of them are similar in nature or use similar price parameters. It is thus essential for successful trading, especially when using divergences, to check the formulas out that are readily available in most cases.

(6) Avoid using indicators that emphasize similar time periods. In other words combine one leading indicator with another that lags behind it.

To understand this rule better, when looking at a price based indicator, you can think of an exponential moving average based price indicator as a leading indicator. While a Simple moving average (SMA) based indicator is a lagging indicator. Remember that the EMA places more weight on recent data while the SMA places equal weight on all data in the period of interest.

All volume based indicators are considered leading indicators when compared to price based indicators. The reason for this is that volume signals often precede price movements.

Within volume indicators, the ones that are based on intraday price data are considered leading indicators while those based on today's price data in relation to yesterday's (inter day) price data are lagging indicators.

Examples of leading indicators include Chaikin money flow (CMF) which bases calculations on the intraday price midpoint to decide whether the stock is under accumulation or distribution. Finite volume element indicator is another leading indicator that uses the arithmetic average of the intraday high, low and close, known as typical price, to decide whether money is flowing in or out of a security. Examples of lagging indicators are On balance volume (OBV) and Money flow Index (MFI), both of which base money flow calculations on inter day price comparisons, i.e, today's price in relation to yesterday's.

## **Practical Applications**

In the remainder of this chapter I will present examples from my trading diary on how these concepts are used. Most of the technical indicators used are common with information and mathematical formulas on them available on numerous free internet sites.

## **Divergences Using Price Based Indicators**

In this section I will present a couple of examples on how triple divergences using two well known price based indicators can predict price movement. As mentioned in the previous guidelines, it is necessary that the two indicators used are: a leading indicator usually based on the exponential moving average (EMA)

and a lagging indicator usually based on the Simple moving average (SMA). The following examples clearly demonstrate the usefulness of this approach utilizing MACD histogram as leading indicator and Stochastics (STO) as lagging indicator.

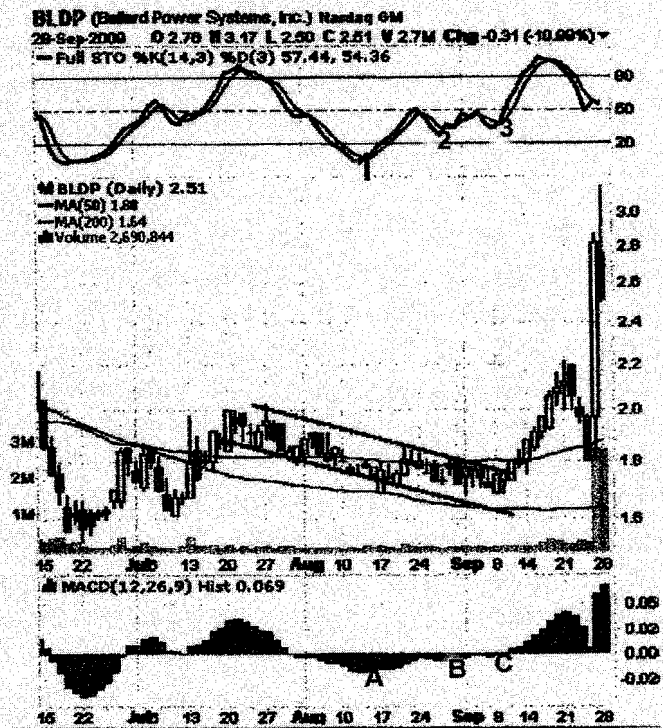
**ALERT1:** The descriptors leading and lagging are usually used in relation to price, meaning that a leading indicator would give a signal before a price move occurs, while a lagging indicator gives a signal after the price move takes place. My use of these terms is in relation to the time period being stressed by the indicator. The MACD histogram is leading in time since it places more weight on most recent data thus signaling the move earlier. On the other hand stochastics lags in that all data points in the period of interest are equally weighted.

### **Example 1: Ballard Power Systems (BLDP)**

The chart page 48 shows the price trending down between mid July and early September 2009. The top portion of the chart displays the Stochastics (STO) showing higher lows at points **1**, **2** and **3**. The MACD histogram is represented in the lower part of the chart showing less negative values or shallower valleys at points **A**, **B** and **C**.

Thus while the price was trending down we had both indicators the MACD histogram leading indicator and the Stochastics lagging indicator showing triple bullish divergences from the price. Three consecutive higher lows were formed by both indicators as the price trended lower.

As you can see from the chart the price advance accelerated once the downtrend was broken. If we entered when both indicators showed the third divergence at points **3** and **C** corresponding to a price of around \$1.75, we would have a significant profit in less than 10 trading days.





### **Example 2: Cousins Properties Inc (CUZ)**

By examining the chart page 50 you can clearly see the triple divergence between Stochastics (STO) shown on the top portion of the chart and price. The lower arm of the triangle on the price chart is trending down while the STO is forming higher lows at points **1**, **2** and **3**. A similar situation is manifested by the MACD histogram at points **A**, **B** and **C** forming a triple divergence in relation to price. As the price moved down, the valleys at **A**, **B**, and **C** became shallower.

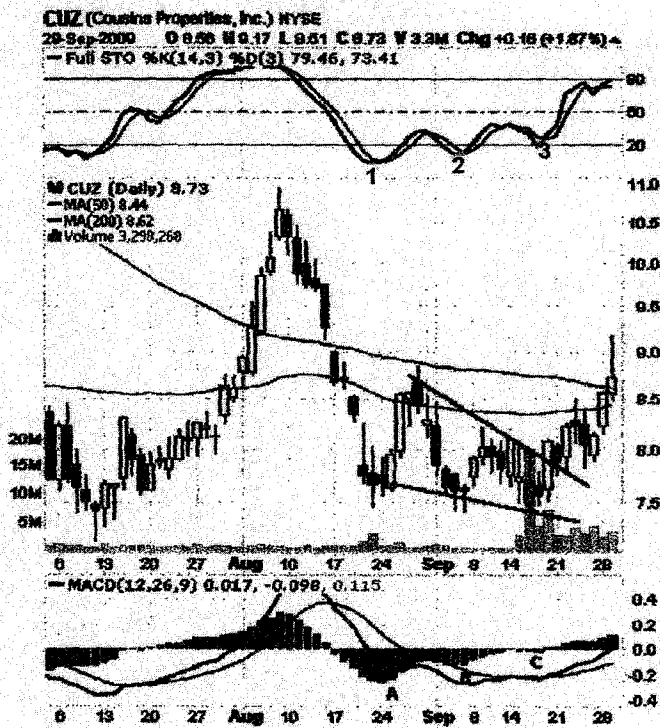
Notice that our entry price corresponding to point **C** on the MACD histogram is around \$7.5 which is slightly lower than the price corresponding to point **3** on the STO chart. The reason is that the MACD histogram is based on EMA calculations that stress recent data and thus signals a possible move earlier. If we entered at \$7.5 based on the triple divergence signal we would have achieved a profit of near 15% in eight trading days.

My experience shows that more than 90% of the trades using triple MACD and histogram divergences are profitable. Also, almost 60% of the trades result in significant price moves giving explosive profits of more than 50% within two to three trading weeks. Be sure you are always looking out for such trade setups.

### **Divergences using both Price and Volume indicators**

In my discussion earlier this chapter, I pointed out that volume based indicators are considered leading indicators when compared to price based indicators. This creates a powerful trading tool since combining both volume and price based indicators enables the trader to use the first as a signal and the second as confirmation triggering a trade entry.

To accomplish this it is important to follow the guidelines for trading divergences discussed earlier in this chapter. When you see the volume indicator trending in an opposite direction to that of price, the stock should be placed on daily watch. The trade is triggered when the price based indicator completes a triple divergence. This occurrence often is close in time to a price breakout from a downtrend. Applying this concept will be clearer



when reading the following example.

### **Example 3: Columbia Banc Corp ( CBBO)**

By examining the chart page 52, it is clear that the CMF is moving in an opposite direction to price. Notice that the CMF was very negative (almost at -0.5) corresponding to the point **V1** on the price chart. Between points **V1** and **V2** the corresponding CMF trended higher becoming less negative and eventually reaching close to the zero line. This indicates that most sellers have been exhausted and buyers are gaining the upper hand.

In the bottom section of the chart the MACD histogram is forming a triple divergence at points **1**, **2** and **3** relative to price points **V1**, **V2** and **V3**. Notice that the MACD histogram is forming a shallower valley as the price is making lower lows.

The CMF, considered a leading indicator, alerted us that a directional price change is coming as soon as it started trending in the opposite direction to that of price. Notice, however, that an early entry in the vicinity of points **V1** and **V2** before triple divergence confirmation would have resulted in an immediate loss. Of course since we expected the price to reverse, this may not seem as a problem. Remember, however, that the market is unpredictable and there is no way to tell how much further the stock will drop before reversal.

The best strategy is to wait for the MACD histogram triple divergence at point **V3**, corresponding to price point **3**, and enter the trade then at \$1.25. This would have resulted in a significant profit almost immediately.

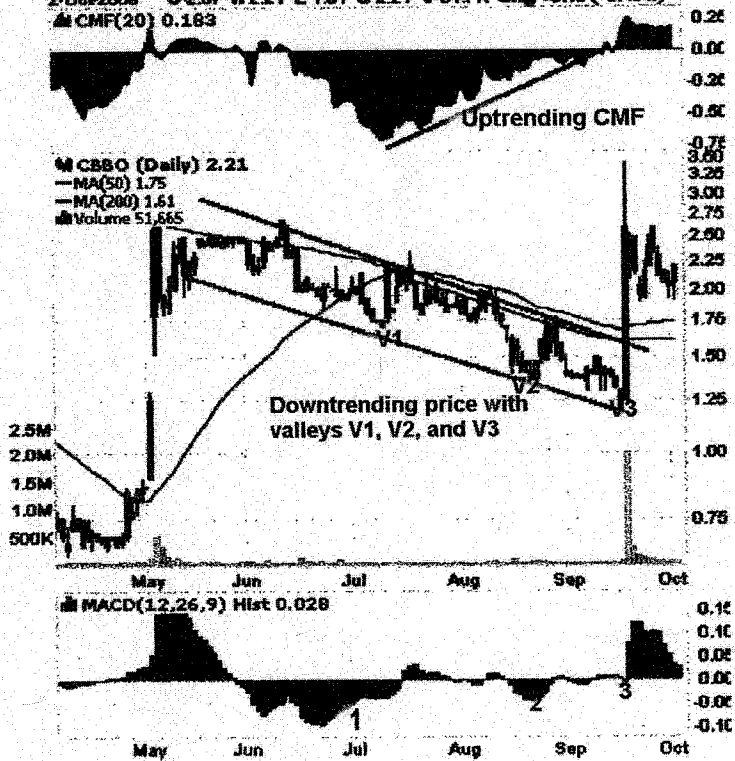
It is critical to realize that on occasions the stock reverses after a double divergence, or even without any MACD /CMF signal. In other words if one of the setups presented in this chapter occurs, you are likely to have a high profit trade, but such trades can still materialize without these setups being present.

As a trader, your goal should be to have a set of tools that have a high percentage of success and trade those setups. This is how order is made from an unpredictable market, by ignoring stocks that do not meet your trading setups and trading only the ones that do.

**CBBO (Columbia Bancorp) Nasdaq Q8**

2-Oct-2009 O 2.07 H 2.21 L 1.91 C 2.21 V 61.7K Chg +0.18 (+9.40%) ▲

▲ CMF(20) 0.183



## Chapter 4

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### Explosive Chart Patterns

In my previous book “Generate Thousands in Cash on Your Stocks Before Buying or Selling Them”, I have dedicated a chapter to discuss chart patterns that are likely to result in profitable trades. My goal in this book is to focus on specific chart patterns that can deliver explosive profits. I will also present more detailed parameters that define these patterns to avoid errors in recognizing them. In addition, I will show how specific technical indicators are combined with these patterns to determine strategic entry points. These entry points insure that the trader gets in a short time before an explosive move occurs, while still benefiting from the bulk of the move.

#### Falling Rectangle Pattern

Based on my trading experience the bullish **Falling Rectangles** and the closely related bearish **Rising Rectangles** are the most profitable chart patterns. If you are able to recognize and trade one of these patterns, you are likely to be rewarded by no less than fifty percent profit in a short period of time.

A rectangle is defined by an upper resistance boundary line and a lower support boundary line. Prices remain most of the time between these two lines thus forming a rectangular pattern.

A falling rectangle is formed when prices trace lower highs and lower lows but remain confined within a narrow range. In the case of rising rectangles prices form higher highs and higher lows while remaining within a narrow range.

During the formation of a falling or rising rectangle pattern

prices should remain mostly within a narrow range defined by 5 percent standard deviation above or below the 20 period Simple Moving Average. This is defined by the Moving Average Envelope parameters (20, 5), resulting in two curves outlining the upper and lower boundaries. Prices are required to fall within these boundaries most of the time for a falling rectangle pattern to be established.

The stock should be non trending in technical terms during the formation of a falling rectangle. Although the establishment of lower highs and lower lows indicates a visual down trend, the stock should have an Average Directional Movement of below 20 ( $ADX < 20$ ) during the formation of the rectangle.

The duration in time of the falling rectangle formation should be at least 15 trading days. The longer the time a stock stays in a falling rectangle formation, the more explosive and profitable the move is likely to be.

**ALERT1:** The moving average envelopes are an enhanced portrayal of a simple moving average line. This is done by surrounding the line pattern with curves or envelopes that deviate from the moving average line by a set percentage. This allows the trader to determine when prices have strayed from the moving average by that percentage. In the case of a falling rectangle we require that prices do not stray more than five percent from the moving average at least 70% of the time.

The Average Directional Indicator (ADX) is a function of True Range (TR) and is built on the premise that a trend is a series of price ranges extending in a specific direction. Positive directional movement (+DM) is indicated if a day's trading range is higher than the one before it. If a day's trading range is lower than the one preceding it then negative directional movement (-DM) results. A more complex situation arises if the second day's trading range partially overlaps the first, that is, it is both higher and lower than the first day's trading range. In this case the larger part of a day's range extending beyond the prior day's trading range is used to identify the directional movement. If the larger part is higher then the directional movement is positive,

while if the larger part of a day's range is lower the directional movement is negative.

The True range (TR) is the largest of the following:

- (1) The difference between today's high and today's low.
- (2) The difference between today's high and today's close.
- (3) The difference between today's low and yesterday's close.

The Figure page 56 shows different examples of the average directional movement indicator. Notice that the average directional movement in examples A and C is positive since most of the second day's range is above the first day's range. B & D show negative directional movement since the larger part of day two's trading range is below day one. In example E, the average directional movement is zero since the second day's trading range is within the first day's range. In other words, the first day's range overlaps the second.

**ALERT2:** The Average Directional Movement or ADX measures the strength of a trend. ADX is on a scale from zero to 100, with numbers below 20 indicating a technically non trending stock and numbers above 30 indicating that a trend is established and strengthening. Note that ADX does not tell the direction of the breakout. It is common to see ADX values below 20 and moving lower during the formation of a falling rectangle.

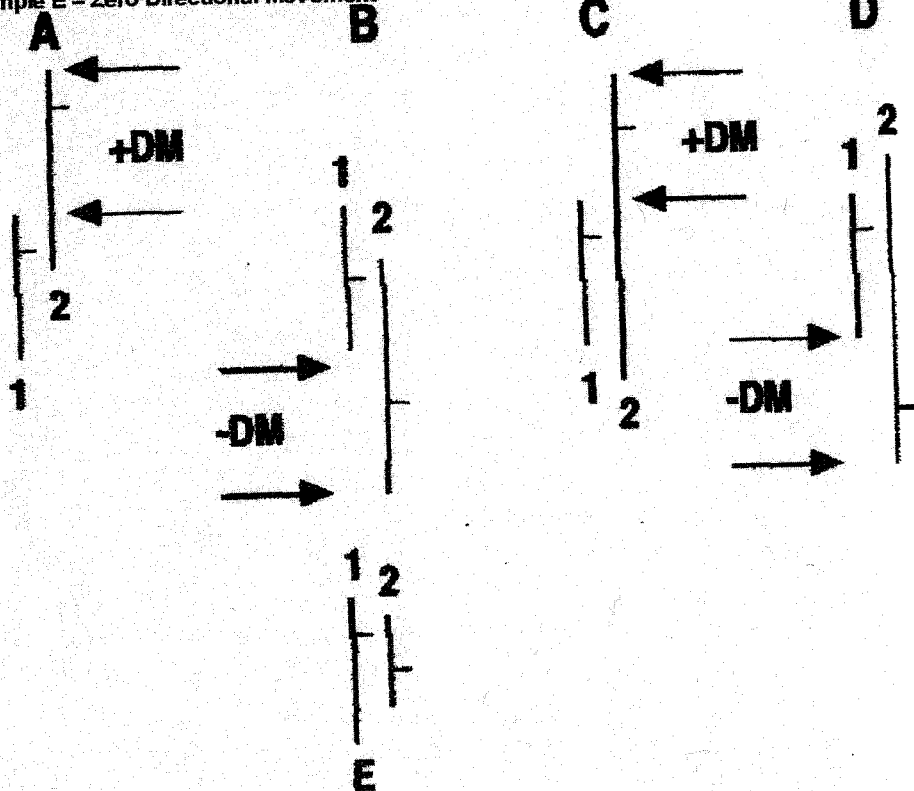
In summary the requirements for a falling rectangle pattern are:

- (1) Prices forming lower highs and lower lows.
- (2) The upper and lower price boundaries of the rectangle remain more than 70% of the time bound by a 5% envelope from the 20 day simple moving average.
- (3) The stock is non trending in technical terms defined by an  $ADX < 20$  during the formation of the rectangle.
- (4) The formation of the rectangle is of at least 15 day duration.

## Entry Signals

The entry trigger is given in two steps: (1) ADX starts moving higher indicating a possible start of a new trend. (2) The

# **ADX Illustrations** Examples A&C = Positive Directional movement Examples B&D = Negative Directional movement Example E = Zero Directional Movement





positive directional indicator +DI crosses the negative directional indicator –DI establishing an upward direction for the move.

How falling rectangles are traded will be clarified in the following actual examples.

### **Example 1: Power One (PWER)**

As can be seen from the chart page 58, a rectangular shaped pattern is evident between points **1** and **3** on the chart. This rectangle is also characterized by lower lows and lower highs on the price chart, indicating a likelihood of a falling rectangle pattern provided conditions listed previously are satisfied.

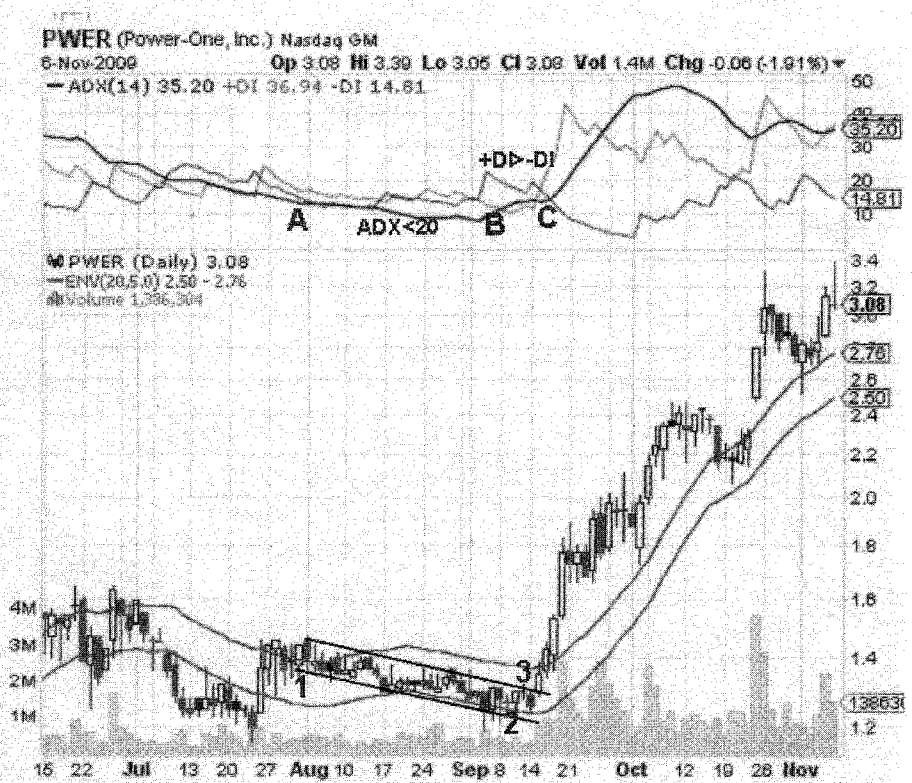
The pattern had a duration starting late July 2009 and continuing to mid September 2009 or almost 50 trading days. This meets our time restriction of at least 15 trading days for the formation of the pattern.

It is also evident that most of the rectangular pattern between points **1** and **3** lies within 5% deviation from the 20 day moving average. This is clearly seen by constructing the ENV(20, 5) on the chart forming the two curves defining the upper and lower envelope boundaries.

Notice also that points **A** and **B** on the ADX chart correspond to readings below 20 and the ADX was slowly moving lower during the formation of the falling rectangle between points **1** and **2**. Take note also that as the prices increased from **2** to **3** the ADX value moved higher between points **B** and **C** indicating a possible new trend starting. Also near point **C** on the ADX chart the positive directional indicator +DI crosses the negative directional indicator –DI triggering an entry signal around \$1.40. As you can see such trade was rewarded by over 100% profit within a short period of time.

### **Example 2: Ballard Power (BLDP)**

This example has been used in the previous chapter to demonstrate trading divergences. I have decided to use it again here to make a couple of general points regarding trading: (1) Two traders using different systems can still identify the same winning trade (2) To be successful in trading, you only need to



learn few profitable setups. Once you are able to recognize such setups easily with a glance at the chart, you are on your way to being a consistent winner.

Can you recognize the falling rectangle formation on the chart page 60? If not then read the previous pages in this chapter once again.

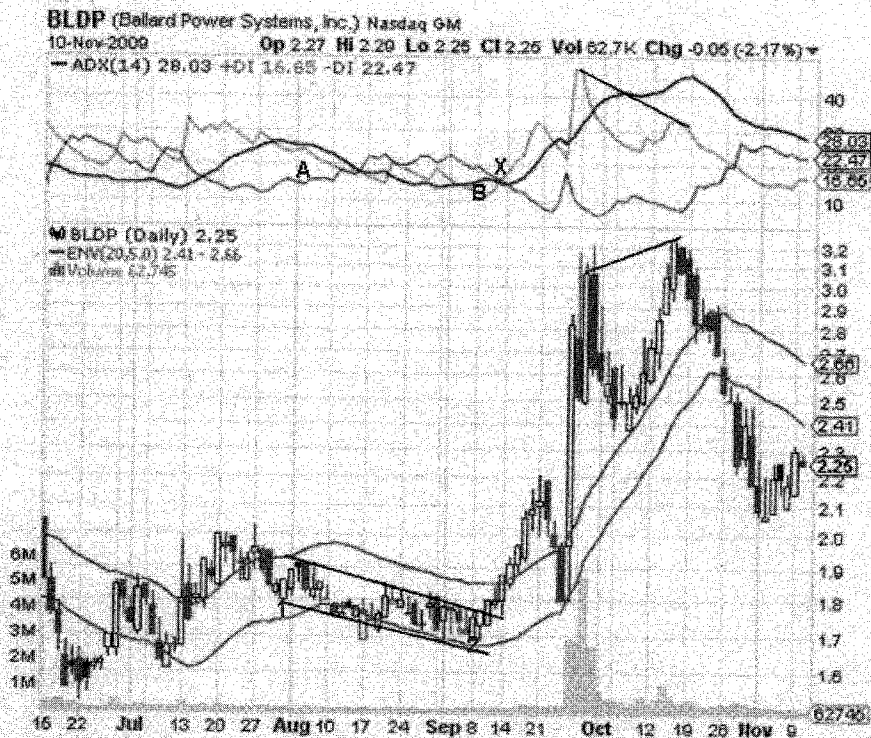
As you can see a rectangular shaped pattern is formed between points **1** and **2** on the chart page 60. This rectangle is forming lower highs and lower lows as evident in the downward slant. In addition, the prices are confined within 5% standard deviation from the 20 day moving average as demonstrated by the moving average envelopes ENV(20, 5) depicted on the chart. As you can see most prices fall within the boundaries of the moving average envelopes.

The corresponding points **A** and **B** on the ADX chart show an ADX value near 20 at point **A** and decreasing as one gets closer to point **B**. Decreasing ADX values are a trademark of falling rectangles formations until a trade trigger gets close.

The trade entry is triggered at the price corresponding to point **X** on the chart where the positive directional indicator +DI crosses the negative directional indicator -DI. By constructing an imaginary vertical line from point **X** on the ADX chart down to the price chart, you can see that the corresponding price is around \$1.80 in early September. This setup delivered a profit of over 70% in less than 45 days.

To exit falling rectangle trades, you can use any of the techniques described in previous chapters. In this example I will present another simple exit strategy that will allow you to capture a significant portion of the profits. This strategy can only be used if the following conditions are met:

- (1) Two distinct peaks must be visible with the second price peak equal or higher than the first.
- (2) The two peaks must be separated by a V or U shaped valley resulting in a closing price pullback to near the upper moving average envelope.
- (4) The second price peak must be formed with lower trading volume than the first peak.



The exit is triggered when the positive directional indicator +DI diverges negatively from the price. As can be seen on the chart page 60, the first price peak was formed in the beginning of October followed by a pullback to the upper envelope. A second peak reaching a higher price point was formed in the middle of October on lower trading volume than the first. Notice, however that the +DI formed a lower peak corresponding to the higher second price peak. This can be clearly seen by the downward slant on the line connecting the two +DI peaks compared to an upward slant to the line connecting the two price peaks. An exit is thus triggered at the second peak around \$3.20.

For practice purposes try implementing this exit strategy on the previous example (POWER). Can you recognize the exit point?

If you look at the POWER chart page 58, the first price peak near \$2.40 occurred in the first week of October followed by a pullback to just below the upper moving average envelope. A second much higher price peak at \$3.00 was formed late October. In this case the trading volume was more than three times the previous peak volume and no negative divergence occurred between the positive directional index +DI and price. A pullback took the stock to near the upper envelope followed by another price peak near \$3.20 slightly higher than the first peak.

This peak is recognized as an exit trigger for the following reasons: (1) Recognizable V shaped valley between both peaks with the second higher than the first. (2) Lower volume traded during the formation of the second peak. (3) +DI negative divergence between second price peak and first price peak.

**ALERT1:** You are probably wondering why we stayed after the peak at \$2.40? There was a high at \$2.00 then a pullback to the upper envelope at \$1.80 followed by a move to \$2.40 on lower volume and negative +DI divergence. The reason is twofold: (1) The pullback to the upper envelope was on intraday and not closing basis. (2) No U or V shaped valley formation is visible between the two peaks. Remember also what we mentioned before that the test of the upper MA envelope must be on closing prices.

**ALERT 2:** Remember that this simple exit strategy will capture the lion's share of the profit. The stock may however climb another 10% or so. If that occurs so be it, you already got out with a significant profit and the extra time you stay in the trade for a small additional profit is most often not worth it.

## **V Shaped Reversal Patterns**

Another pattern that delivers profits rivaling those of falling rectangles is the V reversal pattern. This is difficult to recognize until after one has the benefit of hindsight since no clear chart pattern can be seen before the reversal is well under way. Adding to the difficulty of trading this pattern is the steep and quick decline that usually precedes the reversal. The common saying between traders "Don't catch a falling knife" clearly describes a mistimed entry into a V reversal trade. Enter few days early and you can face a quick loss, or enter a few days late and you can give up a large portion of the profit making the risk reward ratio of the trade highly unfavorable.

Most traders enter a V reversal trade when the stock pulls back to near support area. While this may be a logical entry point, what if the stock's downward momentum is strong enough to break support and continue its decline.

V reversal patterns can also occur after a pullback from a long advance. The pullback often takes place pulling back the stock to an undetermined price, only to be followed by a violent V reversal and continuation of the original trend. Many traders either short the stock thinking it will continue the decline, while others wait for a classic re-tracement amount such as the Fibonacci, 38.5%, 50%, 61.8% or 76% to enter a long trade. The question in this case is which retracement number will the stock reverse after? It is much more difficult to tell in reality than in theory and traders often enter such trades too early or wait too long.

The question thus is: Can a trader tell when the falling knife stops falling and time the entry early enough to capture most of the profits? The answer is yes if one uses the right combination of indicators and chart signals.

To spot V reversals we will use the following three types of indicators:

- (1) An oscillator based on Simple Moving Averages, namely the Full Stochastics (STO).
- (2) A trend following momentum indicator based on Exponential Moving Averages, namely the Moving Average Convergence/Divergence (MACD).
- (3) Candlestick reversal signals.

### **Full Stochastic Oscillator**

The Stochastics Oscillator (STO) is a momentum indicator that compares the closing price to the high/low range over a predetermined number of days or periods. If the closing prices are near the top of the range, this is an indication of accumulation and that smart money is buying. Closing prices near the low signal distribution or that smart money is selling.

There are three versions of the Stochastics oscillator: fast, slow and full.

In this section, I will give a brief description of the Full stochastics oscillator since it is one of the three major signals used in spotting V reversals.

The full Stochastics oscillator calculation requires three parameters. Two of these parameters are similar to the ones used in the fast and slow stochastic oscillators. The difference is the middle parameter which is a smoothing factor of the initial or( fast) %K line. The full %K line is just an m period simple moving average of the initial % K (fast) line, with m representing the middle parameter.

In summary the calculations for the full Stochastics Oscillator (STO) are as follows:

**% K (full) = m day SMA of K (fast)**

**Where:**

**K(fast) = (( Close – Low<sub>(n)</sub> )/High<sub>(n)</sub> – Low<sub>(n)</sub>)) x100**

**and % D(full) = m day SMA of %K (full)**

The full Stochastics is a more flexible and sophisticated indicator in that it combines three parameters instead of two. Using the more popular 14 period calculations, a fast stochastics is repre-

sented as (14, 3). The reason being is that :

**%D (fast) = 3 day SMA of %K (fast)**

while the full stochastics is represented as (14, 1, 3) indicating the presence of an additional middle parameter.

The full Stochastics oscillator moves between zero and 100. Readings above 85 indicate an overbought stock while readings below 20 indicate an oversold stock.

A trader may be tempted to use this indicator alone to try spotting a V reversal pattern. One may think that all they have to do is wait for the oscillator to move below 20 and start turning up to trigger entry. The problem with this method is that when a stock is moving down quickly, a trend may be developing. Since the Full Stochastics is an Oscillator and not a trend following indicator, false signals can be generated frequently. It is common for the indicator to reach an oversold state just to stay there for a while as the stock continues to move lower in price. Thus an entry in such cases will result in an immediate and possible large loss for the trader.

### **Moving Average Convergence/Divergence MACD**

There are two major differences between MACD and Stochastics that make them useful as complementary indicators: The first is that MACD is a trend following indicator while Stochastics is an oscillator. The second is that Full Stochastics is based on simple moving average (SMA) while MACD is based on Exponential Moving Average (EMA).

The first difference guarantees that if a stock was to establish a trend the MACD will protect us from making an inaccurate entry using Stochastics alone. The use of both Exponential and Simple moving average based indicators assures us that both the short term and the longer term trends are in our favor.

The most common formula for MACD is the difference between the 26 day and the 12 day exponential moving averages. Of the two moving averages the 12 day is the faster while the 26 day is the slower. A 9 day exponential moving average is plotted alongside to act as a trigger line. A bullish signal is given when the MACD moves above its 9 day EMA. A bearish signal



is given when the MACD moves below its 9 day EMA trigger line. Note that the period can be days, weeks, one hour or any other selected time frame.

One of the major advantages of MACD is that it incorporates both momentum and trend in the same indicator. Also by using Exponential moving averages as compared to Simple moving averages less lag is encountered when trying to time the shift in price direction.

When both Full Stochastics and MACD are oversold and signal a long entry simultaneously, we are assured that: (1) Whether the stock is in a trend or settles into a trading range we are on the right side of the trade, and (2) By using both Exponential and simple moving average based indicators we can be certain that both the intermediate as well as the short term trend is in our favor.

Trading V reversals offers both an opportunity and a challenge. A trader has the potential of making a significant profit on the likely sudden and strong reversal. This, however is balanced by the ability to accurately time the entry point. No matter how accurate a technical indicator is, there is always some amount of lag time. The problem with V reversals is that even a small lag time in prices following the indicator can result in an immediate and often a not so small loss.

To avoid the lag issue, a trader should enter a trade only when a high probability of a reversal is confirmed. My trading experience has shown that the best way to accomplish this is by waiting for specific candlestick signals to materialize during the steep decline phase of a stock. When such signals appear in combination with oversold Full Stochastics and MACD with bullish crossover a trade trigger is given.

For bearish downward inverted V reversals after a long advance, we will look for overbought MACD and Stochastics. The MACD should cross downward below the trigger line and the Stochastics should be above 85 and moving lower. At that point a candlestick bearish reversal signal on the chart will trigger a short trade.

## **Candlestick Trigger Signals**

To be able to follow the rest of this section you will need a basic understanding of candlestick charts. I have included a chapter on this subject in my previous book “generate thousands in cash on your stocks before buying or selling them” or alternatively you can refer to any other basic to intermediate candlestick chart book. To keep in line with my stated goal to have this book as a stand alone, I have included chapter 17 from my previous book in Appendix A. This way any one who needs to brush up on candlestick chart patterns can refer to the appendix without having the other book. If you are already familiar with candlestick chart formations then there is no need for you to refer to the Appendix.

You have watched a stock drop precipitously day after day and you are thinking to yourself “it is just a matter of time before this stock bounces back hard. All I have to do is jump in when the time is right and cash in on a handsome profit”. The question is then when is it the right time to jump in and this section will provide the answer.

While the stock is dropping keep an eye on both Full Stochastics and MACD. When both are oversold as defined in the previous section, you should place the stock on a daily watch. Your goal is to look for a strong candlestick reversal confirmation signal in one of the following well known forms:

- (1) Hammer.
- (2) Inverted hammer.
- (3) Doji.
- (4) Bullish engulfing pattern.
- (5) Bullish abandoned baby.

For inverted V reversals when the stock has been making a parabolic move higher for a while, watch for overbought Stochastics and MACD as described in the previous section. Your goal is to look for one of the following well recognized bearish candlestick reversal signals:

- (1) Hanging man.
- (2) Shooting star.
- (3) Doji.

(4) Bearish engulfing pattern.

(5) Dark cloud cover.

These by no means include all the bearish or bullish candlestick combinations. We are limiting our trade entry trigger to the strongest signals to secure a high probability of success. If you are not familiar with the candlestick patterns listed in this section please review the appendix.

**ALERT:** In the majority of cases, oversold Stochastics is the first signal that appears on the chart followed by either a candlestick reversal pattern or an oversold MACD crossover. On occasions where the candlestick reversal signal shows up first, the MACD bullish crossover is likely to follow within a couple of days. The important point to remember is that a V or U reversal trade should only be taken when all conditions of oversold Stochastics, oversold MACD and a candlestick reversal pattern appear on the chart.

Using a combination of the MACD/Stochastics with candlestick charts to enter highly profitable V and inverted V reversals will be clearer when you study the following examples.

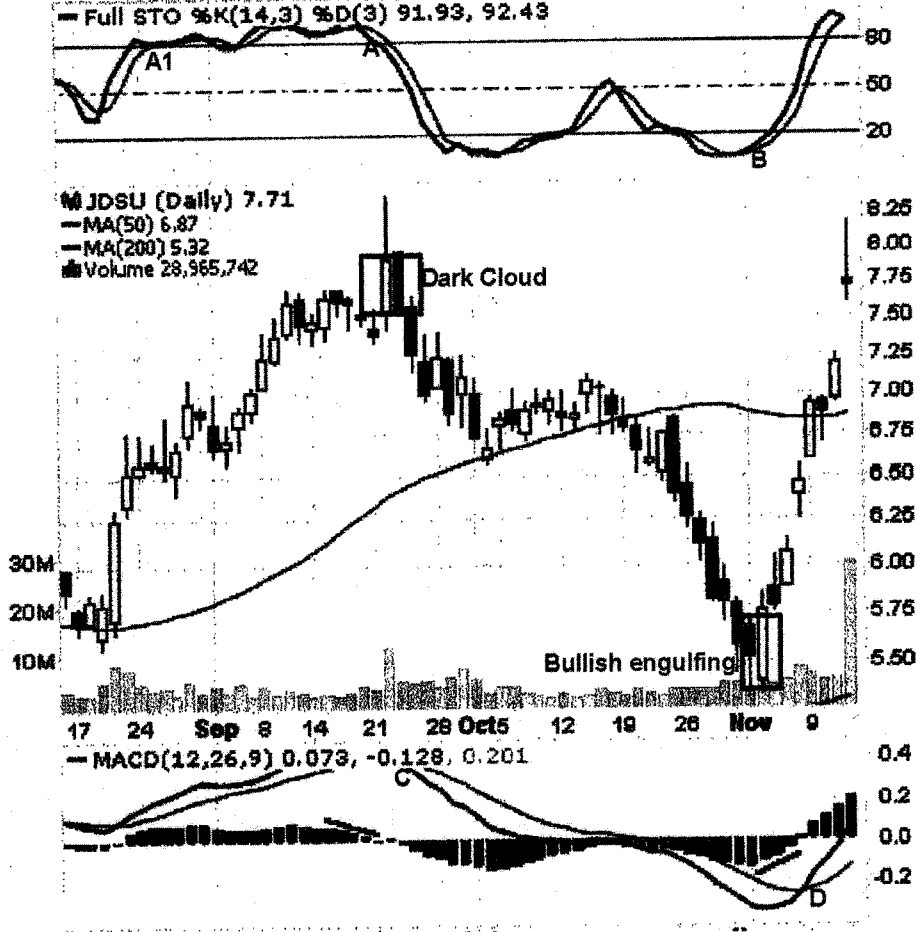
### **Example 3: JDS Uniphase (JDSU)**

After the formation of a dark cloud cover late September 2009 seen on the chart page 68, the stock settled into a steep decline. Notice that around October 15, the full Stochastics oscillator was oversold, which for some traders may signal an entry point. Notice, however that the MACD was still in neutral territory and moving lower. This is an indication that the trend following indicator is telling us that the stock is in a downtrend. Thus entering based on an oscillator signal alone will result in just a temporary bounce after which the stock is likely to continue trending down, as did happen in this case. It was not until early November that both Full Stochastics and MACD were oversold as seen at points **B** and **D** on the chart. Note that points **B** and **D** coincided with the formation of a bullish engulfing candlestick pattern identified as one of the trade trigger patterns. This would have signaled an entry around \$5.75 resulting in a profit of over 35% in 6 trading

**JDSU (JDS Uniphase Corp.) Nasdaq GS**

12-Nov-2009 0 7.74 H 8.16 L 7.61 C 7.71 V 29.0M Chg +0.51 (+7.08%)▲

— Full STO %K(14,3) %D(3) 91.93, 92.43



days.

If you prefer trading on the short side, you could have used the inverted V signal given at point **A** showing an overbought Stochastics, point **C** signaling an overbought MACD and a Dark cloud cover short trade trigger forming simultaneously. This would have allowed shorting at around \$7.00 for a profit of around 30%.

Point **A1** on the chart illustrates the danger of using the stochastics oscillator as a trade trigger by itself. Even though the full Stochastics was overbought, it remained so until point **A** with the stock moving from \$6.25 to \$8.00. Shorting the stock using this indicator alone would have resulted in a short term loss of over 20%.

#### **Example 4: Playboy Enterprises (PLA)**

This is an example of a U type reversal where even though the reversal is strong resulting in a handsome profit, it is not as sudden as a V reversal. This type of reversal is characterized by multiple candlestick signals often occurring just before a trade trigger is given.

Notice on the chart page 70 that the Full Stochastics (STO) entered oversold territory in late October but the MACD at that time was still overbought indicating that the reversal setup was not complete.

In early November at point **H**, a hammer appeared on the candlestick price chart while the Stochastics was still oversold at point **A**. A trade trigger was still not in effect since the MACD has not yet crossed up from oversold territory.

At point **D** on the price chart a Doji candlestick appeared coinciding with an oversold Stochastics at point **B**. A day later the signal of an oversold MACD with upward convergence near point **X** appears. This is the final trade signal for entry around \$2.80 resulting in 75% profit in four trading days.

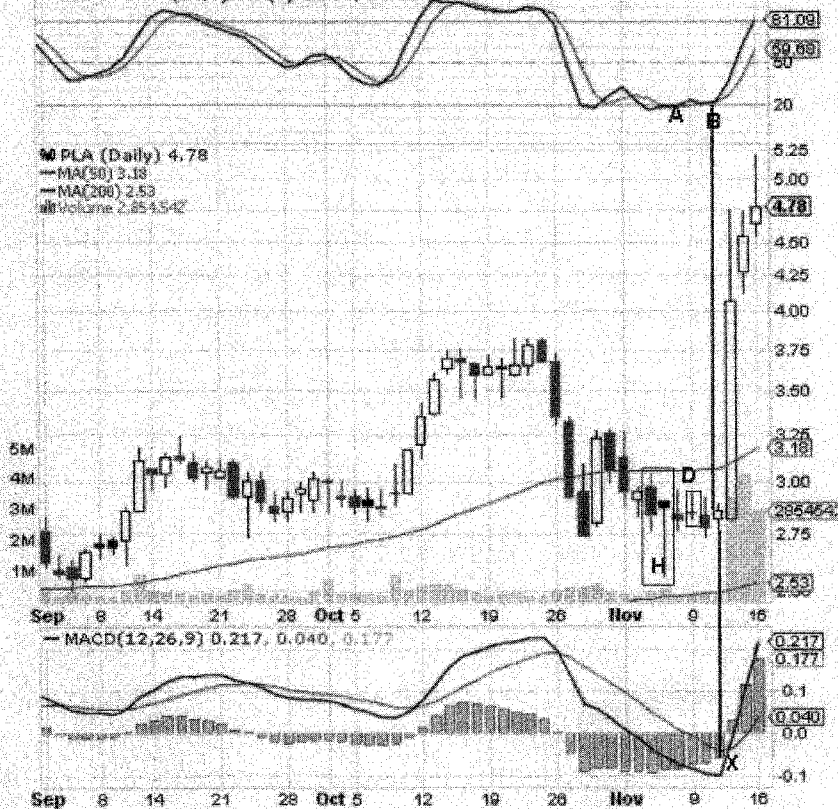
**ALERT:** In U type reversals it is common to see more than one candlestick reversal signal on the price chart. The trade should only be taken when both Stochastics and MACD are moving up from oversold territory with at least two candlestick reversal sig-

PLA (Playboy Enterprises Inc H) NYSE

16-Nov-2009

Op 4.64 Hi 5.22 Lo 4.55 Cl 4.78 Vol 2.9M Chg +0.23 (+5.05%)

Full STO %K(14,3) %D(3) 81.09, 59.68



nals appearing on the price chart.

### **Example 5 : Vishay Intertech (VSH)**

This example shows a situation where a candlestick reversal pattern appeared a couple of days before the MACD bullish reversal signal.

Notice that the Full Stochastics moved into oversold territory on October 26 as can be seen on the Chart page 72. This is almost six trading days before the bullish engulfing candlestick signal appeared in early November. A couple of days later the MACD showed a bullish crossover from oversold territory at point **B**. The Stochastics also showed a bullish crossover at point **A**. Our trade would have been entered at point **Y**, the price point corresponding to the last signal (MACD bullish crossover) at point **B** after both candlestick trigger signal and Stochastics oversold crossover appeared. Our entry at around \$6.80 would have resulted in a move to \$8.00 within 8 trading days.

### **VPV and PVP reversals**

Valley peak Valley bullish reversals and Peak Valley peak bearish reversals are excellent indicators of trend direction change. For this reason they come third after V reversals in the list of explosive chart patterns.

VPV bullish reversals usually take place after a steep drop in the stock. The initial indication that such a reversal is taking place is the price stops dropping and breaks above the steep downtrend line. This is followed by the establishment of a shallower downtrend line with lower highs and lower lows. A subsequent break of the shallow trend line and a retest is an indication of a possible VPV reversal. The first valley (V) is the lowest low formed by the shallow trend line just before a break above it forming the peak (P). This is followed by a retest of the line to form the second valley (V). Please note that for the test to be successful the price point corresponding to the second valley should be higher than the first.

PVP reversals are similar in nature except that they occur after a steep uptrend. The steep uptrend line is then broken and

VSH (Vishay Intertech, Inc.) NYSE

18-Nov-2009 0 7.51 H 7.85 L 7.39 C 7.81 V 2.2M Chg +0.30 (+3.99%) ▲

→ Full STO %K(14,3) %D(3) 96.24, 93.09





a series of higher highs and higher lows form a shallow uptrend line. A break below the shallow uptrend line and a subsequent retest forms a potential PVP reversal.

VPV and PVP reversals have special significance when they appear on the weekly chart because they are a likely indication of a long term trend reversal. To benefit from this powerful chart pattern, it is important to recognize its potential formation before the actual breakout. This is done by recognizing four features which are as follows for a bullish VPV reversal:

- (1) Initial steep downtrend line broken with subsequent formation of a shallower downtrend line with lower highs and lower lows.
  - (2) An MACD bullish crossover occurs during the formation of the shallower trend line but before the final break above this line and subsequent retest.
  - (3) A Relative Strength Index (RSI) price positive divergence occurs as the shallower trendline is forming.
  - (4) The magnitude of the RSI shows a marked increase as the break above the trendline and retest takes place.
- This occurrence is usually the trigger to take the trade.

The Moving average Convergence /Divergence (MACD) was introduced on page 64. Below is a brief explanation of the Relative Strength Index or (RSI).

### **Relative Strength Index(RSI)**

The formula for RSI is as follows:

$$\text{RSI} = 100 - [(100/(1+\text{RS}))]$$

**where RS = Relative Strength Value calculated as:**

**RS = average gain/average loss**

Average gains and average losses are both reported as positive numbers and are for the time period of calculation. For the purpose of RSI the most common period used is 14.

To start the calculation the first average gain is defined as:

$$\text{First Average gain} = [\sum_{n=1..14}(\text{gains})]/14$$

While the average loss is defined as:

$$\text{First Average Loss} = \text{Abs.} [\sum_{n=1..14}(\text{losses})]/14$$

**Abs= Absolute value.**

Average gain is then calculated as:

**Average gain = [13( Average gain)<sub>n-1</sub>+ Current gain]/14**

And the average loss is calculated as:

**Average loss = [13(Average loss)<sub>n-1</sub> +Current loss]/14**

The RS value is then calculated by dividing the average gain by the average loss for each period. The RSI is then calculated by converting the RS value into an oscillator moving between 0 and 100 using the above formula.

### **Example 6: Apple Computer (AAPL)**

By studying the weekly chart on page 75, it is clear that the steep downtrend line was broken in the middle of October giving way to the formation of a shallow downtrend line with lower highs and lower lows. A positive divergence between RSI and price is also visible during the formation of the shallower downtrend line. This is evident in that the RSI value at point **B** is higher than that at point **A** while the price at the first valley **V** spikes below that at point **1**. The MACD showed a bullish crossover signal at point **X** just before the shallow trend line was broken forming the peak at point **P**. The trade trigger signal is given on retest of the shallow downtrend line at the second valley **V**. Entering right after the signal at around \$80 would have resulted in over 100% profit in around 5 months. This is an excellent return especially considering we are dealing with an \$80 stock.

The next patterns that can result in explosive price moves are the single and multiple falling wedge formations.

### **Falling Wedges**

Standard simple falling wedges are usually formed during a retracement from a quick price advance. The falling wedge formation is characterized by lower highs and lower lows with the price range narrowing as the formation of the wedge apex nears. Essentially the falling wedge is formed by two down sloping trend lines converging together as they approach the wedge apex.

Falling wedges are considered bullish whether they occur during a price decline or a price advance.

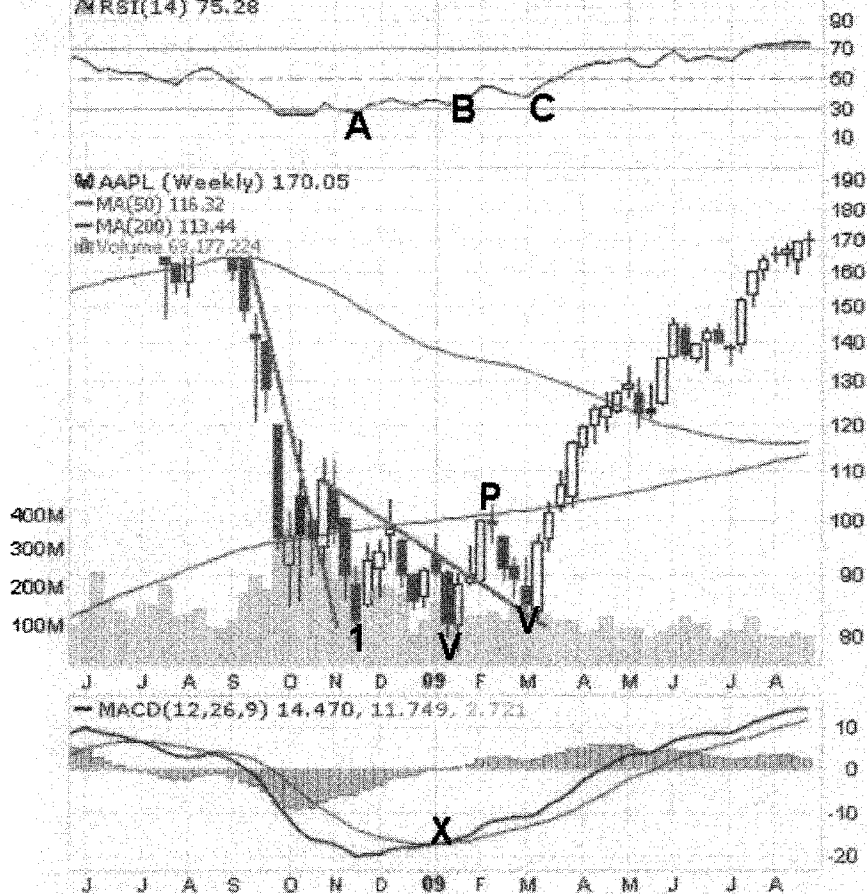
Rising wedges are bearish indicators and are characterized by two trend lines sloping upwards and converging at the

**AAPL** (Apple, Inc.) Nasdaq GS

28-Aug-2009

**Close** 170.05 **Volume** 69.2M **Chg** +0.83 (+0.49%) ▲

**RSI(14)** 75.28



wedge apex. In essence the prices form higher highs and higher lows with narrowing price ranges as the apex gets closer.

Rising wedges are considered bearish whether they appear in an uptrend or a downtrend.

Volume trends lower during the formation of both rising and falling wedges and increases significantly as the breakout takes place.

Simple standard wedge formations are confirmed by the following defining characteristics:

- (1) Volume should trend lower as the price approaches the wedge apex and increase during breakout.
- (2) The upper and lower wedge trend lines should be tested at least a total of five times. Two touches on one line and three on the other.
- (3) The time duration of the wedge should be between 15 and 120 days.

If any of the above conditions are not satisfied, then the formation of a falling or rising wedge is suspect.

To trade falling wedges successfully and capture most of the resulting profits, it is important to recognize when the formation is about to be near completion. In other words, for maximum profits a trade should be entered before the actual breakout takes place.

Assuming a valid wedge formation as defined by the three conditions outlined above, a trade trigger is signaled when the following conditions are in place:

- (1) The nearing of the wedge apex formation coincides with 0.618 Fibonacci retracement from the maximum price point.
- (2) The full stochastics index is in oversold territory as the wedge is near completion and the trend lines converge towards the apex.

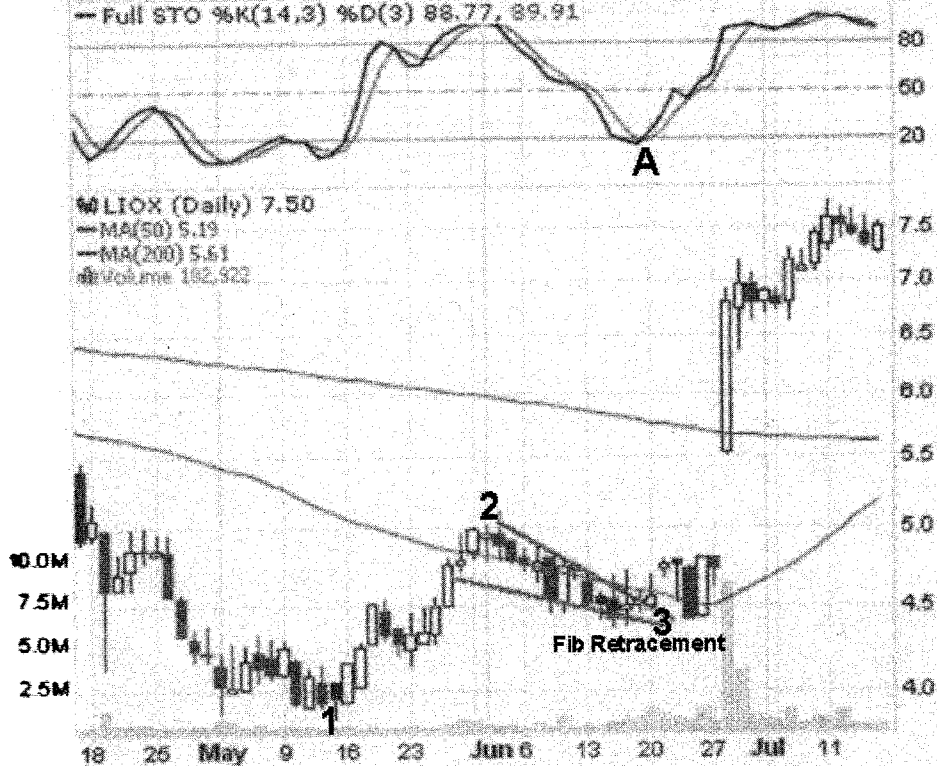
### **Example 7: Lionbridge Technologies (LIOX)**

Rather than cherry picking an example, I decided to use the same example I presented in my previous book for two reasons: (1) To show that the wedge formation requirement and trig-

LIOX (Lionbridge Technologies, Inc.) Nasdaq GM

15-Jul-2005 O 7.27 H 7.55 L 7.25 C 7.50 V 182.9K Chg +0.18 (+2.46%) ▲

Full STO %K(14.3) %D(3) 88.77, 89.91



ger parameters work in most cases. And (2) At the time the chart was prepared for the other book, the trade outcome was not yet known.

As can be seen from the chart page 77, the stock made a quick move between points **1** and **2** from a price of \$4.00 to \$5.00. The stock then pulled back in a falling wedge formation to point **3**. The falling wedge formation is confirmed by:

- (1) Lower lows and lower highs between points **2** and **3**.
- (2) The volume remained low between points **2** and **3** and increased as the breakout took place.
- (3) The upper and lower trend line boundaries of the falling wedge were touched more than a total of five times. There were more than three tests of one line and two of the other.

Since all the conditions of a falling wedge formation were satisfied, we will look for a trade trigger when the pullback gets close to the 0.618 Fibonacci retracement. In this case it is calculated as :  $\$5.00 - 0.618 (\$5.00 - \$4.00) = \$4.38$ . Notice that the full stochastics is oversold at point **A** corresponding to price point **3**. In addition there were multiple tests of the Fibonacci price retracement in the vicinity of point **3** indicating that a decisive break below the 0.618 retracement price of \$4.38 is unlikely.

The apex of the wedge coincided with the oversold Stochastics at point **A** corresponding to price point **3** and a Fibonacci retracement of 0.618 at a price around \$4.40. If we entered a trade at \$4.50 on June 20, we would have been rewarded by a move to \$7.50 or a profit of 67% in three weeks. This is an example of the kind of profits falling wedges can deliver if you observe the formation conditions and trigger parameters carefully.

The previous section discussed standard single wedge formations, however, on some occasions a sustainable breakout is preceded by multiple falling wedges.

**Multiple falling wedges** form during a volatile consolidation period where prices can swing wildly between support and resistance with minor penetration of each until an actual and prolonged breakout takes place.

When a falling wedge retraces prices to near the original support, this is usually an indication of a high probability of multiple wedge formation. Remember that a single falling wedge is characterized by a pullback to near the Fibonacci 0.618 retrace-ment level. If this level is broken and the stock pulls back to near the original support; it is more likely that a second wedge will form. On rare occasions a third wedge can form, but it is safe for a trader to enter a position after the completion of a second wedge.

Each wedge of the multiple wedge formation must satisfy the previously mentioned characteristics to be counted as a wedge. These include: a down trending volume as the wedge converges towards the apex with increase on breakout. Touching of the upper and lower boundaries at least five times and a duration in time of no less than 15 and no more than 120 days.

Since multiple wedge formations do not hold support at the 0.618 Fibonacci level, that is no longer considered a part of the trade trigger. Although a short term trade can be entered after each wedge, it is recommended that a trade entry be only made after the formation of a second wedge. The reason for this is that a pull back and formation of a second wedge can occur before a worthwhile profit can be made.

The entry trigger for a sustained advance in this case is activated by the following two conditions:

- (1) A second oversold Stochastics signal after the upper and lower arms of the second wedge have been touched at least five times.
- (2) The second oversold Stochastics signal corresponds to a price point near the original support. This is the point from which the stock has advanced to the maximum price point before wedge formation.

Trading multiple falling wedges will be clearer when reading the example below.

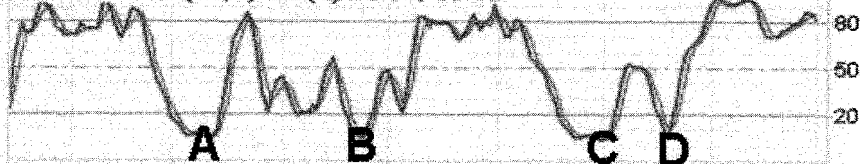
### **Example 8 : Advanced Micro Devices (AMD)**

By studying the chart on page 80, two falling wedge formations can be seen. The first starting the middle of May and ending late

# **AMD (Advanced Micro Devices, Inc.) NYSE**

1-Dec-1999 O 14.12 H 14.16 L 13.53 C 13.97 V 5.4M Chg -0.16 (-1.11%)▼

Full STO %K(14,3) %D(3) 81.54, 85.02



%AMD (Daily) 13.97

MA(50) 10.60

MA(200) 9.35

Volume 5,376,400





July, and the second starting early September and ending mid October. Both formations satisfy the definition requirements of a falling wedge. Can you tell what these are? If not please read the previous section again.

Notice that in both wedges the trading volume trends lower as the apex is reached. The length in time of both wedges is between 15 and 120 days, with the first around 75 days and the second 45 days. In both cases the upper and lower arms of the wedge formation are touched at least a total of five times, two on one and three on the other.

The apex of the first wedge around point **2** shows a price pullback from \$11.00 to \$8.00, which is the original support from where the advance started. This is an indication that a second wedge is likely to form before a sustained advance is likely to occur. Remember that for the first wedge to be a stand alone simple wedge, the 0.618 Fibonacci retracement must hold. In this case the pull back will be to:  $\$11.00 - 0.618 (\$11.00 - \$8.00) = \$9.15$ . The fact that this price was broken and the original support at \$8.00 was retested is an indication of a likely second wedge.

If we decide to trade the first wedge formation we will enter at point **2** near the original support. This also coincides with the second oversold Stochastics at point **B**. Point **1** is not a valid entry point since the upper and lower arms of the wedge have not been tested a total of five times. This is the case even though the Stochastics is oversold at point **A**.

With these kinds of setups it is often better to skip the first wedge and enter the trade when a second wedge trade trigger is given. The reason for this is that the advance after the first wedge may be short lived and not worth the trade, although this was not the case in this example.

The second wedge trade trigger is at point **4** which is again near the original support of \$8.00 coinciding with a second oversold Stochastics at point **D**. Point **3** is not a valid trade trigger since the arms of the wedge have not been touched a total of five times even though the Stochastics is oversold at point **C**.

**ALERT:** The important aspect of multiple falling wedges as com-

pared to single falling wedges is the formation of two oversold stochastics points, with the second being the trigger. The reason for this is that with simple wedges the retracement is only to the Fibonacci number thus making it unlikely for the stochastics to register an oversold signal. On the other hand multiple wedge retracements go deeper even at the first price point resulting in a second oversold Stochastics as seen in the above example.

In addition to the standard single and multiple wedge formations there is one lesser known highly profitable bullish wedge formation missed by most traders, namely the reverse rising wedge.

The **bullish reverse rising wedge** is formed by two trend lines diverging away from the wedge apex. As the trend lines diverge, prices form lower highs and lower lows. This is essentially the exact reverse of a bearish rising wedge where the trend lines converge towards the apex while forming higher highs and higher lows.

The characteristics of a reverse rising wedge formation are as follows:

- (1) Volume trends higher as the wedge arms diverge and the reverse wedge is formed. Note that this is the opposite of a regular wedge where the volume trends lower.
- (2) The upper and lower arms of the wedge must at least be touched a total of five times.
- (3) The reverse rising wedge has a shorter time duration than a regular wedge and is usually between 15 and 75 days. The reason for this is that the increasing divergence as the wedge forms limits the allowable separation of the wedge arms before the pattern is likely to fail.

The trade trigger for a reverse rising wedge occurs on a partial pullback to retest the low of the wedge at the point of maximum divergence. When such partial pullback takes place coinciding with oversold full Stochastics a trade entry signal is given. Although reverse rising wedges are somewhat rare, they usually are very profitable as can be seen from the following example.

# **ANN** (Anntaylor Stores Corp.) NYSE

1-Nov-1999 O 19.36 H 19.39 L 18.97 C 18.67 V 1.5M Chg -0.25 (-1.32%) ▼

— Full STO %K(14,3) %D(3) 72.88, 52.34



### **Example 9: Ann Taylor (ANN)**

By examining the chart page 83, a reverse rising wedge formation can be seen between points **1** and **2**. Notice that the upper and lower trend lines are diverging from the apex and forming lower highs and lower lows. The volume is also trending higher between points **1** and **2** and the trend lines are touched more than five times. The upper arm is touched three times while the lower arm is touched more than three times. The time duration of the wedge formation is around 20 days.

After the lower arm of the wedge is touched at point **2**, the upper arm is touched a third time, and then a partial price pullback to point **3** takes place. This pullback is considered partial since the price does not reach the lowest low at point **2**. Coinciding with the partial pullback is an oversold full Stochastics at point **B** which gives the final trigger to enter the trade at around \$14.50 resulting in a move to \$20 within eight days.

The oversold point **A** on the Stochastics chart is not considered a trade entry signal since a partial pullback has not yet taken place. This is critical in a reverse rising wedge formation, since a pullback below the previous low at the lower arm indicates that the wedge formation is not complete. It is thus critical to wait for a partial pullback and not to try to anticipate the reversal before an actual signal is given.

The next highly profitable chart pattern is the partial pullback ascending and reverse ascending triangles.

### **Partial Pullback Ascending Triangles**

I have discussed standard ascending triangles in my previous book and I will borrow the definition from there:

An ascending triangle is a bullish continuation pattern that should mostly be traded if the stock is in an uptrend. The flat top arm of the triangle defines price resistance. Whenever buying pressure builds, it is encountered by selling at the resistance line. The selling pressure weakens every time resulting in a higher low, until eventually sellers are exhausted and a break above the resistance line takes place. Volume is usually low when trading within the triangle pattern and increases on breakout.

It is common practice to enter an ascending triangle trade on a break above the horizontal upper arm. In this section, however, we will be looking for a specific type of ascending triangle setup that is likely to result in an explosive upward move.

Ascending triangle patterns tend to fail more than thirty percent of the time. It is thus important to be able to identify the specific ascending triangle setups that have a high probability of success in terms of pattern behavior as well as profit potential. Such ascending triangles are characterized by a partial decline or pullback after a breakout above the horizontal resistance arm of the triangle. For the pattern to result in an explosive move, it is essential that the decline is bought into. The best way to tell whether this is taking place is using Chaikin Money Flow (CMF). I have discussed this indicator in my previous book, but keeping with my goal of having this book as a complete stand alone, I will present a brief discussion of the Chaikin Money Flow (CMF) indicator below.

Chaikin money flow is an indicator combining price and volume to point whether the stock is under accumulation or distribution. This is based on the premise that if a stock closes below its midpoint of the day there is distribution occurring. If on the other hand the stock closes above its midpoint then accumulation is taking place.

CMF value above 0.1 indicate heavy accumulation and predicts higher prices ahead, while CMF values below -0.1 indicate heavy distribution and predicts lower prices ahead. Values between -0.1 and 0.1 indicate either weak buying or weak selling dependent whether the indicator is above or below the zero line. Thus values between -0.1 and zero, signal weak selling while those between zero and 0.1 signal weak buying.

As the stock breaks the upper horizontal resistance arm of the triangle, the Chaikin Money Flow (CMF) should be crossing the zero line and turning positive. This is important since a decrease in CMF as the breakout occurs is likely to indicate a possible pattern failure. Furthermore the CMF should become more positive during the partial pullback, in other words creating a positive divergence between CMF and price. This divergence indi-

cates that the stock is being accumulated during the pullback.

Thus the conditions that have to be met for a partial pullback ascending triangle to be a high profit trade candidate are as follows:

- (1) A clear traditional ascending triangle should be formed.
- (2) Break above the horizontal resistance arm should be accompanied by Chaikin Money Flow (CMF) moving into positive territory.
- (3) A partial pullback should occur after the break above the upper arm of the triangle.
- (4) The pullback must be accompanied by positive Chaikin money flow (CMF) price divergence, with CMF preferably near or above 0.1 as the pullback nears completion.

The trade is triggered by a reversal candle appearing after the pullback is completed. More often than not, the reversal is spotted by an open below the prior day's low and a close above it. This usually results in the formation of a bullish harami or a piercing pattern. Please refer to the candlesticks chapter in the appendix to learn more about reversal candlestick formations.

My experience has shown that the partial pullback is unlikely to exceed the 0.618 Fibonacci retracement of the distance between the lowest low on the diagonal arm of the ascending triangle and horizontal resistance arm.

Trading the partial pullback ascending triangle will be clearer in the following example.

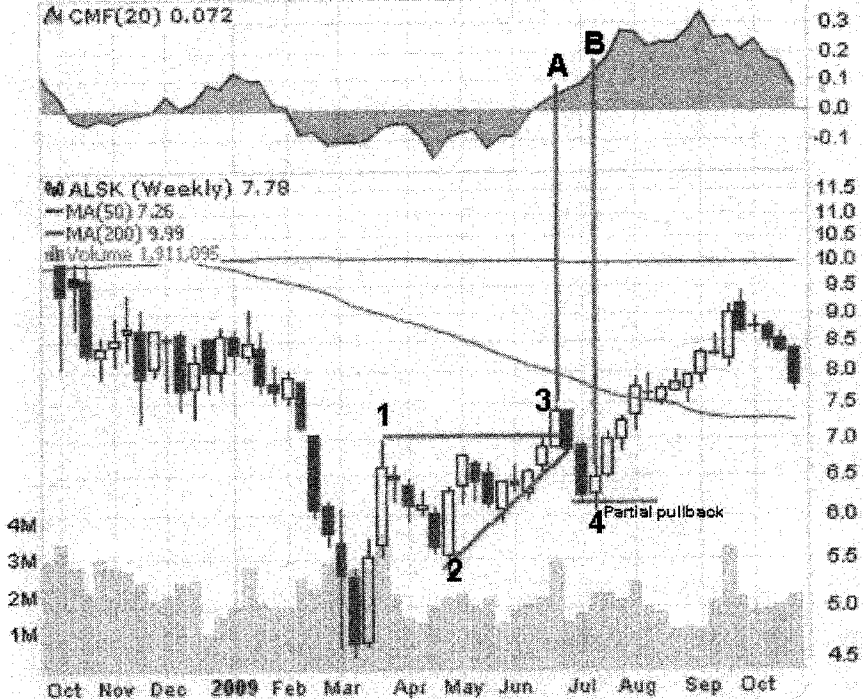
### **Example 10 : Alaska Communications (ALSK)**

A traditional ascending triangle defined by points **1**, **2** and **3** can be clearly seen on the chart page 87. The breakout at point **3** on heavy volume is accompanied by positive and increasing Chaikin money flow at point **A** on the CMF chart. A partial pullback then follows to point **4** accompanied by increasing CMF above 0.1 to corresponding point **B** on the CMF chart. This is close to the Fibonacci retracement from the lowest point on the diagonal arm of the triangle, point **2**, to the horizontal line calculated as: \$7.00

**ALSK** (Alaska Communication) Nasdaq QM

30-Oct-2009 O 8.37 H 8.40 L 7.70 C 7.78 V 1.9M Chg -0.56 (-6.71%)

CMF(20) 0.072



-  $0.618(\$7.00 - \$5.5) = \$6.07$ . As can be seen the partial decline stopped at around \$6.00 near point 4. This was confirmed by a reversal candlestick with a lower open than the previous day forming a bullish harami. Our trade entry trigger was at \$6.5 with an eventual move to \$9.00 or 38% in sixty days.

The next type of ascending triangle that can deliver strong profits is the **reverse partial decline ascending triangle**.

The reverse ascending triangle is defined by a horizontal or resistance upper arm and a diagonally slanted lower arm. The difference between the standard and the reverse ascending triangle is that the lower arm is slanted downward thus forming lower lows. The reasoning behind the bullish nature of this pattern lies in the lack of increase in trading volume as the price decreases indicating that sellers are less motivated to sell. In the last phase before the breakout a partial decline occurs indicating that this time sellers were not able to push the prices back to the lower arm of the triangle as buyers stepped in. This is an indication that buyers have overwhelmed sellers and the stock is ready to reverse.

For this pattern to remain intact and be profitable, it is essential that the consecutive tests of the lower arm of the triangle be accompanied by sustained accumulation. Although as the prices decline to test the lower arm of the triangle it is expected that buying interest will diminish; it is critical that accumulation rather than distribution takes place. For this purpose it is necessary that the Chaikin Money Flow (CMF), while decreasing during pattern formation, remain positive. A significant drop in CMF to negative territory indicates that the pattern is likely to fail.

In summary, the defining properties of a reverse partial pullback ascending triangle are as follows:

- (1) A standard reverse ascending triangle with a horizontal resistance line and a down sloping lower arm is formed.
- (2) As the prices decline along the lower arm, the volume should be either irregular or decreasing but not increasing.
- (3) The Chaikin Money Flow (CMF) should remain



positive, but can decrease, during the formation of the triangle pattern.

(4) The resistance arm and the lower down sloping diagonal arm should be tested at least a total of four times, two on the upper and two on the lower, if this does not occur the pattern is not considered complete.

The trade is triggered when the following conditions are in place:

(1) A partial pullback from a test of the resistance arm takes place, provided the four touch total condition is satisfied.

(2) The partial pullback is accompanied by an increase in CMF, preferably to above 0.1 indicating heavy accumulation during the decline.

(3) The trigger is confirmed by a bullish Moving average convergence divergence (MACD) crossover slightly before or after the move in CMF to above 0.1 during the partial pullback.

Trading the bullish partial pullback reverse ascending triangle will be clearer when studying the example below.

### **Example 11: Arkansas Best Corp (ABFS)**

By examining the chart on page 90, a reverse ascending triangle outlined by points **1**, **2**, **3** and **5** is formed. Notice the horizontal upper resistance arm **1**, **2** and the lower arm **5**, **3** forming a downward slant with lower prices as one moves from point **5** to **3**. Also the Chaikin Money Flow (CMF), while decreasing between points **A**, **B** and **C** corresponding to price points **5**, **6**, and **3** along the lower arm, remains positive. This is an indication that drops in prices did not attract more selling. Notice also that the volume trended down during the formation of the reverse ascending triangle; with a large volume spike in early May corresponding to the vicinity of point **5**, moving to a lower volume spike corresponding to point **6**, and even a lower volume at point **3**. After the resistance arm was tested at point **2**, and the diagonal arm at point **3**, three times each, for a total of six times thus completing the four touch requirement to define the pattern, a partial



pullback takes place. The partial pullback was accompanied by a significant increase in CMF to point **D** indicating heavy accumulation. An MACD bullish crossover confirmation signal at point **X** preceded the increase in CMF confirming the trade trigger signal. Our entry was at \$20 for a move of thirty percent to \$26 in less than one month.

Another pattern that can deliver strong profits and that is characterized by a low failure rate is the compressed double bottom pattern that will be discussed in the next section.

### **Compressed Double Bottoms**

The traditional double bottom is a bullish pattern shaped in the form of a W. This pattern usually occurs after a downtrend and is characterized by a lower trading volume on retest of the first bottom. Thus the second valley must show a lower trading volume for the pattern to be valid.

Compressed double bottoms are a special version of the traditional double bottoms where the valleys are much closer together. There are essentially two kinds of compressed double bottoms.

- (1) Alternating double bottoms where the valleys are separated by a single trading period.

- (2) Consecutive double bottoms where the valleys occur in consecutive trading periods with no separation.

Compressed double bottoms are of special significance on the weekly charts showing a much lower failure rate and a more explosive move than daily charts. Such patterns tend to give numerous false signals on the daily charts, since day to day stock price volatility can negate the pattern formation.

**Alternating compressed double bottoms** are defined by the following properties:

- (1) Two downward spikes occurring with one week separating them.

- (2) Clear view to the left of the spikes for at least six months. This implies that no spikes of equal or longer range occurred in the last six months. This is a critical

requirement for the pattern to be valid.

(3) Prices within the downward spikes should overlap each other. The closing and opening prices do not matter as long as significant overlap exists between the spikes.

(4) Higher trading volume on one of the spikes than the other. If both spikes are defined by black candlesticks where the closing price is near the bottom, then the first spike is likely to have higher volume. On the other hand if the second spike is a white candlestick while the first is black then the second spike is likely to have the higher trading volume.

The requirements for the **consecutive compressed double bottoms** are somewhat different and are as follows.

(1) Two consecutive downward spikes on the weekly chart well below the surrounding price action taking place after a decline.

(2) Clear view to the left of the spikes as indicated in the previous section.

(3) At least one of the spikes has higher volume but in no particular order.

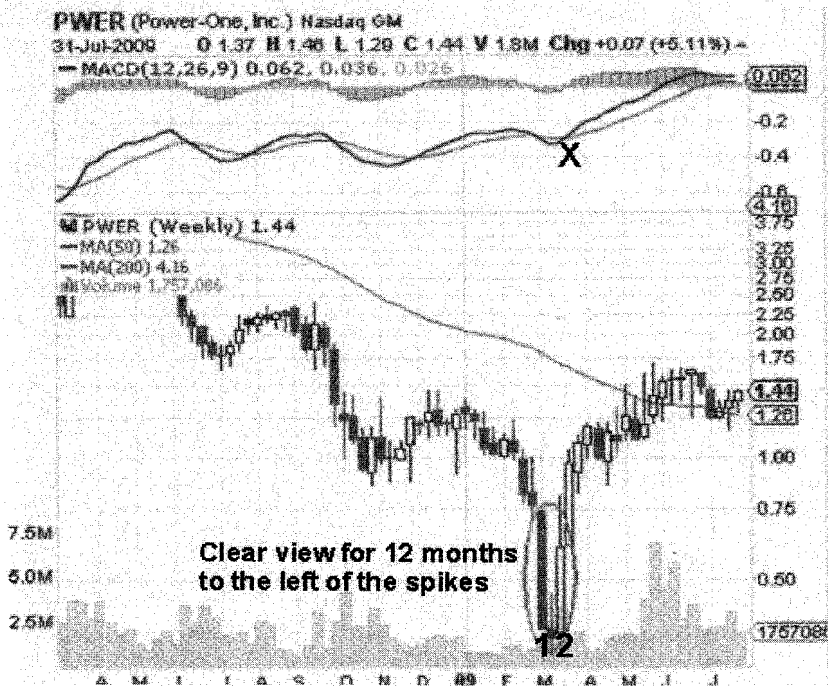
(4) The bottom ends of the spikes should terminate near the same price with significant price overlap.

For both alternating as well as consecutive compressed double bottoms, the downward spikes can be formed by two white, two black, or one white and one black candlesticks. As indicated above it is not important whether the close is near the low or high of the week as long as significant overlap exists.

Trading compressed double bottoms will be clearer when studying the examples below.

### **Example 12 Power One (PWER)**

This is the same example I used to illustrate trading the highly profitable falling rectangle pattern earlier in this chapter. Before forming a falling rectangle pattern the stock completed its downtrend by forming an alternating compressed double bottom. This double bottom appears on the chart page 93 with alternating valleys at points **1** and **2** and one trading week between them. A



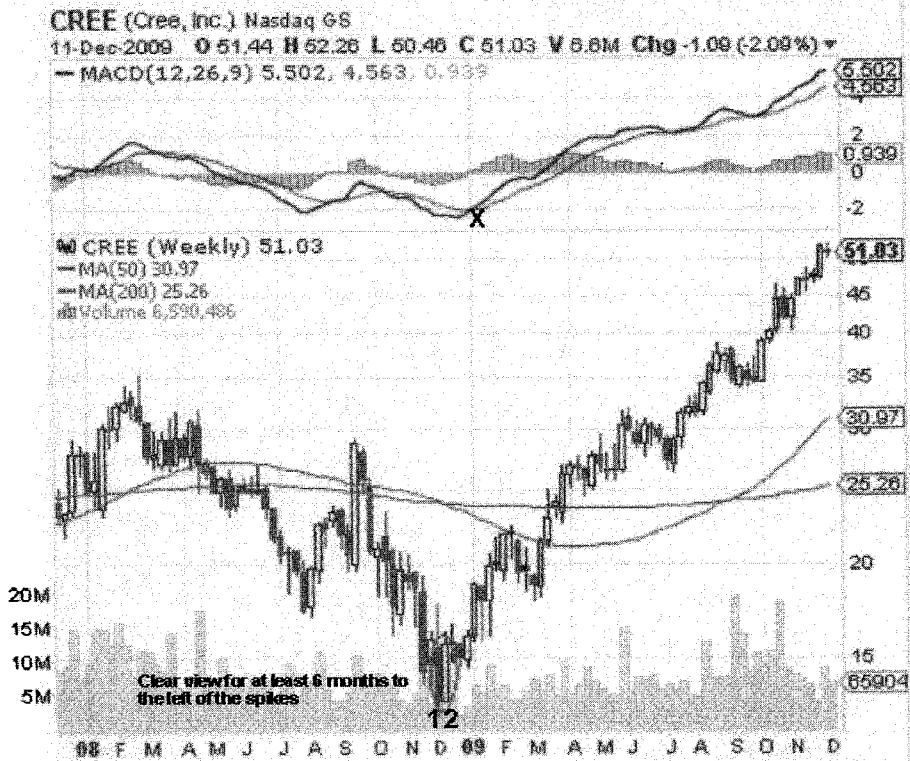
clear view to the left of the spikes of more than 12 months can also be seen as indicated on the chart. This is more than double the six months minimum requirement indicating the potential for an exceptionally strong move. The downward spikes at points **1** and **2** have significant price overlap. The second spike is a white candlestick closing near the high as opposed to the first which closed at the bottom of the week's trading range forming a black candlestick. The second spike also has a higher trading volume than the first as expected since the price closed at the top of the range.

The bullish MACD crossover at point **X** right after the second spike gives a trade trigger at \$0.80 eventually resulting in a double in three months. As we have seen previously the stock eventually formed a falling rectangle and as of the date of this writing (December 15, 2009) the stock closed near \$4.15. This shows the potential profits by getting in early on such kinds of setups.

### **Example 13 Cree Inc. (CREE)**

This is an example of the consecutive compressed double bottoms where the two downward spikes occur right after each other and are not separated by a trading week. The chart on page 95 shows two consecutive spikes at points **1** and **2** with a clear view of almost a year to the left of the spike as indicated on the chart. In addition as seen in the previous example there is significant overlap between the two spikes. The second spike is a white candlestick with the price closing at the high end of the range for the period. As expected the second candlestick shows higher trading volume than the first.

The trade trigger is given at point **X** with entry at a \$17.00 price in mid January 2009. The stock doubled to around \$35 by July and tripled to \$51 by December. Remember that doubling your money every six months can turn a \$10,000 investment to 1 million in less than four years so do not balk on this kind of return.







## Chapter 5

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### Explosive Profits Trading Momentum Shifts

In a previous chapter I have discussed momentum based consolidation breakouts. In this chapter, the focus will be on pinpointing trend reversals or significant corrections by recognizing a prior shift in momentum.

A momentum shift indicates that at some point in the future the price trend will change but does not provide information on the timing of such change. A trade trigger that defines the timing of a momentum shift is thus essential to determine our entry point.

A very simple, yet extremely powerful indicator that provides information on momentum shift, is the ROC or Rate of Change. This is a momentum oscillator that measures the percentage change in price from one period to the next. The ROC gives a comparison between the price for the current period to that of several or n periods ago.

**ROC = ((Current close – Close n periods ago) / (close n periods ago)) 100**

The ROC oscillator fluctuates above and below the zero reference line as the indicator moves from positive to negative. Movement of the oscillator relative to price can also warn of pending momentum shifts as will be demonstrated in the rest of this chapter.

#### Relationship between Momentum and Price

In normal situations both momentum and price trend in the same direction and form new highs and lows at the same time. In

rare situations, when the momentum as measured by the Rate of Change (ROC) falls out of sync with price, it is usually an indication of a shift in momentum and a likely price trend change. This is essentially a sign of divergence between price and momentum.

### **Positive Divergences**

In this case, momentum as represented by the Rate of Change (ROC) is moving higher as prices are moving lower. In other words momentum is diverging positively from price. Remember that ROC can be negative or positive; and in this case when the ROC is moving higher, it is essentially becoming less negative. As the price drops the selling momentum decreases as a result of ROC moving from negative closer into positive territory. This is an indication of a decrease in selling pressure until it becomes so weak, eventually resulting in buyers taking control triggering an upward price reversal.

A positive divergence can also occur when a lower price is not confirmed by a lower ROC valley or an increase in negative momentum. When this occurs a trigger, to be discussed later, will be our signal to trade counter to the prevailing trend.

### **Negative Divergences**

In this case the momentum as represented by the rate of change (ROC) is moving lower as prices are moving higher. In other words momentum is diverging negatively from price. As momentum, represented by (ROC) moves lower it becomes less positive eventually moving into negative territory. As the price is increasing the buying momentum is decreasing represented by less positive ROC eventually moving into negative territory indicating that sellers now have the upper hand.

A negative divergence can also occur when a higher price peak is not confirmed by a higher ROC peak or an increase in positive momentum. When this occurs a sell trigger, to be discussed later, will give a signal of an impending change in price direction.

Once a negative or positive divergence between price and

ROC is spotted on a chart, the next step will be to identify the trigger to time our trade entry.

### **Trade Entry Trigger**

The ROC price divergence is only an indication of a future change in price but not a trade signal at the time it appears on the chart.

As previously noted in the case of a down reversal from an uptrend, the Rate of Change (ROC) momentum indicator starts diverging negatively from price. The first hint of an approaching reversal is when a new price high is not confirmed by a new ROC high. However as long as the momentum trend line corresponding to price support is in an uptrend or flat no trade trigger is yet in effect. This is an indication that buyers are still in control when the stock is trading near support levels. A bearish trend reversal is indicated when the ROC breaks below its price support level trend line. This is thus our trigger to take the trade.

The first signal of upward reversals from a downtrend, is when a new low in price is not confirmed by a lower ROC valley. However as long as the ROC trend line corresponding to price resistance is flat or in a downtrend, no actionable trade trigger is in place. This is an indication that sellers are still in control when prices are near resistance levels. A bullish trend reversal is usually indicated when the ROC breaks above its resistance level trend line.

Based on my personal trading experience momentum shifts are best used to predict a downward reversal from an uptrend. In essence it is a good and simple technique to use to exit trades or short stocks. Although this strategy can be used to enter a stock on a reversal from a downtrend, other strategies discussed in this book, as well as my previous book, are much more effective.

### **Example 1: Dow Industrial Average (\$INDU)**

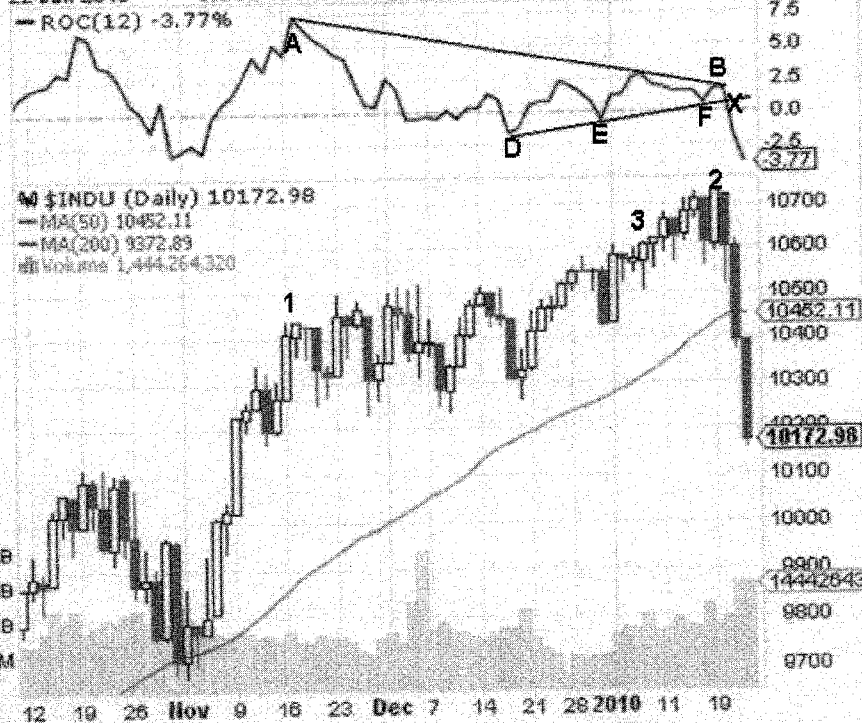
By studying the chart on page 100, it can be seen that an uptrend in price between **1**, **3** and **2** has occurred. The corresponding momentum chart as represented by Rate of Change (ROC) showed a clear downtrending line between points **A** and

**\$INDU (Dow Jones Industrial Average) INDX**

22-Jan-2010

Close 10172.98 Volume 1.4B Chg -218.90 (-2.09%) ▼

— ROC(12) -3.77%



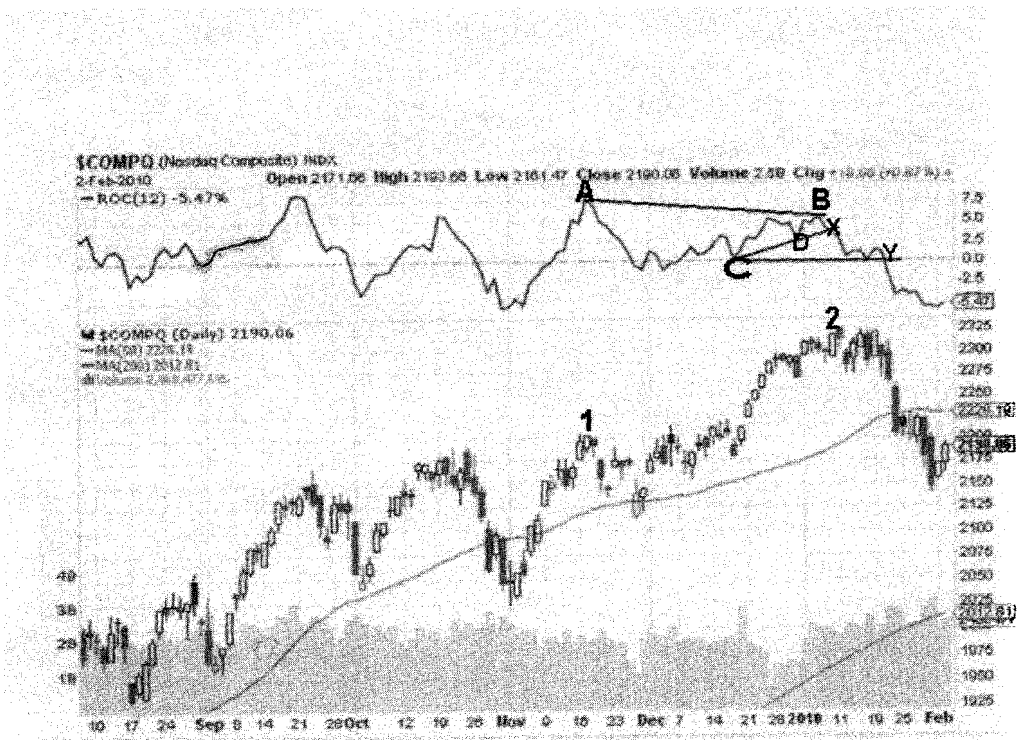
**B.** In addition, the new price high at point **2** was not confirmed by a new ROC high at point **B**. In fact a negative divergence between price points **1**, **2** and ROC points **A** and **B** occurred.

Notice that the momentum or ROC trend line **D**, **E**, **F** corresponding to price support is trending higher. Thus, even though a price ROC divergence occurred between points **3** and **2**, it was not confirmed by a higher ROC peak; so no action was taken. The reason is that the ROC trend line **D**, **E**, **F** corresponding to price support was still in an uptrend indicating that buyers are still in control at support prices. The ROC support trend line eventually breaks at point **X** giving a trade signal and warning of an impending steep drop in the index. A 500 point drop takes place within few days after the trade trigger.

### **Example 2: Nasdaq Composite Index (\$COMPQ)**

I have picked this example to illustrate that, on occasions, multiple trade triggers are given by ROC – Price divergences. Thus if a trader misses the first signal, another trigger is likely to appear on the chart within few days. In addition it is critical for a trader to realize that when trading such setups one needs to recognize slight variations on the basic theme discussed in this chapter. This capability is important when trading any setup since there is a lot of noise in stock charts that has to be ignored to be able to see the profitable trade clearly. This usually comes with experience.

By examining the chart page 102, it is seen that even though the price made a new high at point **2**, it is not confirmed by a new momentum or ROC high at point **B**. Notice that the ROC support trend line **C**, **D**, **X** is in an uptrend indicating that buyer support is still present and no trade trigger is in effect. When the ROC uptrend support line is broken near point **X**, a first trade trigger is given warning of a coming drop in the Nasdaq composite. The actual drop occurred few days later when another trigger manifested itself on the chart with a break below the flat ROC support line **C**, **Y**. This is another trigger to take action if the trader has missed the first. Taking the trade at the price corresponding to point **Y** is still highly profitable, even though an earlier entry



near price point **2** corresponding to point **X** would have yielded a higher return.

Since the two previous examples for a reversal from a top were for indices, the example below demonstrates that this concept works for individual stocks.

### **Example 3: Google Inc. (GOOG)**

By examining the chart page 104, it can be clearly seen that the price at point **2** is higher than that at point **1**, with momentum as measured by ROC forming a higher peak at point **B** than **A**. The momentum is thus in sync with price indicating that further price advance is likely ahead. Between points **2** and **3** a negative divergence between ROC and price takes place when an uptrend in price is countered by a downtrend in momentum or ROC. Notice that while point **3** forms a new peak on the price chart higher than point **2**, point **C** on the ROC chart is lower than point **B**. This is an indication that momentum is diverging negatively from price warning of a coming reversal at some point in the near future. The ROC line **D, E** corresponding to the up trending support line shown on the price chart indicates that buyers are still in control and there is no need for action yet. At point **X**, however, the **D, E** line uptrend is broken giving a trade trigger at the corresponding price shown by drawing a vertical line from point **X** down to the price chart. This corresponds to a price around \$610, with an eventual drop to \$530 resulting in a profit of around 15% in less than 30 trading days.

In the next example, I will demonstrate how a sudden momentum shift is usually a precursor to a strong price reversal.

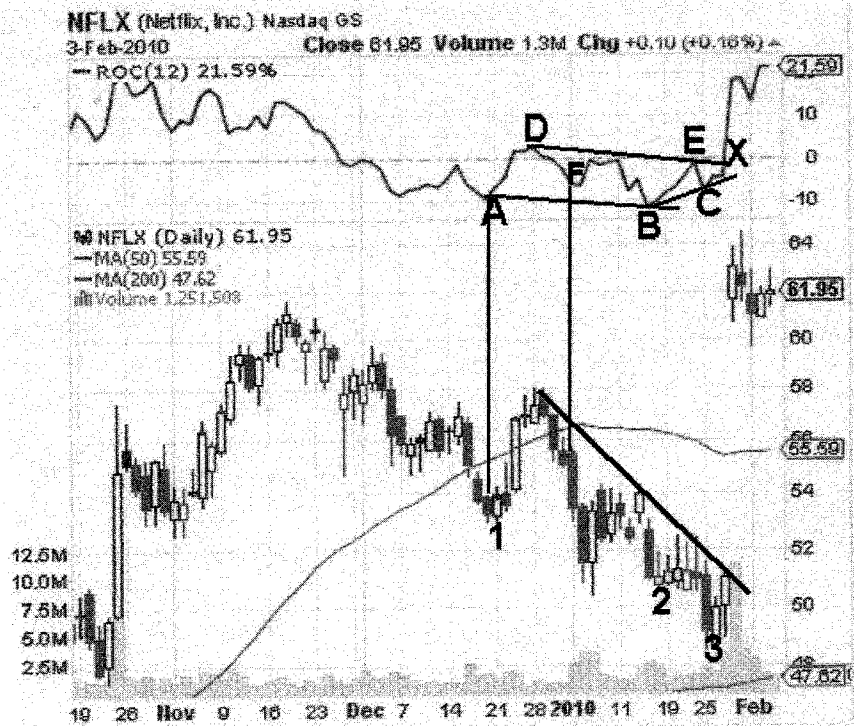
### **Example 4 : Netflix Inc (NFLX)**

I indicated previously that price momentum divergences are best used to decide when an uptrend is about to end. However, in situations where a sudden momentum shift occurs during a price downtrend, a strong price reversal to the upside usually follows. In these kind of situations ROC – Price divergences can be used as an entry signal as will be demonstrated in this example.

By studying the chart on page 105, it is evident that the







price is forming lower lows at points **1**, **2** and **3**. Notice that momentum as represented by ROC moves in the direction of price between points **A** and **B**, by forming a lower low at **B** corresponding to the lower price low at **2**. As the price drops further to a lower valley at point **3**, the ROC diverges positively by moving up to point **C**. This creates a sudden shift from the down trending ROC line **A, B** to the up trending line **B, C** giving us the first signal of a coming price reversal.

Notice that the ROC line **D, E** corresponding to price resistance trend line is moving lower indicating that sellers are still in control as the stock moves to near price resistance. At point **X** the ROC down trend line corresponding to price resistance line is broken, giving a trade trigger signal a couple of days before a significant gap up occurs.

Notice that although the ROC trend line is positive between points **A** and **F**, this does not represent a positive divergence. The reason is that point **F** corresponds to a downtrend line resistance price rather than a support price as is the case with point **A**. The vertical lines drawn from points **A** and **F** on the ROC chart down towards the price chart clearly demonstrate this. The rise in ROC between points **A** and **F** corresponds to a price increase hence placing price and momentum in sync as expected and giving no signal to act.

One way to use momentum shifts as demonstrated above is few days prior to earning announcements. My experience has shown that if a stock exhibits a positive momentum shift supported by positive ROC price divergence, a likely strong post earning move will occur as seen in this example. Be aware however, that this does not imply that a momentum shift is a necessary condition for a post earnings move. Such moves can and do occur without any momentum signals present.

One way I use momentum shifts is to decide whether to hold a stock through earnings. My usual trading policy is not to hold stocks traded short term through earnings, but I will usually make an exception if a sudden momentum shift takes place few days before announcement.

Another profitable way is to use this technique as a simple

screening tool during earnings season. Check the stocks reporting earnings one week prior to earnings report date and look for ones that show a sudden shift in momentum. To further supercharge your profit potential you can narrow the candidates to those showing a high level of short interest. If a stock sporting a high level of short interest also exhibits a positive momentum shift with ROC – price positive divergence, a post earnings short squeeze is very likely to materialize. This will permit a trader to take a stock, or preferably a high potential option position, few days before earnings and bank a significant profit after earnings announcement.

Due to the high profit potential of this kind of set up and its low failure rate, I usually recommend a position be taken right after a positive momentum shift occurs. This is represented by point **C** on the NFLX chart which is few days before the actual trigger or point **X** appears. The reason for this, is that to benefit from this technique you will have to buy the stock before earnings and a trigger on occasions may not be given until the close of the day prior to earnings.

Momentum divergences are very effective in pinpointing long term trend reversals as can be seen in the example below. The March 2009 bottom in the Dow Jones Industrial Average could have been accurately traded by recognizing a positive momentum divergence on the weekly chart.

It is important to note that momentum divergences are more effective in timing longer term uptrend reversals using weekly charts. When looking for short term upward reversals using daily charts it is advisable to look for sudden momentum shifts as seen in example 4.

### **Example 5: Dow Jones Industrial Average Index (\$DJX)**

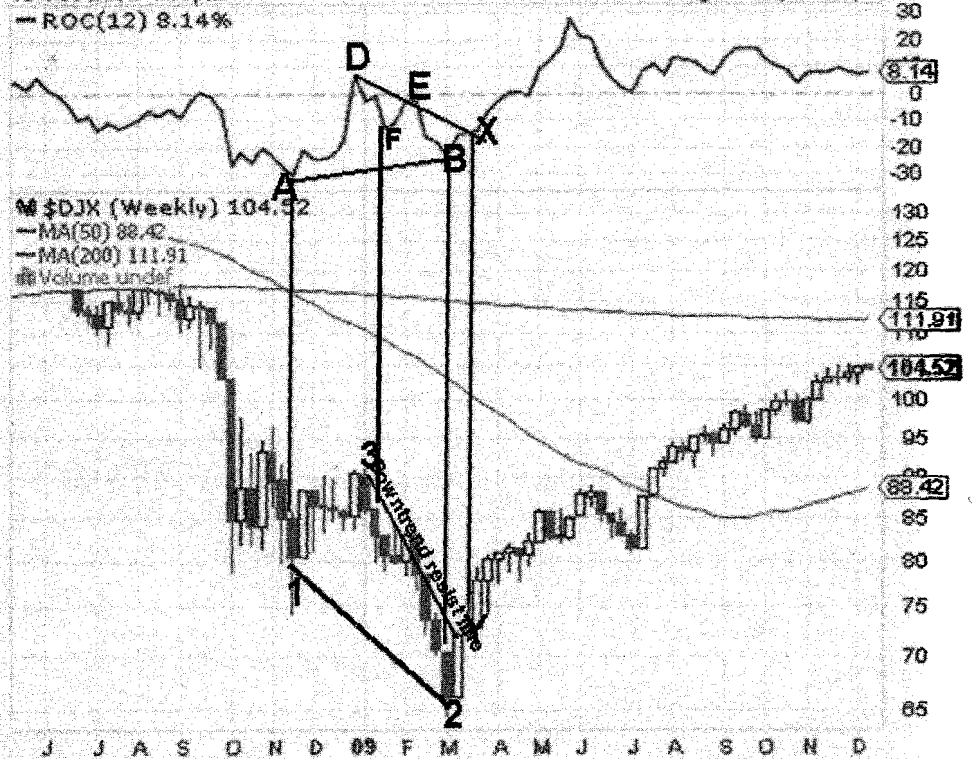
By examining the Dow Average Index weekly chart on page 108, it can be clearly seen that the price is trending down between points **1** and **2** while the corresponding ROC trend line between **A** and **B** is moving higher. A lower price valley at point **2** relative to point **1** is not confirmed by a lower momentum or ROC at point **B** relative to point **A** indicating a positive divergence be-

\$DJX (DJA 1/100) INDX

15-Dec-2008 4:00pm

ROC(12) 8.14%

Last 104.52 Chg -0.20 (-0.19%)



tween momentum and price. This is our first signal of an impending long term trend reversal in the index.

The ROC trend line **D, E, X** corresponding to the downtrend price resistance line **3, Y** is moving lower. This indicates that every time the price moves up to the trend line sellers take over and the price is pushed lower. This is confirmed by the negative slope of the ROC line **D, E, X** indicating that ROC is becoming less positive, or in other words buy interest is weakening when the price moves up to the resistance line **3, Y**.

When the ROC downtrend line **D, E, X** is broken, this indicates that buyers have seized control as the price hits the resistance downtrend line. As can be seen on the chart a vertical line drawn down to the price point **Y** from the ROC point **X** indicates an entry around 7500 on the Dow with an eventual move to 10400 by December 2009.

When interpreting momentum divergences it is critical to be alert to possible false signals. A trader may recognize the move from point **A** to point **F** on the ROC chart as an indication of a possible reversal. It is important to notice that point **3** corresponding to point **F** on the price chart does not form a lower price valley than point **1** corresponding to point **A** on the ROC chart. Hence this cannot be considered an ROC –price divergence signal.

When trading Price-Momentum shifts or divergences, a trader should not try too hard to find the desired setup. For these types of trades to be profitable, a clear signal on the chart should manifest itself and be easily recognizable as demonstrated in the previous examples.



## Chapter 6

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### **Explosive Profits Trading Signal Price Bars**

Some traders use only price charts to trade, focusing on information provided by each price bar on the chart. While this approach is useful, it is only so for highly experienced traders in extremely short time frames of few hours to a couple of days.

This trading methodology can be very confusing for a beginner or intermediate level trader, since a signal bar indicating an upward reversal one day can be followed by another signal bar indicating a move in the opposite direction. An experienced professional trader can tell which bar is a reliable indicator and which is not. On the other hand an intermediate level trader or a beginner is likely to be lost in the maze of opposing price bars and conflicting signals.

If you happen to be a sophisticated highly experienced trader and are interested in learning more on trading exclusively using price bars, you may want to read the book “Reading price charts bar by bar” by Al Brooks. As of the time of writing this section this is the only book available that focuses exclusively on price action based trading without the use of traditional technical indicators.

My objective in this chapter is twofold: (1) To adapt the use of signal price bars so they are accessible and easily traded by beginner or intermediate level traders. And (2) To demonstrate that by using relatively simple techniques even a beginner can trade successfully in a short term time frame of no more than few days.

To follow the concepts in this chapter, it is important to be

familiar with simple daily price bar reversal signals. The one bar daily reversal signal is one of the simplest and most commonly used. It is defined as follows for up and down reversals:

**Upward Daily Reversal:** The price trades below the previous day's low and closes at or above the prior day's close.

**Downward Daily Reversal:** The price trades above the previous day's high and closes at or below the previous day's close.

A word of caution: The presence of the above conditions indicates that a reversal, up or down dependent on the signal bar, is likely to occur. On the other hand reversals can occur without the presence of the signal price bars described above. If you want to use this method for short term trading, your strategy is to only take the trades that fall within the parameters of the system described in this chapter. Although you will miss some opportunities, there will be more than enough to give you a handsome profit getting in and out of a single stock short term.

The example below shows how signal bars are spotted on a real stock chart.

### **Example 1: Momena Pharmaceuticals Inc (MNTA)**

The points labeled **1** with large font on the High, Low, Close (HLC) price chart page 113 indicate upward reversal bars. In each of these bullish reversal bars, the stock traded below the prior day's low but closed above the previous day's close. As can be seen all were tradable signals whereby the stock moved up for few days after the signal bar appeared until a new down reversal signal was generated.

Down reversal signals are marked by **2** with large font on the chart. In these cases the stock traded higher than the prior day's high but closed below the previous day's close thus indicating a bearish signal price bar. As in the preceding section these signals gave tradable setups for few days until a bullish signal appeared.

The problem arises when price bar signals are visible on the chart but are negated within a day or two by an opposing



**MNTA** (Momenta Pharmaceuticals Inc.) Nasdaq GM

24-Dec-2008

**Close 12.81 Volume 246.0K Chg +0.33 (+2.64%)**

1d MNTA (Daily) 12.81

all volume 246,045



signal or an unexpected reversal. These type bars are labeled **1** and **2** with small font on the chart page 113. Notice that the bullish bar signal mid October 2009 marked small font **1** was negated within a couple of days. Also the bearish reversal signal around December 6, 2009 marked small font **2** was negated by an opposing bullish reversal signal marked small font **1** three days later. Trading these signals would have only resulted in small profits for a highly experienced trader. A beginner or intermediate level trader would more likely have held onto the position and suffered a loss.

The question is whether there is a simple way to avoid trading these “false” price bar signals and concentrate on trading the profitable signals. While a highly experienced trader can intuitively recognize such fake signals, a beginner is more likely to be whipsawed by price gyrations getting in and out often with little left in profits after commissions and slippage.

To be sure that only high probability price bar signal trades are taken we will need to:

- (1) Pinpoint the likely location of a high probability signal bar trade within the price chart.
- (2) After locating the tradable signal bar within the price chart, confirm the high probability nature of the trade by using a well selected technical oscillator. This insures that long trades are taken in oversold conditions while short trades are taken under overbought conditions.
- (3) Time the entry trigger just before a move occurs. This is important since we are trading in very short time frames of several days, and each day the stock moves we are giving up potential profits. Thus the trade trigger should be early enough to insure adequate profit but late enough to result in a high probability trade without a long time wait for the move to occur. As can be seen later, the trigger chosen provides such a happy medium.

The location of the high probability signal price bars is defined by the Moving Average Envelope parameters (10, 5) resulting in two curves outlining the upper and lower boundaries. These curves deviate five percent each above and below the ten

day Simple Moving Average, SMA (10).

For high probability upward reversal price bars look for: (1) A bullish signal bar where the price traded below yesterday's low and closed above yesterday's close. (2) The signal bar is located totally or partially below the lower boundary of the (10, 5) Moving Average Envelope parameters. In other words the signal price bar can be completely below the lower boundary of the moving average envelope or can partially penetrate below the lower boundary.

For high probability downward reversal signal price bars look for (1) A bearish signal bar where the price traded above yesterday's high but closed below yesterday's close. (2) The signal bar is located totally or partially above the upper boundary of the (10, 5) Moving Average Envelopes. In other words the signal bar can be either totally above the upper boundary of the Moving Average Envelopes or partially penetrate it.

Although some price signal bars totally within the edges of the upper or lower boundary can result in profitable trades, we will only take trades where the signal bars conform to the criteria described above. Remember that our aim is to take trades with a high probability of a profitable outcome and not to necessarily trade every opportunity that is presented.

For confirmation as to whether a stock is in an overbought or oversold condition when a signal bar is identified, we will use the momentum oscillator William's %R described below.

### **William's % R.**

This is a momentum oscillator that qualitatively works in a similar manner to a stochastics oscillator. It is used in a similar manner to measure overbought and oversold conditions. The scale ranges from zero to -100 with zero to -20 considered overbought and -80 to -100 considered oversold.

The calculation of William's % R is performed as follows:

**Williams %R = [(Highest close over n periods – close)/highest high over n periods – lowest low over n periods]] \* -100**

This equation shows the relationship of the close to the relative high low range over a period of time. The nearer the close to the

top of the range the less negative (higher) the indicator will be. In these cases it will be close to zero. The nearer the close is to the bottom of the range the nearer the indicator is to -100 or the lower it will be. The highest reading is zero which occurs when the close is at the high end of the high low range. The lowest reading is -100 and is shown when the close is at the low end of the high low range.

Once a bullish or bearish signal price bar is located on a price chart, the trader should go through the following stepwise procedure to decide whether a trade should be entered or not.

### **For reversals from a bottom. (long trades)**

- (1) Check if the bullish signal price bar is totally below or partially penetrates the lower boundary of the (10,5) Moving Average Envelopes.
- (2) If so, check if the Williams %R corresponding to the trigger bar is below -50. The lower the better since that indicates a more oversold condition.
- (3) If both conditions (1) and (2) are satisfied the trade is triggered the next day.

Note that we used -50 as a threshold for trade entry and not the highly oversold condition of -80. The reason for this is twofold: (1) The Williams %R is a highly sensitive oscillator and a large price move is often not required to advance the oscillator from a highly oversold condition (-80 to -100) to a slightly oversold (below -50) situation. (2) The price signal bars selected are already in an oversold situation since they are below the lower boundary of the lower moving average.

### **For reversals from a top (short trades)**

- (1) Check if the bearish signal price bar is totally above or partially penetrates the upper boundary of the (10, 5) Moving Average Envelopes.
- (2) If so, check if the Williams %R corresponding to the trigger bar is above -50. The higher the better since that indicates a more overbought condition.
- (3) If both conditions (1) and (2) are satisfied the trade is

triggered the next day.

Executing such trades is quite easy as will be demonstrated in the next example.

### **Example 2: Momena Pharmaceuticals Inc. (MNTA). Entry Points.**

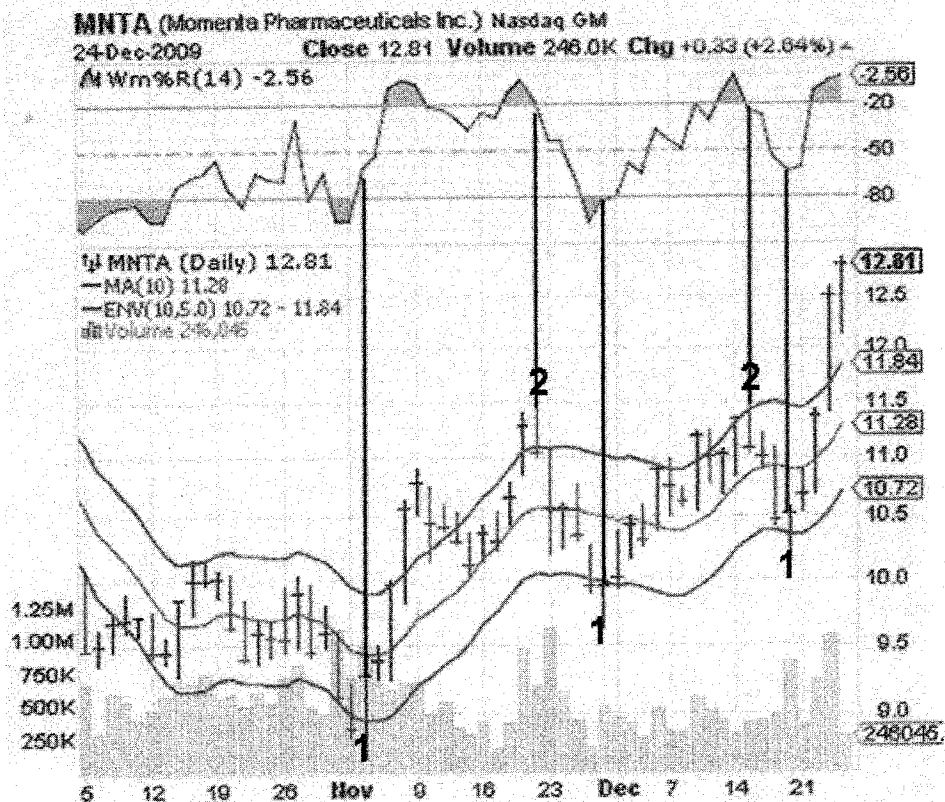
By examining the chart page 118, bullish signal price bars are labeled **1** and bearish signal bars are labeled **2**. Remember that for a bullish signal bar we require that the stock trades below the prior day's low but closes at or above the prior day's close. As can be clearly seen on the chart all bars labeled **1** satisfy this condition. Also all bearish signal bars denoted by **2** traded above the previous day's high but closed at or below the previous day's close. This is the requirement that bearish signal bars have to meet as described earlier in this chapter.

Notice that all bullish signal bars labeled **1** also satisfy the requirement that they be totally or partially below the Moving Average Envelope ENV (10, 5) lower boundary. This is a boundary defined by the lower curve on the chart deviating by five percent from the ten day simple moving average SMA (10), defined by the middle curve on the chart. All the signal bars labeled **1** have a section of them falling below the lower envelope boundary.

In a similar manner, all signal bars labeled **2** partially protrude above the upper boundary of the Moving Average Envelopes ENV (10, 5). This is the boundary defined by the upper curve on the chart deviating by five percent from the ten day simple moving average SMA (10), defined by the middle curve on the chart.

Vertical lines drawn from the price chart to the Williams %R curve show that all bullish trigger bars correspond to Williams %R below -50, satisfying the second condition of a trade entry. Also all bearish price signal bars correspond to Williams %R values above -50 as shown by the vertical lines drawn from points **2** to the Williams %R curve. This is also the second condition needed for a bearish trade to be taken.

To clarify how the trades on this chart are executed, the table below lists the open, high, low and close prices for MNTA



near the signal price bar. The data is listed in groupings of three days with the middle being the signal price bar day, the prior day signifying the reference date, and the third day denoting the trigger day. Please note that the last three data points are not shown on the chart since it was already completed before that date.

<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
11/2/09	9.14	9.21	8.84	8.90
11/3/09	8.83	9.40	8.70	9.27
11/4/09	9.29	9.49	9.25	9.38
<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
11/19/09	11.17	11.40	10.86	11.29
11/20/09	11.25	11.60	11.00	11.05
11/23/09	11.01	11.09	10.20	10.58
<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
11/27/09	10.05	10.27	9.90	9.95
11/30/09	9.90	9.99	9.62	9.95
12/1/09	10.06	10.39	9.93	10.02
<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
12/14/09	11.12	11.39	10.84	11.35
12/15/09	11.34	11.53	11.05	11.08
12/16/09	11.16	11.21	10.90	11.01
<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
12/17/09	10.98	11.09	10.42	10.47
12/18/09	10.50	10.57	10.15	10.52
12/21/09	10.60	10.88	10.55	10.69
<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
12/30/09	12.90	13.10	12.87	13.03
12/31/09	13.03	13.10	12.51	12.60
1/4/10	12.78	13.00	12.50	12.61

To perform trades efficiently and be able to capture short term repeatable profits, you will need to stick to a step by step trade

execution procedure as follows:

- (1) Check if the bullish or bearish signal price bar meets the intraday trade and close conditions described in this chapter.
- (2) If (1) is satisfied, check if the signal bar is partially or totally outside the upper or lower boundary of the ENV (10,5) as described in earlier sections of this chapter.
- (3) If both (1) and (2) are met look to see if the Williams %R requirement is also satisfied. Readings below -50 are needed for an upward reversal and above -50 for downward reversal.
- (4) If all above conditions are met, then take the trade the next day. The price you enter the trade at will depend on whether you are able to watch the market intraday or not, however using the guidelines below will provide a better entry:

#### **For upward reversals:**

- (1) If the stock gaps up at the open wait until around 10:30 AM EST.
- (2) If the stock gaps down at the open but stays above the reference day low then take the trade at the open. Note that the reference day is the day before the signal bar.
- (3) If the stock opens at or very near the prior day's close you execute the trade during the first hour of trading.

#### **For Downward reversals:**

- (1) If the stock gaps down at the open wait until around 10:30 AM EST.
- (2) If the stock gaps up at the open but stays below the reference day high then take the trade at the open. Note that the reference day is the day before the signal bar.
- (3) If the stock opens at or very near the prior day's close, execute the trade during the first hour of trading.

#### **Stop Parameters:**

Since we are trading short term it is important to set a stop



as soon as we get into the trade. If you observe the conditions stated above, it is unlikely except in a small percentage of trades that the stop will be hit. However, since we are getting in and out within few days, it is imperative not to let a short term trade become an unintended long term hold. Our stop parameters are simple and are as follows:

- (1) For an upward reversal place a stop just below the low of the reference day. This is one day before the entry signal bar is spotted on the chart.
- (2) For a downward reversal place a stop just above the high of the reference day. This is one day before the entry signal bar is spotted on the chart.
- (3) Place the stop before the market opens on the day after the trigger day (the day you executed the trade).

The first bullish signal price bar for MNTA occurs on 11/3/2009 when the stock trades at \$8.70 below the prior day's low of \$8.84, but closes at \$9.27 above the prior day's close of \$8.90. With both the ENV (10, 5) and the William's %R conditions satisfied as seen on the chart page 118, we will enter the trade the next day, 11/4/2009 and assume an entry price at the average of the day or \$9.37. Our stop is placed at the reference day's low or \$8.84 on a closing basis. Remember that the reference day is the day before the signal day and thus it refers to 11/2/2009 in this example.

We will hold the stock until a bearish signal reversal price bar shows up on the chart. This occurs on 11/20/09 where the stock traded \$11.60 which is above the previous day's high of \$11.40, but closed at \$11.05 below the prior day's close of \$11.29. We can also verify by looking at the chart that both the ENV (10, 5) and the Williams %R conditions are satisfied. We will thus sell our long position on the next trading day (11/23/09) and shift to a short position at the average trading price on that day which is \$10.65. Our stop will be a close at the reference day's high which in this case is \$11.40. We will continue taking long positions when a bullish price signal bar manifests itself on the chart and shift to a short position when a bearish signal bar appears, as described above resulting in the following trades:

Entry Date	Entry Price	Exit Date	Exit price	profit(\$)
11/4/09(L)	9.37	11/23/09	10.65	1.28
11/23/09(S)	10.65	12/1/09	10.16	0.49
12/1/09(L)	10.16	12/16/09	11.21	1.05
12/16/09(S)	11.21	12/21/09	10.88	0.34
12/21/09(L)	10.88	1/4/10	12.75	1.87

As you can see, our total profit is over \$5 on a stock with an average price of around \$10.50 which is almost a 50% profit in two months. Notice also that the profits made on long trades are higher than short trades indicating that the stock is in an uptrend. As you will see in the next section, price signal bar trades are most effective in non trending or slowly trending stocks and lose their utility as the trend becomes more rapid and asserts itself.

### Secondary Exit Signal Price Bars

In the previous example our entry point into a short position was at the same price as our exit from a long position and vice versa. This exit signal is considered a primary signal since it also triggers a trade entry in the opposite direction.

On occasions after entering a long trade based on a bullish signal price bar, the stock eventually moves above the upper boundary of the Moving average envelope ENV (10, 5) without giving a bearish price bar signal. This can indicate one of two possibilities: (1) A new uptrend is established and the stock will continue higher. In this case other trend reversal exit strategies will have to be used. (2) The stock will pull back to below the upper boundary of the ENV (10, 5) without a bearish signal price bar appearing on the chart. In this case we will exit our position as soon as such a signal appears after re-entry below the ENV (10, 5) upper boundary. Our exit in this case is not followed by taking a position in the opposite direction. We will instead wait until a bullish signal price bar appears again and take a long trade.

When trading an upward reversal, we will look for a secondary bearish exit signal with a close between the upper boundary of the ENV (10, 5) and the SMA (10). If no such signal appears in this area our exit will be our stop which is at the low of

the reference day, or the day prior to the bullish price bar signal.

A similar kind of situation may arise when entering a short trade. In this case our secondary exit signal can occur after the stock price re-enters the ENV (10, 5) through the lower boundary. Our strategy is to exit the short position but not take another position until a new bullish signal price bar appears on the chart. Essentially we are not immediately shifting to a long position. If the stock continues dropping below the lower Moving Average Envelope ENV (10, 5) boundary without a primary signal bar appearing, it is likely that a downtrend is asserting itself. It is thus necessary to use trend reversal indicators to close the position.

When trading a downward reversal, we will look for a secondary bullish exit signal with a close between the lower boundary of the ENV (10, 5) and the SMA (10). If no such signal appears in this area our exit will be our stop which is at the high of the reference day, or the day prior to the bullish price bar signal.

As I said many times, the market is unpredictable and as I indicated in the beginning of this chapter reversals can occur without signal price bars appearing on the chart. Using secondary exit signals prevents an intended short term trade from becoming a losing long term position and insures constant profits using this swing trading strategy. Sticking to both primary, exit and reverse, and secondary exit only signals, as well as observing set stops; is critical to success in capturing short term profits as discussed in this chapter.

Some traders may question why with secondary signal bars we do not immediately sell and reverse position. Based on my experience I have seen times when such signals are short lived and negated by a primary signal in the opposite direction. I do not have to tell you that profits are realized only when you close your position and that is why exiting at the first sign of potential trouble is critical. Again, remember that we are dealing with short term swing trading and we should remain true to our objective.

A summary of the different types of signals is provided below to insure that a total grasp of this strategy is achieved before using it in actual trading:

### **Primary bullish price signal bar**

This is a signal bar indicating a long position entry the next day after exiting any current short position. In effect the short position is reversed to a long position.

The conditions are as follows:

- (1) The stock trades below the prior day's low but closes above its close.
- (2) The signal bar is either totally or partially below the lower Moving Average Envelope ENV(10, 5) boundary.
- (3) The Williams %R reading corresponding to the signal day is below -50.

A stop is set below the reference day's low. The reference day being the day prior to the price signal bar day.

### **Secondary bullish price signal bar**

This is a signal bar indicating a next day exit from a short position without entering a long position.

The conditions are as follows:

- (1) The stock trades below the prior day's low but closes above its close. This is a similar condition to a primary signal bar.
- (2) The signal bar appears after the stock trades below the lower boundary of the ENV (10, 5) and re-enters it without a primary signal bar appearing on the chart.
- (3) On the signal bar day, the stock closes between the lower boundary and the middle curve of the ENV(10, 5). In this case no stop is needed since we are exiting a position without entering a new position.

### **Primary bearish price signal bar**

This is a signal bar indicating a short position entry the next day after exiting any current long position. In effect the long position is reversed to a short position.

The conditions are as follows:

- (1) The stock trades above the prior day's high but closes below its prior day's close.
- (2) The signal bar is either totally or partially above the

upper Moving Average Envelope ENV(10, 5) boundary.  
(3) The Williams %R reading corresponding to the signal day is above -50.

A stop is set above the reference day's high. The reference day being the day prior to the price signal bar day.

### **Secondary bearish price signal bar**

This is a signal bar indicating a next day exit from a long position without entering a short position.

The conditions are as follows:

(1) The stock trades above the prior day's high but closes below its close. This is a similar condition to a primary bearish signal bar.

(2) The signal bar appears after the stock trades above the upper boundary of the ENV (10, 5) and re-enters it without a primary signal bar appearing on the chart.

(3) On the signal bar day, the stock closes between the upper boundary and the middle curve of the ENV (10, 5). In this case no stop is needed since we are exiting a position without entering a new position.

The example below shows how a combination of primary and secondary signal price bars are used in an actual trade.

### **Example 3: Chelsea Therapeutics (CHTP)**

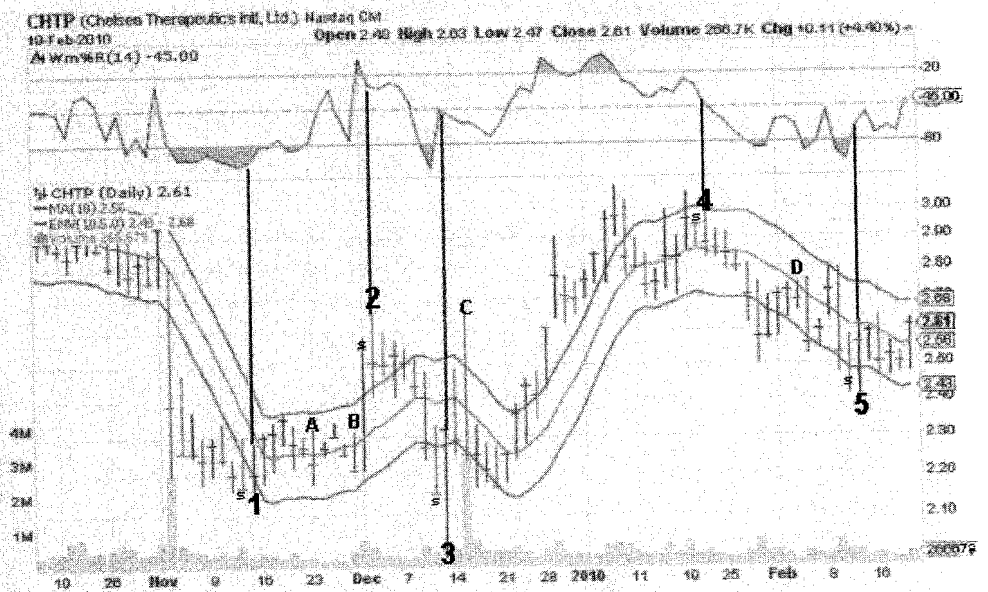
On the chart page 126, the following notations are used:

(1) Numbers indicate bullish or bearish tradable price signal bars.

(2) Letters indicate bars that are not tradable since they do not meet all the necessary conditions to be considered primary or secondary signal bars.

To demonstrate how techniques in this chapter are used for short term trading, I will go through this example in more extensive detail than usual.

By studying the chart page 126, it is clear that the first bullish signal price bar appears on 11/13/09 designated by point **1** on the chart. The data for the reference day, the signal day and the trade trigger day is given in the table below:



<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
11/12/09	2.24	2.30	2.17	2.17
11/13/09	2.22	2.28	2.16	2.20
11/14/09	2.20	2.31	2.18	2.30

Notice that on the signal day (11/13/09), the stock traded at a low of \$2.16 which is below the previous day's low of \$2.17; but closed at \$2.20 which is above the prior day's close of \$2.17. This satisfies the first condition for a primary bullish price signal bar. The signal bar is also partially below the lower boundary of the Moving Average Envelope ENV (10, 5) and the corresponding Williams %R is below -50; thus conforming to the two other conditions.

This indicates that a long trade should be entered the next day with a stop near the low of the reference day (11/12/09). We will assume an entry near the average of the trigger day's (11/14/09) price range or \$2.25, with a stop just below the low of the reference day of \$2.17.

Points **A** and **B** on the chart show price bars that satisfy one of the bearish signal bar conditions, namely that they traded higher than the previous day's high but closed below the prior day's close. However, the condition that the bar should partially or completely protrude above the upper boundary of the Moving Average Envelope ENV (10, 5) is not satisfied. This implies that these bars cannot be considered tradable primary signal bearish price bars.

Bars **A** and **B** cannot be secondary sell signal bars since the closing price is between the lower boundary and the center curve of the Moving Average Envelopes ENV (10, 5). Remember that a secondary bearish signal bar requires, in addition to a re-entry below the upper boundary after moving above it, that the close is between the upper boundary and the center curve of the ENV (10, 5). Based on the above, price bars **A** and **B** are not tradable and our protection in case the stock continues to move against our position is the stop near the low of the reference day.

A tradable bearish price signal bar appears at point **2** on

the chart. The data for the reference day, signal day and trigger day is tabulated below.

<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
12/1/09	2.23	2.58	2.21	2.55
12/2/09	2.60	2.60	2.40	2.51
12/3/09	2.53	2.60	2.47	2.50

Notice that the three required conditions for this to be a tradable primary signal bar are satisfied;

- (1) On the signal day 12 /2/09, the stock trades at \$2.60 which is above the prior day's high of \$2.58 but closes at \$2.51 which is below the reference day's close of \$2.55.
- (2) The signal bar is mostly above the upper boundary of the Moving Average Envelopes ENV (10,5).
- (3) The Williams %R corresponding to the signal bar is above -50. This is clearly seen by constructing a vertical line from the price chart to the Williams % R chart.

Our trigger day is on 12/3/09 where we will sell our long position and enter a short position. We will use for our long exit and short entry the average price of the trigger day or \$2.54 with a stop near the reference day's high of \$2.55.

Our profit from this go around is \$0.29 in 20 days. It does not take but a few days for another primary bullish signal bar to appear at point **3** on the chart. The three day data for this bar is listed below.

<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
12/10/09	2.29	2.33	2.15	2.15
12/11/09	2.27	2.33	2.00	2.32
12/14/09	2.49	2.49	2.25	2.29

On the signal day (12/11/09), the stock trades at \$2.00 which is below the low of \$2.15 on the reference day but closes at \$2.32 which is above the prior day's close of \$2.15. Remember that the day prior to the signal day is known as the reference day



while the day after it is the trigger day.

The two other conditions are also met in that the Williams %R is below -50 and the signal bar protrudes below the lower boundary of the ENV (10, 5). Look at the chart page 126, can you recognize this? If not study this example from the beginning again.

We will thus exit our short position and enter a long position on the trigger day, (12/14/09). We will use the average price of \$2.37 to execute both trades and place a stop near the reference day's low of \$2.33. In this round trip our profit is  $\$2.55 - \$2.37 = \$0.18$  in 11 days.

A possible bearish trigger bar appears at point C which meets two of the criteria for being a primary signal bar but fails to meet the third. The conditions met are: (1) The bar trades above the high of the prior day but closes below the previous day's close. (2) The signal bar partially penetrates above the upper boundary of the ENV (10, 5). The bar at point C, however, corresponds to a Williams %R below -50 thus failing to meet the requirement of a reading above -50 for a bearish signal bar.

The bar at point C also fails to meet the criteria for a secondary bearish signal bar since it closes between the lower boundary and the center curve of the ENV (10, 5). As you recall one of the criteria of a secondary bearish signal bar is that the close should be between the upper boundary and the center curve of the ENV (10, 5).

The next tradable bearish signal bar appears almost five weeks after our long entry and is designated by point 4 on the chart page 126. The data for this signal bar is listed below:

<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
1/20/10	2.95	2.95	2.86	2.94
1/21/10	2.98	2.98	2.83	2.88
1/22/10	2.91	2.92	2.82	2.86

On 1/21/10, the signal day, the stock traded at \$2.98 which is above the prior day's high of \$2.95 but closed at \$ 2.88 which is

below the prior day's close of \$2.94. The Williams %R is above -50 which satisfies the second condition of a primary signal. Notice, however that the third condition requiring that the signal bar penetrates at least partially the upper boundary of the ENV (10,5) is not satisfied. Point **4** hence cannot be considered a primary bearish price signal bar.

The signal bar at point **4** appears after a move above the upper ENV (10, 5) boundary but fails to produce a bearish primary signal bar, thus meeting one of the conditions for a secondary signal bar. Also the bar at point **4** closes between the upper boundary and the center curve of the ENV (10, 5). Since this bar appears after a move above the Moving Average upper boundary and re-enters below it, it is considered a secondary signal bar. Remember that a secondary signal bar indicates an exit from our current position without shifting to a new position.

Assuming an exit price at the average of the trigger day on 1/22/10, our exit price will be \$ 2.87 for a profit of \$2.87 - \$2.37 = \$0.40 in five weeks.

We will now wait for another primary bullish price bar signal to enter a long trade. Notice that at point **D** two consecutive bearish signal bars appeared but whether they are tradable or not is of no concern to us since we do not hold a position at this point. The next primary bullish price signal bar appears at point **5** on the chart. The reference, signal and trigger day data for this bar are as follows:

<b>Date</b>	<b>Open</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
2/10/10	2.50	2.58	2.41	2.43
2/11/10	2.44	2.62	2.39	2.56
2/12/10	2.56	2.60	2.50	2.59

As you can see, the stock trades on 2/11/10 at \$2.39 which is below the low of the previous day but it closes at \$2.56 which is above the prior's day close of \$2.43. This establishes 2/11/10 as a potential bullish primary price bar signal provided the two other conditions are met. The signal bar at point **5** goes partially below

the lower boundary of the Moving Average Envelope ENV (10, 5). In addition, the corresponding Williams %R reading is below -50. This established 2/11/10 as a tradable primary signal day making 2/10/10 the reference day and 2/12/10 the trigger day.

Our long trade entry will be executed at the average of the trigger day which is at \$2.55. We will place a stop near \$2.43 which is the low of the reference day.

Note that at point 4 we exited our long trade but did not enter a short trade. While in hindsight it would have been profitable to switch to a short trade, doing that would have violated our trading system. Remember that trading is a matter of probabilities and based on experience, I have seen that when a primary signal bar fails to penetrate the upper or lower Moving Average Envelope boundary; a continuation of the trend is likely. It would have been possible that after point 4 the stock would have immediately reversed and continued its uptrend. Our decision was to exit to preserve our profit but not take a new position just in case a continuation of the uptrend was to assert itself.

It is important to stick to our trading system, with the realization that on occasions exceptions will occur and we will miss some potential profits.

A summary of the profits realized trading this method using the above example is given below:

<b>Entry Date</b>	<b>Entry Price</b>	<b>Exit Date</b>	<b>Exit price</b>	<b>profit(\$)</b>
11/19/09(L)	\$2.25	12/3/09	\$2.54	\$0.29
12/2/09 (S)	\$2.54	12/14/09	\$2.37	\$0.18
12/14/09 (L)	\$2.37	1/22/10	\$2.87	\$0.40
2/12/10 (L)	\$2.55			

(L) = Long, (S) = Short

As you can see we have a profit of \$0.87 on a \$2.50 stock which is around 30% profit in less than two months.

To effectively use the short term trading concepts in this chapter, keep the following in mind:

Primary price bar signals are sufficient but not necessary

for a stock move in a specific direction to occur. This means that if a primary tradable price bar signal manifests itself on the chart, then there is a high probability of a move. The direction of the move is determined by the nature of the signal bar, bullish or bearish. On the other hand a move can take place in either direction without such signal bar appearing on the chart. If you are using techniques in this chapter for short term trading, your goal should be to only take high probability trades. In other words you should follow the rules set in this chapter and take trades that only conform to them.

Strategies in this chapter are best suited for lower price stocks within the range of two to ten dollars. A twenty dollar stock will most likely not yield enough percent return to justify frequent entry and exits in addition to tying a relatively large amount of cash in the trade. On the other hand, an extremely low price stock is likely to be highly volatile resulting in frequent entries and exits with very small profit. Also the potential of being whipsawed and hitting stop prices increases as the stock price goes lower and becomes not worth the effort at prices below two dollars.

Every range bound stock eventually breaks out of its trading range and establishes a trend that may be quite strong. It is critical to place stop losses after you enter the position just in case a new strong trend establishes itself. A trend is good if it moves in the direction of your trade, but if it moves against you it can spell big trouble and in such situations having a stop price is crucial.

It is best to place a stop around two to three percent below the reference day low for long trades, and two to three percent above the reference day high for short trades. Stop loss bars in this example were marked with small letter **s** on the chart.

The stop should be on closing basis. In other words, if the stock closes below (if long) or above (if short) our stop price on a given day we will exit the trade the next day. Remember that the reference day is the day prior to the day when the primary signal price bar appears, also known as the signal day.

## **Volume Considerations**

As I indicated previously, a range bound stock is likely to eventually break out of its trading range. On occasions such breakouts are very powerful and have the ability of wiping out most of the profit scalped by trading short term while the stock was confined in a range. My experience has demonstrated that paying attention to volume can be instrumental in avoiding being on the wrong side of a powerful breakout.

In cases where the traded volume for a reference bar is 50% or higher than that of the signal bar, then the trade should not be taken. The reason for this is that a low volume signal bar relative to a high volume reference bar is a sign that the previous trend is likely to reassert itself. Thus taking the trade may result in a small profit or a loss.

For a reversal from a bottom or a long trade, a reference bar near the lower boundary of the ENV (10, 5) carrying a trade volume of 50% or more than the ensuing signal bar will in effect neutralize that signal and no trade is to be taken.

Similarly, for a reversal from a top or a short trade, a reference bar near the upper boundary of the ENV (10, 5) with a trading volume of 50% or more higher than the following signal bar indicates that the trade should be skipped.

In both bullish and bearish reversals, primary signal reversal price bars preceded by multiple (two or more) high volume bars in the direction of the existing trend near the upper (if short trade) or lower (if long trade) of the ENV (10, 5) should also not be traded. This is usually a strong signal of a potential breakout in the direction of the existing trend.

The effectiveness of using volume differences between reference and signal bars in avoiding a trade entry counter to a pending breakout will be demonstrated in example 4.

In the next part of this chapter I will present another strategy, namely the three bar count reversal technique which can be used in cases where no primary signal bars, as defined in this section, appear on the chart.

### **Three Bar Count Trend reversals**

This is a back up strategy to the primary signal price bar approach discussed in the previous section. On occasions a stock price meets the Williams %R and the ENV(10, 5) condition but fails to meet the trading range and closing price parameters. In other words, for a reversal from a bottom the following two conditions are met:

(1) The corresponding Williams %R to the primary signal price bar is below -50.

(2) The primary signal price bar partially penetrates the ENV (10, 5) lower boundary or totally falls below it.

However the third condition below is not met:

(3) The price must trade below the prior day's low but close above the previous day's close. A situation may be encountered where the stock trades below the prior day's low but still closes below its close. Or the close may be above the prior day's close but the stock never trades below the previous day's low. It is also possible that neither condition is met.

In such cases your next step is to check whether the price bar in question is a three count bullish reversal bar signaling a long trade as will be explained later in this section.

For a reversal from a top, the following conditions are met:

(1) A price bar penetrates the upper boundary of the ENV(10,5) or totally falls above it.

(2) The corresponding Williams %R to the price bar is above -50.

However the condition below is not met:

(3) The price must trade above the prior day's high but closes below its close. In some cases the stock may trade above the prior day's high but still close above the previous day's close; while in others, the stock may close below the prior day's close but never trade above its high. It is also possible that neither condition is met.

In such cases your next step is to determine whether this price bar is a three count bearish reversal bar in line with the con-

ditions discussed in the next section.

### **Three Bar Count Signaling a Long Trade**

A trader who is new at using this short term trading method may find it slightly challenging since the three bar count does not necessarily occur on three consecutive days. Correct bar counting is critical to trading success using this trading strategy. By learning the step by step procedure below and strictly following it, you can avoid any pitfalls using this method:

- (1) Identify the most recent minor price support or valley based on closing prices. This is not a major support area, but rather a minor, but well defined minimum formed in a short time period. This type of formation is a zig zag type defined by a peak, a valley, and a second peak before the continuation of the downtrend.
- (2) The first day with a close below the minor low identified in step 1 is labeled bar 1, the first of the three bar count.
- (3) The next day when the price closes below the low of bar 1 is identified as bar 2, the second bar in the three bar count. Note that bars 1 and 2 do not necessarily appear on two consecutive days.
- (4) Bar 3, or the signal bar is defined by a day where the price trades but not necessarily closes below the range of bar 2. Note that bars 2 and 3 do not have to appear on two consecutive days.

Once bar 3 has been identified, a signal to enter a long trade the next day is given, provided the Williams %R and the ENV (10, 5) conditions are met. As you may recall a long trade entry requires a Williams %R below -50 and a total or partial penetration of the price bar below the lower boundary of the ENV(10, 5).

### **Three Bar Count Signaling a Short Trade**

The Stepwise process to be used before entering a short trade is summarized below:

(1) Identify the most recent minor resistance or peak based on closing prices. This is not a major resistance area, but rather a minor, but well defined peak formed in a short time period. This type of formation is a zig zag type defined by a valley, a peak, and a second valley before the continuation of the uptrend.

(2) The first day with a close above the minor high identified in step 1 is labeled bar 1, the first of the three bar count.

(3) The next day when the price closes above the high of bar 1 is identified as bar 2, the second bar in the three bar count. Note that bars 1 and 2 do not necessarily appear on two consecutive days.

(4) Bar 3, or the signal bar is defined by a day where the price trades but not necessarily closes above the range of bar 2. Note that bars 2 and 3 do not have to appear on two consecutive days.

Once bar 3 has been identified, a signal to enter a short trade the next day is given, provided the Williams %R and the ENV (10, 5) conditions are met. As you may recall a short trade entry requires a Williams %R above -50 and a total or partial penetration of the price bar above the upper boundary of the ENV(10, 5).

### **Trading Three count signal bars**

There are two ways you can trade using a combination of the concepts presented in this chapter. The first is to start a three bar count after every minor low or high is established. This is not the most efficient or desirable way to trade since in many cases the three bar count is not complete before another minor support is established requiring a restart of the count.

The second alternative is to wait until a potential reversal price bar satisfies both the Williams %R and the ENV (10, 5) conditions for either a bullish or bearish reversal. If that happens, check first if it is a primary signal price bar satisfying the trade and close parameters described earlier in this chapter. If these conditions are met, then a trade can be entered the next day without



employing the three bar count.

If both the Williams %R and the ENV (10, 5) conditions are met but the trade range/close condition is not, then locate the prior minor support or resistance and count price bars according to the stepwise procedure described in the previous section.

If the previous price bar is bar 3 (the signal bar), then a trade can be entered the next day. In other words a trade can be executed up to two days after the signal bar. If after establishing the minor low or high, the three bar count places bar 3, two days or more prior to the subject bar, no trade is to be taken. Remember that the subject bar is the price bar satisfying both Williams %R and ENV(10, 5) but not conforming to the trade/close parameters to be labeled a primary price signal bar.

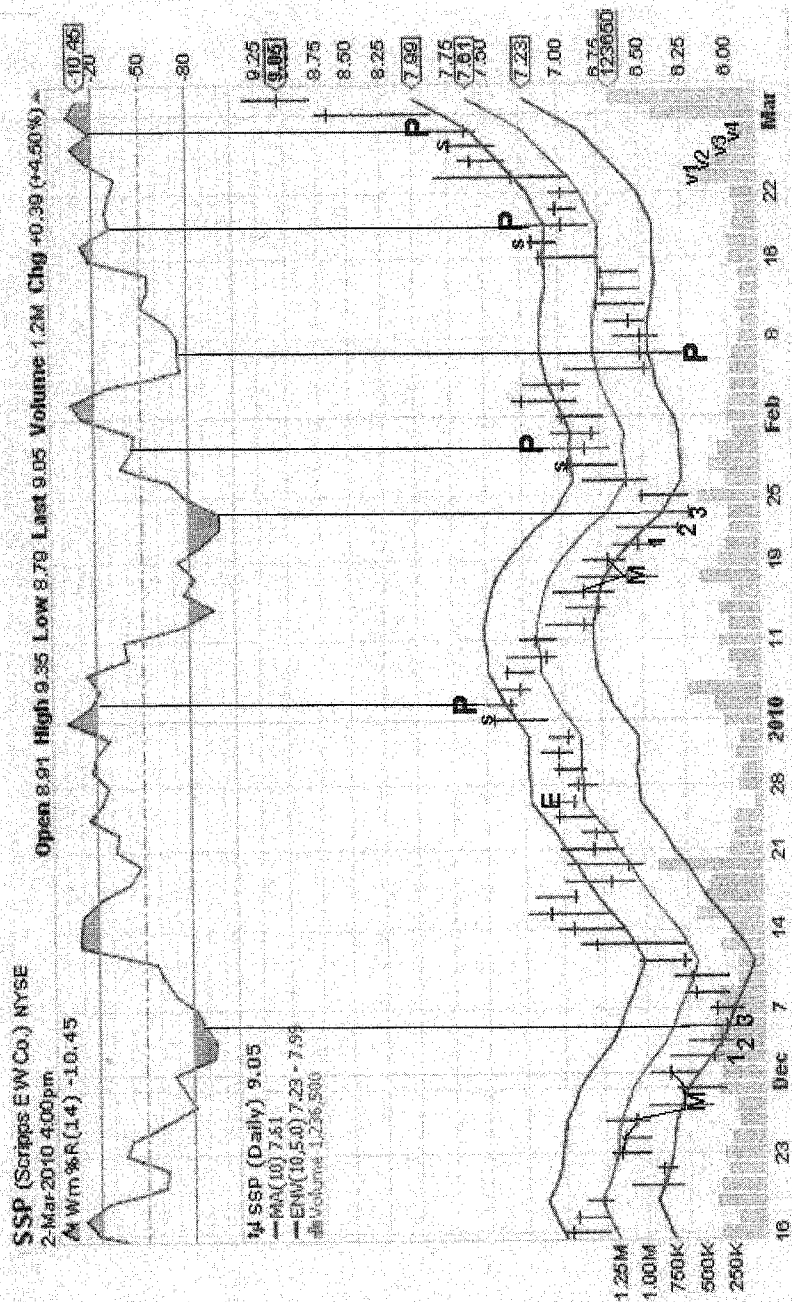
#### **Example 4: Scripps E.W. Co (SSP)**

This example illustrates many of the concepts presented in this chapter including:

- (1) A refresher in trading primary signal price bars.
- (2) Stresses the importance of using stops.
- (3) Trading three count signal price bars.
- (4) Using volume differentials to avoid being at the wrong side of a breakout.
- (5) Exiting trades using secondary price bar signals.

Please pay attention to the following letter and number codes used on the chart page 138.

- (1) All primary signal price bars, whether tradable or not are marked with the letter P.
- (2) The first, second, and third bars in a three bar count signal are marked 1, 2, 3.
- (3) Stops are marked with a small letter s.
- (4) The points marked M denote the minor low used as a reference to count bars in the three bar count signal.
- (5) The bar marked 3 in the three bar count is considered a signal bar.
- (6) v1, v2, v3, v4 denote the volume traded on those specific days.
- ( 7) E denotes a secondary price bar exit signal.



By examining the chart page 138, the first potential reversal bar that satisfies both the Williams %R and the ENV (10, 5) conditions but does not meet the trade/close parameters for a long trade appears on December 7, 2009. Your first task as a trader is to find out whether any of the prior two bars is bar 3 or the signal bar of a three bar count signal. The first step is to locate the most recent minor low to enable the counting process. This minor low is represented by the letter **M** on the chart and is clarified by connecting the closing prices on the days before and after the low, to the closing prices during the formation of the low. This forms a peak followed by a valley at point **M** after which a second peak of lower height forms.

If you have trouble identifying minor lows and highs, just look at a line chart and use that to determine the location of the minor low and then revert to the High, low close chart to trade.

It is clear that the bar marked **1** on the chart December 2, 2009 can be counted as the first bar in a potential three bar count signal since it closes below the minor low at **M**. The bar right after bar **1** can be labeled bar **2** of the three bar count since it closes at the low of bar **1**. Also on the day following bar **2**, the stock trades below the low of bar **2**, thus identifying the price bar on this day as bar **3** or the signal bar in a three bar count. The signal bar has occurred on December 4, 2009, one trading day prior to the potential reversal bar. A long trade can be entered on December 8, 2009 at \$6.15 ( average day's price) with a stop at the low of the three bar count signal bar or \$5.91.

On December 24, 2009 a secondary price bar exit signal appears on the chart identified by point **E**. Notice that this secondary signal bar appears after the price moves above the upper boundary of the ENV (10, 5) without a primary signal bar present. Also this bar satisfies the condition of a close between the upper boundary and the center curve of the ENV (10, 5).

It is worthwhile noting that this bar occurred a day before a major holiday with the market closing at 1PM EST, with low trading volume and the absence of major market players. If you are new to this method of trading my advice is to follow the system and exit the trade. After gaining some experience, you can skip

the secondary signal on two days only, the day before Christmas and that before Thanksgiving. These days are unique in that the market closes early and are not representative of a regular market day. However if you do decide to skip a secondary signal on these days, you must be alert for any other exit signal within the next few days.

For the purpose of this example we will assume an exit on December 28, 2009 at \$6.89 (average day's price).

The next bearish primary price bar signal appears on the chart on January 5, 2010. If you cannot easily identify this bar please re-read example 3. Notice that on the signal day the stock trades above the prior day's high but closes below its close. Also the vertical line drawn from the price chart towards the Williams %R shows a corresponding reading of above -50, and the price bar partially penetrates the upper boundary of the ENV (10, 5). We will thus enter a short trade on 1/6/2010 at \$7.31 (average day's price) with a stop at the high of the reference day at \$7.50 marked **s** on the chart.

The next time a potential reversal bar appears that satisfies both the Williams %R and ENV (10, 5) is on 1/25/2010. As described before we will attempt to find out whether bar **3** or the signal bar in a three count bar trade is located in one of the two days preceding the potential reversal bar. First we locate the minor low labeled as **M** on the chart. Remember that a minor low or high is based on closing prices and can be formed in few days with as little as three price bars as the case in this instance. The closing prices forming a peak before and after the valley **M**, are connected to it with straight lines drawn to further clarify the existence of a minor low.

The first price bar that closes below the minor low **M** appears on 1/20/2010 and is labeled as bar **1** of the three bar count signal. The next day the prices close below the low of bar **1**, and thus this day is identified as bar **2**, the second bar in the three bar count. On the following day the stock trades below the low of bar **2** and is thus labeled as bar **3** or the signal bar in a three bar count trade. Since the signal bar was one day prior to the potential reversal bar, which is within the two day window, we will

hence enter a long trade on 1/26/2010 at \$6.66 (average price of the day), with a stop at \$6.21, the low of the reference bar.

On 1/28/2010, only two days after our entry, another bearish primary signal bar appears on the chart. Note that the price trades above the prior day's high, but closes below its close. Both the ENV (10, 5) and the Williams %R conditions are satisfied, so we will exit the long trade and reverse to a short trade on 1/29/2010 at \$6.90 (average of the day's price) with a stop at the high of the reference day or \$6.98 labeled as **s** on the chart.

Unfortunately we get stopped out of our trade on 2/1/2010 since the stock traded at \$6.99. We thus exited our last short position and currently hold no position in SSP.

We will wait for another entry signal which shows up as a primary bullish signal bar on 2/5/2010. First we verify that this price bar meets all the required conditions. The stock trades below the previous low but closes above the prior day's close. The price bar partially penetrates the lower boundary of the ENV(10, 5) and the Williams %R is below -50. We will hence enter a long trade on 2/8/2010 at \$6.53 with a stop at \$6.44, the low of the reference day.

The following trade opportunity manifests itself as a bearish primary price bar signal on 2/18/2010. This price bar satisfies the three required conditions, Williams %R, ENV(10,5) and the trade /close parameters. We will thus exit our long trade and reverse to a short trade on 2/19/2010 at \$6.97(average of day's price) with a stop at the high of the reference day or \$7.19. Two days later we get stopped out of the trade with the stock advancing on heavy volume. Our exit is on 2/23/2010 at our stop price of \$7.19.

**Important Note:** Getting stopped out frequently within a short period of time indicates that the stock is starting to trend in an opposite direction to your trade. As you can see we got stopped out of two short trades within a couple of weeks. This is usually a warning that a strong trend in the opposite direction to our position is starting. It is my policy to stop scalping a stock and look for an opportunity to trend trade if I get stopped twice. In this case

thus it is best to move to a different stock.

To illustrate the use of volume in making short term trading decisions using this method, I will continue with this example.

We were stopped out of our last trade on 2/23/2010 and currently hold no position in the stock. We will thus wait for another opportunity to enter a trade. The next bearish primary signal price bar appears on 2/26/2010 on the chart. However, this bearish signal bar has a low volume v4 preceded by three heavy volume bullish bars v1,v2 and v3 in the direction of the established trend. The traded volumes on 2/23, 2/24, and 2/25/2010 were 543,500, 357100, and 341,000 respectively; but on the signal day 2/26/2010 the volume was 185,200.

The stock re-asserted its uptrend on 3/1/2010 with a volume of 870,300. If we were to ignore the message the volume is giving and entered a short trade on 3/1/2010, the day after the bearish signal bar was given, we would have been stopped out right the next day. It is thus important to watch for clues as to whether a stock is getting ready to break out from a trading range into a trend. Volume as well as being stopped out twice in a short period of time are good indicators of a potential trend.

A summary of the trade entries, exits and profits for the last example is presented below.

<b>Entry Date</b>	<b>Entry Price</b>	<b>Exit Date</b>	<b>Exit price profit(\$)</b>	
12/8/09(L)	\$6.15	12/28/09	\$6.89	\$0.74
1/6/10 (S)	\$7.31	1/26/10	\$6.66	\$0.65
1/26/10(L)	\$6.66	1/29/10	\$6.90	\$0.24
1/29/10(S)	\$6.90	2/1/10	\$6.98(X)	-\$0.08
2/8/10(L)	\$6.53	2/19/10	\$6.97	\$0.44
2/19/10(S)	\$6.97	2/23/10	\$7.19(X)	-\$0.22

(L) = Long , (S) = Short, (X) = stopped out.

Our profit in almost 9 weeks is \$1.77 or 27% on a stock with an average price of \$6.50.

## Final Word

I have helped many beginning traders with small accounts build up their trading funds using the methods in this chapter. As with any endeavor in life, some did better than others, while a few did not succeed at all. Traders who were successful using this approach followed the strict rules with iron discipline even if they were stopped a day after entering the trade. As with other trading systems, not all stocks make good trading candidates for any specific system. Successful traders were able to only trade stocks that fit within the parameters of the system as described in this chapter.

To insure success using the short term trading methods in this chapter, be sure you stick to the general guidelines listed below:

(1) Trade stocks between \$2 and \$15. Stocks over \$15 require tying up too much cash to scalp small percentage profits. Stocks below \$2 are highly volatile and you are likely to be stopped out frequently.

(2) Based on my trading experience, I have chosen the Moving Average Envelopes ENV(10,5) to define the resistance and support areas of a good candidate stock. Be sure that the stock you pick is tradable using the ENV(10,5). In other words, the resistance prices fall near the upper boundary and support prices are near the lower boundary with price bars oscillating above and below those boundaries.

In some cases you may encounter a stock where all resistance price bars fall below the upper ENV(10,5) boundary. In other cases, all support price bars fall above the lower boundary, while on rare occasions both of the above statements may apply.

Even though the envelope parameters can be changed to force an otherwise non conforming stock to become tradable, that defeats our purpose of sticking to the system. In such cases moving to another stock is the best alternative.

(3) Always place a stop effective at the open of the day

following your trade entry. Follow the rules described in this chapter to determine the stop price.

(4) Be aware of volume considerations when a trend reversal signal bar has low volume relative to the bars before it. This is an indication that the prior trend is likely to assert itself.

(5) When using the Three Bar Count reversal signal, be sure you are correctly counting the bars, by first determining the minor low or high prior to the potential trend reversal bar. Remember that the three bars may not appear on consecutive days.

(6) As a new trader using this method, you may at first miss some scalping opportunities on the stock you are trading. Do not be discouraged since with more experience you will be able to recognize most of the tradable signal price bars. Your goal initially is to trade the bars you can easily recognize and progress from there.



## Chapter 7

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### **Explosive Profits From Small Price Bars**

How many times have you looked at a “boring” stock that traded for weeks or even months in a narrow price range and decided to drop it from your radar screen; just to suddenly see it explode upwards with thirty, fifty or even one hundred percent profit in few days. Such occurrences are more common with low priced stocks that are not heavily owned by institutions and do not trade heavy volumes. In my previous book “Generate Thousands in Cash on Your Stocks Before Buying or Selling Them”; as well as in earlier chapters of this book, I stressed the importance of volume spikes as a possible clue to an intermediate term advance. In the case of explosive moves from small price bars, a one or two day spike accounts for most of the profit, and missing this spike will essentially make the trade without merit. The question thus becomes as to whether there is a simple and practical way to anticipate such explosive moves. Remember that we are not looking here for the next Google or Intuitive Surgical or other similar type stocks. Our aim is to lock in significant profits by positioning ourselves in the stock before a massive spike and then taking our profits and moving on.

An easy way would be to just enter a trade when a stock is in a quiet trading period and wait until the sudden move takes place. This may be an option if you have unlimited patience and a large trading account since you may have to wait a very long time for the breakout. In fact some stocks stay few years in quiet periods before a major move occurs. This conflicts with our objective as traders which is growing our trading account as quickly

as possible. The question then arises as to whether this is a good approach for long term investing. My answer to that is no, since most of these stocks may explode for a couple of days and then give up most of their gains or languish in consolidation patterns for weeks or months. We also are not taking company fundamentals into account to insure that we are in viable companies for the long term.

In the section below, I will introduce specific technical and chart indicators that can signal a coming explosive move. In the next section, I will discuss how these parameters must line up in combination with each other, to allow a trader to predict explosive moves from small price bars.

### **Relative Positions of the Moving averages**

A simple moving average (MA) for a specific period  $n$ , is calculated by adding the prices for each element (day, week, etc) in that period and dividing by the number of elements:

$$\text{MA}(n) = [\sum_{i=1..n} (P)_i] / n$$

**Where  $n$  = Number of periods,  $P$  = Price**

Note that the Simple moving average weighs each data point equally.

The equation of the Exponential Moving average EMA is the following

**$\text{EMA} = (\text{EMA} * (1-K)) + (\text{Price} * K)$ , Where  $K = 2 / (1+N)$  .  $N$  = Number of days in average.**

The way the calculation is done is as follows:

- (1) Multiply Yesterday's EMA by  $(1-K)$
- (2) Multiply today's price by  $K$
- (3) Add the two results to get today's EMA.

Note that in the case of the Exponential Moving Average, each price has a higher weighting than the price for the period before. Thus each new price has a higher impact on the EMA than the MA. Later in the chapter I will explain the importance of this observation in predicting explosive breakouts from small price bars.

## Relative Positions of the Directional Indicators

The positive directional indicator is calculated as follows:

$$+DI = EMA(+DM/TR) n$$

Where EMA = Exponential moving average

n = Number of periods and TR = True Range

+DM = Positive directional movement

Where  $+DM_k = H_k - H(k-1)$  Only if  $H_k > H(k-1)$  . If  $H_k \leq H(k-1)$  then  $+DM_k = 0$

Where  $H_k$  = High price for current period,  $H(k-1)$  = High price for prior period.

In essence to calculate the positive directional movement we are adding all positive differences for the high prices between period k and k-1 for all periods between 2 and n.

The negative directional indicator is calculated as follows:

$$-DI = EMA(-DM/TR) n$$

Where EMA = Exponential moving average

n = Number of periods and TR = True Range

-DM = Negative Directional movement

Where  $-DM_k = L(k-1) - L_k$  Only if  $L(k-1) < L_k$  . If  $L(k-1) \geq L_k$  then  $-DM_k = 0$

In essence to calculate the negative directional movement we are adding all negative differences for the low prices between period k-1 and k for all periods between 2 and n.

As a reminder the Average true range (ATR) is the average of true ranges (TR) over a specified period. The true range for a specified period is defined as the greatest of the following:

- (1)  $(H)_p - (L)_p$
- (2)  $Abs[(H)_p - (C)_{p-1}]$
- (3)  $Abs[(L)_p - (C)_{p-1}]$

**Where H = high, L = low, C = close, P = current period, Abs = Absolute Value**

In cases (2) and (3) it was necessary to use absolute values to insure a positive number.

Buy and sell signals are generated by crossings of +DI and -DI. A sell signal occurs when -DI crosses +DI from a higher level moving lower. A buy signal is given when the +DI crosses

the  $-DI$  from below moving higher.

While these signals are useful, they are of limited value on their own when a stock is confined in a narrow trading range. The reason for this is that in such cases a strong and quick unsustainable mini move is enough to create a cross in one direction only to be followed by a cross in the opposite direction. This is in essence a false signal and is quite common in non trending stocks when these indicators are used. The trick is to supplement this useful indicator with other technical or price bar indicators to neutralize false signals as will be shown later in the chapter.

### **Average Directional Indicator**

The Average directional Indicator or ADX is calculated as follows:

$$ADX = EMA(DX)_n$$

**Where  $n$  = Number of periods**

$$\text{Where } (DX)_k = [((+DI)_k - (-DI)_k) / ((+DI)_k + (-DI)_k)] * 100$$

**Where  $k$  = Any specific period.**

The ADX is an oscillator that moves between zero and 100. If the ADX value is lower than 20, the trend is considered weak, while values above 40 indicate strong trends. Note that the ADX indicates the strength of a trend but does not indicate the direction. This is where the  $+DI$  and  $-DI$  crossovers come into play.

When we are dealing with sudden moves from narrow price bars, waiting for the ADX to hit 40 or even 20 will be too late. As you will see in the examples later in this chapter, a one hundred percent move can occur with the ADX at 20 or below. The reason for this is that for the ADX to move above 20 and keep climbing a new trend needs to develop. However, we are not trend trading in this case but rather looking to capture profits from sudden explosive moves that may be temporary in nature. For this reason our ADX requirements will have to be modified and combined with other indicators to insure that we do not miss the trade.

### **Indecision Candlesticks**

Dojis and spinning top candlesticks indicate indecision and

a back and forth game between buyers and sellers. These types of candlesticks are prevalent near the support and resistance areas of the narrow price bars defining a non trending stock. As I will demonstrate later in the chapter, recognizing the technical signals that indicate that the indecision period is about to end is key to making profits trading small price bars.

### **Characteristics of explosive moves from small bars**

To anticipate a price spike out of a non trending stock trading within the limits of small price bars, it is important to understand how institutions and large players go about accumulating such stocks. The manner in which these market participants accumulate lower volume traded stocks has an effect on the behavior of such stocks within their trading range. To avoid a runaway move, institutions usually accumulate such stocks by buying a slightly larger number of shares than they are selling, with the difference accounting for the accumulated stock. The plan is to prevent any major move until they have control of the amount of shares they want. This process can continue for weeks or even months dependent on the type of stock and the volume traded on an average day.

These staged accumulations are the reason behind the minor moves in these stocks from the price bar range support area to the resistance area. This type of move is likely to be reflected in the most recent data, and thus can be detected by an upward inflection in a short term exponential moving average which is highly weighted to the latest data.

As accumulation continues and becomes more urgent, due to possible news story or the close completion of share accumulation targets by major players, longer term data starts getting affected. This is reflected in the upward curvature of a short term simple moving average where all data points carry equal weight.

As accumulation continues more and more days start experiencing its effect so that the simple moving average starts moving up faster than the exponential moving average subsequently crossing it. Since we are dealing with sudden moves that are expected to last few days, our choice of moving average will

have to be of extremely short duration. Based on my experience trading such setups, the five day simple moving average MA(5), the ten day exponential moving average EMA(10), and the fifteen day exponential moving average EMA(15) are chosen.

For the accumulation condition to be satisfied we require that the moving averages are lined up as follows:  $MA(5) > EMA(10) > EMA(15)$ . In addition we require a fresh cross of the MA(5) above the EMA(10) and EMA(15).

As any experienced trader knows, moving averages are sometimes lagging indicators. For this reason other technical indicators and chart features are combined with moving averages to decide the price and time of entry.

Within the longer term non trend, there exists several mini trends that cause the stock to oscillate between the support and resistance area of an established narrow price bar range. On occasions spikes outside the resistance area occur fooling traders into thinking that a strong move is on the horizon. This is important to large players who are in the process of accumulating the stock. Retail traders get tired of waiting out a non trending stock and look at it as “dead money” making it easier for savvy big players to get their shares before the move in the stock.

Technical manifestation of the mini trends between support and resistance and spikes above the resistance area are expressed by the positive directional movement +DI crossing above the negative directional movement -DI. Unfortunately these crossovers do not last and reverse as quickly as they appear indicating that the mini trend will not result in a major spike.

While it is important that the +DI crosses the -DI to have a move to the upside take place, this does not guarantee that it will be sustainable even over a short term. For this reason we require that the Average Directional Movement ADX has recently broken its downtrend and is flat or moving higher. Notice that we are not specifying an ADX reading above 20 since, as I indicated before, if we wait for a real trend to be established we are likely to miss the surge we are looking for. Our requirement for a strong positive trend is that the +DI crosses the -DI indicating a positive move and an ADX which is either flat or is moving up after break-

ing a recent downtrend.

To this point we have put together two parts of the puzzle. Using the moving average crossover requirement, we are certain that the accumulation is in its last stages. The +DI crossing the -DI indicates that the directional move is positive, while the break of the ADX downtrend implies that the move is strengthening. Remember that the ADX gives a measure of the strength of a move but not its direction, which is why we also utilize the +DI crossover.

What is missing from our entry specification is a trade trigger point suggesting that the quick surge we are anticipating is quite close and we better act soon. When a stock trading in a narrow range tests the resistance of that range, a period of indecision follows, after which the stock either reverts to support or breaks out. This period of struggle between buyers and sellers is recognized by the presence of several doji and spinning top candlesticks. Our aim is to find the time when this indecision is resolved to the upside resulting in a powerful short term advance. This is signaled by a candlestick with a close at or above the latest doji's or spinning top's high, provided the moving average crossover, +DI/-DI crossover and ADX conditions are met. When this trigger candlestick appears it is recommended that the trade be entered the next day.

In summary, the procedure for trading short term break-outs from small price bars is as follows:

- (1) The moving averages should be lined up as follows:  $MA(5) > EMA(10) > EMA(15)$  with a crossover of the simple moving average above the exponential moving averages.
- (2) +DI should have crossed above -DI. The larger the angle of separation the stronger the move is likely to be.
- (3) The ADX should have recently broken out of a down trend into an uptrend or flat curve. The reason for requiring that the ADX break out of a downtrend be recent is to avoid false signals. If the ADX has been in an up trend for an extended period after a wide angled +DI/-DI crossover has taken place, this indicates that any trigger candlestick may be a fake out. This is because with

up trending ADX and wide angle of separation between +DI and -DI we expect a trigger candlestick to appear quickly, usually within seven trading days.

(4) The trade is executed after the appearance of a trigger candlestick. This is a candlestick that closes at or above the most recent doji high. Provided conditions 1, 2 and 3 are met.

*Application of these concepts and their utility in predicting explosive moves from small price bars will be demonstrated in the following examples.*

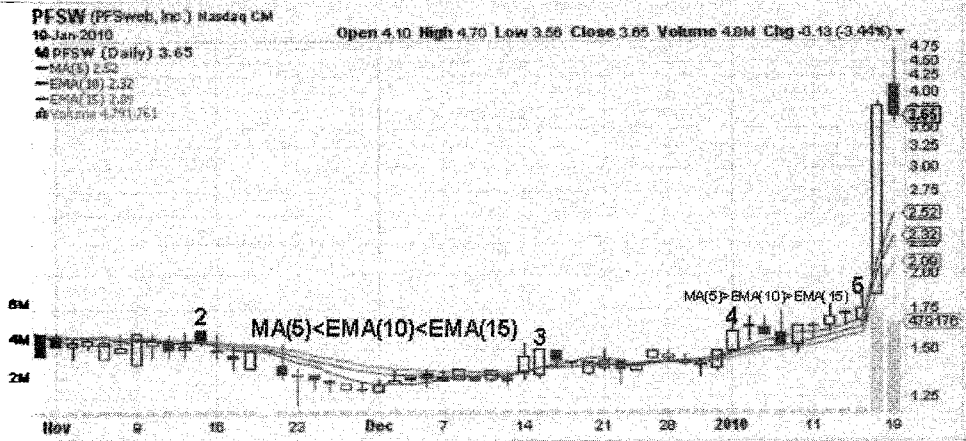
### **Example 1 PFS Web (PFSW)**

Look at the sudden spike on the chart page 153 that occurred on January 18, 2010 and imagine the kind of profit you can make if you can predict such spikes a short period of time before they happen. This is what the techniques in this chapter are capable of delivering. Remember that in trading we are dealing with probabilities and that there are no guarantees, however even a fifty percent success in this case is enough to deliver substantial profits.

For the purpose of clarity, two charts have been used to discuss this example. The first on page 153 is a moving average chart depicting the line up of the MA(5), EMA(10), and EMA(15) for the different price ranges. The second chart on page 154 shows the ADX, +DI/-DI, signal dojis and trigger candlesticks.

A simple glance at the moving average chart page 153 clearly shows that the area between points 4 and 5 is the only range where the moving averages lined up in a manner that meets our first condition. The five day simple moving average has crossed the ten and fifteen day exponential moving averages with clear separation and a fresh cross a couple of days after point 4. Between points 2 and 3, the moving averages lined up in the opposite direction with  $MA(5) < EMA(10) < EMA(15)$ . The region between points 3 and 4 and the one prior to point 2 show the moving averages very close to each other with frequent criss-crossing. It is evident that based on the moving average condition alone, the only candidate trigger range is that between points



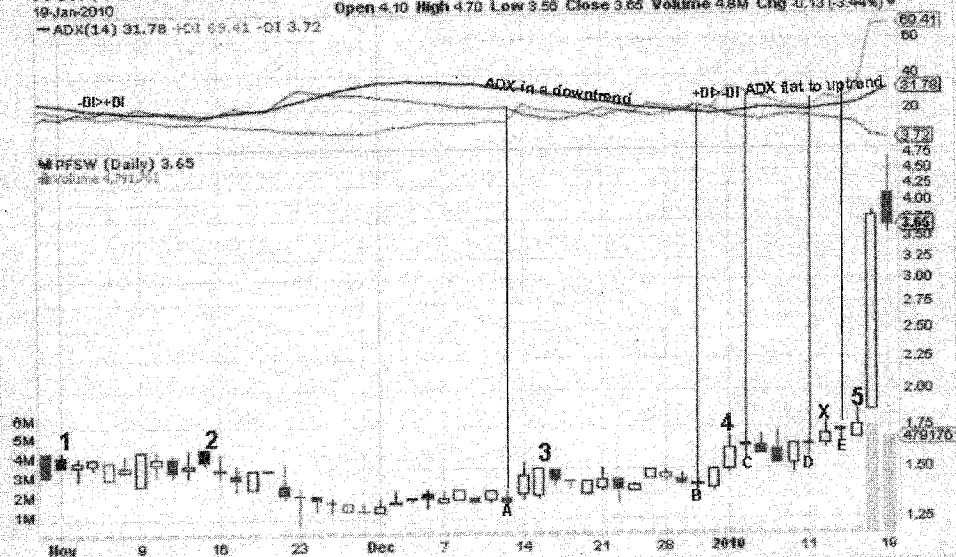


PFSW (PFSweb, Inc.) Nasdaq CM

19-Jan-2010

Open 4.10 High 4.70 Low 3.55 Close 3.85 Volume 48M Chg -0.13 (-3.44%)

-ADX(14) 31.78 +DI 65.41 -DI 3.72



**4** and **5**. For the purpose of illustration and so that you can practice the techniques in this chapter, I will provide a detailed presentation on how the different price ranges on the chart relate to other conditions that need to be met for a spike to occur.

Between points **1** and **2** on the chart page 154, it is clear that the negative directional indicator  $-DI$  has crossed the positive directional indicator  $+DI$  and remains above it. This indicates that one of the required conditions of a sudden move is not met and thus no trade entry is indicated between price points **1** and **2**. Even when the stock makes a slight move at point **2**, it is evident that this move will not be sustainable since the  $-DI$  crossed the  $+DI$  with increasing separation indicating that the stock is likely to fall back to the support area which is what actually took place. Notice the multiple number of dojis and spinning tops between points **2** and **A** indicating indecision on the direction of the stock. After point **A** what looks like a trigger candlestick appears, however since the  $+DI$  has not crossed the  $-DI$  and the ADX is still in a downtrend, as indicated by the vertical line drawn from the price chart to the ADX chart, no trade trigger is given.

At doji **B** the  $+DI$  crosses over the  $-DI$  with a small angle of separation but the downtrend in the ADX line has not been broken yet implying that the trigger candlestick after doji **B** is not tradable.

The first candlestick that satisfied both the  $+DI/-DI$  crossover and ADX conditions is doji appearing after point **4**. The vertical line drawn from doji **C** up to the ADX chart verifies that the  $+DI$  has crossed above the  $-DI$  with a wide angle of separation and the ADX is no longer trending down. This implies that the positive directional movement is strengthening.

Our goal is to watch for a trigger candlestick which closes at or above the high of doji **C** at \$1.70 on 1/5/2010. After doji **C** and between dojis **C** and **D** no candlestick trigger appeared that closed at or above doji **C** high of \$1.70 until point **X**. Candlestick **X** closed at \$1.70 which is equal to the high of doji **C** and higher than the close of doji **D** of \$1.65 on 1/11/2010. Notice that doji **D** also satisfies both the  $+DI/-DI$  crossover and ADX conditions. Thus candlestick **X** is the trigger and the trade is entered the next

day at price point **E**.

If you missed the above entry, candlestick **E** is also a doji with both ADX and +DI/-DI crossover conditions met. Candlestick **5** closes above the high of doji **E** providing another trade trigger. The next day happens to be the day of the spike and your final chance to enter the trade.

## Final Word

To effectively trade narrow range price bar spikes follow the procedure described below as we did in this example:

Your initial step is to identify a strong price spike candidate stock trading in a narrow price range with many price bars showing as spinning tops and dojis as evident in this example.

Your second step is to glance at the line up of the different moving averages since this is easy to see. If the line up is clearly in the wrong direction, that is:  $EMA(15) > EMA(10) > MA(5)$  as seen between points **2** and **3** on the chart, then wait for the next range. If the moving averages are too close to each other without clear separation, then look to see if the +DI/-DI and the ADX conditions are met. In the overwhelming majority of situations these conditions will not be satisfied without a clear crossing of the moving averages in the required manner.

Any range where the moving averages line up in the requisite manner, namely  $MA(5) > EMA(10) > EMA(15)$  will need to be scrutinized carefully for a possible trade signal doji and trigger candlestick as explained below.

Your next step is to locate a doji or spinning top where both the +DI/-DI crossover and the ADX conditions are satisfied. Such a doji is likely to be located at a minor resistance area near the top of the narrow trading range. This is identified by the ranges **1** and **2**, or **4** and **5** on the chart page 154. Note that prices between points **1**, **3** and **4** on the chart are near support area of the narrow trading range and are unlikely to provide a trigger bar.

Once you have located a doji that satisfies both the ADX and +DI/-DI crossover conditions, place the stock on a daily watch list to be ready when a trigger candlestick appears on the chart. Look out for an increase in angle of separation between +DI and

–DI after crossover indicating that a trigger candlestick is likely in the near future.

If you examine the chart page 154, as we mentioned before, the first doji satisfying both the +DI/-DI and ADX conditions is doji **C**. A narrowing angle of separation between +DI and –DI after crossover delayed the appearance of a trigger candlestick until after doji **D**. The trigger candlestick **X** appeared at this point with the angle of separation between +DI and –DI increasing and the slope of the ADX line moving up. This implies that the positive directional indicator is moving above the negative directional indicator with increasing strength, a clear message that the spike is likely to be soon.

Following this stepwise procedure is very effective in identifying entry points before price spikes take place as demonstrated in the previous example. Be sure that all moving average, ADX as well as +DI/-DI crossovers are satisfied before identifying the trigger doji. Once that is done you can then enter the trade the next day.



## Chapter 8

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### **Explosive Profits Trading Price Spikes**

A price spike occurs when the price of a stock moves out of a range within a specified trading period and then pulls back into the range within the same period. The range could be defined by prior multiple periods as in the case of a consolidation pattern, or a single period as in the case of a sudden reversal signal. Price spikes can take place accompanied by high trading volume as well as average or even below average trading volumes. They can also occur within basing patterns or at trend reversal points.

To trade price spikes successfully, it is imperative to distinguish between ordinary spikes that occur frequently within a trend and extraordinary or tradable spikes that foretell a trend reversal or a breakout from a consolidation pattern.

#### **Consolidation pattern price spikes**

When a stock pauses after trending for a while, it settles into a consolidation pattern, after which it can either continue its current trend or undergo a trend reversal. Consolidation patterns seen at the end of long up trends or downtrends are known as basing patterns from which a stock can launch into a new trend. A stock in a consolidation or basing pattern trades between an upper boundary or resistance and a lower boundary or support, until a pattern break occurs and a new trend is established.

During the consolidation period the stock may experience several price spikes where the stock trades outside the support and resistance lines just to close within the confines of these lines.

These spikes can give valuable information on the likelihood of the direction of the upcoming breakout. Bullish price spikes are defined by an intra period trade below the support line but a close above it. Bearish price spikes, on the other hand, are characterized by an intra period trade above the resistance line but a close below it.

A stock in a consolidation pattern showing an overwhelmingly higher number of bullish price spikes is likely to break to the upside while a stock showing a larger number of bearish price spikes is likely to break to the downside.

There is a simple and logical explanation as to why price spikes below support are bullish while those above resistance are bearish. Every time the stock spikes below support buyers step in forcing a close above the support line. This is an indication that buyers are waiting for an opportunity to acquire shares every time the stock temporarily moves below support pushing it above the support line at the close. In other words smart money is accumulating shares at what it perceives to be a good entry price. This also demonstrates a high level of urgency since the stock is only able to drop below the support line on an intra period basis and rarely closes below it.

When the price spikes above the resistance line, sellers step in pushing it below that line at the close of the period. This indicates that sellers have an urgency to step in and sell before the close to exit their position at what they perceive as a full valued price. This indicates that a distribution of shares is in progress and when that is over a price drop is likely to occur.

The nature of price spikes can foretell the direction of a breakout from a consolidation or basing pattern, but does not give an indication of timing. As any moderately experienced trader knows a stock can remain in a non trending pattern for several months. Thus, knowing the direction of the coming move is of limited value unless we can pin point the timing within a reasonable level of accuracy. To accomplish this it is important to realize that when a stock moves from a trending to a non trending or consolidation pattern a significant reduction in volatility takes place. The volatility remains low during the consolidation phase



and becomes even lower as the breakout nears. Once the volatility moves out of its unsustainably low range a price breakout is likely to follow in the near future.

To translate these concepts into usable technical indicators, in the next section I will introduce the Percent B (%B) indicator derived from Bollinger Bands.

### **Percent B (%B)**

The formula for percent B (%B ) is as follows:

$$\% B = (\text{Price} - \text{Lower Band}) / (\text{Upper Band} - \text{Lower Band})$$

**Where the upper and lower bands refer to the Bollinger bands with normal settings of (20,2).**

Bollinger bands consist of a middle band and two outer bands. The default setting for the middle band is twenty periods and the outer bands are usually two standard deviations above and below the middle band.

As the price moves to the upper band, %B moves closer to 1, while it moves closer to zero as the price moves closer to the lower band. There are actually six probabilities for %B:

%B = 1 when price is at the upper band.

%B = 0 when price is at the lower band.

%B > 1 when price is above the upper band.

%B < 1 when price is below the lower band.

%B > 0.5 when price > 20 day moving average.

%B < 0.5 when price < 20 day moving average.

The common use of percent B (%B) is to identify overbought and oversold conditions. For our purpose, however, we will be using this indicator as a volatility shift signal to clue us on an impending breakout from a non trending pattern.

When a stock is trading in a consolidation or basing pattern, prices near support levels are likely to be closer to the lower Bollinger band, while those near resistance levels are likely to be closer to the upper Bollinger band. As the breakout becomes closer, a volatility squeeze occurs where the volatility drops to unsustainably low levels. If we use some creative thinking we can visualize how the %B indicator can be used to alert us to such

unsustainable low volatility levels. As the volatility decreases we expect the %B values for prices corresponding to support levels to increase while those corresponding to resistance levels to decrease. As the %B values become closer, the rising %B trend line corresponding to support prices and the falling %B trend line corresponding to resistance prices converge towards each other. The narrowest distance between the two lines signifies a period of unsustainably low volatility often followed by a sudden volatility shift manifested by a %B breakout above the apex of the triangle formed by the two convergent trend lines.

Remember that the %B is a function of Bollinger Bands which are based on a twenty period simple moving average. The rise in %B values corresponding to support prices implies that the price trend factoring in the last 20 periods is moving closer to the upper Bollinger band. On the other hand as %B values corresponding to resistance prices fall, the price trend line for the last 20 periods moves towards the lower band. The convergence of the two corresponding %B trend lines indicates that the price trend factoring in the last twenty periods is confined to a very narrow range creating a compressed rubber band effect. As the %B breaks above the convergent trend lines, a sudden increase in volatility occurs and the rubber band snaps and the stock gets ready to establish a new trend and break out of the consolidation pattern.

While this concept may present a slight challenge to visualize at this point, studying the example below will make it much clearer.

### **Example 1: Ziopharm Oncology (ZIOP)**

After the stock moved from a bottom in mid December 2009, it settled into a consolidation period between early January and late February 2010. This non trending period is depicted on the chart page 163 with two parallel lines defining areas of support and resistance. Notice that during the consolidation period there are many bullish price spikes where the price trades intra-day below the support line but closes above it. These spikes are labeled with the letter **A** on the chart. In comparison there



is only one bearish price spike labeled **B** on the chart where the price moves above the resistance line but closes below it on an intraday basis. The overwhelmingly large number of bullish price spikes in relation to bearish price spikes indicates that there is a much higher probability that the consolidation pattern is likely to result in a break to the upside.

Notice that there is a single price spike in late January where the stock traded below the support line but still closed below it. This can fool some traders into thinking that the lower probability outcome of a break to the downside is about to materialize. For this reason it is important to pay attention to the **%B** trend line behavior to be sure that the trade is entered near a breakout.

Note that if a trend line was drawn between points **1** and **3** corresponding to support prices it will be moving lower. This is an indication that a breakout is still far away and it is not yet time for action. The reason for this is that as the **%B** is moving lower the price is trending further towards the lower Bollinger band and further away from the upper Bollinger band implying that a volatility squeeze is not likely. This indicates that no trading action should yet be taken. It is interesting that point **3** corresponds to the “non conforming” bullish spike where the close is below the support line. Paying attention to the **%B** trend line was thus quite important especially if the lower probability outcome materialized and the stock continued to move lower.

Between points **3** and **4**, the **%B** trend line corresponding to support prices started moving higher. Simultaneously, the **%B** trend line **1, 2** corresponding to resistance prices started moving lower with both lines converging near point **X**.

The convergence of the two trend lines is an indication that the volatility has dropped to unsustainably low levels and a trade signal is likely to occur soon. Our trade trigger comes when the **%B** breaks above its downtrend line **1, 2** indicating that a convergent triangle formation is complete and that the **%B** line moved above the apex, which occurs at point **X**. This signals a trade entry for the next day, February 17, 2010 at around \$3.16. As can be seen on the chart the stock moved to \$5.30 by April 2,

2010 for a profit of over 65% in 45 days.

### **Example 2: Green Plains Renewable Energy (GPRE)**

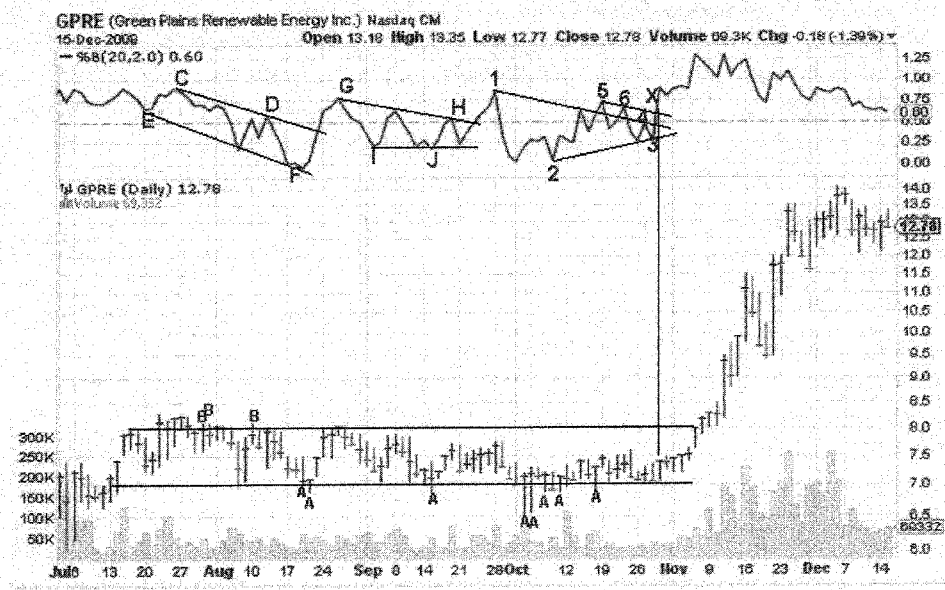
This example demonstrates how to appropriately count bullish and bearish price spikes. In addition, the importance of the slope of the %B trend line is pointed out when deciding on a trade trigger signal.

The consolidation period on the chart page 166 is defined by two parallel lines, a lower support line and an upper resistance line. Bullish price spikes are designated by the letter **A** on the chart. Note that only spikes conforming to the condition whereby the stock drops below the support line on intraday basis but closes above it, are counted. The count does not include spikes where the stock trades below the support line and still closes below it. In a similar manner, only conforming bearish spikes are counted whereby the stock trades above the resistance line but closes below it. These spikes are labeled **B** on the chart page 166. Spikes where the stock trades above the resistance line but still closes above it are considered non conforming spikes and are not included in the count.

As can be clearly seen from the chart page 166, the number of conforming bullish spikes labeled **A** is much larger than the number of bearish spikes labeled **B**. This clearly signals a likely break to the upside.

Our next step is to determine our entry point by looking for convergent %B trend lines corresponding to support and resistance price points.

Notice that the first %**B** trend line labeled **C**, **D** corresponding to resistance prices is parallel to line **E**, **F** corresponding to support prices. Since in this case the line **E**, **F** does not trend up, the lines will never converge indicating that the volatility is too high for a possible breakout. Notice also that in this section that the bearish spikes labeled **B** outnumber the bullish **A** spikes which are nonexistent. This indicates that if the %**B** trend lines satisfied the convergence condition, our break will likely be to the downside. This may seem contradictory to our previous statement regarding an upside breakout, but remember that at this



point we still do not have the benefit of the rest of the data.

The second **%B** section shows a down trending upper line **G, H** corresponding to resistance prices, but the **%B** trend line **I, J** corresponding to support prices is flat. This does not qualify as a trade trigger since the support line is flat indicating no price trend movement of support prices to the upper Bollinger band. At this stage, counting from the beginning of the consolidation period, both bullish and bearish spikes are almost equal in count and thus we have no indication on the direction of the move using this method. Hence even if the **%B** condition is satisfied we will not execute the trade.

As a trader it is important to take trades that only meet your trading criteria. In this case since there was no overwhelming disparity between bullish and bearish spikes to this point, no confirmation is available on the direction of the breakout. If the **%B** trend lines were to be tradable, the trade should not be taken unless another consolidation pattern breakout setup can be recognized.

The last **%B** trend lines **1, 4** and **2, 3** show clear convergence. The trend line **1, 4** corresponding to resistance prices is moving lower, while the trend line **1, 3** corresponding to support prices is moving higher, eventually converging near point **X**. A break of the **%B** line above trend line **1, 2** triggers our trade the next day around \$7.25. This is determined by the vertical line drawn from the **%B** chart towards the price chart. The stock moved to close to \$14.00 in early December for a profit of almost 90% in 30 days.

When constructing **%B** lines, the more points defining the line the more valid it is. This line **1, 4** connecting three points is a stronger trend line than line **5, 6** connecting only two points. Notice also that **%B** trend lines can have some outlying points as seen with points **5** and **6** slightly protruding above the **1, 4** trend line. Think of this in a similar manner as you would drawing price trend lines. Two points are enough to construct a price trend line but the more points used the stronger the trend line and the more reliable it is. Also with price trend lines there are always points that fall outside the trend line without affecting its validity.

In this case using line 5, 6 would still have been valid but the entry would have been delayed a couple of days. This delay in this example had little effect on the profitability of the trade.

### **Trend Reversal Price Spikes**

There are two distinct ways a stock can undergo a trend reversal. The first, addressed in the previous section, is a pull-back into a basing pattern which can last for a few weeks or even months. An eventual break out from this pattern can establish a new trend or continue the existing trend. An alternate way in which a stock can experience a trend reversal is a V shaped reversal where the stock either reverses immediately or undergoes a brief indecision period lasting few days prior to establishing a trend.

In chapter 17 of my book “Generate Thousands in Cash on Your Stocks Before Buying or Selling Them” I have presented a method that uses a combination of candlestick signals and selected technical indicators to spot V type reversals. A section of chapter 17 is presented as an Appendix in this book for your referral.

Although this method is quite powerful in spotting sudden reversals, it is most useful when the stock experiences few days of indecision before the move occurs. This allows the trader to be sure that the MACD and Stochastics signals meet the required criteria and that the reversal candlestick is identified. As explained in chapter 17 of my previous book, stocks can still undergo sudden reversals without the MACD and STO conditions being met.

The objective of this section is to use price spikes to identify very powerful and sudden reversals where the stock does not undergo a brief period of indecision. In these situations once a bullish or bearish price spike appears on the chart and the reversal is confirmed by a specific indicator, a trade signal is given and an entry should be made the next day.

Since in the case of sudden reversals there are no clearly defined support and resistance lines, an alternate reference point will need to be used. Our reference will be the last two period price bars.



Bullish price spikes are thus defined by an intra period trade below the low of at least the most recent two price bars representing the last two trade periods; but with a close above that of the most recent price bar representing the prior trading period.

Bearish price spikes are defined by an intra period trade above the high of at least the most recent two price bars representing the last two trade periods, but with a close above that of the most recent price bar representing the prior trading period.

Since in this case there is no consolidation price pattern where the stock is non trending, the volatility is not likely to drop to unsustainably low levels as defined by % B described in the previous section. On the other hand we expect a volatility shift either from downward to upward volatility or vice versa dependent on whether an upward or downward trend reversal is in progress. As a stock gets close to a top or bottom and gets ready to reverse, the volatility in the direction of the current trend starts decreasing until it reaches a very low number at or near the inflection point. As the stock enters a reversal, an increase in volatility in the direction of the new trend starts occurring. This is often manifested on the chart by an upward curvature from an extremely low volatility or a break of the existing volatility trend line.

To translate this concept into a usable technical signal, in the next section I will present the Bollinger band width parameter derived from Bollinger bands.

### **Bollinger Band Width**

The Bollinger Band width measures the distance between the upper band and the lower band. Bandwidth decreases as the distance becomes narrower and increases as it becomes wider. Since Bollinger Bands are based on standard deviation, a drop in volatility is manifested by a decrease in bandwidth and a jump in volatility is indicated by an increase in bandwidth.

The common method of judging the narrowness of the bandwidth is to relate it to the stock price. A bandwidth is considered extremely narrow and thus the volatility is extremely low if the bandwidth is below 10% of the stock price. Thus for a stock at \$100, a bandwidth of 10 will be considered narrow while a \$10

stock will require a band width of 1 or less.

My experience has shown that for many low price stocks the 10% requirement is very restricting and is often hard to meet. The strategy we will use to implement the Bollinger Band width to measure volatility will be a two step procedure as follows:

(1) When a bullish price spike is identified, check if the Bollinger Band width is at 10% or less of the stock price.

If so, then take the trade as soon as the Bollinger Band width curve emerges from a bottom and starts curving upwards indicating an increase in uptrend volatility.

(2) If the Bollinger Band width is above 10% of the stock price, then look for a Bollinger Band width curve break above its trend line. The trend line is constructed by connecting at least two peaks .

Using a combination of bullish or bearish price spikes with volatility shifts as indicated by the Bollinger band width indicator to spot trend reversal will be clearer when studying the examples below.

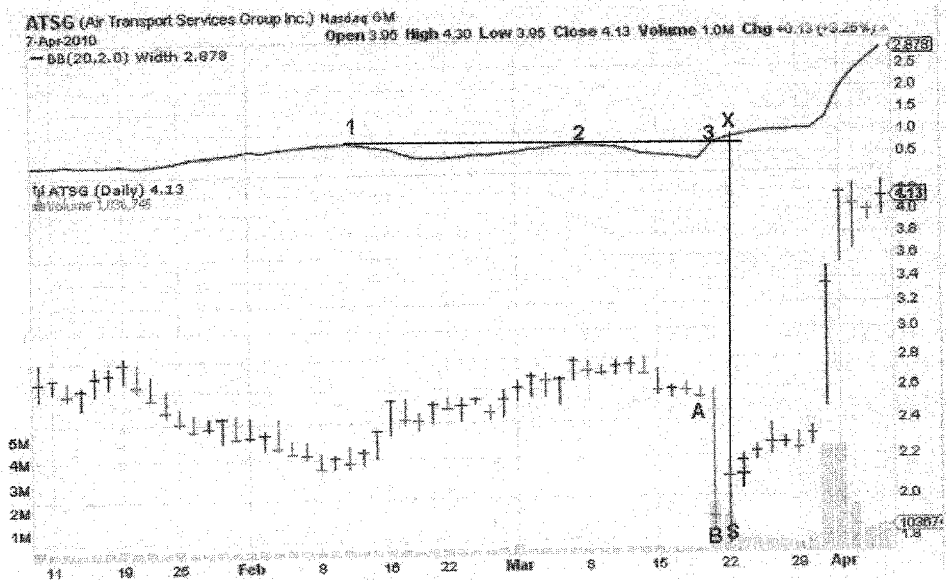
### **Example 3: Air Transport Group Inc (ATSG)**

This example illustrates the use of a price spike with Bollinger Band width trend line break to spot an explosive upward reversal.

By examining the chart page 171, it is clear that a bullish price spike labeled **S** appears on March 22, 2010. The stock trades below the two prior period lows but closes above the most recent period's close.

<b>Date</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
3/18/2010(A)	\$2.59	\$2.53	\$2.54
3/19/2010(B)	\$2.58	\$1.84	\$1.90
3/22/2010(S)	\$2.14	\$1.78	\$2.09

This is evident by examining the table above where the spike bar **S** registers a low of \$1.78 which is below prior bar's **B** low of \$1.84. This is also below the price bar **A** low of \$2.53 which is two days prior to the spike bar. The close of the spike



bar is at \$2.09 which is higher than the prior bar's close of \$1.90. Thus the bar labeled **S** on the chart satisfies the condition of a bullish price spike bar. The next step is to identify the trade trigger by identifying a Bollinger Band width trend line break or an upward curvature of the bandwidth curve from an extremely low reading.

Checking the bandwidth corresponding to the signal bar **S** on the chart, a reading of around 1.00 is given which is much higher than the maximum 10% of the corresponding price (\$2.00) required to be considered a low reading. Our next step is to look for a possible break of the Bollinger Band width trend line to identify a reversal.

The Bollinger Band trend line **1, 2** can be constructed and extrapolated to point **3** where the band width curve breaks above the trend line. Notice that the signal spike **S** corresponds to point **X** on the Bollinger Band width chart. The Bollinger Band width curve breaks above its trend line prior to point **X**, hence triggering our trade entry on March 23, 2010 at the bar labeled **T** on the chart. Our entry price is at \$2.15 on 3/23/2010 with the stock moving to \$4.13 by 4/7/2010 for a profit of around 95% in 15 days.

Notice that between points **1** and **2**, even though the price increased, the volatility as measured by the Bollinger Band width reflective of a twenty day data set was slightly lower. A sudden drop in price between points **A, B** and **S** did not result in a significant volatility drop since the stock was reaching a trend reversal point whereby the downward volatility at point **B** is balanced by an immediate upward volatility at point **S**. The main reason for the lack of a volatility drop is that the reversal happened almost instantaneously. As will be seen in the next example, in cases where a reversal is preceded by a short indecision period a more pronounced volatility drop will occur.

A break of the Bollinger Band width above its trend line indicates an increase in upward volatility and a sudden reversal. If we were to wait for a low volatility reading based on the Bollinger Band width we would have missed the trade. Remember that we would require a Bollinger Band width of no more than ten percent

of the corresponding price at the signal bar which in this case is 10% of 2.00 = 0.2. As can be seen this value was never reached before the reversal took place.

#### **Example 4: Fibertower Co (FTWR)**

I have chosen this example to illustrate how price spikes are used with both Bollinger Band width upward curvature from an extremely low reading and Bollinger Bandwidth trend line break. This allows the reader to learn how to pin point the trade trigger using each approach as well as compare the two techniques recognizing the advantages and disadvantages of each.

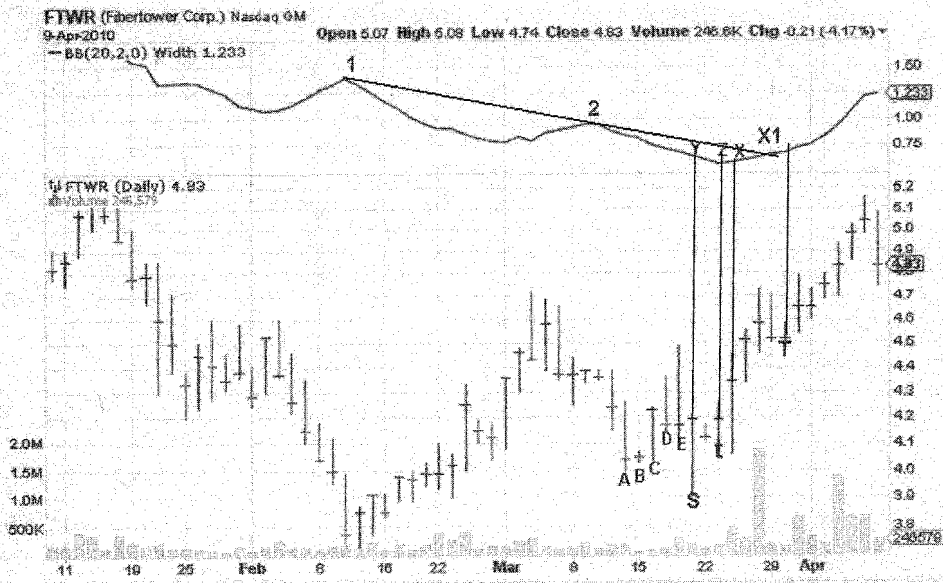
A bullish price spike labeled **S** appears on the chart page 174 on March 19, 2010. The price spike bar is characterized by a lower low than the prior two price bars **D** and **E** as seen in the table below:

<b>Date</b>	<b>High</b>	<b>Low</b>	<b>Close</b>
3/12/2010(A)	\$4.26	\$4.00	\$4.04
3/15/2010(B)	\$4.07	\$4.03	\$4.05
3/16/2010(C)	\$4.24	\$4.04	\$4.23
3/17/2010(D)	\$4.36	\$4.14	\$4.17
3/18/2010(E)	\$4.49	\$4.09	\$4.17
3/19/2010(S)	\$4.22	\$3.90	\$4.19

The signal price spike closes at \$4.19 which is above the prior day's close at \$4.17 as evident from the above data.

It is worth noting that the price spike **S** registers a low below the last five trading days labeled **A**, **B**, **C**, **D** and **E** on the chart. This is of special significance since this implies a bullish spike on both the daily and weekly chart, a more powerful signal than a spike appearing only on the daily chart. This can be clearly seen by studying the data in the table above.

By examining the Bollinger Bandwidth value at point **Y** corresponding to the price spike **S** on the price chart, a reading of 0.4 is registered on the bandwidth chart. This is within the ten percent maximum requirement based on the closing price of \$4.19 on the



price spike signal day. This is an indication that the volatility has dropped to extremely low levels on signal day, and it is just a matter of few days before the volatility starts rising again signaling an upward reversal. Notice that the Bollinger Band width curve was still in a downtrend at point **Y** indicating that the volatility was still dropping. We will thus wait until a Bollinger Band width bottom is established which occurs at point **Z** on the bandwidth chart. The next day at point **X** on the Bollinger band width chart is the first day an upward curvature from the bottom is seen thus triggering a trade. We enter the trade the next day, March 23, 2010 at \$4.20, and as you can see the stock moved to around \$5.20 by April 8, 2010 for a profit of 25% in 16 days.

If we were to ignore the extremely low Bollinger Band width reading, and use the Bollinger Band width trend line break method we would have entered few days later at a higher price. The trend line is drawn through points **1** and **2** and extrapolated to point **X1** on the Bollinger Band curve. Our entry will be the first day the bandwidth curve breaks above point **X1** which is labeled **T** on the price chart. In this case our entry will be at around \$4.55 on March 31, 2010 with a move to around \$5.20 by April 8, 2010 for a profit of 15% in 8 days, which is still quite respectable.

This exercise demonstrates that it is advisable to take the trade if the price spike signal is accompanied by extremely low volatility readings. The trade should be entered right after an upward curvature from a Bollinger Band width minimum. As demonstrated in this example waiting for a trend line break is likely to result in reduced profit due to a delayed entry.





## Chapter 9

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### **Explosive Profits Trading Reverse Price Swings**

If you were to read stock message boards, you may come across statements such as “The stock is up today because there are more buyers than sellers” or “The stock is up on heavy volume so there was a lot of buying going on today”. In reality each buyer is matched with a seller so why is it that stock prices swing at all? The reason behind price swings that are often quite wild is not the volume of shares bought or sold but rather the urgency which buyers or sellers are under. If buyers are aggressive and want to establish a position quickly, prices will have to be bid up to entice holders to sell. On the other hand, if sellers are looking to quickly exit their positions, the ask price has to be lowered to interest potential buyers. Therefore, the buy or sell imbalance that causes prices to change is not volume related but is more a matter of urgency.

In any given period, be it daily, weekly or even five minutes; price swings can occur reflecting which side is more aggressive in taking action. If we consider a daily period as an example, swings above the opening price are indicative of buy interest while swings below the opening price are reflective of sell interest. The difference between the high of the day and the opening price is considered the maximum buy swing for the day. On the other hand, the difference between the open and the day's low is considered the maximum sell swing for the day.

On occasions a stock can swing wildly intraday in a countertrend direction without affecting the existing trend. As an example, an up trending stock can experience large intraday sell

swing maximum values while maintaining the day to day up trend. In a similar manner, a down trending stock can experience large intraday buy swing maximum values without affecting the existing down trend.

Counter trend intra period swings are of special significance especially on days where the stock closes in the direction of the existing trend. Such swings provide information on the maximum swing tolerance of a stock without reversing trend. One way I have successfully used this information in short term trading is averaging the maximum counter trend swing values on days where the stock closes in the direction of the existing trend to calculate an average maximum swing number. This is the maximum amount a stock can swing intraday in a counter trend direction without a trend change. After experimenting with different time periods, I have concluded that using a four period average works best.

Another way to use this information is to enter a long trade at an oversold condition or a short trade at an overbought condition. As an example for a long trade, one can average the maximum buy swings calculated as the difference between the high and the open of each day, adding the number and taking an arithmetic average. With the stock in an oversold state, a swing significantly greater than this average is likely an indication of aggressive buy interest and potential trend reversal. In the next section I will introduce to you a specific strategy I used to employ reverse price swings to enter a new position.

### **Trading reversals using price swings**

Since this method is based on intraday price swings we will not be using technical indicators to determine oversold or overbought conditions. Our first requirement is that the stock is either oversold or overbought on weekly basis. In price bar terms, this is translated in that we require the price to close below the close five days ago for up reversals and above the close five days ago for down reversals.

Remember that we are dealing with short term trading in this case, thus picking the best day of the week to enter a posi-

tion is likely to increase our profitability. It is important to enter long positions on a likely weak day and short positions on a likely strong day. This fits well with the requirement of the stock being oversold or overbought.

In my previous book "Generate Thousands in Cash on Your Stocks Before Buying or Selling Them", I have discussed weekly cycles pointing out that some days of the week show a high probability of a strong market while others show a high probability of a weak market. To remain true to my objective for this book to be a stand alone, I will quote a small part of that section for those who do not have the prior book:

### **Weekly Cycles**

*You probably heard the saying "Buy in October and sell in May and go away". This refers to the seasonality of the market, indicating weakness starting the end of the summer into October and subsequent strength into the new year. With the advent of the internet the cycle has shortened significantly in recent years, where selling is recommended in late February or March.*

*During my trading years, I have wondered whether there is a mini-cycle within the trading week. Are there any days of the week that are more often buy than sell days? What is the best day to buy? Are there discernible intra-week trends based on the prior day's strength and so on.*

*While it is not wise to generalize and make blanket predictions, I found through my years of trading experience the following to be more often true than not.*

*Mondays are the strongest day of the week especially after a weak Friday.*

*Tuesdays are sell days after a strong Monday. They are usually characterized by a choppy morning followed by a stronger afternoon. So if you are planning to sell on Tuesday you are likely to get a better price later in the day. Tuesday mornings are considered a buy day after a weak Monday.*

*Wednesdays are usually choppy with no clear direction.*

*Thursdays are usually buy days especially later in the day when they exhibit weakness.*

*Fridays usually have a minor downward bias in the morning with a stronger finish. While these statements seem quite general, they are much more useful when combined with strength index and five day oscillator readings”.*

As indicated in the above quote, in my previous book the five day oscillator was used in combination with the day of the week to make buy or sell decisions. In this case, however, we will make our decision based on probabilities without resort to oscillators.

When entering an oversold position expecting an upward reversal, it is best to avoid strong market days but rather take the position on weak days. With Monday likely being the strongest day of the week, that day will be excluded as a trade entry day. We will also exclude Thursdays which are usually strong in the afternoon. This leaves Tuesdays, Wednesdays and Fridays as potential days for entering an oversold stock expecting an upward reversal.

Using a parallel argument for entering overbought positions, it is better to avoid weak days and rather take positions on strong days of the week. With Friday likely to be the weakest day of the week, it will be excluded. Also since Tuesday is a sell day after a strong Monday, which is often the case, it will also be dropped as a potential trade entry day. This leaves Mondays, Wednesdays and Thursdays as potential short entry days into an overbought stock expecting a down reversal.

Remember that as the case with everything in the market, this is all based on probabilities. On occasions Monday may be the weakest day and Friday the strongest. In such cases while our profit may be smaller, the reverse swing short term trading method will still work.

Once a stock satisfied the closing requirement of being in an oversold condition where its close today is below the close five days ago; our next step is to define a trade trigger. As mentioned previously a maximum bullish price swing greater than the average of the past four days is likely an indication of fresh buying that can result in a trend reversal. We will thus require that on the signal day a maximum bullish swing of 1.75 times the aver-

age upswing in the past four days occur. Remember that we are looking at an oversold stock which has been in a downtrend, so in essence we are looking at reverse price swings, or price swings against the existing trend.

In a similar manner we will require that an up trending stock shows a reverse swing at 1.75 times the average maximum downward swing for the past four days. Of course the stock will have to satisfy the requirement of a close above that of five days ago to be considered overbought.

Our trade trigger day will be the day after the signal day provided it falls on one of the appropriate days of the week. If that does not happen, then the trigger day will be two days after the signal day.

As with every short term trading method, this is not a one hundred percent accurate approach. There will be situations where the stock will undergo a trend reversal without the settings described here materializing. On other occasions a set up as described in the section above will trigger an entry just to find out that in a day or two the stock will not move as expected. On such low probability occurrences, a stop is important to protect our position. A stop is set just below the close on the day prior to the signal day on a closing basis for uptrend reversals or long trades. The stop is moved to slightly above the close of the day prior to the signal day on a closing basis for down reversals or short trades. Remember that the signal day is the day before the trade or trigger day, hence the stop is set based on the close two days prior to the trigger day.

A stop is set on a closing basis, so the position is exited after a close that activates the stop starting with the trigger or trade day.

In summary, the stepwise procedure for short term trading using reverse price swings is as follows:

For Uptrend reversals or long trades:

- (1) Check if the stock satisfies the oversold condition requirement. This requires that the close is below that of five days ago.

- (2) If (1) is met, calculate the average maximum bullish price swings for the past four days. This is done by measuring the difference between the high price and the open for each day and then averaging the numbers.
- (3) Wait until the maximum bullish price swing on a trading day is at least 1.75 times the average maximum bullish price swing calculated in step 2. Once this condition is satisfied the day is considered the signal day.
- (4) Take the trade the next day if it falls on Tuesday, Wednesday or Friday, otherwise wait until the next day.
- (5) Place a stop at two percent below the close on the day prior to the signal day. The stop is placed on the trade day and is on closing basis.

#### For Downtrend reversals or short trades:

- (1) Check if the stock satisfies the overbought condition requirement. This requires that the close is above that of five days ago.
- (2) If (1) is met, calculate the average maximum bearish price swings for the past four days. This is done by measuring the difference between the close and the low price for each day and then averaging the numbers.
- (3) Wait until the maximum bearish price swing on a trading day is at least 1.75 times the average maximum bearish price swing calculated in step 2. Once this condition is satisfied the day is considered the signal day.
- (4) Take the trade the next day if it falls on Monday, Wednesday or Thursday, otherwise wait until the next trading day.
- (5) Place a stop at two percent above the close of the day prior to the signal day. The stop is placed on the trade day and is on closing basis.

Using reverse price swings in short term trading will be clearer when studying the examples below.

#### **Example 1: Cliffs Natural Resources Inc (CLF)**

This method is useful in telling when a stock is likely to

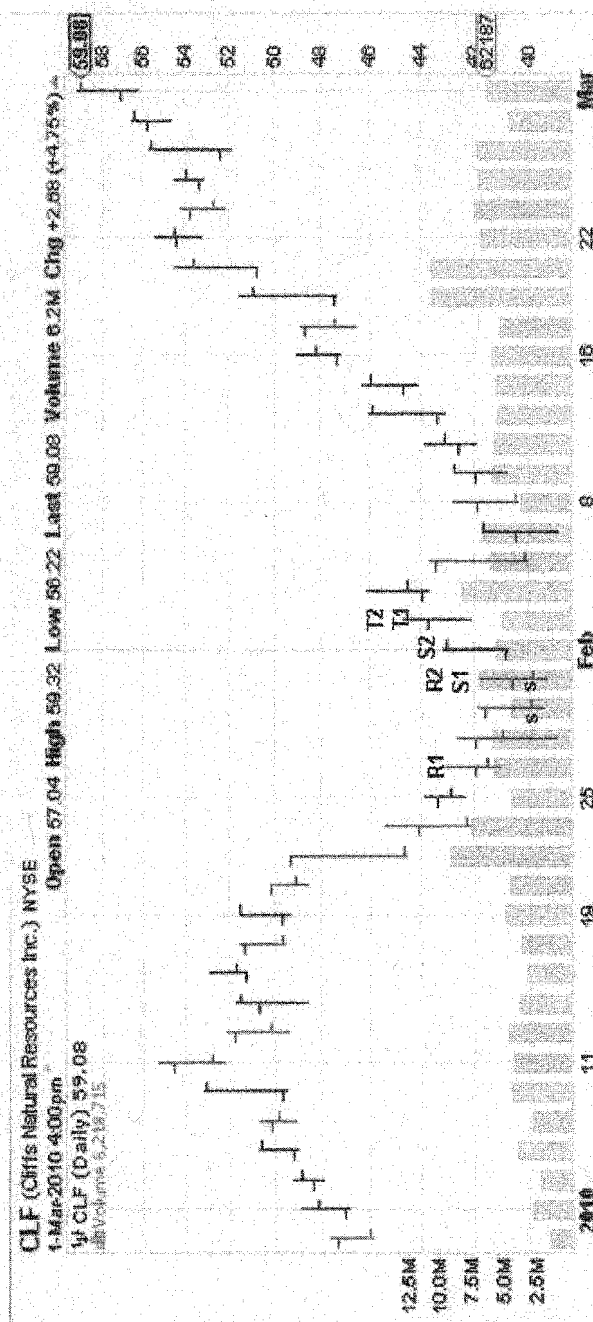
complete a temporary pullback and resume its uptrend as will be demonstrated in this example.

As explained in the previous section, our first step when trading an uptrend reversal is to spot an oversold stock. This is done by locating the day when the close is below that of five days ago. The table below shows the closing prices for CLF between 1/19/2010 and 2/2/2010.

<b>Date</b>	<b>Closing Price</b>
1/19/2010	\$51.56
1/20/2010	\$49.18
1/21/2010	\$44.74
1/22/2010	\$42.37
1/25/2010	\$42.89
1/26/2010	\$41.60
1/27/2010	\$41.01
1/28/2010	\$40.04
1/29/2010	\$39.95
2/1/2010	\$43.01
2/2/2010	\$44.54

It is interesting to note that there are several days where this condition is met, starting with 1/26/2010 and ending with 1/29/2010. For each of these dates, the close on that day is lower than the closing price five days ago. As an example, the close on 1/26/2010, labeled **R1** on the chart page 184 is \$41.60 but the close five days ago on 1/19/2010 is \$51.56. Similar comparisons can be made for the other dates mentioned as seen in the table below.

<b>Date</b>	<b>Closing Price</b>	<b>Closing price 5 days ago</b>
1/26/2010	\$41.60	\$51.56
1/27/2010	\$41.01	\$49.18
1/28/2010	\$40.04	\$44.74
1/29/2010	\$39.55	\$42.37





The day you should use is whichever day the stock appears on your radar screen. As an example, if you were to notice the stock first on January 28, 2010, this day can be used as the reference day even though the prior two days do satisfy the over-sold condition.

For the purpose of illustration, I will use two different dates to perform the calculations to determine the signal day and the subsequent trade trigger day. The first reference day I will be using is January 26, 2010 labeled as **R1** on the CLF chart. As indicated previously, this day satisfies the oversold requirement since the closing price is lower than the close five days ago.

The next step is to calculate the average maximum bullish price swing for the prior four days and then take an arithmetic average of the numbers. The table below lists the high, open and the maximum bullish price swing for each day calculated as : high – open for that day.

<b>Date</b>	<b>High</b>	<b>Open</b>	<b>Maximum Swing</b>
1/20/2010	\$50.19	\$50.19	0.00
1/21/2010	\$49.41	\$49.39	0.02
1/22/2010	\$45.49	\$44.11	1.38
1/25/2010	\$43.88	\$43.37	0.51

The average maximum bullish price swing is calculated as:  
 $(0+0.02+1.38+0.51)/4 = 0.478$

Our next step is to locate the signal day. This is the day where the maximum bullish price swing is at least 1.75 times the average bullish price swing for the prior 4 days or:  $1.75 (0.478) = 0.837$

<b>Date</b>	<b>High</b>	<b>Open</b>	<b>Maximum Swing</b>
1/27/2010	\$42.66	\$42.00	0.66
1/28/2010	\$41.89	\$41.65	0.24
1/29/2010	\$41.88	\$40.66	1.22
2/1/2010	\$43.16	\$40.86	2.30
2/2/2010	\$44.74	\$43.77	0.97

By studying the table above it can be seen that the first day where the maximum price swing exceeds 1.75 times the average is on January 29, 2010. On this day the maximum price swing is 1.22 which is higher than the minimum requirement of 0.837

Based on this, Friday January 29, 2010 labeled **S1** on the CLF chart will be designated as the signal day. The next trading day falls on a Monday which is not one of the specified entry days for an uptrend reversal. We will thus enter our trade on Tuesday February 2, 2010 labeled as **T1** on the CLF chart at the open or \$43.77.

Note that our standard practice is to enter the trade at the open unless there is more than two percent gap from the prior close. In that case we will wait an hour or two before entry.

We will also set a stop at the close of the day prior to the signal day on a closing basis. Since the signal day fell on January 29, 2010, our stop will be 2% below the close of January 28, 2010 or at  $0.98(40.04) = 39.24$  shown as the first small letter **s** on the chart. We will exit the position if a close below \$39.24 were to take place starting the day of our entry.

As can be seen in the table below, the nearest the close got to our stop price was on February 4, 2010 at \$40.23.

The stock closed near \$72.70 on April 23, 2010 for a profit of 66 percent in almost ten weeks.

<b>Date</b>	<b>Closing Price</b>
2/2/2010	\$44.54
2/3/2010	\$44.55
2/4/2010	\$40.23
2/5/2010	\$41.69
2/8/2010	\$40.53

For the purpose of illustration, let us assume that CLF did not appear on our scan until the market close on January 29, 2010. As you will see below that will have no effect on the entry or profitability of the trade. The reason for this is our stringent requirement of a maximum bullish price swing at least 1.75 times

the average. This is not likely to occur unless a trend reversal is in the cards.

It is evident that the close on January 29, 2010, labeled **R2** on the CLF chart, is below the close five days ago at \$42.37.

Our next step is to calculate the average maximum bullish price swing for the prior four days.

Date	High	Open	Maximum Swing
1/25/2010	\$43.88	\$43.37	0.51
1/26/2010	\$43.12	\$41.97	1.15
1/27/2010	\$42.66	\$42.00	0.66
1/28/2010	\$41.89	\$41.65	0.24

The average maximum bullish price swing for the prior four days is:  $(0.51+1.15+0.66+0.24)/4 = 0.64$

For the signal day we require the maximum bullish price swing be at least  $1.75(0.64)=1.12$ .

This occurs right the next day on February 1, 2010, labeled as **S2** on the CLF chart where the maximum price swing is 2.30 as shown previously. Our trade day will be the day after, or Tuesday February 2, 2010, labeled **T2** on the CLF chart. This happens to be the same trade day as when we used January 26 as our reference day.

We will enter the trade at the open on February 2, 2010 at \$43.77 with a stop 2% below the day prior to the signal day. Since the signal day was February 1, 2010, our stop will be 2% below the close on January 29, 2010 or  $0.98(39.55)=38.76$  shown as the second small **s** on the CLF chart.

You may be wondering why we are setting stops at almost 10% below our entry price rather than a tight stop of 2-3%. The stop is not set based on a specific number but rather the likelihood of a double bottom formation which may or may not occur. Note that the signal day is the first day when the maximum swing is 1.75 times the average indicating a possible turnaround. It is thus logical to conclude that the day prior to the signal day is close to defining a first bottom. This is where the logic behind the

stop at the day prior to the signal day comes from. The stop is set at the closing price since there is a higher probability that this price will define a number close to the bottom.

### **Example 2: Lululemon Athletica (LULU)**

As I mentioned often, trading is unpredictable and on occasions our stop will be activated, and we will have to exit our position. In such cases we will re-start the process by locating the signal bar by first identifying a new reference bar after our exit, as will be demonstrated in this example.

This example will also show that if you stick to the rules of this short term trading method, you will eventually reap big enough profits to make up for any stops that are activated many times over.

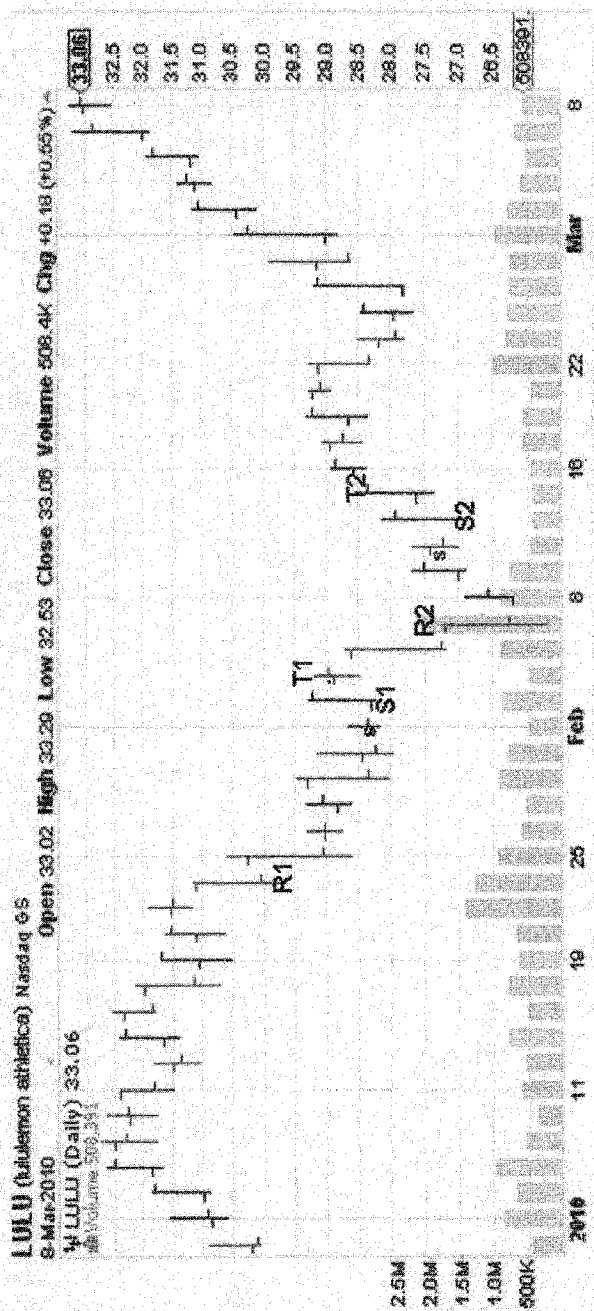
By examining the chart on page 189, the first reference day is on January 22, 2010 labeled **R1** on the chart. On this day the closing price is \$30.04 which is below the closing price five days ago, or \$31.86 on January 14, 2010.

Our next step is to calculate the average maximum price swing for the prior four days as follows.

<b>Date</b>	<b>High</b>	<b>Open</b>	<b>Maximum Swing</b>
1/15/2010	\$32.14	\$31.97	0.17
1/19/2010	\$31.67	\$31.06	0.61
1/20/2010	\$31.63	\$31.10	0.53
1/21/2010	\$31.92	\$31.53	0.39

The average maximum bullish price swing is calculated as:  $(0.17+0.61+0.53+0.39)/4 = 0.425$

The next step is to locate the signal bar by determining the day where the maximum bullish price swing is at least 1.75 times the average. Or:  $1.75(0.425)=0.744$



Date	High	Open	Maximum Swing
1/25/2010	\$30.60	\$30.26	0.34
1/26/2010	\$29.29	\$29.03	0.26
1/27/2010	\$29.28	\$28.83	0.45
1/28/2010	\$29.46	\$29.28	0.18
1/29/2010	\$29.13	\$28.43	0.70
2/1/2010	\$28.65	\$28.30	0.35
2/2/2010	\$29.27	\$28.30	0.97

As evident in the table above, the first day the maximum price swing is greater than 0.744 does not occur until February 2, 2010 which is designated as the signal day labeled **S1** on the chart. Our trade entry day is February 3, 2010 labeled **T1** on the chart. Since the opening price on February 3 was \$28.89 which is 2.3% above the close of the prior day we will not enter our position at the opening price. For the purpose of this example we will use an entry price at the day's average or \$28.70.

Our stop will be set at the close of trading on the day prior to the signal day. This will be the close on February 1, 2010 at \$28.35 labeled as the first small **s** on the chart. This stop is set on a closing basis, so we will exit the position on the first day after a close below this price takes place.

On February 4, 2010 the stock closes at \$27.25 which is below our stop price of \$28.35. We will thus exit the position at the open of the next day unless a 2% or more gap down occurs, in which case we will exit later in the day. We will hence exit our position at the open on February 5, 2010 at \$27.19 for a loss of 5.3%.

At this stage we are faced with a decision whether to abandon trading this stock or continue by locating a new reference day, followed by a signal day and trade day. Our determination will be subject to the following two conditions.

- (1) The stock must be in a clear uptrend. This judgment is made by looking at the twelve month daily chart. A clear uptrend except for occasional pullback should be clearly evident.

(2) We will abandon the trade if we are stopped out a second time. This is an indication of a possible trend reversal rather than a pullback within the existing trend.

By examining the long term chart for LULU (not shown) we can clearly see that the stock is in an uptrend. Since we have been only stopped out once, we will continue trading this stock.

At this point we will start the process over by locating the reference day where the stock closes below the price five days ago. This happens to be February 5, 2010, labeled **R2** on the chart page 189 and which is coincidentally the same day we exited our recent trade.

We will then follow the same process we did before by calculating the average maximum bullish price swing for the prior four days as follows:

Date	High	Open	Maximum Swing
2/1/2010	\$28.65	\$28.30	0.35
2/2/2010	\$29.27	\$28.30	0.97
2/3/2010	\$29.18	\$28.89	0.29
2/4/2010	\$28.70	\$28.62	0.08

The average maximum bullish swing is calculated as:  
 $(0.35+0.97+0.29+0.08)/4 = 0.423$

We will then locate the signal bar where the maximum bullish swing is at least 1.75 times the average or  $1.75(0.423) = 0.740$

Date	High	Open	Maximum Swing
2/8/2010	\$26.89	\$26.59	0.30
2/9/2010	\$26.99	\$27.68	0.69
2/10/2010	\$27.66	\$27.41	0.25
2/11/2010	\$28.13	\$27.03	1.10

By studying the table above, it can be clearly seen that the first day the maximum bullish price swing exceeded 0.740 is on February 11, 2010. This will be designated as the signal day labeled **S2** on the chart. Our trade entry day will be February 12,

2010 labeled **T2** on the chart at the open price of \$27.51. Our stop will be set at the close of the day prior to the signal day which is February 10, 2010 at \$27.21 on a closing basis, labeled **s** on the chart.

The closing price came nearest to our stop on February 23, 2010 and the stop was never triggered. As of April 23, 2010 LULU closed around \$43.64 with the long term advance still intact. Our profit is at 56% up to this point with potential for further advance.

As can be seen from the preceding two examples, this method is best used to enter a stock on pullbacks within a major trend. In such cases our stop is not likely to be triggered more than once before the existing trend re establishes itself, as seen with the second example (LULU). It is thus important to observe the rules of this short term trading system by entering into pullbacks within a major trend and carefully observing the two stop rule by abandoning the trade if your second stop is triggered.

### **Trend Reversals Using Failed Price Swings**

Another interesting and useful application is using maximum reverse price swings to predict an impending significant price correction or trend reversal. The more prevalent method is to use selected technical indicators in oversold or overbought territory to spot such reversals. In this section, I will demonstrate how calculating price swings can alert the trader to a potential correction using price action.

If you were to consider a stock in an uptrend, the stock can swing a certain amount below the close on intraday basis and still not affect the final positive outcome of that day. The maximum or reverse swing is calculated as the difference between the close and the low of the day.

The stock can thus tolerate this amount of reverse price swing on that specific day without changing the existing trend. These negative or reverse swings on positive days are called reverse failed swings since they do not result in a price close opposite to the existing trend.

If we were to calculate the average of the failed reverse



swings over a number of days, this will give us an average maximum failed reverse swing a stock can tolerate without a trend reversal. We expect that if on a certain day a stock experiences a maximum failed reverse swing much higher than the average, there will be a high probability of a price direction change in the near future.

Based on my trading experience, for a major correction or trend reversal, we will use an average of the maximum failed swings for the past five trading days as our starting number. I have experimented with using longer time periods of up to 10 days but there was little difference in the results since not all trading days are factored in as will be explained below.

Remember that failed price swings exist only on days where the stock moves in the direction of the existing trend. Thus if a stock is in an uptrend, only failed maximum reverse price swings on up days are factored in the calculations. If the stock is in a downtrend only failed maximum reverse swings on down days are considered. Please note that the five trading days considered exclude days where the stock moves against the prevailing trend, since on such days no failed swings exist.

At this stage we need to define a threshold above which we consider the maximum failed price swing high enough to result in a possible trend reversal. Keep in mind that reverse price swings are in effect a measure of the volatility of the stock in the direction opposite to the prevailing trend. We expect that higher volatility stocks will need a larger maximum failed price swing to indicate a possible trend reversal. In essence this value is likely to deviate more from the average failed maximum price swing for higher volatility than lower volatility stocks.

In my experience an effective strategy is to require that on the signal day the maximum failed reverse price swing is two standard deviations higher than the average for the past five days. This insures that higher volatility stocks will have to “reverse swing” further to indicate a possible trend reversal.

The concept of standard deviation is familiar to anyone with knowledge of basic statistics, however if you need a refresher the formula for standard deviation is:

$$\sigma = \{[\sum_{i=1..n} (X_i - M)^2] / (n-1)\}^{1/2}$$

Where the mean  $M = [\sum_{i=1..n} X_i] / n$

Example: let us say you want to find the standard deviation of the following numbers: 1, 3, 4, 6, 9, 19

mean  $M = (1+3+4+6+9+19) / 6 = 7$

Standard deviations  $= (X_i - M) = -6, -4, -3, -1, 2, 12$

Squares of deviations:  $= (X_i - M)^2 = 36, 16, 9, 1, 4, 144$

Sum of deviations:  $= \sum_{i=1..n} (X_i - M)^2 = 36+16+9+1+4+144 = 210$

Divided by one less than the number of data points

$= [\sum_{i=1..n} (X_i - M)^2] / (n-1) = 210/5 = 42$ .

Standard deviation is the square root of the above number  $\sigma = 6.48$ .

You can calculate this using an excel spreadsheet with the cell code **=stdev (X1:Xn)** or by using a scientific calculator.

The stepwise procedure for using failed reverse price swings to exit a trending stock due to a pending trend change are as follows:

(1) Determine when to start your calculations by deciding when the stock is either in an overbought or oversold condition. This can be based on a technical indicator or even your gut feeling that the stock has run up or down too long. It is advisable to be on the conservative side and start the calculation process as soon as an overbought or oversold condition appears.

(2) Count the next five days where the stock moved in sync with the current trend. If the stock is in an uptrend, then count only the days where the closing price is higher than the prior day's closing price. Days where the price closes below the prior day's close are not factored into the calculations. The opposite applies for a stock in a down trend.

(3) Calculate the average of the maximum failed reverse price swings for the next "counted" five days. That is the five days moving with the trend. For up days in an uptrend, failed reverse maximum price swings are calculated as the difference between the close and the low of the day. For down days in a downtrend they

are calculated as the difference between the high and the open of the day.

(4) Calculate the Standard deviation for the failed maximum reverse price swings for the five days averaged in step (3).

(5) Add the calculated average to twice the standard deviation. This is the minimum failed maximum reverse price swing that has to be met for the day to be identified as a signal day. Remember that this day must close in the direction of the existing trend.

(6) The trigger or trade day is the day after the signal day where the position is exited.

This procedure will be clearer by following the example below.

### **Example 3: Cliffs Natural Resources Inc(CLF)**

This example illustrates how maximum reverse price swings can be used to determine an exit point just before a trend reversal.

As I indicated in the last section, the day you start the calculations is dependent on when you think the stock is in an overbought or oversold condition. Looking at the CLF chart page 196, it is clear that March 1, 2010 is well overbought on the stochastics chart. Also the MACD histogram has stopped rising and leveled off and the MACD itself is approaching overbought territory. Thus March 1, 2010 may be a logical start date.

While in this example the MACD did give a reasonably accurate bearish crossover signal, on occasions such signals come late or are inaccurate in predicting trend reversals. Using failed reverse price swings can serve as an alternate way to predict a reversal allowing an earlier exit.

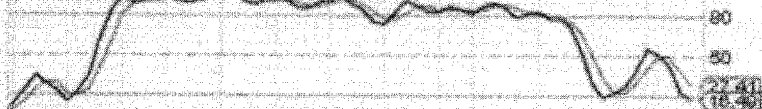
The table below lists the opening and closing prices on the indicated dates. The column heading "count" refers to the days where the price closed above the prior day's close and was in line with the uptrend. Remember that only days in sync with the existing trend are counted since our goal is to find how much a stock can swing opposite to the existing trend without causing a

# CLF (Cliffs Natural Resources Inc.) NYSE

30 Apr 2010

Close 62.53 Volume 7.4M Chg -1.80 (-2.80%)

Full STO %K(14,9) %D(3) 16.49 27.41

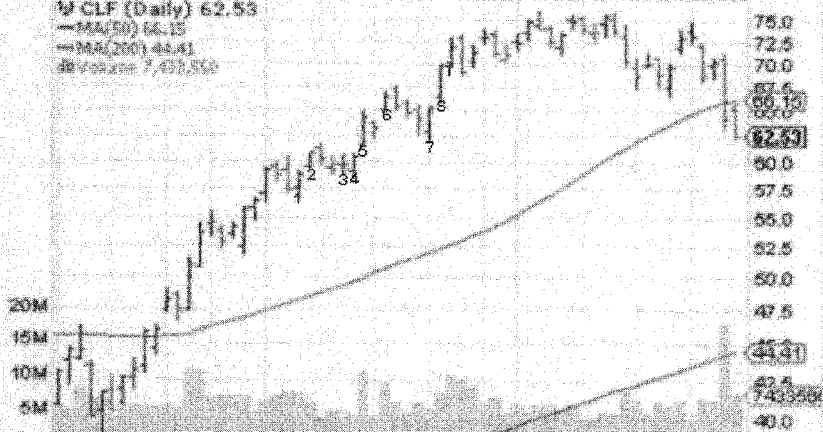


CLF (Daily) 62.53

MA(50) 66.15

MA(200) 44.41

Volume 7,432,550



Feb 8 16 22 Mar 8 15 22 29 Apr 12 19 26

MACD(12,26,9) -0.057 1.383 -1.430



Feb 8 16 22 Mar 8 15 22 29 Apr 12 19 26

reversal.

<b>Date</b>	<b>Open</b>	<b>Close</b>	<b>Count</b>
3/1/2010	\$57.04	\$59.08	
3/2/2010	\$59.64	\$58.65	
3/3/2010	\$59.24	\$57.41	
3/4/2010	\$57.94	\$58.65	1
3/5/2010	\$59.42	\$60.65	2
3/8/2010	\$61.17	\$60.17	
3/9/2010	\$59.31	\$59.18	
3/10/2010	\$59.66	\$59.71	3
3/11/2010	\$59.07	\$60.31	4
3/12/2010	\$61.50	\$64.34	5
3/15/2010	\$63.71	\$63.15	
3/16/2010	\$64.97	\$66.27	6
3/17/2010	\$67.72	\$65.43	

By examining the table above, the first day that closed higher than the prior day's close was on 3/4/2010, and this day will be counted as the first day in the five days needed for the calculations. On 3/5/2010, the close is also higher than the prior day's close so this will be day two of five. 3/8 and 3/9/2010 are not counted since the close is lower than the prior day's close and thus not in the direction of the trend. The next three countable days are 3/10, 3/11, and 3/12 where the close for each day is higher than the prior day. Thus the five days to be used in calculating the failed maximum price swings are 3/4/2010, 3/5/2010, 3/10/2010, 3/11/2010 and 3/12/2010. These are labeled with their count numbers on the chart page 196.

Our next step is to use these five days to calculate the average maximum failed price swings

<b>Date</b>	<b>Low</b>	<b>Close</b>	<b>Maximum Swing</b>
3/4/2010	\$56.46	\$58.65	\$2.19
3/5/2010	\$59.32	\$60.65	\$1.33
3/10/2010	\$58.66	\$59.71	\$1.05
3/11/2010	\$58.41	\$60.31	\$1.90
3/12/2010	\$61.28	\$64.34	\$3.06

The average failed maximum price swing is calculated as:

$$(2.19+1.3+1.05+1.9+3.06)/5 = 1.90$$

The standard deviation is calculated as described previously and is = 0.79

The next step is to identify the signal day where the maximum failed price swing is at least two standard deviations above the average or:  $1.90 + 2(0.79) = 3.48$ .

We will thus continue checking for days in the direction of the trend and look for the first day where the maximum failed price swing exceeds the threshold of 3.48 calculated above.

<b>Date</b>	<b>Open</b>	<b>Close</b>	<b>Count</b>
3/18/2010	\$65.71	\$64.56	
3/19/2010	\$64.93	\$64.01	
3/22/2010	\$62.85	\$65.24	7
3/23/2010	\$65.72	\$69.72	8
3/24/2010	\$70.09	\$71.76	9

By studying the table above, it is clear that the dates 3/22/2010, 3/23/2010 and 3/24/2010 are days in sync with the uptrend in the stock. Thus our next task is to search for the day where the maximum failed price swing is greater than 3.48.

<b>Date</b>	<b>Low</b>	<b>Close</b>	<b>Maximum Swing</b>
3/22/2010	\$61.87	\$65.24	3.37
3/23/2010	\$65.72	\$69.72	4.00
3/24/2010	\$69.68	\$71.76	2.08

By examining the table above which includes the days in sync with the trend, it is clear that the first day that the maximum failed reverse price swing exceeded the threshold is 3/23/2010 at 4.00. This will be our signal day labeled **S** on the CLF chart page 196. Our trade trigger day will be 3/24/2010 and is labeled **T** on the chart, where we will exit the position. For illustration we will use the average price of \$70.87 as our exit price. Considering that we did not use technical indicators this is quite impressive since it is within four percent of the high. On May 3, 2010 the stock traded at \$58.95 which is over twenty percent below our exit point.

Using the MACD crossover would have alerted us to an exit around \$71.5 which is within one percent of the exit point using failed price swings. Remember that in this case the MACD crossover was a good predictor of a direction change in price, however on occasions the MACD fails to predict reversals in time for action.

## **Final Word**

This chapter demonstrates that reverse price swings provide important and useful information that allows the trader to determine entry as well as exit points. While this method can stand on its own, it is recommended that one uses a trend following indicator such as MACD for qualitative confirmation. This implies that it is not necessary that the MACD gives a crossover signal but rather that it is in overbought or oversold territory.

Trading is a game of probabilities and by combining both, a price bar strategy and a technical indicator your success rate is likely to be much better.





## Chapter 10

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### **Explosive Profits Trading Price Bar Patterns**

In Chapter Four I have discussed a number of chart patterns that can deliver strong profits. While some use chart patterns in their trading, others shy away from them due to the potentially subjective nature of such patterns. Two traders can look at the same chart pattern and see two different formations based on whether a trader's outlook is positive or negative on the stock. The ability to recognize chart pattern shapes objectively comes only with trading experience. Enough experience will eventually enable the trader to put his bias aside and objectively look at these chart patterns and correctly interpret them.

Another way to trade is to avoid interpreting chart pattern shape formations by trading based on price bar sequences. In this case the trader is unlikely to mistake an ascending triangle for a wedge or form a shape in his mind that will justify the position he is holding. Price bar patterns are based on a sequence of price bars that indicate a high probability of a specific outcome be it bullish or bearish.

Notice that I have used the word probability implying that the signals given by these patterns are not one hundred percent accurate. This should not come as a surprise since no trade setup is ever fool proof. Failure of a specific price bar pattern to produce the expected high probability outcome is in fact a signal in itself. That is where astute professional traders take the other side of the trade. They immediately recognize a false signal as evidenced by the action of the stock. That is why stop losses are critical and on some occasions it is recommended that a stop

and reverse order be entered. Price bar pattern failures are in themselves tradable setups that often result in better profits than cases where the outcome is expected. The reason for this is that once professional traders with large accounts recognize a pattern failure and take the other side of the trade, the stock is likely to move quickly.

One of the biggest mistakes that inexperienced traders make is that they expect patterns, whether determined by charts or price bars to be well defined. As an example, a beginning trader will need to see a well defined apex with two convergent lines to recognize a symmetrical triangle. On the other hand an experienced trader can see a symmetrical triangle in the process of forming as soon as the two arms start converging. This trader understands that stock charts do not form perfect geometrical shapes, and thus the arms of a symmetrical triangle do not need to meet forming an apex for a trade to be entered.

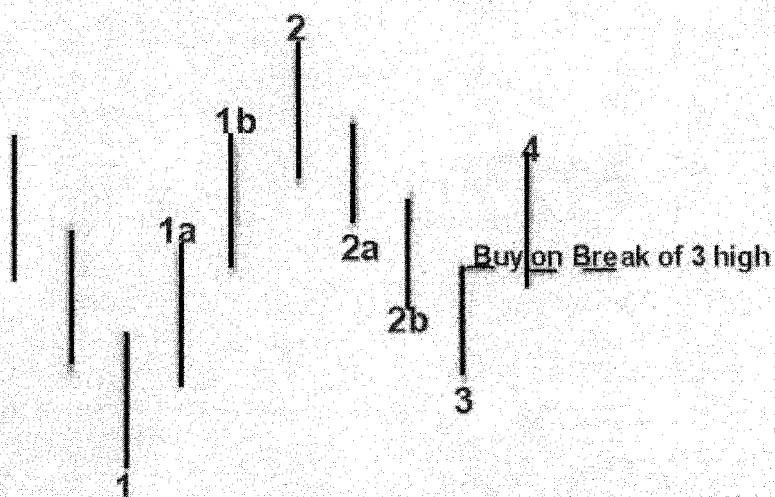
Similarly with price bar patterns, it is necessary to recognize the pattern outline with the understanding that the details including the number of price bars between inflection points can vary. The graphical illustrations of the different price patterns in this chapter portray the most probable case. Actual market examples presented are likely to deviate from a perfect scenario as would be expected. It should be the goal of every trader to learn to recognize such patterns even if they do not perfectly fit the representative illustrations in this chapter. This can only come with experience studying and trading actual market examples. The extensive market examples using actual trades in this chapter are intended to help achieve this goal.

### **Four Step Uptrend**

The Schematic on page 203 shows the general price bar structure for this setup. The four steps are as follows:

- (1) Bar 1 forms a new low below the preceding price bar.
- (2) The high of bar 1 is penetrated to the upside. This can happen in one or more bars with a multi bar penetration preferred. Thus either bars 1a, 1b, or 2 can signal the final penetration of bar 1 high.

## Four Step Uptrend



The example on page 203 depicts three bars after bar 1 which is the most likely scenario due to the “rule of threes”.

(3) After bar 1 penetration high is complete a pull back starts eventually penetrating the low of the final bar ( bar 2 in this case). This can also occur in one or more bars as depicted by price bars 2a, 2b and 3. Bar 3 is essentially a retest of the low of bar 1. Remember that for a successful retest, the low of bar 3 should be above that of bar 1.

(4) The uptrend is confirmed when the high of price bar 3 is penetrated as seen with bar 4. Again one bar is used for illustration purposes only, and bar 4 can represent multiple bars leading to the penetration of bar 3 high.

At this time it is important to stress a point I mentioned in the beginning of this chapter. When looking at price bar patterns, it is important to internalize the general pattern structure rather than the specific details. In the case of the four step uptrend, a low is formed below the prior price bar (bar 1 on the chart). The high of this bar is penetrated at 2, recognizing that between bars 1 and 2 there can be one or more price bars. A retest of bar 1 is seen at 3, also recognizing that between bars 2 and 3 there can be more than one bar. The reversal is completed by bar 4 penetrating the high of bar 3 with bar 4 possibly representing one or more price bars. As can be seen, it is the 1, 2, 3, 4 general pattern that should be recognized rather than the specific details regarding the number of bars needed for each step to be completed.

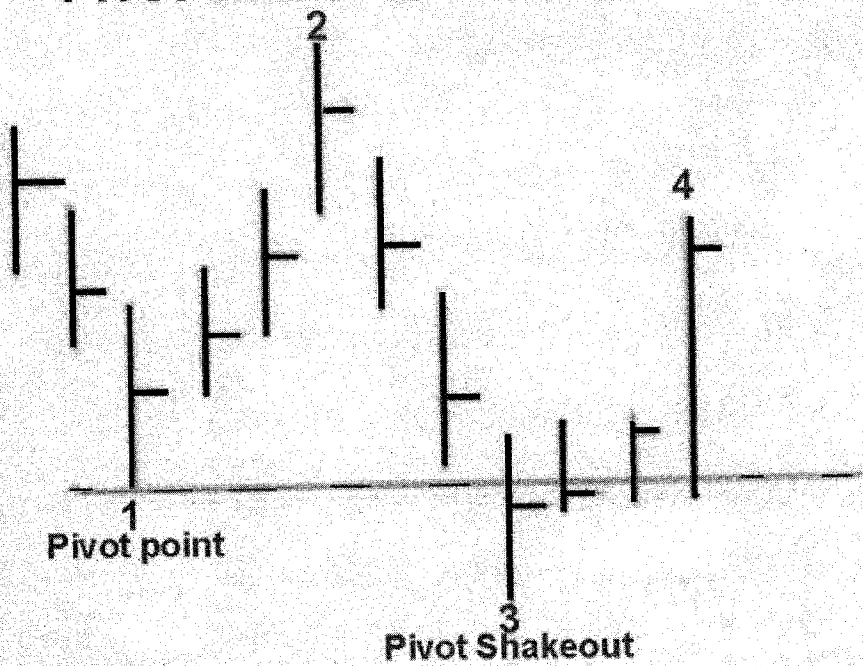
### **Pivot Shakeout Reversal**

The diagram on page 205 shows the general setup using one pivot support. The stock rallies then falls back below the pivot support shaking out weak holders and clearing out all the stops. After the pivot shakeout, a lack of supply becomes clear to professional traders at which time they start buying aggressively resulting in a sustained stock uptrend. The pivot shakeout is a four step process that can be summarized as follows:

(1) A single or multiple pivot support low is established.

This support may be represented by the most recent

## Pivot shakeout Reversal



pivot point or a prior pivot point in an area of strong support. This is designated by bar 1 on the chart page 205.

(2) A powerful advance follows represented by bar 2 on the chart. Bar 2 can appear within one or more bars after bar 1, with the most likely scenario being three bars.

(3) The stock undergoes a shakeout bringing the price below the pivot point thus shaking out weak hands and clearing all the stops. This is represented by bar 3 on the chart.

(4) After the shakeout is complete, a reversal rally takes place breaking above the high of the pivot shakeout bar 3. This is most likely to occur within one to three bars and is represented by bar 4 on the chart.

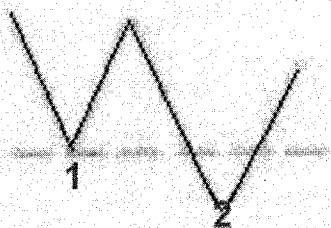
The buy point is when the range of bar 4 exceeds the high of all prior price bars between the shakeout bar 3 and the breakout bar 4.

It is important to recognize that a double pivot point shakeout is likely to result in a much stronger and more sustainable reversal than a single pivot shakeout. Schematics for weak pivot shakeout showing one pivot point and strong pivot shakeout showing two pivot points are depicted in the diagrams page 207.

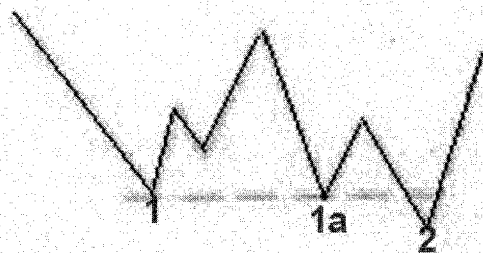
Another point worth stressing is that the reference pivot support does not necessarily have to be the most recent one. This may be one or two supports prior to the most recent one provided they are stronger. The strength of the support can be measured by the number of pivot points or the volume traded at the support minimum.

### **Narrow Range Bar Continuation Pattern**

One of the questions I get asked often in my trade groups is: How can one tell if an initial strong advance in a stock is the first leg of a big price move or just a temporary spike after which a pullback to support will occur? On occasions the first leg of a monster advance is followed by a pullback forming a falling wedge or a consolidation such as a bullish pennant or a symmetrical triangle formation. In some cases after an advance none of these well known chart patterns are formed but the stock still



**Weak pivot shakeout**



**Strong Pivot Shakeout**

embarks on a second leg of rising prices. In this case the criteria to look for is the type of price bar pattern formed right after the advance.

There is a high probability the advance will continue if the stock gets acclimated to the new price level. This is usually manifested by the price fluctuating within the range of the latest price bar during the strong advance. This can be clearly seen by studying the chart on page 209. Notice that the bars labeled “3+ narrow range bars” are within the range of the latest bar in the strong price move. An additional requirement is that the three or more continuation bars should exhibit narrowing price ranges. The narrower the range becomes, the closer the second leg of the strong up move is likely to be.

The trade entry point is just below the high of the third consolidation bar. It is important to realize that it is not possible to determine exactly how many bars will constitute the consolidation pattern for a specific stock. On the other hand experience shows that after a strong advance a short consolidation of three to ten bars is likely with the highest probability of a five bar maximum.

This is mainly the reason that our trade entry is at the high of the third bar.

## **Second Day Shakeout Pattern**

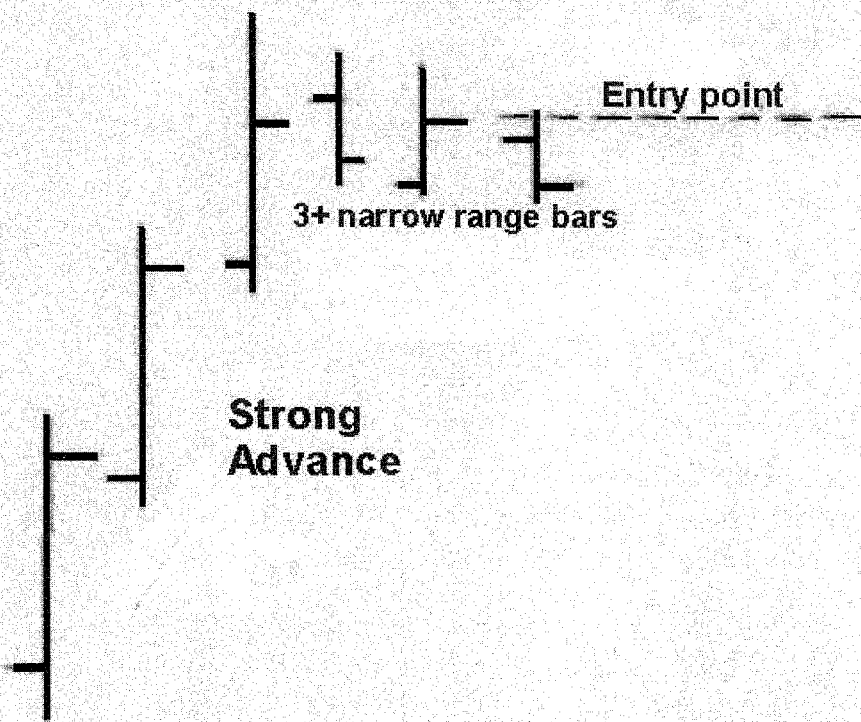
To be able to trade this type of reversal, a trader must be able to watch price action intraday. It is common for the market to fool day traders by opening and making an initial move in the opposite direction of the most likely sustainable day to day move.

This type of reversal occurs as follows:

- (1) The stock opens above the prior day's low which is considered an important support point.
- (2) The stock proceeds to break below the prior day's low often by an amount less than half the prior day's range. This serves to clear the stops, shake out weak holders and trap new shorts entering on break of support.
- (3) After the stops are taken out, the stock reverses and moves above the day's open. This should be your entry point since once the price moves above the open any



## Narrow Range Bar Continuation Pattern



day traders shorting the stocks are likely to cover adding fuel to the advance.

A schematic of this setup is shown on page 211. Notice the open above the prior day's low, then the subsequent shakeout. This shakeout takes the price below day 1 low just to reverse and move above day 2 open after clearing out the stops and shaking out weak holders.

It is important when trading this pattern to set your entry point slightly above the open of the second day after the shakeout. On occasions the stock moves slightly above the day 1 low after the shakeout, tempting traders to buy in at that point just to see the stock reverse back and break below the shakeout low and continue its downtrend. One strategy is to place a stop buy slightly above the second day's open after the shakeout is complete.

### **Out Of Range Three Bar Reversal**

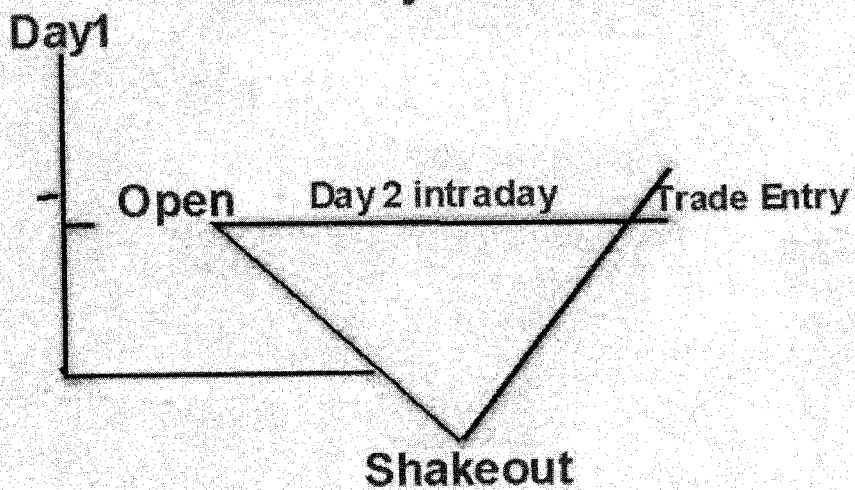
It is important to first understand the difference between "In Range" and "Out of Range" price bars. In range bars are where all of the bars overlap previous bars as seen in the schematic page 212. Out of range bars are where one or more bars do not overlap previous bars. A drawing of such type bars is seen also on page 212.

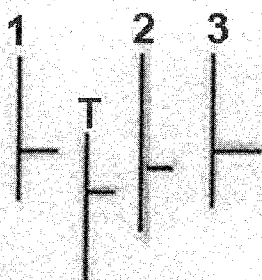
Notice that with in range bars, all price bars 1, 2, 3 and T overlap each other, while in the picture representing out of range bars, the price bar T does not overlap previous bar 1.

Out of range bars have a special significance in that they usually indicate a trend reversal. An example of an out of range bar trend reversal is shown on the price bar chart page 213. Notice that the out of range bar O does not overlap one of the preceding bars T. Bar T is an important price bar in that it is the highest bar of the previous uptrend. This behavior is an indication of a high probability reversal with the possible trade entry area indicated on the chart.

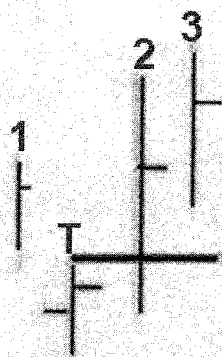
Remember that the out of range bar can occur one or more bars after the top bar T in the uptrend. In this case the out of range bar appeared two bars after the highest bar in the up-

## Second Day Shakeout Pattern



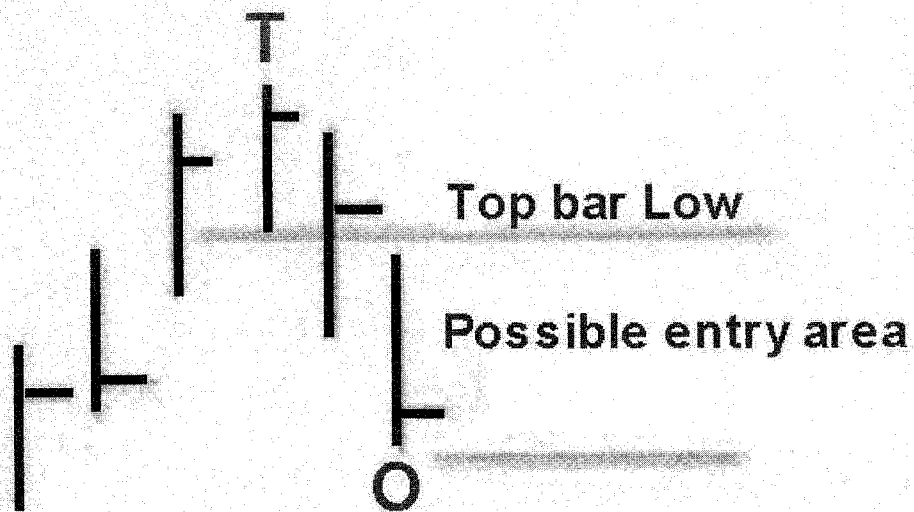


**In Range Bars**



**Out of Range Bars**

## Out of Range Reversal



trend.

To decide whether a trade should be taken we will look for the price to rally above the close of the out of range bar within two to five bars. This is because markets tend to revisit congestion areas between two to five times with three being the most likely, remember the “rule of threes”. If a rally above the close of the out of range bar does not take place within five price bars then no entry signal is given.

The price bar chart on page 215 shows a rally occurred within four bars after the out of range bar O. Our entry will be at the close of price bar E which is above that of bar O.

### **Overlapping Wide Range Bars**

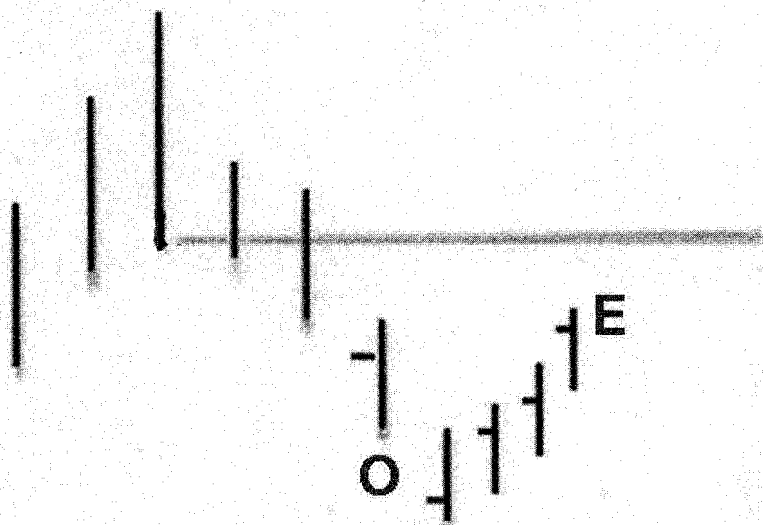
Wide range bars with positive close that overlap in a narrow zone indicate strong buyer demand for a stock. In most cases the lower end of the overlap zone is defined by the close of the prior period. This is an indication that sellers were too weak to be able to move the price below the prior period's close. The wide range bars indicate aggressive buying into the close of each of the two periods forming the zone. A schematic of the buy zone defined by two overlapping wide range bars is shown on page 216.

Wide range bars with negative close that overlap in a narrow range indicate aggressive selling of a stock. In most cases the upper end of the overlap zone is defined by the close of the prior period. This is an indication that the buyers were too weak to move the price above the prior period's close. Wide range bars with negative close indicate aggressive selling into the close of each of the two periods forming the zone. A representation of a narrow sell zone defined by two overlapping wide range bars is depicted on page 216.

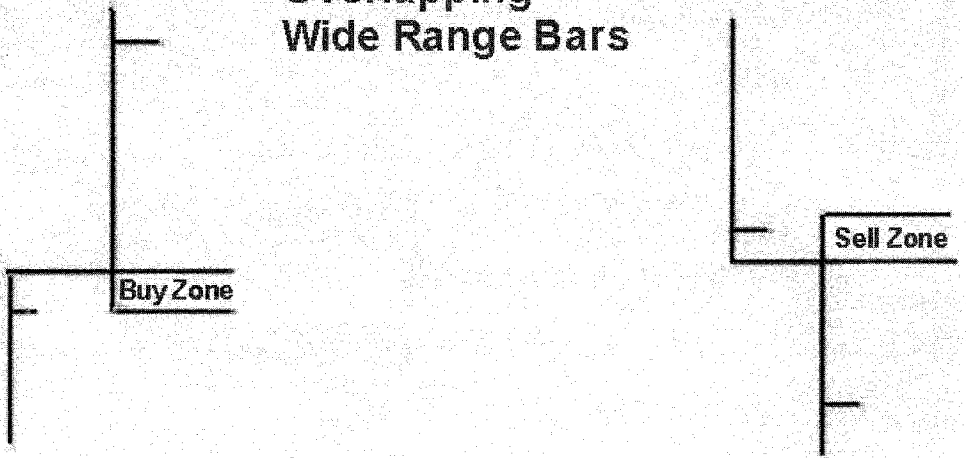
### **Price Pattern Pullbacks**

A stock in an uptrend is likely to experience several pullbacks along the way. Buying into these pullbacks will allow a lower risk entry and a likely immediate short term profit as the stock retraces its prior high. The trick is to buy on temporary

# Out of Range Three Bar Reversal



## Overlapping Wide Range Bars





weakness in anticipation of continuation of the established major trend.

As with every trading method, this also will not work one hundred percent of the time. On occasions, a stock just continues its move without a day to day pullback. In such cases an entry can be made on an intraday pullback if you can follow the market during the trading day; otherwise you are likely to miss the move.

Sometimes the pullback may be a trend reversal resulting in a price break below support and continues lower. In such cases placing stops as well as the use of other methods described earlier in this book are necessary.

There are three major types of pullbacks shown on page 219.

### **(1) Intraday Pullback**

As mentioned before, some stocks exhibit exceptional strength for an extended period of time to the point where day to day pullbacks are non existent. In such situations it is best to enter a long trade on an intraday pullback to just above the open of the prior day.

Price bar 3 on the chart page 219 is an example of an intraday pullback on a strong stock. Notice that the open and closing prices of bar 3 are above those of bar 2. A long entry is best made slightly above the open of bar 2.

This technique is only practical if you can watch the market intraday. Keep in mind that the first and last hours of trading are the most telling, and consequently trade decisions can be made based on these alone. If price bar 3 low drops below the open of price bar 2, it is best to omit the trade. If this does not take place, then watch the last hour of trading and enter only if the stock is strong. Usually if the stock's strength is intact, the last hour will not show trades below the prior day's open.

Although it is best to enter near the open of bar 2, if evidence of weakness is seen, it is better to wait until the last hour of trading and enter on strength. In such cases an entry moderately above day 2 open is acceptable.

## **(2) Alternating Pullback**

After the first leg of a strong advance, a stock may enter a congestion area to catch its breath before continuing the second leg of the advance. Pullbacks are likely to take place during this short period that can allow a lower price entry for the trader. During consolidation periods positive close bars are followed by negative close bars thus forming alternating sequences of higher and lower closing prices.

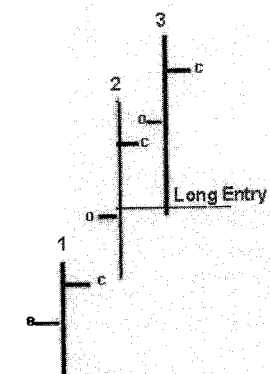
Since a stock in a strong advance is likely to leave congestion in three to five bars, it is advisable to enter the trade after the first low close bar in the congestion area. An example of overlapping pullbacks during congestion is shown on page 219. Notice that bar 1 which is a continuation of the advance is followed by a negative close bar 2 that halts the advance and signals the start of congestion. As can be seen bar 1 has a closing price higher than the open while bar 2 has a closing price lower than the open. Price bar 2 is the first negative close bar during congestion and our entry will be the next period, or price bar 3, at a point at or slightly above the low of bar 2.

If one is not able to watch the market intraday a limit order to enter two to five percent above the low of bar 2 can be placed. The percent tolerance used will depend on the volatility during congestion and the stock price.

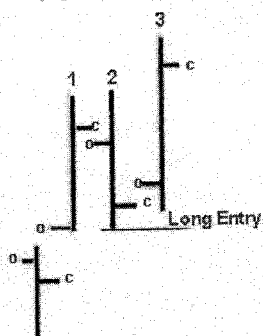
If the congestion in question is after the first leg of the advance, it is most probable that a second leg will start within three to five bars. It is thus essential to enter after the first low close bar which is the second bar in the congestion area. Notice that this is always the case since, until a negative close price bar appears, the stock is still in an uptrend. The appearance of the first negative close bar signals the start of the congestion zone with the prior positive close bar counted as bar 1 and the negative close bar as bar 2.

If the stock is already in the second or third leg of an uptrend, there is a possibility that the alternating pullback consolidation pattern may signal the end of a trend. It is thus important to place a stop loss to protect your position in this situation. The

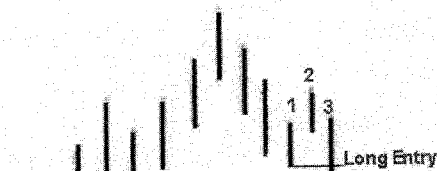
## Price Pattern Pullbacks



Intraday Pullback



Alternating pullback



1-2-3 Pullback

stop is placed just below the close of the last bar in the uptrend, or the bar before bar 1 in the congestion zone. In addition, if the stock is in its second or third leg it is highly advisable to check technical indicators for overbought conditions. Two useful indicators are MACD and Stochastics. Note that since Stochastics is an oscillator, it is likely to have been overbought for awhile. If on the other hand, the trend following MACD indicator is overbought in combination with a stochastic indicator that has been in overbought territory for an extended period of time; this is a warning of a potential correction and a tight stop must be placed.

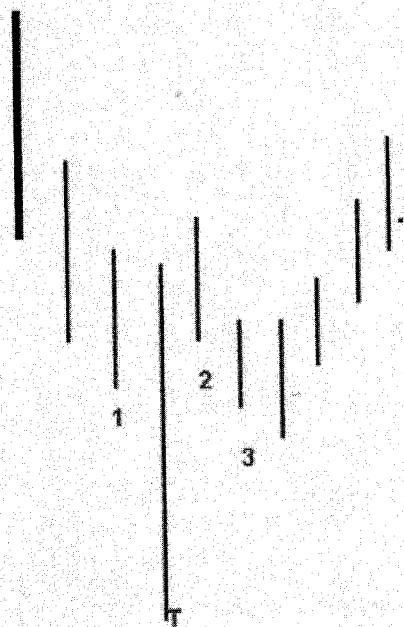
### **(3) 1, 2, 3 Pullback**

This is a common form of three bar pullback shown on page 219 where the first bar has a low below that of the prior two bars. Bar 2 opens above the mid range of bar 1 with the high of bar 2 exceeding that of bar 1. Bar 3 is essentially a retest of the low formed by bar 1. The low of bar 3 is usually slightly below that of bar 1 which serves to flush out stops and weak hands. The bar 3 high usually overlaps bar 2 and is at, or slightly above that of bar 1. If you can watch the market a good entry will be on day 3 at a price slightly above the low of bar 1. If you are unable to watch intraday trading then place a limit order five percent above the low of bar 1. A stop should be placed an amount equal to half the price range of bar 1 below the low of bar 1.

1, 2, 3 pullbacks often occur after strong price thrusts to the upside or downside. A price bar representing the final thrust is usually a sign of exhaustion or capitulation of either buyers or sellers. Dependent on the existing direction of the trend, this bar will inevitably form a new price low in a downtrend and is followed by a strong positive close bar indicating that all sellers are flushed out. In cases of strong thrusts where the thrust bar forms a low much lower than the prior bar, bar 3 does not have to penetrate the thrust bar low, but will likely penetrate the low of the bar prior to the thrust bar.

An example of a 1, 2, 3 thrust pullback is shown on page 221. As you can see bar T or the thrust bar forms a much lower low than bar 1 which is the first price bar in the 1, 2, 3 bullish pull-

## 1,2,3 Thrust pullback



back. Bar 2 is a positive close bar with its high penetrating the high of bar 1. Bar 3 penetrates slightly below bar 1 as is the case in a standard 1, 2, 3 pullback. The main difference with a thrust pullback is that our entry does not have to be at bar 3 since the thrust bar low defines a new stop threshold. It is thus wise to wait until a positive close bar which in this case occurred two periods after bar 3.

The reason for waiting is that there is always a remote possibility that the stock will still go lower after bar 3. A trade entry at the first positive close bar with a stop at the low of the thrust bar is likely to limit any possible loss. Remember that the low of the thrust bar is usually quite a bit below that of bar 1. For this reason a significant drawdown can occur before the stop is triggered. By waiting for confirmation manifested in a positive close bar, this probability is significantly reduced.

### **Triple Bar High Reversal**

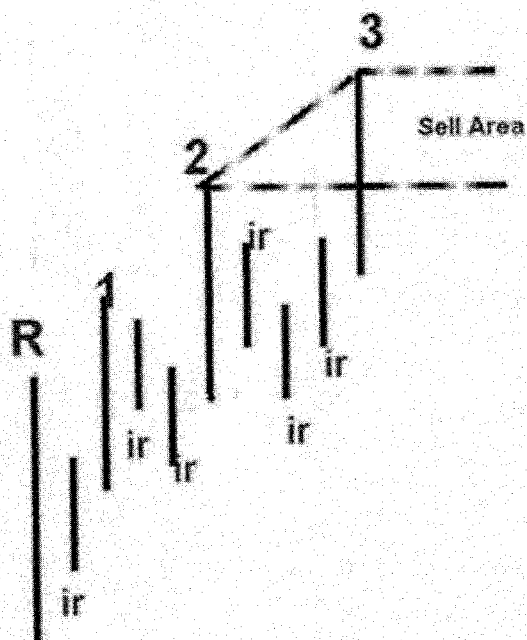
A new high formed by strong thrusts above each of the three bars, after the reference bar, is usually an indication of an overstretched market. The Reference bar being the first thrust bar that breaks above a prior resistance. This setup signals a high probability that a pullback will likely take place after such an advance.

The picture on page 223 shows an example of three bar high reversal. Notice that the high of bar 1 exceeds the reference bar R high. Bar 2 exceeds bar 1 high while bar 3 exceeds bar 2 high. Thus each of the three bars 1, 2 and 3 forms thrusts above the prior bar's high with bar R being the start or reference bar. Bars labeled ir are inside range bars and are not counted as thrust bars. It is thus important to recognize that when looking at this pattern, only thrust bars are to be recognized as part of the post reference three bar count while all other bars are ignored.

The sell area designated on the chart page 223 falls between the high of bar 2 and that of bar 3, which is the third bar from the reference bar R not counting inside range bars. This sell area signals a possible pullback, consolidation or trend reversal.

Whether a triple bar high signals a trend reversal, tem-

## Triple Bar High Reversal



porary pullback, or consolidation will depend on whether other technical indicators are overbought. It is often the case that when both MACD and Stochastics are in overbought territory, after a triple bar high, a trend reversal is likely. A pull back is more likely if the Stochastics oscillator is in overbought territory but the MACD trend following indicator is still in neutral or oversold territory.

Remember that with price bar patterns our goal is capitalizing on very short moves, thus our strategy will be to exit the position in the sell area regardless whether a reversal or pullback are to follow. If we wish to continue trading the stock we will re-enter the position upon emergence of a new recognizable price bar pattern.

### **Bullish and Bearish Reversal Zones**

A stock in a trading range or consolidation pattern tends to move between two zones: a buy zone and a sell zone. These zones are in a way analogous to support and resistance, but our aim in this section is to more clearly define entry and exit as well as stop points.

The diagram on page 225 shows an example of bullish and bearish reversal zones for a stock in a consolidation pattern or trading range. Please note the abbreviations used on the chart as follows: LBL = Low bar low, LBH = Low bar high, HBL = High bar low, HBH = High bar high.

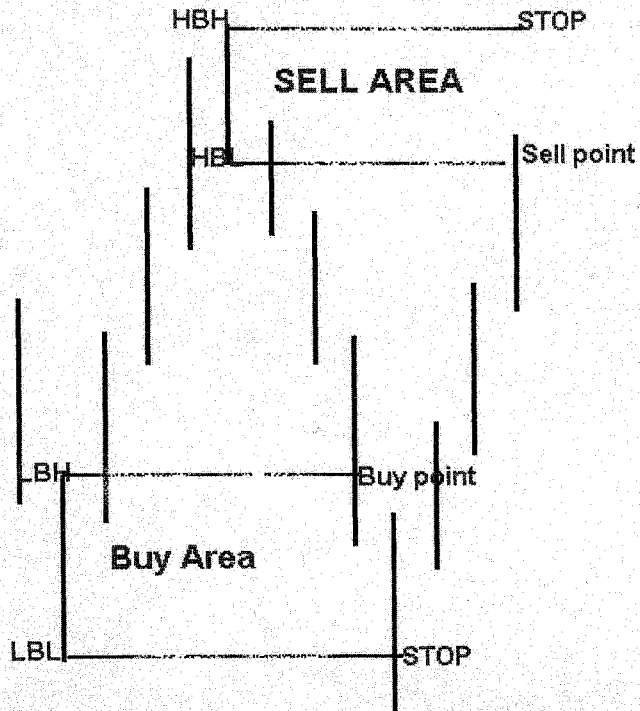
The boundary of the buy or support zone is defined by the Low bar low (LBL) and the Low bar high (LBH), with the entry or buy point set on a break of the Low bar high (LBH). The Stop is placed just below the Low bar low (LBL).

The boundary of the sell zone is defined by the High bar high (HBH) and the High bar low (HBL), with the sell or exit point on a break of the High bar low (HBL). A stop is placed just above the High bar high (HBH).

This technique should not be used when a stock is in a strong up or downtrend since getting stopped out frequently in such situations is highly likely. If a trending stock enters a consolidation phase, this method can be used after the failure of a



## Bullish and Bearish Reversal Zones



first breakout attempt. This failure, in effect, confirms the stock's entry into a consolidation phase. Experience shows that strongly trending stocks in a consolidation phase tend to break out within three to five attempts.

### **Two Day Bar Reversal**

This pattern usually emerges from an exhaustion bar which gives the impression of a strong buy interest in an up move or a sell interest in a down move. In the case of an upward exhaustion bar, the stock opens the next day below the close of the prior day, with selling continuing all day, resulting in a closing price near the low of the day. In the case of a downward exhaustion bar or bottom formation, the stock opens higher the next day than the close of the prior day, with buying continuing throughout the day resulting in a close near the day's high.

A schematic of the two day price bar reversal for both bullish and bearish scenarios is shown on page 227.

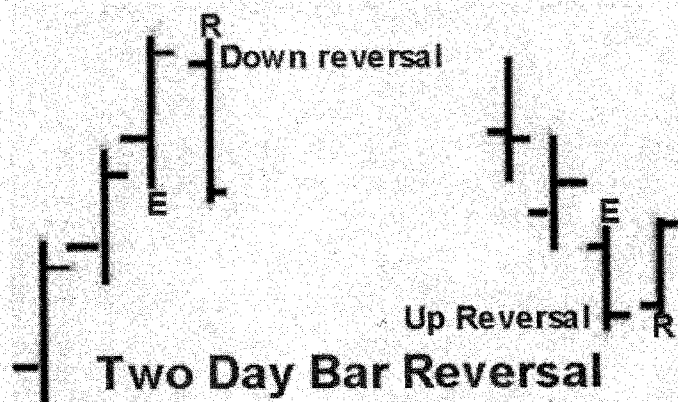
Notice that in the case of down reversal the exhaustion bar E is followed by the reversal bar R with an open below the close of bar E. The reversal bar R also shows a close near the low of the day. This is an indication that sellers have taken control with a likely trend reversal.

In the case of an up reversal or bottom formation, the exhaustion bar E is followed by a reversal bar R with an open above the close of bar E. Remember that bar R shows a close near the high due to aggressive buying throughout the day. This is an indication that buyers have taken control and the stock is due for an up reversal.

In both up and down reversals, an important feature of both exhaustion bar E and reversal bar R is that they have above average ranges relative to prior price bars in the stock's recent history.

### **Tight Range Price Bar Continuation Pattern**

A stock in a trend tends to enter a consolidation period where there is a pause in the price advance or decline before the trend resumes. The consolidation period is characterized by nar-



lower range price bars while the continuation or breakout bar has a wider price range. The number of price bars in the consolidation period is dependent on two factors: (1) The stage of the advance. (2) The strength of the advance as defined by the angle of ascent. For stocks in the earlier stages (first or second leg) of the advance with a wide angle of ascent, the consolidation period can be limited to as few as two to three bars. Stocks in the latter stages (third leg or after) in the advance with a narrowing angle of ascent can exhibit up to between seven and ten consolidation price bars. A breakout from the consolidation pattern is characterized by a wider range price bar with a close much higher than the highest closing price bar in the consolidation phase. A diagram of the tight range price bar consolidation pattern is shown on page 229.

### **Examples Trading Price Bar Patterns**

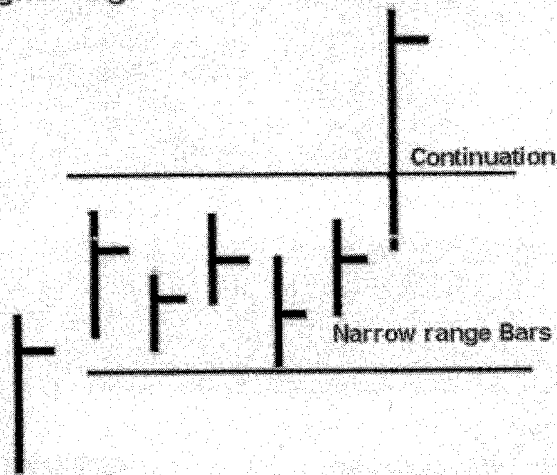
In this chapter, I will deviate slightly from my usual method of presenting examples. Rather than pick an example to illustrate each price bar pattern, I will highlight multiple patterns that can exist on one stock chart.

While certain price bar patterns can sometimes result in an intermediate term advance, most are usually short term trades of between two and ten days. As such it is not uncommon to find multiple patterns within a single stock price chart spanning a period of few months.

When trading price bar patterns, it is important not to try force fitting them into the stock price chart. It is essential to only trade patterns that are obvious to you as a trader and skip any potential trades that are not crystal clear. As you gain experience, more and more tradable price bar patterns will emerge on each stock chart. This slow stepwise procedure is necessary to avoid taking low probability trades that can result in a loss which can hurt traders confidence. Lack of confidence is the number one enemy of a trader leading to doubt and hesitation to pull the trigger when a trade setup materializes.

In the examples that follow, I will stay true to this point in that my focus will be on the most evident and easily recognizable

### Tight Range Bar Continuation



price bar patterns on each chart. This does not imply that there are no other tradable patterns that may be recognized by more experienced traders. If you are a beginner in using such patterns, it is my recommendation that you focus on the ones that literally jump at you. You will be surprised that these patterns alone are enough to result in significant trading profits.

### **Example 1: Coinstar (CSTR)**

This example illustrates the following Price Bar Patterns:

- (1) Four Step Uptrend
- (2) Pivot Shakeout Reversal

Four Step Uptrend: On the chart page 231 bar **1** forms a new low below the preceding price bar. This is followed by a multi bar uptrend culminating in a trend high at bar **2**. Notice that there are three bars between bar **1** and bar **2**, which is the most likely scenario, "rule of threes". Bar **2** low is subsequently penetrated and a retest of bar **1** low accomplished at bar **3**. Bar **3** meets the criteria of having a low above that of bar **1** thus resulting in a successful retest. Bar **4** penetrates the high of bar **3** indicating the confirmation of the four step uptrend.

Our buy point is near the high of bar **3** marked **BP** on the chart. This trade results in a move from near \$46 to around \$50 in few days. Our exit is signaled by the failure of the price to close above bar **2** high.

(2) Pivot Shakeout Reversal: On the CSTR chart page 231, price bar **P2** penetrates below the pivot point **P1**.

Remember that, as mentioned before, the pivot point does not have to be at the support point right before the shakeout price bar. The three support points prior to bar **P2** are much higher than the price at **P2**, and thus will not qualify as the reference pivot point. Price bar **P1** qualifies as a pivot point since it is an area of strong support with a low near that of the shakeout bar at **P2**.

Between pivot point **P1** and shakeout bar **P2** there were multiple advances and pullbacks. This further establishes **P1** as a strong support since none of the pullbacks reached the price point at **P1**.

# **CSTR (Coinstar, Inc.) Nasdaq GS**

3-Sep-2010

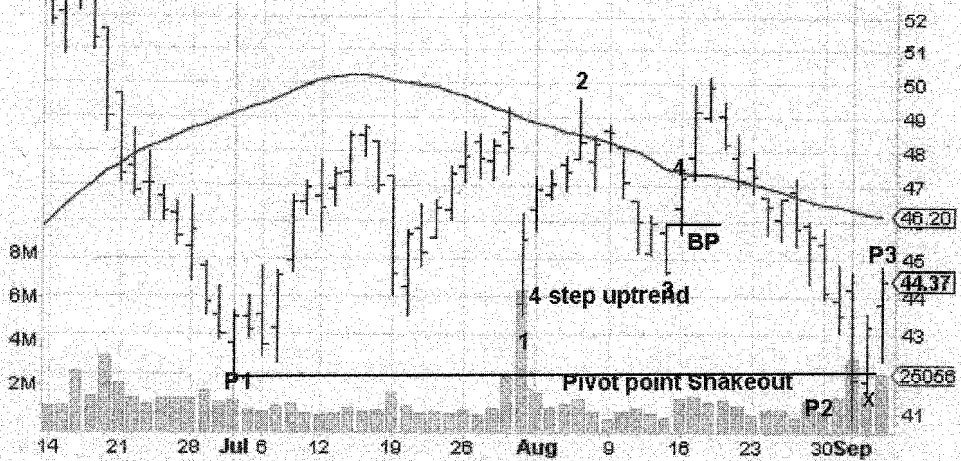
**Op 43.79 Hi 44.80 Lo 42.30 Cl 44.37 Vol 2.5M Chg +1.19 (+2.76%) ▲**

**1/2 CSTR (Daily) 44.37**

— MA(50) 46.20

— MA(200) 38.00

▒ Volume 2,505,850



After the shakeout a rally to above the shakeout bar **P2** occurs within two bars. As I indicated previously, it is common for the reversal to occur within one to three bars taking the price above the high of the shakeout bar.

Our entry point is when the range of bar **P3** exceeds the high of bar **X**, which is the only bar between the shakeout bar **P2** and the breakout bar **P3**. This occurs at around \$43.5 designated as our entry point.

### **Example 2: Power One (POWER)**

This example illustrates the following two price bar continuation patterns:

- (1) Tight Range Bar Continuation Pattern
- (2) Narrow Range Bar Continuation Pattern

I have been asked by many of my local trade group attendees if there is an easy way to distinguish these two patterns since they sound and look quite similar. The answer to this question is “yes” and it is quite straightforward.

If you study the chart on page 234, the True Range Bar (TRB) Continuation Pattern thrust bar **T** is followed by multiple consolidation bars. By carefully examining the consolidation area, there are several bars that protrude significantly above the thrust bar **T**, often by a range near half that of the thrust bar.

In the Narrow Range Bar (NRB) Continuation Pattern, Thrust bar **T** is followed by mostly in range consolidation price bars. As you can see the high of price bars in the consolidation range is near or below the high of thrust bar **T**.

Thus in a Narrow Range Price Bar Continuation pattern, consolidation bars highs fall near or below the high of the thrust bar. It is quite rare to find consolidation bars that break much above the thrust bar. On the other hand in a Tight Range Bar Consolidation Pattern, bars within the consolidation range can move a significant amount above the thrust bar. Be sure you are able to differentiate between these two patterns since the entry rules are different.

(1) Tight Range Bar Consolidation Pattern: As can be seen from the chart page 234, the stock advanced strongly starting on



July 4, 2010 until it reached the thrust bar **T** on July 8, 2010. The advance was halted by the appearance of bar **C** which is the first bar in the consolidation pattern. Consolidation continued for seven bars until the breakout bar **BR** characterized by a wider range than consolidation range bars, and a close above that of the highest closing bar within the consolidation range **HC**. Our buy point designated as **BP** on the chart is when the breakout bar **BR** moves above the highest close within the consolidation range (closing price of bar **HC**). The move of the breakout bar price above the high of the consolidation range signals the continuation of the uptrend.

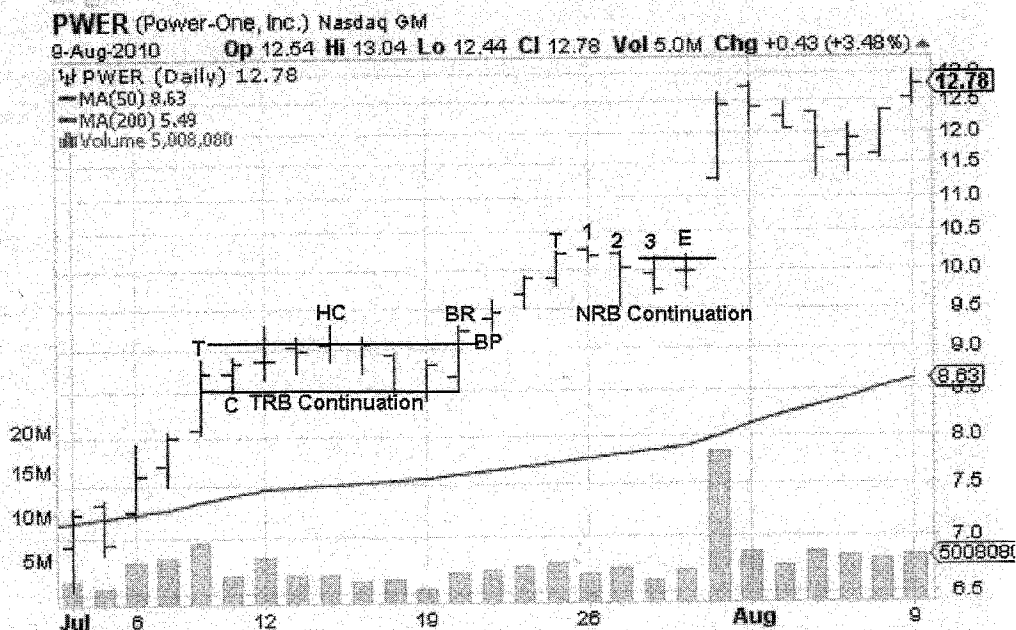
(2) Narrow Price Bar Continuation Pattern: After breaking out of the Tight Bar Continuation pattern, the stock moves higher until it reaches another thrust bar **T** on July 25, 2010. This is followed by bar **1** which halts the advance and is thus designated as the first bar in the consolidation pattern. As we indicated previously, our entry in the case of a Narrow Range Bar Price Continuation pattern is at or slightly above the third bar high within the consolidation pattern marked as bar **3** on the PWER chart page 234.

The trade is executed the next day or at bar **E** on July 29 2010. The stock gaps up the next day and the uptrend continues as expected. We will place a limit order to be executed on July 29 (bar **E**) just below the high of bar **3** or at \$9.95. This is almost two percent below the high of bar **3**.

This illustrates the importance of entry no later than the third bar of the consolidation pattern. In extremely strong advances entry after the second consolidation bar is often warranted. Remember that the most probable outcome in a Narrow Range Price Bar Continuation pattern is a three to five bar consolidation before the uptrend continues.

### **Example 3: F5 Networks (FFIV)**

This example illustrates an important bullish reversal price bar pattern, namely, the Out of Range Price Bar Reversal. On many occasions this pattern signals a shakeout whereby weak hands are scared into selling and stops are flushed out before



a strong advance takes place. This pattern is sometimes seen on a strong stock right after good earnings are reported. Even though the earnings were good, such a steep fall in the stock price serves to place doubts in the minds of individual investors. Questions such as “Someone must know something I don’t or the stock would not have fallen that much in price”, “The stock has run up so much already so good earnings must have already been factored into the price” or my favorite “buy the rumor sell the news” in which case the prior run up has already factored good earnings so investors are locking in profits.

The FFIV chart on page 236 shows a strong advance, which occurred after earnings, between July 25, 2010 and August 10, 2010. On August 11, a thrust bar **T1** appears on the chart indicating the top of the advance. Right after bar **T1**, an out of range bar **O1** appears lying completely outside the range of thrust bar **T1**. The two parallel lines drawn between the low of bar **T1** and that of bar **O1** define the trade entry area.

Notice that right after out of range bar **O1**, another out of range bar **1** shows up on the chart resulting in further drop in the stock price. A three day drop from \$93 to \$82 is likely to get even the most confident investors to doubt their decision to own this stock. Most are likely to have sold, or have been stopped out when the stock trades below \$80 on an intraday basis on August 12, 2010.

The appearance of the second consecutive out of range bar proves the wisdom of waiting until the price moves back to the close of the prior out of range bar **O1**. Our buy point **BP** on the chart is near the close of bar **O1**, which occurs three price bars after the second out of range bar **1**. Our entry point is around \$86.5 and our stop will be set near the close of the lowest bar after bar **O1**, or bar **1** at around \$82.5

The stock surges again between bar **1** on August 12, 2010 and a new thrust bar **T2** on August 20, 2010. One price bar after **T2** a new out of range bar **O2** appears on the chart. The question in any trader’s mind who already entered the stock, is whether this is a trend reversal and a reason for concern or another shakeout.

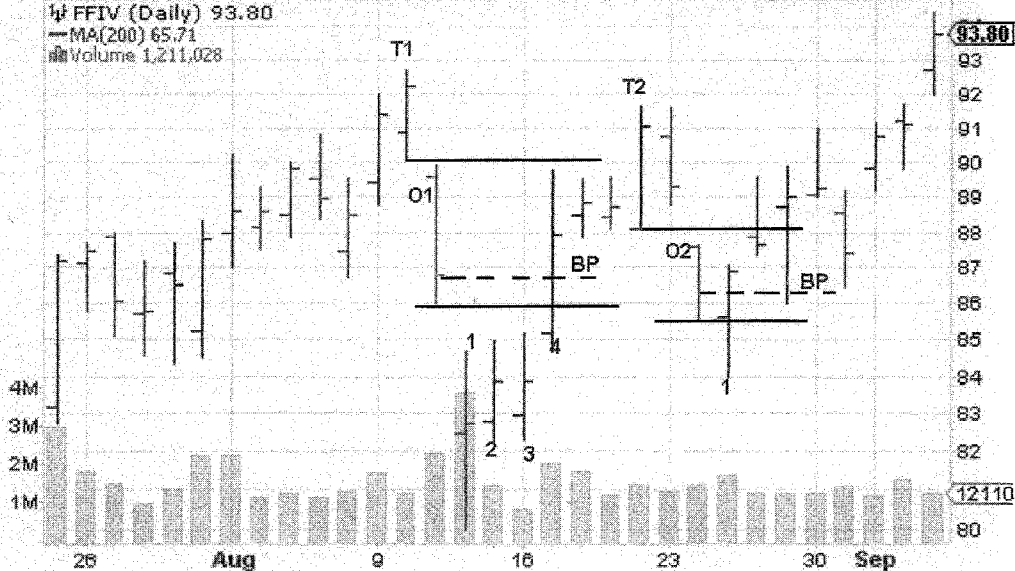
# **FFIV (F5 Networks, Inc.) Nasdaq GS**

3-Sep-2010 **Op** 92.72 **Hi** 94.48 **Lo** 92.00 **Last** 93.80 **Vol** 1.2M **Chg** +2.69 (+2.95%) ▲

FFIV (Daily) 93.80

MA(200) 65.71

Volume 1,211,028



It is common with high volume strong stocks to undergo multiple shakeouts since this is needed to scare holders into selling to the smart money that is accumulating the stock. A second shakeout is usually characterized by: (1) A quick reversal and price move to the buy point at the close of the out of range bar. (2) Failure of the lowest close to break below the close of the lowest price bar in the first out of range price pattern.

As can be seen from the chart, out of range bar **O2** is immediately followed by a reversal bar **1** that pushes past the close of **O2** and never drops below the lowest bar in the previous out of range price pattern (bar **1** after bar **O1**).

Our second buy point shown also as **BP** on the chart is near the close of bar **O2** and is around \$86.5.

If you have already purchased the stock, it is a good time to add to the position or make a new entry if you do not own the stock. A move to around \$94 takes place within ten days.

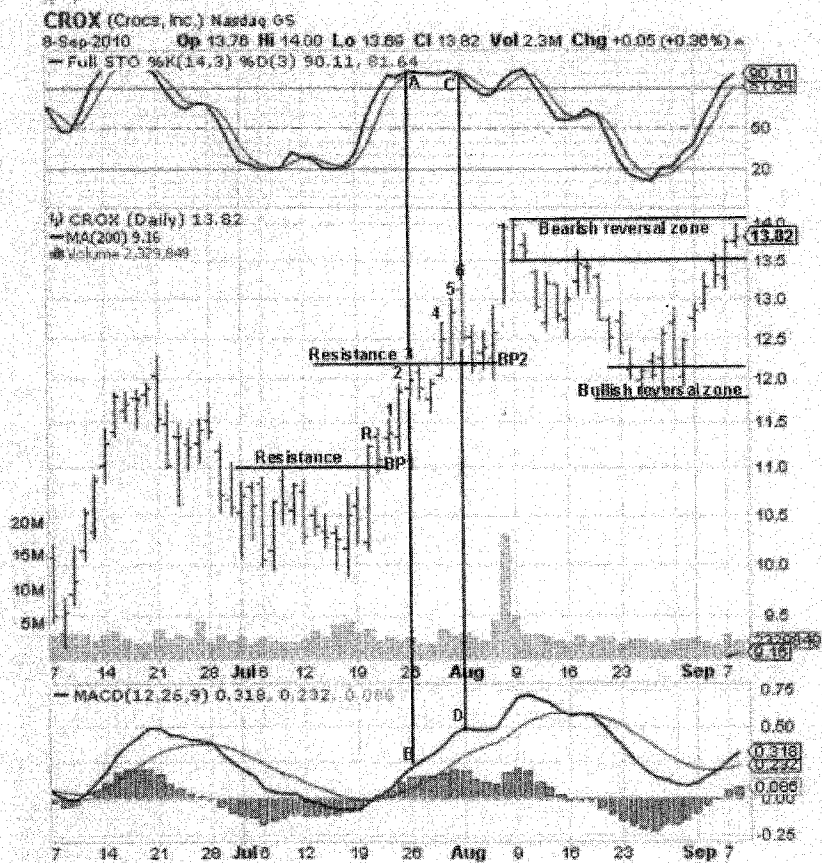
When trading out of range price bar reversals, it is critical not to enter the trade outside the buy area. This is defined by two parallel lines: the top line is at the low of the thrust bar of the prior advance and the second line is at the low of the first out of range bar. The reason for this is demonstrated in this example, since if you were to enter right after bar **O1** you would have risked a high drawdown before reversal and would have likely been shaken out of the trade. Ideally the entry should be made on a break above the close of the out of range as designated by buy points **BP** on the chart in this example.

#### **Example 4 : Crocs Inc (CROX)**

This example illustrates the following two price patterns:

- (1) Triple Bar High Reversal
- (2) Bullish and Bearish Reversal Zones

(1) Triple Bar High Reversals: By examining the chart on page 238, the first resistance is broken on July 20, 2010 and thus the corresponding price bar on that date is labeled as the reference bar **R**. As we explained in the discussion of Triple Bar High Reversals earlier in this chapter, inside range bars are not counted and only thrust bars that close above the prior price bar



close are counted. The bar following bar **R** is not counted since it closes below the close of bar **R**. The bar two bars after reference bar **R** is counted as bar **1** since it closed above the reference bar. The two consecutive bars after bar **1** are considered thrust bars, since each closed above the prior bar closing and thus they are marked bar **2** and **3** of the Triple Bar High Reversal. Vertical lines drawn from bar **3** towards the Stochastics and MACD charts, show overbought Stochastics with the MACD in neutral territory. Since the stock is clearly in an uptrend the MACD which is a trend following indicator is more important in this case. Over-sold Stochastics more likely indicates a period of consolidation or a temporary pullback which is what actually happens in this case.

After a slight pullback from bar **3**, which is now considered a reference bar, three consecutive thrust bars labeled **4**, **5** and **6** appear on the chart. Bar **6** shows an overbought Stochastics at point **C**, but the MACD is still not in overbought territory at point **D**. This indicates that again the most likely outcome is a consolidation period or a minor pullback.

Notice the points **BP1** and **BP2** which designate trade entry points on break of resistance in both stages of the advance. Our initial entry point is at around \$11 resulting in a move to \$13.25 within ten trading days. The second entry at point **BP2** is at \$12.25 resulting in a move to \$13.25 within two trading days.

Remember that trading Triple bar High Reversal as with many methods in this chapter is a short term scalping technique. It is thus advisable to follow the system and exit after the third thrust bar and reenter after the pullback or consolidation is over. Of course there will be occasions when no pullback will occur and you will miss the next scalp, however you have already made money on the stock and should either wait for the next setup or move to another stock.

## (2) Bullish and Bearish Reversal Zones

A bearish reversal zone defined by the high bar high and high bar low appears on the chart on August 20, 2010. Of course when this bar appears on the chart, you do not know whether the

stock will move higher. It is thus necessary to wait for the high bar low to be broken. In this case you will place an intraday stop at the high bar low around \$13.50 to exit if you hold the stock.

The bullish reversal zone boundaries are defined by the low bar low and the low bar high, with our entry point on a break of the low bar high which is around \$12.25 on August 24, 2010 in this case. With the stock eventually advancing to \$14.00 this results in another entry into the sell zone as defined on the chart and an exit will be necessary on a break of the high bar low. If we own the stock we should place an intraday stop around \$13.50 which is close to the high bar low in the sell zone.

It is critical to keep reminding yourself of two important points: (1) Trading price bar patterns is mostly a short term scalping method and (2) The market is unpredictable and in such situations your profit can quickly disappear.

For this reason when entering a stock in a buy zone it is acceptable to wait for a close above the low bar high to initiate the trade. On the other hand exits at the high bar low should be placed on intraday basis since sudden and significant moves can always occur in the market. Check out what happened with this stock on September 9 and 10 2010. A sudden move from near \$13.50 to \$11 within two days. The only way you could have kept the profit is by placing an intraday stop if you cannot monitor the market.

### **Example 5: Netezza Corp (NZ)**

This example illustrates the following three price bar patterns:

- (1) Pivot Point Shakeout Reversal
- (2) Two Day Bar Reversal
- (3) Triple Bar High Reversal

(1) Pivot Point Shakeout reversal: On the chart page 241 the price bar **P2** penetrates below pivot point **P1** low but closes above it, signaling a classic pivot point shakeout reversal. As you may recall from the previous example demonstrating this pattern, it is common for several advances and pullbacks to occur between the pivot point and the shakeout point. The pullback



# NZ (Netezza Corporation) NYSE

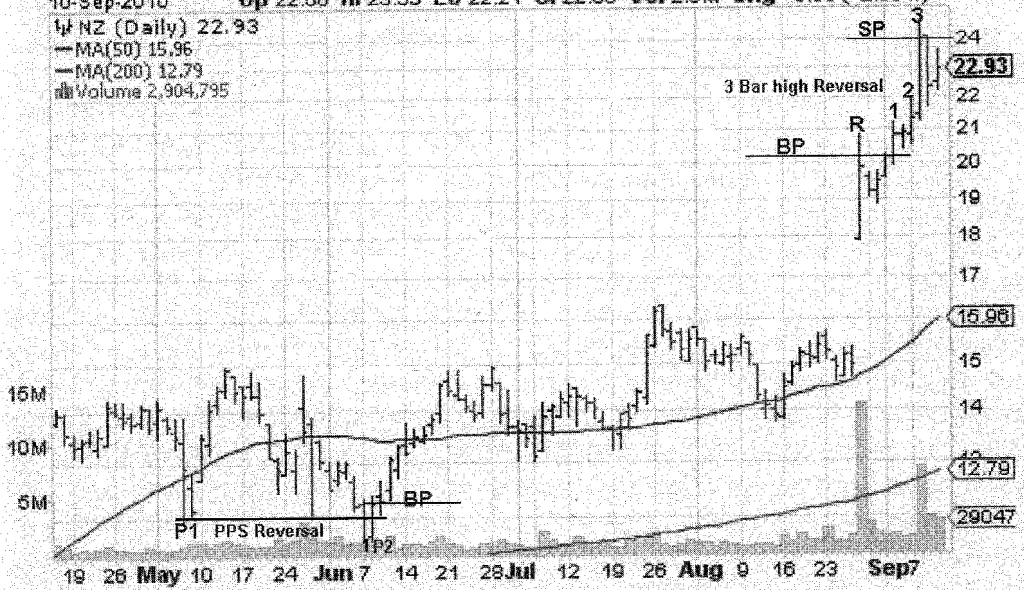
10-Sep-2010 Op 22.50 Hi 23.53 Lo 22.21 Cl 22.93 Vol 2.9M Chg +0.56 (+2.50%) ▲

1/4 NZ (Daily) 22.93

—MA(50) 15.96

—MA(200) 12.79

Volume 2,904,795



points, however, never penetrate below the low of the pivot point. As can be seen on the chart, in late May 2010 a pullback to the support near **P1** took place, but it never penetrated the low of **P1** indicating that this was not a pivot point shakeout.

(2) Two Day Bar Reversal: Bar **1** on the chart page 241 is not considered a shakeout since although it penetrated the low of **P1** it did not close above it. **P2** was the first shakeout bar since it dropped below the low of bar **P1** and then closed above it. Interestingly, bars **1** and **P2** form another mini pattern within the major shakeout reversal pattern. Notice that after exhaustion bar **1** pushed the close below the prior support **P1**, bar **P2** opened above bar **1** with buying continuing throughout the day resulting in a close near the high. This is a classic Two day bar reversal pattern as described earlier in this chapter.

Our entry point is on a break of the shakeout bar **P2** close designated as point **BP** on the chart around \$12.5. The stock moved to \$15 within ten trading days.

(3) Triple Bar High Reversal: As discussed earlier in this chapter, it is required that the reference bar **R** in a triple bar high reversal breaks above prior resistance. The chart on page 241 shows a gap up above prior resistance for the reference bar in a triple bar high reversal.

Bar **1** is the first bar with a close above the reference bar **R** and is thus counted as the first thrust bar of the three bar sequence. Notice that inside range bars between bar **R** and bar **1** are not counted. Bars **2** and **3** are the second and last thrust bar in the sequence with each bar closing above the prior bar while ignoring any inside range bars.

Our entry point is on a break of the reference bar close and is designated by the second **BP** point on the chart around \$20. Our sell point is the day after the third thrust bar in the sequence with an exit of around \$24 in eleven trading days.

## Price Pattern Classifications

I have picked the following example to illustrate multiple major and minor price bar pattern trade setups. Minor price bar patterns are usually embedded within major price bar patterns

serving to reinforce and validate the higher probability directional move of these setups. The tradable price bar patterns discussed in this chapter can be classified into major and minor patterns as follows:

#### Major Price Patterns

- (1) Four step uptrend
- (2) Pivot point shakeout reversal
- (3) Narrow range bar continuation
- (4) Tight range price bar continuation
- (5) Triple bar high reversal
- (6) Bull and Bear reversal zones

#### Minor price patterns

- (1) Second day shakeout
- (2) Overlapping wide range bars
- (3) Two day bar reversal
- (4) Intraday pullback
- (5) Alternating pullback
- (6) 1, 2, 3 pullback

### **Example 6: Isilon Systems Inc (ISLN)**

This example illustrates the following major and minor price bar patterns:

- (1) Tight range bar continuation
- (2) Triple bar high reversal
- (3) Two day reversal
- (4) Overlapping pullback
- (5) 1, 2, 3 pullback

(1) Tight bar range continuation pattern: As can be seen from the chart page 244, three consecutive thrust bars **T2**, **T1** and **T** appearing starting July 21, 2010 moved the stock to a high close with the final thrust bar **T**. This bar was followed by a small inside range bar **C** that halted the advance signaling the start of a consolidation pattern. This pattern continued until late August, when on August 23rd, 2010 a break above the highest close bar **HC** within the consolidation pattern took place with a gap up. The gap bar signals the entry point for this pattern as indicated by "**TRB continuation entry**" on the chart. Assuming entry in

**ISLN** (Isilon Systems, Inc.) Nasdaq QM

15-Sep-2010

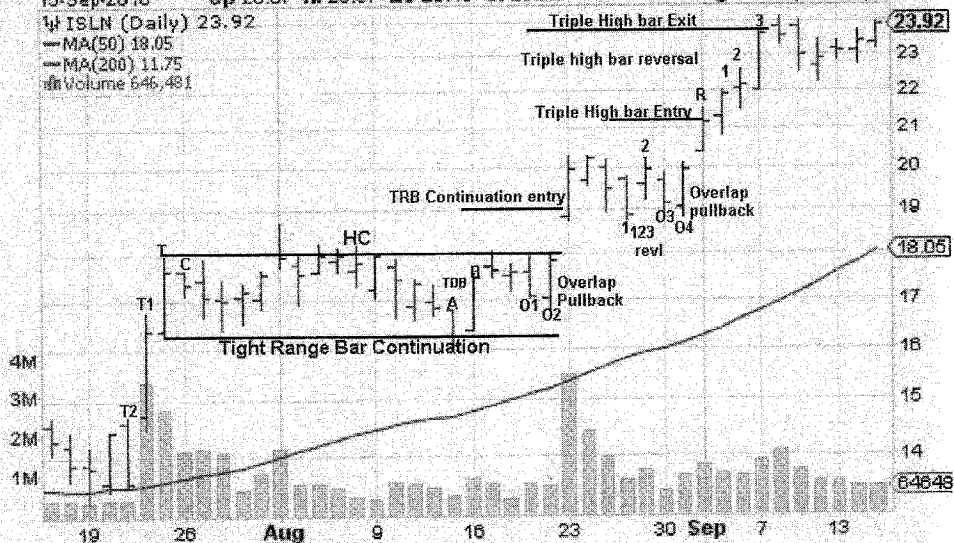
Op 23.37 Hi 23.97 Lo 23.18 Cl 23.92 Vol 646.5K Chg +0.50 (+2.13%)

ISLN (Daily) 23.92

MA(50) 18.05

MA(200) 11.75

Volume 646,481



the middle range of the gap day, our entry price will be around \$19.5

(2) Triple bar high reversal: Notice that bar **R** breaks above prior resistance and is thus designated as the reference bar in the triple bar high reversal. This time bar **R** is followed by three consecutive thrust bars **1**, **2** and **3** with each closing above the preceding bar's close and no inside range bars in between. Our entry point is on a break above the close of the reference bar **R** indicated as "**Triple high bar entry**" on the chart. The entry price is around \$21 and our exit will be right after the third bar of the triple bar high reversal at around \$24 within four trading days. This assumes that we have not bought the stock during the prior tight range bar continuation pattern.

(3) Two day bar reversal: This is a simple pattern observed within the tight range bar continuation pattern. This is identified by the label **TDB** on the chart with bars **A** and **B** constituting this pattern. Notice that bar **B** opens above bar **A**, with buying continuing throughout the day, resulting in a close near the high. This is an indication that accumulation was in progress during the consolidation period and higher prices are likely.

(4) Overlapping pullback: This pattern appeared twice on the chart: the first time it is embedded within the tight bar continuation pattern. Bar **O1** has a high open and low close and is followed by bar **O2** which has a low open and high close. This indicates that as the stock moved close to the support line within the consolidation pattern, buyers stepped in. A second clue is that bar **O1** low is higher than bar **A** low indicating that buyers are stepping in at higher prices signaling the approach of a breakout.

Another overlapping pullback pattern is seen with bars **O3** and **O4**. Bar **O3** opens high but closes near its low while bar **O4** opens low and closes near the high. This is an indication of a likely breakout from a second consolidation pattern. This takes place with a gap up the next day after price bar **O4**.

(5) **1, 2, 3** pullback: Notice that bars **1**, **2** and **O3** form a classic **1, 2, 3** pullback on the chart labeled **123 revl**. Notice that bar **1** has low close, while bar **2** opens above bar **1** but closes

below it; and bar **O3** has also a low close. The close of bar **O3**, however, is above that of bar **1** which is the trademark of a **1, 2, 3** pullback.

Interestingly, right after this pattern the overlapping pullback pattern formed by price bars **O3** and **O4** appears as discussed in the prior section. Both patterns reinforce the likelihood of a further upside move in price.

### **Example 7: Atheros Communications Inc (ATHR)**

This example illustrates the following price bar patterns:

- (1) Overlapping wide range bars
- (2) Intraday pullback
- (3) Triple high bar reversal.

(1) Overlapping wide range bars: The main reason I picked this example is that it contains both: a failed and a successful overlapping wide range price bar pattern. On the chart page 247, the first overlapping wide range price bar pattern is formed by bars **1** and **2**. As demonstrated previously in this chapter, the boundaries of the support zone are defined by the low of the high bar **2**, and the high of low bar **1** and is labeled “**support zone**” on the chart. Before taking a position it is best to wait for a successful retest of the support zone. A successful retest is determined by the failure of any of the three bars, following the high bar in the overlapping bar pattern, to penetrate below the lower boundary of the support zone. Remember “the rule of threes”. In this example the three bars following bar **2** are bars **3**, **4**, and **5**. As can be seen on the chart both bars **4** and **5** penetrate below the lower boundary of the support zone leading to price pattern failure and thus no trade is taken.

Another wide range overlapping bar pattern is formed by price bars **6** and **7**. The zone defined by the high of the first bar **6** and the low of the second bar **7** is shown on the chart as “**support zone**”. Bars **8**, **R** and **ir** are the next three bars after bar **7** in the wide range overlapping bar pattern. As can be seen from the chart, none of these bars penetrate the support zone. Our entry will be with the fourth bar labeled **T1** around \$13.00.

The reason for this is that bar **R** is the reference bar in a

# ATHR (Atheros Communications, Inc.) Nasdaq GS

13-Mar-2009

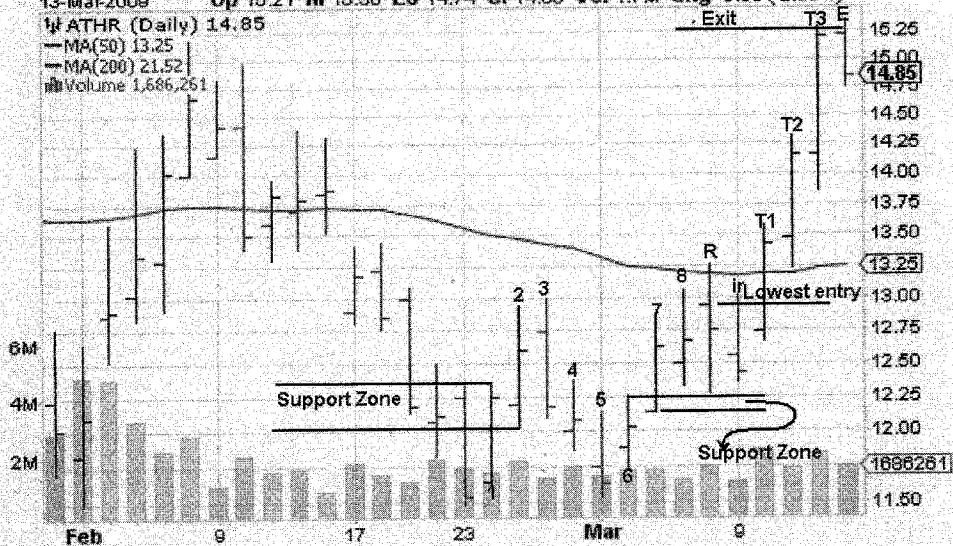
Op 15.21 Hi 15.36 Lo 14.74 Cl 14.85 Vol 1.7M Chg -0.35 (-2.30%)

ATHR (Daily) 14.85

MA(50) 13.25

MA(200) 21.52

Volume 1,686,261



triple high bar reversal that will be discussed later.

(2) Intraday bar reversal: Bars **8** and **R** form an intraday bar reversal two bar pattern. Notice that bar **R** opens above the close of bar **8**, drops below bar **8** low but then closes above the close of bar **8**. This is an indication that even though sellers dominated the trading during the period of price bar **8**, they were unable to keep control the next day as buyers stepped in. This aggressive buying resulted in bar **R** closing above the close of bar **8** and near its high. This is a clear indication of higher prices to come.

It is important to point out that trading action should only be taken as a result of a major price bar pattern setup. Minor price pattern setups usually serve to confirm the most likely direction of the coming price move. As such in this example, the intraday pullback is not a tradable signal in itself.

(3) Triple bar high reversal: On the chart page 247, bar **R** is the reference bar in the triple bar high reversal since it breaks above previous resistance. The next bar is an inside range bar designated as **ir** on the chart and is not counted. This is followed by three thrust bars **T1**, **T2** and **T3**, each of which closes above the prior bar. Our entry will be on a break of the close of the reference bar (which happens to be near \$13) if we have not already taken a position as a result of the wide range overlapping price bar pattern.

If we have entered the trade at bar **T1** as explained before at a price near \$13, the three bar high pattern signals an exit after the third thrust bar **T3**, at bar **E** near around \$15 for a profit of 15% in three days.

## Final Word

In my years of trading and helping other traders achieve their goals, I have concluded that the most important factor in achieving success is picking a trading system that fits one's personality. In this chapter I have presented another trading method that is highly independent from technical indicators or chart patterns but relies on price bar patterns as defined by price action from one bar to the next.



As most realize, trading is a matter of probabilities, and your goal is to increase the probability that the trade you enter will move as you expected. This is one way I recommend using the ideas in this chapter. Remember that more than thirty percent of shape based chart patterns, such as rectangles, triangles, penants etc, fail resulting in the stock moving opposite to the anticipated direction and a quick loss on the trade. You can increase your probability of success by looking for price bar patterns within a chart pattern and deciding whether they point to a bullish or bearish price move. If one or more bullish price bar pattern exists within a bullish chart pattern, then it is more likely the chart pattern will behave as expected. On the other hand if a bearish price bar pattern is embedded within a bullish chart pattern, the likelihood of failure of this pattern increases.

As an example if you observe a bullish ascending triangle chart pattern, but within the price bars forming this triangle there is one or more bearish price bar patterns then you are better off avoiding this trade. This is especially the case if those price bar patterns fall into the ones classified as major patterns in this chapter.



## Chapter 11

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### **Explosive Profits Catching Falling Knives**

I am sure you have heard the famous saying “Do not catch a falling knife” which in trading terms means that you should not try guessing the bottom of a falling stock. By guessing where the bottom is and buying at a price you perceive as a bargain, you risk further possible declines since the bottom of any stock can reach zero. While this may be unlikely it can happen, as I am sure you recall many stocks that went much lower than expected, with few going to zero during the financial crisis of 2008.

On the other hand many stocks that dropped to single digits or even below one dollar recovered handsomely giving any trader who had the courage to get in at such bargain prices significant profits. Of course this is easy to say in hindsight after we know which stocks recovered and moved significantly higher from their lows.

The question is whether there is a reliable method that can allow the trader to anticipate a stock reversal from a downward spiral in a reasonable amount of time.

To answer this question we have to first study the technical characteristics of a “falling knife” stock. An obvious trademark of such a stock is that it shows a definite strong directional movement to the downside. Another important feature of such stocks is that they are strongly trending which has two important implications in technical terms: (1) Any trend following indicator should show a strong and sustainable signal to the downside, and (2) Both the price and the trend following indicator are convergent in nature. That is, as the price moves to lower lows the indicator

forms lower valleys.

To summarize a “falling knife” stock has the following properties:

- (1) A minimum of 40 percent fall from the most recent top to the “Falling knife” bottom.
- (2) Strong directional movement to the downside.
- (3) Sustainable strong momentum trend.
- (4) Price and trend following indicators are in sync with each other.

To anticipate a reversal, our first requirement is an indication that the stock is about to change direction.

The indicator that provides the most reliable information regarding the direction of a stock is the Average Directional Movement or ADX. This indicator was discussed in detail in Chapter 4 but I will present it again here briefly with more focus on the types of stocks discussed in this chapter.

The Average Directional Movement ADX, measures the strength of a stock’s movement in a specific direction. ADX is on a scale from one to one hundred. Numbers below 20 indicate a technically non trending stock, while numbers above 30 indicate an established and strengthening directional trend. Remember that the ADX does not provide information on the direction of the trend but only on its strength.

In the case of a “Falling Knife” stock, this is not important since we know the direction of the current movement which is down. As the strength of the down move increases, the value of the ADX rises often reaching extremes of high 30’s or even above 40. Our first clue that the downward price momentum is weakening is a flattening of ADX and a subsequent formation of a “Mountain shaped bulge”. This is where further price drops do not result in a measurable increase in ADX. As the price drops at a weaker pace, ADX values start showing slight decreases after flattening out for few periods thus forming the “Mountain shaped bulge” mentioned previously.

A flattening or a decrease in ADX values does not necessarily imply a strong sustainable reversal in the stock. This only implies that the rate of the price drop is slowing down and the

downward momentum is weakening. It is possible that the stock may enter a consolidation period or continue its downward move after a temporary bounce.

Our next step is to get confirmation of a possible trend reversal and towards this objective we will use a trend following indicator. The first indicator that comes to mind is the MACD or moving average convergence divergence.

For our current application where a stock is in a strong downtrend, the MACD presents a significant challenge. Since the MACD is based on the absolute magnitude of the difference between two moving averages, it is significantly affected by stock price. As an example the MACD of the Dow industrials can reach triple digits while that of a high price stock such as Google can reach double digits. On the other hand for a small highly volatile stock below \$10 the MACD is usually in single digits. This brings another challenge in that variations in MACD are almost independent of stock volatility but highly dependent on price.

To avoid these problems we will use the Percentage Price Oscillator or PPO as our trend following indicator of choice. This indicator is similar in nature to the MACD in terms of signals generated with signal lines and center line crossovers and divergences. The main difference is that PPO values do not fluctuate wildly with price since they are normalized by the 26 period exponential moving average.

The formulas for the Percentage Price Oscillator or PPO are:

**$$\text{PPO} = (12 \text{ Day EMA} - 26 \text{ Day EMA}) / (26 \text{ Day EMA})$$**

**Signal Line = 9 Day EMA of PPO**

**PPO histogram = PPO - signal line.**

The Percentage Price Oscillator gives the same signals as MACD but with the addition of a normalized percentage dimension. This constrains values within narrow boundaries allowing comparison of PPO values for a stock over a wide time frame even if the security values dropped by 50% or doubled. This is why the PPO is useful with the kind of stocks we are addressing in this chapter. With a “Falling Knife” stock it is not uncommon to see drops of 50% or even more as did happen during the finan-

cial crisis of 2008. Take the Dow industrials for example where the MACD can often reach over 100, the PPO usually ranges between -2% and +2% which is a narrow and well defined boundary.

When a stock is falling precipitously, the shorter moving average drops below the longer term moving average and thus the PPO is negative. As the stock drops further, the PPO becomes more negative reflecting wider separation of the shorter term moving average from the longer term moving average signaling an increase in downward momentum. As the downtrend weakens, we first start noticing the PPO move above the signal line which is its 9 day EMA, rendering the histogram less negative and moving towards the neutral or zero mark. Subsequently the PPO becomes more positive as the shorter term moving average flattens out and moves up to cross the longer term moving average forming a “Valley bulge” in the process.

The likelihood of a reversal in the stock significantly increases the narrower the channel formed between the ADX “Mountain bulge” and the PPO “Valley bulge”. This assumes that a positive divergence exists between the selected momentum trend indicator, to be discussed in the next section, and price. This concept will be clarified with the examples later in this chapter.

At this point we have decided on two technical indicators: the Average directional movement (ADX) to alert us to a possible directional change, and the Percentage price Oscillator (PPO) to indicate a possible trend change.

We still need a third indicator to confirm that there is enough of a momentum shift from a downtrend to an uptrend to make the potential reversal a sustainable and thus a tradable move.

Another way to view a “Falling Knife” stock is as a momentum trade. If we assume that we predicted the coming fall and shorted the stock, our goal would be to exit at the right time to avoid giving up most of our profits. This is not much different than a bullish momentum trade as described in Chapter 1 of this book.

As you may recall, our momentum indicator of choice is the Commodity Channel Index or (CCI). The divergence between

CCI and price was used in Chapter 1 to exit long momentum trades. In this case we will be using the CCI as a confirmation of a shift from a downward momentum to an up momentum to enter a long position on a “Falling Knife” stock.

The Commodity channel index (CCI) is a momentum indicator that measures the location of the price of a stock relative to its moving average. The formulas for CCI were given on page 8 in chapter 1.

I have previously used the analogy of an overstretched rubber band to clarify the use of the CCI. As a “Falling Knife” stock moves down quickly, the price deviates significantly from its moving average to the downside resulting in CCI readings below -100 and often below -200. The rubber band is thus overstretched to the downside and a reversal is likely to move the price back to near its moving average.

When the price moves lower but the CCI forms shallower valleys, positive price/CCI divergence has taken place. In other words a drop in price was not met with a corresponding decrease in CCI value. This divergence is an indication of a momentum shift from a strong downward momentum to a neutral or upward momentum. Combining this with an ADX “Mountain Bulge” signaling a change in directional movement, and a PPO “Valley Bulge” indicating a likely trend change, a tradable strong bullish reversal is highly probable and an entry into a “Falling Knife” stock is justified.

It is important to remember that as is the case with all technical indicator based trading systems; these conditions are sufficient but not necessary for a “Falling Knife” stock to reverse. This means that some stocks will reverse from a severe downtrend without the ADX, PPO and CCI meeting the conditions described here. On the other hand the presence of such conditions is sufficient to substantially increase the probability of a strong reversal.

### **Example 1: A123 Systems (AONE)**

This is a classic example of a “Falling Knife” stock where after earnings report the price dropped almost 45 percent from \$11 at

point **1** to \$6.5 at point **2** in ten trading days as seen on the chart page 257. As the stock drops quickly fear starts to take hold of investors. If you were to check Yahoo message boards on the stock you will read comments as “bankruptcy coming”, “This will go to zero”, “bad management”, “No competitive advantage” etc etc. I found that this is usually a contrarian sentiment indicator that the stock is getting close to a bottom.

Of course I am not suggesting that you enter a trade based on reading comments on a message board. My point is that when most have given up on a stock, it is most likely to see a bullish reversal setup as described in this chapter. As the price drops quickly between points **1** and **2** on the chart page 257, the Average directional movement ADX moves from 25 at point **B** corresponding to price point **3** to 35 at point **X** indicating that the downtrend on the stock is gaining momentum. When the stock gets close to a bottom, the ADX flattens out as seen near point **X** on the ADX chart corresponding to the area between points **2** and **E** on the price chart. The slow down in the momentum of the price drop results in flattening of the ADX and formation of the “Mountain Bulge” as depicted on the chart.

As the stock moves lower in price from point **1** to point **2**, the Percentage Price Oscillator (PPO), which is a trend following indicator shows a downtrend to point **Y** which is in sync with the price. This indicates that both stock price and trend following indicator are moving in the same direction. As the stock price reaches point **2**, the PPO histogram starts forming lower valleys and moving closer to its signal line. This is a message that the rubber band has been overstretched and the stock will snap back to its 20 day moving average. As the PPO histogram moves closer to neutral, the PPO starts flattening out and forming a “Valley Bulge” as seen on the chart.

The distance between points **X** and **Y** on the chart is the narrowest point between the “Mountain Bulge” and the “Valley Bulge” and is a good candidate point for trade entry.

Connecting points **X** and **Y** and extrapolating the vertical line to intersect the price chart gives a likely entry at point **E**.

The next step is to confirm a momentum shift by looking





for positive CCI price divergence. Notice that a price drop from point **3** to point **E**, our likely entry point, resulted in an increase in CCI value between corresponding points **D** and **Z**. That is the CCI formed a shallower valley as the price dropped to a new low indicating a momentum shift from a downtrend to an uptrend. A momentum shift in combination with a directional change as established by a flattening of the ADX chart and formation of a “Mountain bulge”, and a trend change as manifested by the PPO histogram moving closer to neutral resulting in flattening of the PPO and formation of a “Valley Bulge”; indicate that point **E** is a high probability entry point for the stock. Our entry is at \$6.75 with the stock moving up to \$9.50 within ten trading days for a profit of almost 50%.

A “Falling Knife” stock tends to reverse quickly and strongly giving a significant profit in a short time, however, if the trader is to keep most of that profit a timely exit is critical.

A long trade in a falling knife stock is essentially a momentum trade and the criteria used to exit are similar to the ones described in Chapter 1. For most trades our exit will be determined by one of the following two occurrences:

- (1) Exit when the CCI moves near +200 or higher. In this case the price is overstretched way above its moving average and is likely to snap back.
- (2) In cases where the CCI does not reach +200, our exit will be on a negative divergence between CCI and price. Essentially, we will exit if a new high in price is met with a corresponding decrease in CCI.

In this example, the CCI reaches a value slightly above +200 on Friday September 17, 2010, our exit will thus be on the next trading day or Monday September 20, 2010 at a price of \$9.50 as already indicated.

### **Example 2: Power One (PWER)**

Many traders dream of buying a penny stock hoping it will gain many times its value hitting a home run with life changing profits of 1000, 2000 or 10,000 percent. Unfortunately most stocks that drop below one dollar never recover but few gems do

and go on to make new highs. This is one area where the strategies in this chapter have proven to be quite useful. This example illustrates this strategy for a stock that dropped to almost \$0.40 but recovered to reach above \$10 a year later.

As evident from the chart page 260, a steep drop in price of almost 65 percent from \$1.00 at point **1** to \$0.35 at point **2** was accompanied by an increase in the Average Directional Movement (ADX) from 10 at point **C** to 40 at point **X**. This indicates that as the stock dropped between points **1** and **2** the downward pressure gained significant momentum resulting in ADX values above 30, a hallmark of a strong directional trend. As the price moves between points **2** and **E** the ADX starts flattening out forming a “Mountain bulge” signaling a slowdown in downward momentum and a possible direction change.

As the stock dropped from point **1** to point **2**, the Percentage Price Oscillator or PPO moved in sync with the price between points **B** and **Y**. Notice that at point **Y** the PPO histogram moved closer to the neutral zero line and the PPO started flattening out forming a “Valley bulge” indicating a possible trend change.

Trend and directional change confirmation came in as a momentum shift in the Commodity Channel Index or CCI. A positive divergence between CCI and price occurs as the price drops from point **1** to point **3** and then to point **2**. The divergence of interest to us is the one at point **2**, since only at that point the ADX and PPO signals were activated.

Paying attention to this point is critical in avoiding losing trades. Remember that you do not have the benefit of hindsight when the stock is dropping. As such a trader using only CCI or any other price/indicator single divergence as an entry criteria, may take the trade at point **3** just to see the stock drop further. Be sure that all the elements of this system are in place before entering a long trade in a “Falling knife” stock, otherwise you are likely to get hurt.

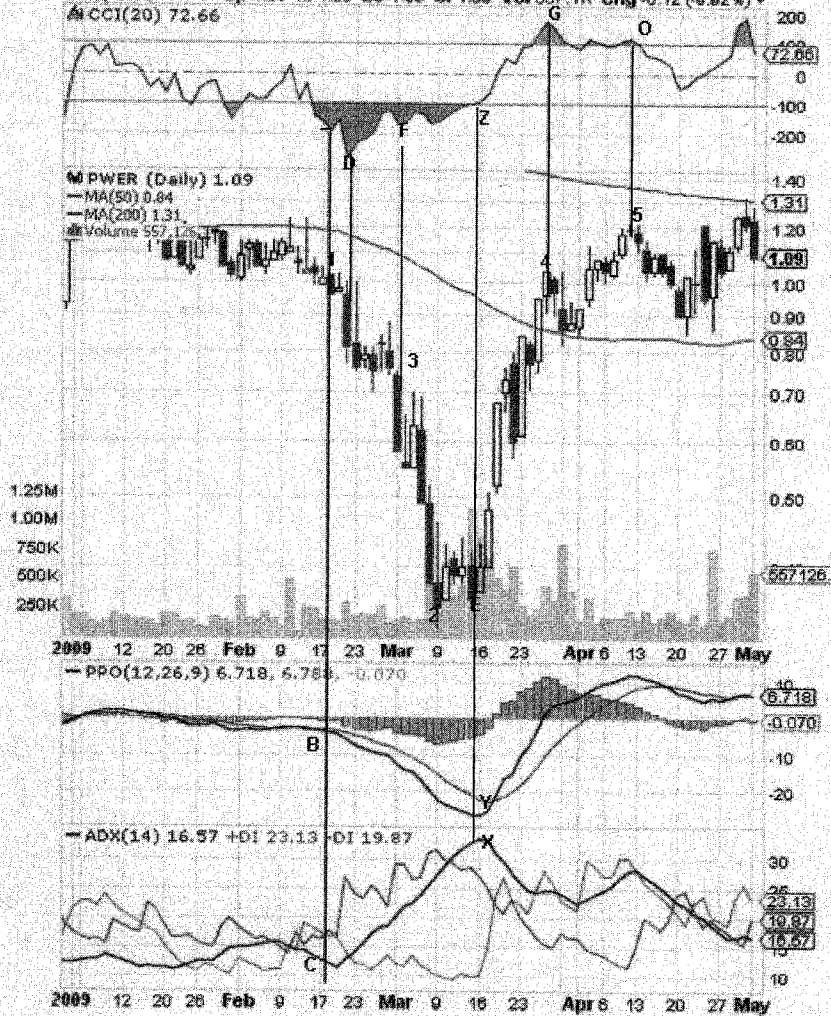
Points **X** and **Y** on the CCI and PPO charts define the narrowest channel between the “Mountain bulge” and “Valley bulge”. By extrapolating the **XY** line to the price chart, our entry will be at point **E** corresponding to point **Z** on the CCI chart which passes

PWER (Power-One, Inc.) Nasdaq QM

1-May-2009

Op 1.23 Hi 1.26 Lo 1.08 Cl 1.09 Vol 557.1K Chg -0.12 (-9.92%)

At CCI(20) 72.66



the positive CCI divergence requirement. Our entry price is at around \$0.40

In this example our exit is determined by a negative divergence between CCI and price. The CCI moved only to about +150 at point **4** and did not reach +200 or higher. The price moves from peak **4** to a higher peak **5**, but the CCI drops from around +150 at point **G** to around +100 at point **O** creating a negative divergence. This gives a signal to exit the stock the next trading day after point **5** at around \$1.15 for almost 300% profit.

One of the questions I get asked often when presenting this method to local trade groups is whether it can be used for longer trading time frames. I actually recommend that beginning traders who are new to this method use weekly timeframes, then move to the shorter daily timeframes. The reason for this is that weekly timeframes tend to smooth out potential false signals, confirm close calls, and merge multiple valley and mountain bulges forming a single channel and thus rendering a trade decision much easier to make.

Later in this chapter I will also demonstrate how multiple time frames can confirm the validity of some trade entries that may not be clear to inexperienced traders in using this method.

The example that follows demonstrates the effectiveness of this method using weekly charts. Keep in mind that in this case a trade may take several months from time of entry until exit and may not be suitable for short term traders. If you are a short term trader and have not used this technique before, my advice is to use multiple time frames. First look at the daily chart and assess the clarity of the trade setup. Is the formation of a valley and a mountain bulge clear? Is there an easily recognizable momentum shift manifested as a clear positive divergence between CCI and price? If so then take the trade, if not then look at the weekly timeframe, which tends to smooth multiple channel formations and gives much clearer signals. If the setup is clear in the weekly time frame then take the trade at the time where the channel is narrowest on the weekly chart. Using multiple timeframes is also especially useful in cases where a "Falling Knife" stock moves up from a bottom and then enters a consolidation pattern before

further advancing. Using multiple timeframes effectively will be demonstrated using examples later in this chapter.

### **Example 3: Monolithic Power (MPWR)**

The weekly chart for MPWR on page 263 shows a steep price drop between points **1** and **2**. During this drop, the Average directional movement ADX moved from around 20 to above 30 at point **Y**, indicating a significant strengthening in the downtrend as the price moved towards point **2**. The Percentage price oscillator PPO moved in sync with price dropping precipitously until reaching point **X**. Notice that the ADX forms a “Mountain bulge” at point **Y** and the PPO forms a “Valley bulge” at point **X** with the distance between these points defining the narrowest part of the channel. The convergence of the ADX and PPO and formation of this channel indicates the ADX is signaling a potential direction change while the PPO is indicating a possible trend change.

A momentum shift is visible at price point **2** due to a corresponding positive CCI /price divergence at point **B**. Notice that the price dropped from prior support area at point **3** to the lower support at point **2**. The Commodity channel index CCI formed a higher low between points **A** and **B** signaling an increase in value of the CCI as the price moved from support point **3** to lower support point **2**.

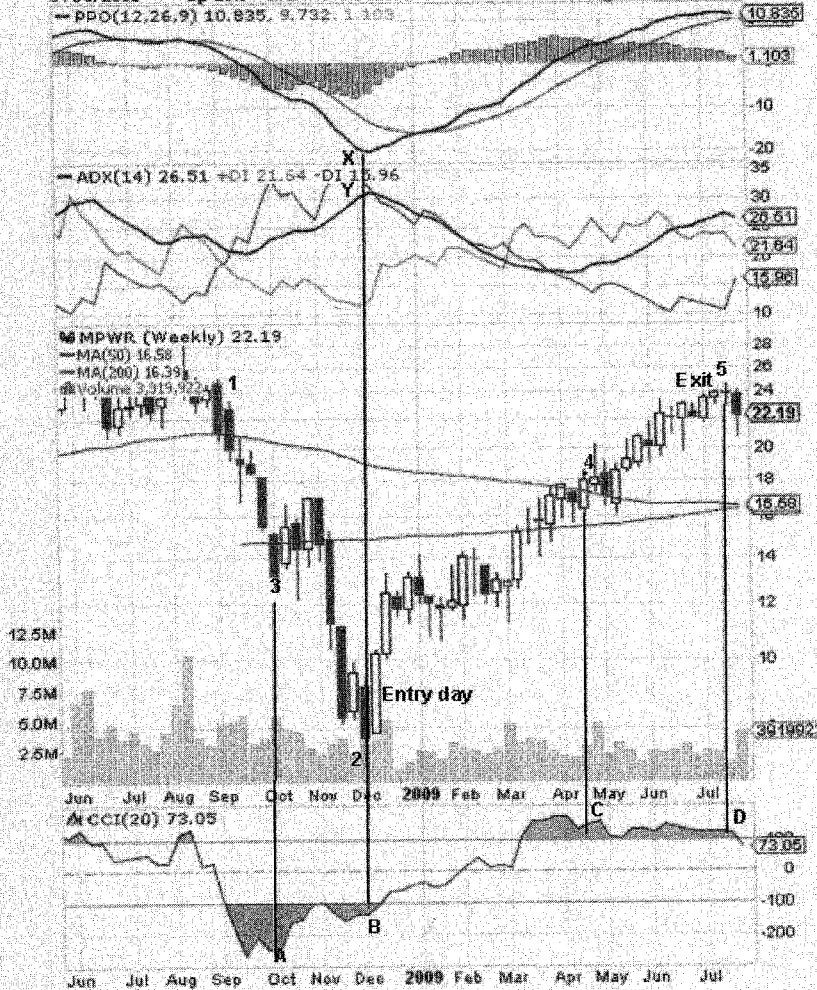
One mistake beginning traders often make is picking the wrong point to compare CCI price divergence. Notice that the price moved up from point **3** before falling back to point **2**. If a trader picked the point at the top of the bounce from point **3**, no divergence would have been visible between this point and point **B**. To avoid this mistake look for the last intermediate support between points **1** and **2** which is clearly point **3**.

Drawing a line connecting points **X** and **Y** on the PPO and ADX charts intersects the price chart upon extrapolation at point **2**. Our entry is on the next day after point **2** labeled “Entry day” on the chart and assuming an entry at the middle range of the day our entry price is at \$9.00. The stock continues moving higher until the CCI value approaches +150 in the vicinity of point **4**. As the stock moves between points **4** and **5** a negative divergence

MPWR (Monolithic Power Systems, Inc.) Nasdaq GM

31-Jul-2009 Op 23.81 Hi 24.40 Lo 20.80 Cl 22.19 Vol 3.9M Chg -1.72 (-7.19%)

PPD(12,26,9) 10.835, 9.732, 1.103



between CCI and price occurs. When I observe this happen, I usually start looking for an exit point which in this case is near point 5, where the stock hit minor resistance with the uptrend weakening and the CCI negative divergence getting more pronounced. Our exit is thus around \$23-\$24 with a profit of 250% in about six months.

### **Trading “Falling Knife” stocks using multiple timeframes**

In my years of coaching traders, I have been fascinated by one phenomenon I kept seeing over and over again. Even though I presented the same method in an identical manner to all traders; many went on to do quite well while others struggled to just become profitable. Some may argue that this may be related to psychological factors and different experience levels. Although these factors have some role in determining the confidence level of a trader and their ability to pull the trigger at the right moment; when I worked one on one with struggling traders I found one single reason to be the most common among struggling traders and beginners. They often take a trade when one or more elements of the system required to pull the trigger are not yet present. What usually occurs is that a trader can clearly see some of the elements of a specific setup on the chart and in their enthusiasm and excitement about the trade they start wanting the other element to be present. This results in a loss of focus and attention to detail and if something is close to what a trader is looking for on the chart, they assume that the setup will materialize and take the trade.

This occurs in situations where a trading system requires several individual technical indicators to line up in a specific manner. There is often one or two indicators that are tricky and can fool the trader if they do not pay attention to detail. As with many systems using multiple indicators, on occasions one of the signals required to trade “Falling Knife” stocks is not clear on the daily charts. Usually the formation of the ADX “Mountain bulge” and the PPO “Valley bulge” are quite prominent and hard to miss. On the other hand the momentum shift signal as manifested by CCI / Price positive divergence is unclear on certain stock daily



charts.

As demonstrated in previous examples in this chapter and throughout the book, I often use candlestick charts to represent price. Although these charts can be informative they may be tricky in cases where price trend information in a short period of time is required as is the case with CCI divergences.

To be certain that all the elements of trading a “Falling knife” stock are present on the daily chart, I recommend that in cases where the CCI divergences are not clear, you follow the stepwise procedure below:

- (1) Change from candlestick to a line chart. This often will give a much clearer picture if a real divergence is visible. If after doing this you are still not certain go to step 2.
- (2) Go to the weekly chart and draw a vertical line from the price nearest to the day the “Falling Knife” setup was evident on the daily chart. Check if there is a convergent ADX “Mountain bulge” and a PPO “Valley bulge” with a narrow channel in between. If not then either skip the trade or wait for the setup to materialize on the weekly chart.

I have found that a situation where a failed setup on the daily chart occurs is a signal that a stock is likely to move from a bottom of a “Falling Knife” into a consolidation pattern. In such cases using weekly charts has special value in that it permits the trader to select their entry closer to the breakout point from the consolidation pattern. It is common for the channel to narrow significantly as the PPO histogram moves to its low point, and starts widening noticeably as the PPO histogram moves nearer to the zero line and the PPO itself moves closer to the signal line. This observation is of significant value in helping the trader time their entry closer to the break out point. Remember what I said before that the duration of a trade on a weekly chart can last several months, few of which can be part of a consolidation pattern where the price experiences small movements. The ability to reduce the amount of time our cash is tied up in the trade, even by a couple of months, is likely to improve our profitability and reduce the impact of lost opportunity due to the inability to put the cash

to work in other trades.

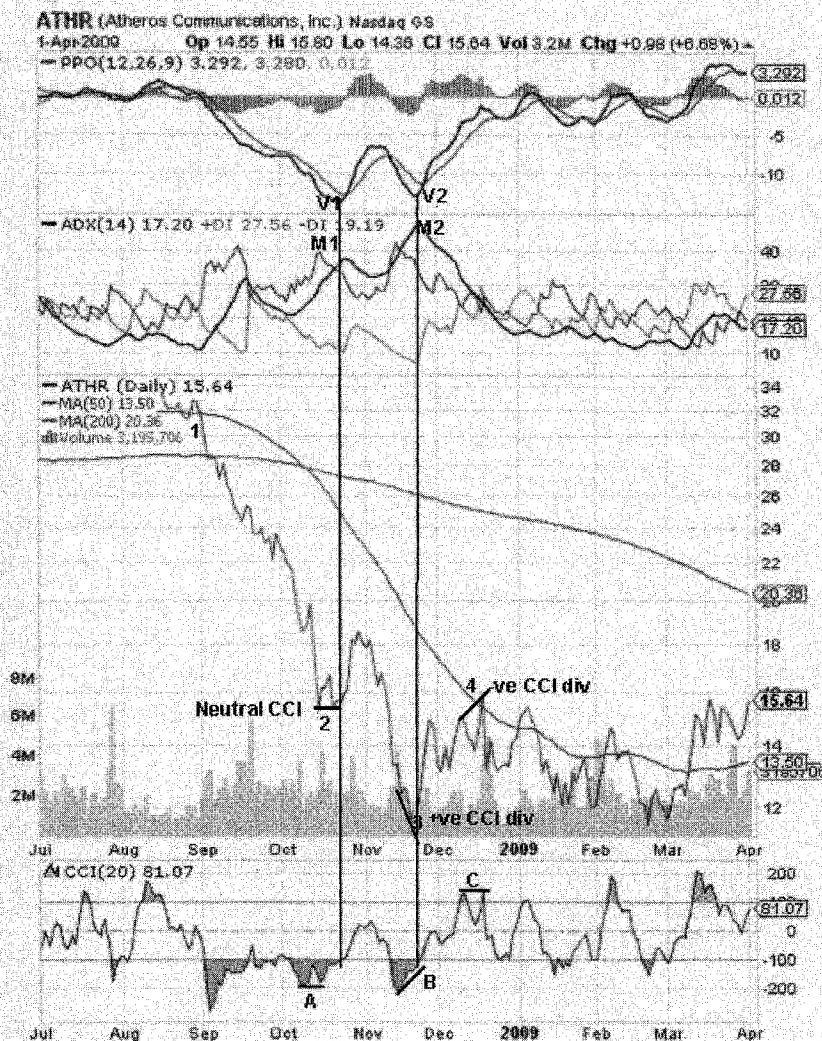
The concepts discussed in this section will be clearer when studying the example below.

#### **Example 4 : Atheros Communications (ATHR)**

The daily line chart page 267 shows a significant price drop between points **1** and **2**, where the price was almost cut in half from \$30 to almost \$16. In the meantime the Average directional movement (ADX) increased from a value of 10 corresponding to price point **1** to a value of above 30 at point **M1** on the ADX chart corresponding to point **2** on the price chart. Simultaneously, the Percentage price oscillator moved lower to point **V1** on the PPO chart corresponding to point **2** on the price chart. Notice that the ADX formed a “Mountain bulge” at point **M1** while the PPO formed a “Valley bulge” at point **V1** with a narrow channel between them indicating that the direction and trend change conditions for a “Falling knife” trade have been satisfied.

We will now look for confirmation as evidenced by a momentum shift resulting from a positive CCI / Price divergence. Notice that the only other minor support between points **1** and **2** was right before point **2** at the same price level, forming a minor double bottom. Remember that when the price is at point **2** we do not have the benefit of hindsight so we do not know what is going to happen later. This is where the astute trader will exercise caution and pay attention to details. The two valleys at near point **2** form a flat line as do the corresponding valleys near point **A** on the CCI chart indicating that no positive divergence exists. Many inexperienced traders may decide to ignore this and rationalize that since the CCI did not move lower with no price change, there is no negative divergence. They may see a neutral picture of the CCI staying flat as a reason to take the trade. This is often a result of allowing a trader’s emotion and excitement to take control to the point that a trade that does not fit the required criteria is taken.

My motto in such cases is “if you are in doubt opt out” and my advice is to skip the trade and wait for another opportunity with the same stock or move to the next one.



For beginners or traders inexperienced in using this system, the next logical step after replacing candlestick with line charts, is to seek confirmation on the weekly chart. This confirmation fails in this example as will be demonstrated later in this section.

Continuing with the current trade on the daily chart, we decide to wait since the CCI /Price positive divergence was not clear beyond doubt. The stock moves higher after point **2** but then makes a new low at point **3**. As the stock drops from point **2** to point **3** after a temporary bounce, the ADX forms another "Mountain bulge" at point **M2** moving above 40 indicating a strong possibility of a change in price direction. In addition, the PPO forms a "Valley bulge" **V2** signaling a high probability of a trend reversal. Notice that the channel between **M2** and **V2** is narrower than between **M1** and **V1** indicating the likelihood of a strong snap back.

We now look again for a momentum shift as indicated by a positive CCI /Price divergence. As the price drops a downward slant in price towards point **3**, as indicated by the short downward sloping line, is countered by an upward slant to point **B** on the CCI chart. Again, when looking at CCI divergence you should compare the lowest price valley to the most recent price support.

Some may ask why we did not compare point **2** to point **3** on the price chart. There are two main reasons: (1) Point **2** already showed an ADX /PPO signal which technically eliminates it from consideration, and (2) Another peak formed right after point **2** from which the stock dropped to point **3**. What we should look for is the latest minor support between the newly formed peak in early November 2008 and point **3** in early December 2008.

In this case notice how the divergence between points **3** on the price chart and **B** on the CCI chart literally jumps out at us with one line angled at almost 45 degrees up and the other almost 60 degrees down. This is the kind of clear and powerful signal smart and experienced traders look for before assuming the risk of a trade entry.

With both trend and directional indicators signaling a re-

versal, confirmed with a momentum shift as indicated by a strong CCI / Price positive divergence, our entry point will be the day after price bar **3** on the chart at around \$12.00.

Our exit will be at point **4** where an increase in price was accompanied with a slightly lower CCI peak at point **C** forming a negative CCI /Price divergence which is one of our exit criteria. Our exit price is just below \$16 giving a profit of over 25 percent in one month.

I will now return to price point **2** on the ATHR daily chart page 267, where we could not get a clear CCI /Price positive divergence signal even after using a line chart. My recommendation is that you should attempt to confirm the ADX directional and PPO trend signals on the weekly chart. If this checks out then look for the momentum shift signal as manifested by a CCI positive divergence from price.

Using weekly charts to trade “Falling knife” stocks reversals may dictate that we stay in the trade for few months. It is thus important that we get clear and unequivocal signals in the candlestick form price chart which is often the most difficult to decipher for this type of trade. Once clear signals are confirmed our goal is to enter as close to a potential breakout as possible to minimize trade holding time.

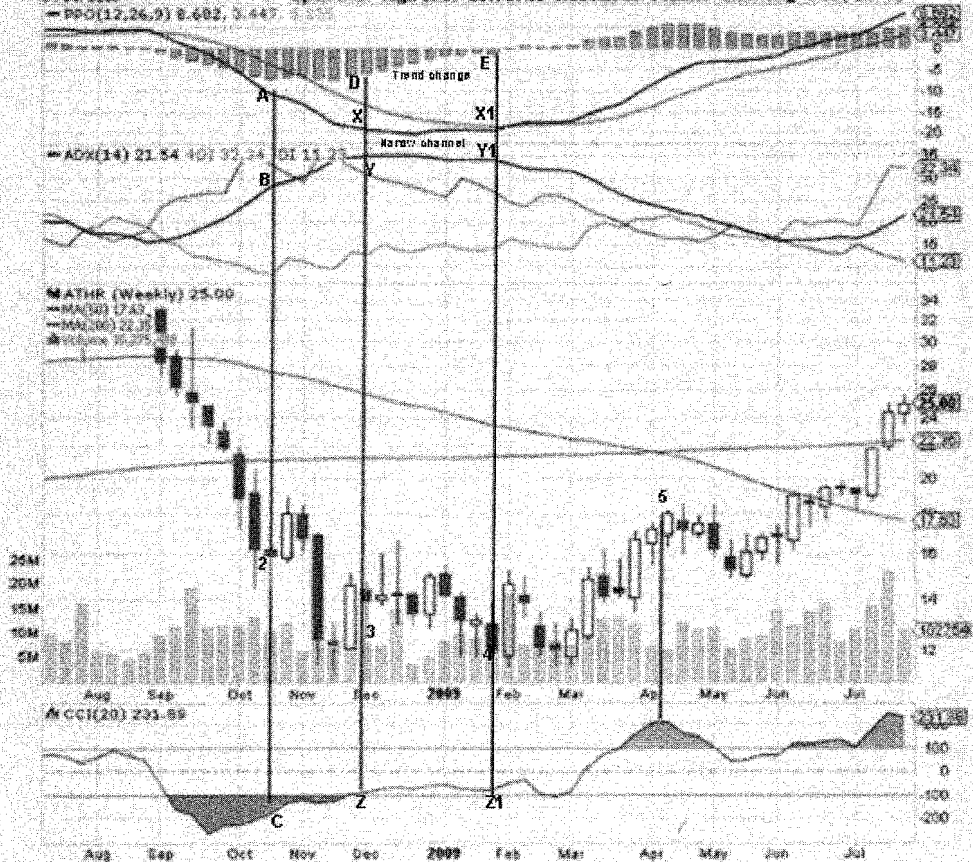
The ATHR weekly chart in candlestick form is shown on page 270, with the ADX and PPO charts appearing above the price chart and the CCI chart below it. Our first step is to check whether the point at the daily chart where we have a questionable CCI / Price positive divergence signal produces a successful PPO trend and ADX directional signal. To start we will locate the closest day on the weekly chart to the signal day on the daily chart, which is shown as point **2** on the weekly candlestick price chart. We then draw a vertical line to intersect the Average directional movement (ADX) and the Percentage price oscillator (PPO) charts above the price chart. This line intersects the ADX chart at point **B** and the PPO chart at point **A**. Notice that points **A** and **B** are at a section of the ADX and PPO charts where convergence is starting to take shape but has not yet formed the characteristic narrow channel between the ADX “Mountain bulge” and the PPO

ATHR (Atheros Communications, Inc.) Nasdaq GS

31-Jul-2009

Open 24.27 High 25.50 Low 23.58 Close 25.00 Volume 10.3M Chg +0.65 (+2.67%)

PPG(12,26,9) 8.602, 3.447, 2.525



“Valley bulge”. As such we decide that point **2** on the daily line price chart is not a valid signal point and we conclude that the questionable momentum shift on the daily chart is not tradable.

Even though points **A** and **B** do not produce the desired signal, the start of the ADX and PPO convergence is quite evident which leads to an expectation that a signal may materialize at a date in the near future. As the price drops from point **2** to point **3**, the ADX and PPO lines start converging and forming the beginning of an extremely narrow channel between points **X** and **Y**. This is an indication that a direction and trend change are likely. The CCI shows positive divergence between points **2** and **3** where the CCI forms a shallower valley at point **Z** than point **C** even though the price has dropped significantly. Thus point **3** on the weekly price chart possesses all the requirements for an entry signal.

As we indicated previously our goal is to enter the trade as close as possible to a breakout to minimize holding time. In weekly timeframes, it is common that the formation of a narrow channel can last for few months. Usually the channel stops getting narrower in the area of potential entry points. In this example, this area is between points **3** and **4** on the price chart and the **XX1YY1** channel formed by the PPO and ADX valley and mountain bulges. Essentially we can enter the trade anywhere between points **3** and **4** since both the directional (ADX) and the trend (PPO) as well as the momentum shift confirmation (CCI ) satisfy our requirements.

How do we then decide the best entry point? To do this we will look for the following clues in the ADX/PPO charts. Our first clue that a breakout is nearing is a widening of the channel starts occurring as happened in this example between **XX1** and **YY1**. Our second clue is a move of the PPO histogram towards the zero line as happened at point **E**. Our last clue is the move of the PPO line to merge with its signal line as seen at point **X1**.

Based on this, our ideal entry point is **4** on the weekly price chart where the ADX/PPO channel starts widening, the PPO histogram moves from point **D** towards the zero line at point **E**; and the PPO line crosses its signal line at point **X1**. Our entry on the

weekly chart will be around \$12 which is interestingly almost at the same entry price as the daily chart when we waited for all the required trade signals to be confirmed.

At point 5, the stock moved to \$18 and the CCI moved above +200 which is one of our exit signals. We will thus sell at around \$18 in early April 2009 for a profit of 50 percent in two months.

There is one important difference in between using daily and weekly charts to trade “Falling knife” stocks. The mountain and valley bulges tend to have more rounded tops and bottoms and form quickly on the daily chart. On the weekly chart they tend to have a flat top and bottom resulting in an elongated narrow channel.

One common question I get asked about using the weekly charts is: How do we know that the narrowest point of the channel has been reached without the benefit of hindsight? To do this just keep an eye on the channel width as it is forming. Initially the channel’s width narrows down significantly until it reaches a time frame where you see little change. This is an indication that the narrowest section of the channel has been reached. At this point as long as all the required signals including the ADX “Mountain bulge”, the PPO “Valley bulge” and the confirming CCI divergence are satisfied, this price point will be an acceptable entry. Of course, as I mentioned previously it is advisable to wait for a trigger signal where the PPO histogram moves closer to the zero line and the PPO crosses its signal line as the channel starts widening; to insure less trade hold time and thus higher profitability.

Finally to end this section, I would like to reiterate my recommendation that beginners trade this system on the weekly chart. One reason for this that I did not mention before, is that the narrow section of the channel on the weekly chart tends to last a longer time and thus trade entry is more flexible with less room for error. On the daily chart, ADX and PPO channels can form quickly with the narrowest section lasting no more than few days requiring a sharp eye and high level of confidence in one’s ability to trade this system.

In the next section, I will discuss using “Falling knife” sig-



nals to predict market reversals from a major drop of 40 percent or more. The key here is the word “major”, since for this technique to work catastrophic drops of at least 40 percent must have occurred as in the case of the 2008 crash establishing the March 2009 bottom.

### **Equity index reversals using “Falling knife” signals**

In chapter 13 of my previous book “Generate thousands in cash on your stocks before buying or selling them”, I have presented an approach for predicting general market reversals. This method uses the volatility of a stock index such as the VIX for the S&P 500 and the VXN for the Nasdaq, in combination with their Moving Average Convergence Divergence MACD in an inverted scale.

I have used this technique extensively in my trade groups to time potential market reversals in the major indices insuring that we are on the right side of the market. I have this system programmed into my trading platform and I recommend you give it a try. As you know it is best to trade with the general Market trend, and this will insure you are long in up trends and short in downtrends.

The “Falling knife” technique is a simpler approach that any beginning or intermediate level trader can use to predict market reversals from significant drops of 40 percent or more. This requirement is extremely important since using this method for minor or moderate pullbacks can result in failed signals and considerable losses.

Let us assume that you are watching a Dow collapse as happened in late 2008 and decide to use the “Falling knife” criteria to ascertain if a reversal is about to take place. If you have a confirmed reversal signal in the ADX/PPO channel formation and CCI divergence, check first if there has been a drop of at least 40 percent from the latest major top. If not, you should wait until the drop reaches the 40 percent threshold, use the VIX method or abandon the trade. This strategy will be clarified in the next example.

### **Example 5: Dow Jones Index (DJX/100)**

When using “Falling Knife” signals to predict general market turnarounds, it is critical that the trader is able to distinguish between setups that satisfy the required entry conditions and ones that do not. As I indicated in the last section, only ADX/PPO signals that correspond to a minimum 40 percent drop from the most recent major top are tradable signals. For the purpose of this system, a top is considered a reference major top if (1) The index stays in the vicinity of a well defined peak for at least a couple of months and (2) The top formation is characterized by low volatility or narrow range bars often forming a rounded tip. Situations where the volatility is high and the index undergoes extreme gyrations are not suitable as reference tops for using “Falling knife” signals to predict a reversal.

Another important requirement for a valid ADX/PPO “Mountain bulge”, “Valley bulge” channel signal is that the channel should be narrow enough. For the purpose of a “Falling knife” reversal the channel is considered narrow enough if the following two conditions are met:

- (1) The ADX “Mountain bulge” forms at a value of 30 or higher.
- (2) The PPO “Valley bulge” forms in the bottom third of the range below the zero line.

The chart of the Dow industrials is shown on page 275 to indicate how to determine which signals are tradable. On this chart we can clearly see three ADX/PPO channels form. The first is in the middle of June 2008, the second in mid October 2008 and the third at the market bottom in March of 2009.

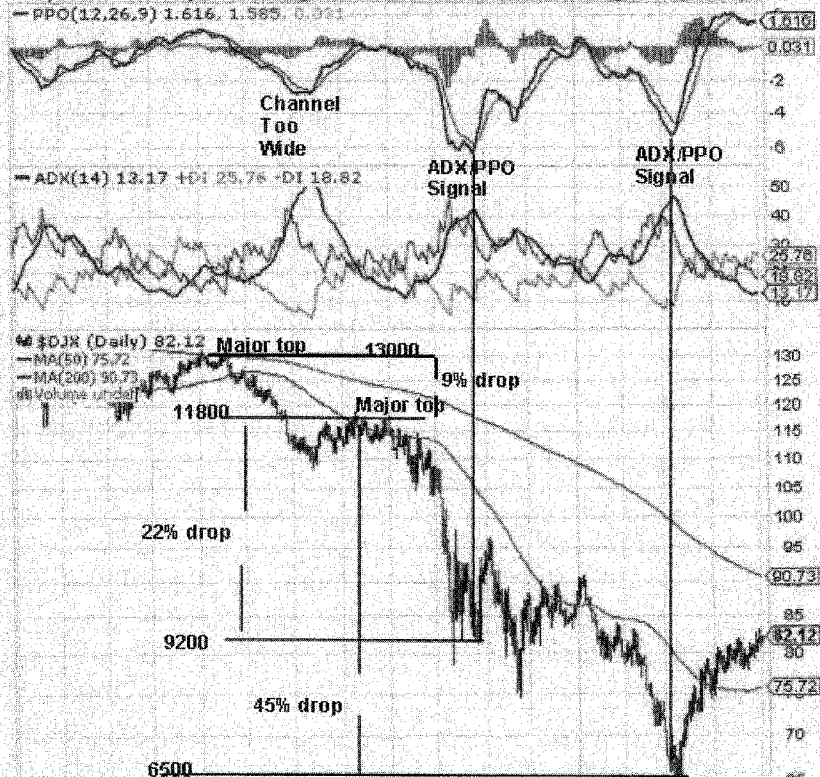
During the first channel formation we notice that the index underwent only a 9 percent drop from the previous major peak at 13,000 to 11,800. In addition the channel is too wide and does not meet the narrowness requirements. While the ADX “Mountain bulge” did form above 40, the PPO “Valley bulge” formed between -2 and -4 which is the middle range between zero and -6. Our requirement is that the “Valley bulge” should form in the lower third of the range or between -4 and -6 for this condition to

\$DJX (Dow Jones Industrial Average Index - CBOE (1/100)) INDX

1-May-2009

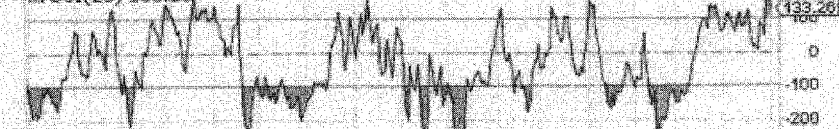
Open 81.87 High 82.20 Low 80.09 Close 82.12 Chg +0.44(+0.54%)

PPO(12,26,9) 1.616, 1.585, 0.031



2008 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2009 Feb Mar Apr May

CCI(20) 133.26



2008 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2009 Feb Mar Apr May

be satisfied. As such the first ADX/PPO is not a tradable signal.

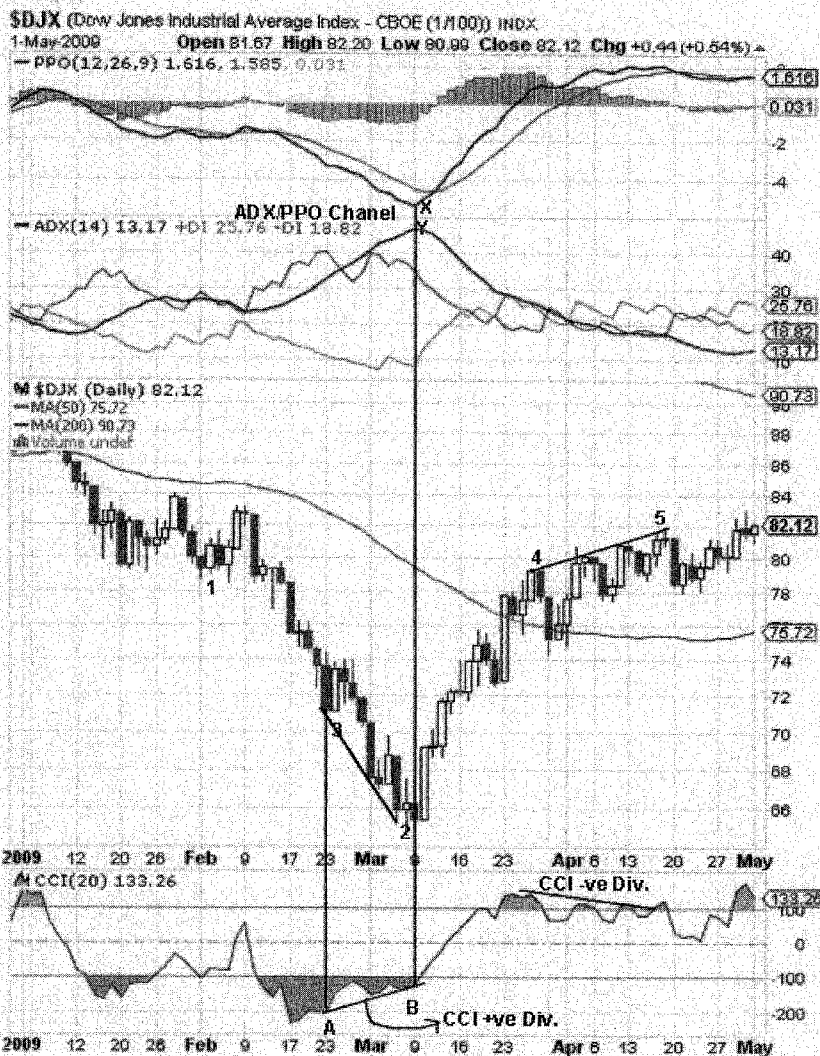
A second ADX /PPO signal forms in mid October 2008. In this case the ADX bulge forms above 40 and the PPO bulge around -6 satisfying the channel width condition. The index drops from the prior major top at 11,800 to 9,200 which is a 22 percent drop and as such does not meet the minimum 40 percent drop rendering this signal also non tradable.

The final ADX/PPO signal forms in March 2009 at a major market bottom. The ADX "Mountain bulge" forms at around 45 and the PPO "Valley bulge" at around -6, forming a channel that meets our width criteria. The index dropped from the previous major peak at 11,800 to 6,500 which is a 45 percent drop meeting our pullback requirement. Notice that in this case, the reference major top is still 11,800 since no well defined market top occurred between that point and the final market collapse. The index experienced high volatility between October 2008 and January 2009 resulting in the lack of a well defined top formation.

With the ADX /PPO channel and the 40 percent drop requirements satisfied, we look at the CCI for confirmation of a momentum shift. The chart on page 277, shows a blow up of the range of interest for better visibility. Notice the extremely narrow channel between points **X** and **Y** as the Dow drops from point **1** to point **2** on the price chart. The ADX "Mountain bulge" forms close to 50 while the PPO "Valley bulge" formed at near -6 which is the lower end of the bottom third of the below zero range. The narrowness of the channel is an indication that a strong index reversal is in the making.

By drawing a vertical line through points **X** and **Y** to intersect the price chart at point **2** and the CCI chart at point **B**, we can clearly see a positive CCI divergence between points **B** and **2**. Notice that the price drop between the most recent minor support at point **3** and the signal point **2**, was countered with a shallower CCI valley between points **A** and **B** forming a positive CCI /Price divergence. Our entry is the next trading day after point **2** or at around 6700.

Our exit is determined by a negative divergence between CCI and price as is clearly seen between points **4** and **5**, where



the price moved higher but the corresponding CCI formed lower peaks. We will thus exit near point **5** at 8,200 for a 30 percent profit in two months.

### **Post Signal Shakeouts**

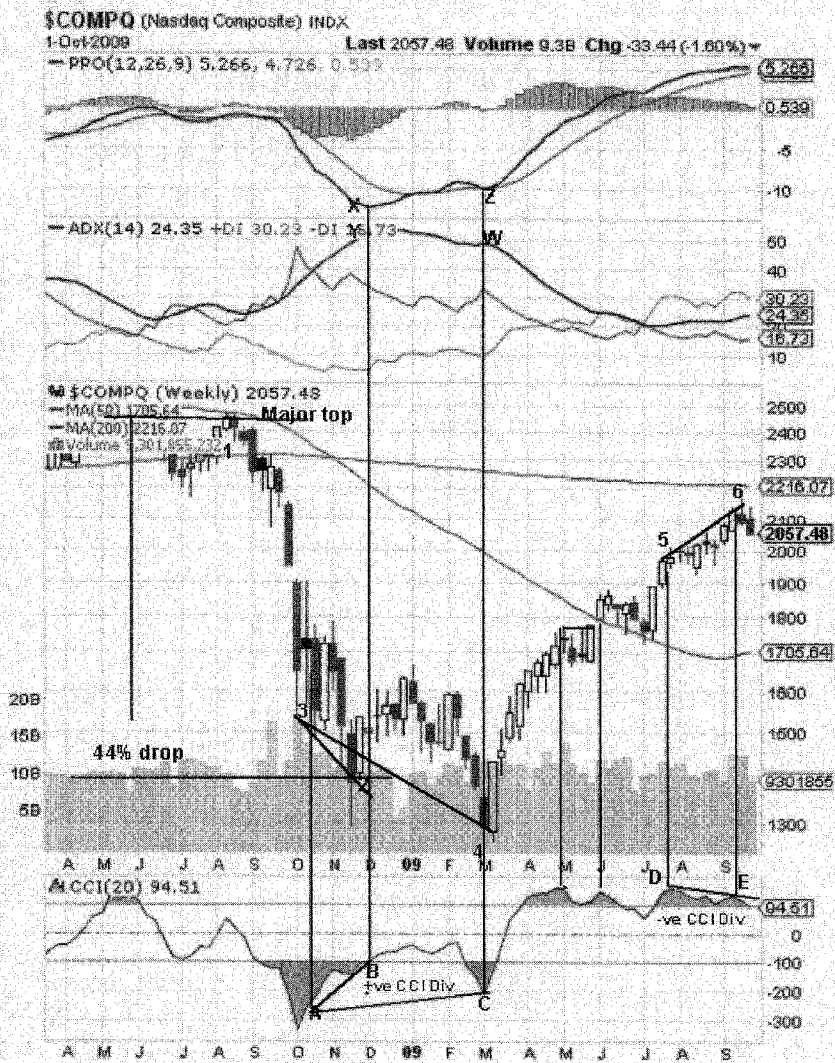
As most traders are aware, no trading tool or system is one hundred percent accurate and foolproof. Even the best trading methods fail on occasions and the “Falling knife” reversal signals are no different. Although my experience has shown over 80 percent profitability, there are times where a possible failed signal can be generated with the ADX/PPO channel and CCI divergence meeting all conditions. Of the twenty percent failure rate, shakeouts account for almost two thirds, whereby the stock gives a “Falling knife” reversal signal, starts an uptrend then reverses and falls below the signal price point to scare traders into selling just to recover and make new highs.

To help avoid being shaken out, I was on the lookout for a simple signal that indicates that the post “Falling knife” price drop is a shakeout rather than a continuation of the steep fall. I have noticed that when the drop is a shakeout, the CCI always forms a shallower valley at the shakeout point than at the minor support point prior to the signal point, where the price is quite a bit higher.

The signal point always forms a much higher CCI valley than the minor support point during the price drop otherwise no “Falling knife” reversal trade is triggered. Because of this, it is necessary to compare the CCI valley at the shakeout point to that at the minor support prior to the signal point. Failure of the CCI to break below the steep valley at the minor support point during a post signal drop is a likely indication of a shakeout, otherwise continuation of the fall is likely and exiting the trade will be necessary. The nature of shakeouts and how to trade them will be clarified in the following example.

### **Example 6: Nasdaq Composite (COMPQ)**

By checking the Nasdaq weekly chart on page 279, you should at this stage be able to recognize that a “Falling Knife”



trade trigger signal is given at point **2** on the price chart. If you are unable to see this please read the previous examples again. Point **2** on the price chart meets all the requirements for a “Falling knife” reversal as follows:

(1) The drop from the major top of the index at 2500 to the bottom at 1400 is a 44 percent drop which is above the minimum requirement of 40 percent.

(2) The channel width requirements are also clearly satisfied. The ADX “Mountain bulge” is formed near 50 while the PPO “Valley bulge” forms in the lower one third of the zone below the zero line. The zone ranges from zero to -15 and the bulge forms at around -12.5.

(3) A CCI positive divergence is evident between the signal point **2** and the prior minor support at point **3**.

Notice that a drop in the index between point **3** and **2** corresponds to an increase in CCI forming a shallower valley at point **B** than point **A**.

This confirms price point **2** as a “Falling knife” reversal trigger and our entry will be at around 1500. What happens this time is that the index moves up to 1600 without triggering a CCI sell signal and then drops taking out the prior closing low at 1400 and the intraday low close at 1300.

As a trader that is in this position, your primary concern should be whether this is a shakeout or a likely continuation of the downtrend. Notice that the CCI at point **C** corresponding to the shakeout point **4** low, forms a shallower valley than point **A** corresponding to the minor support point **3** prior to signal price point **2**. This is an indication that the drop is more likely a shakeout rather than a continuation of the trend.

One question I get asked often is: What about the negative divergence between the CCI at point **C** relative to that at point **B**. Doesn't this indicate a likely continuation of the downtrend? The best way to understand this is as follows: Since point **2** shows a directional as well as a trend reversal signal confirmed by a momentum shift; it is no longer part of the strong downward momentum pushing the price down. The momentum at point **2** shifted from a down direction to a neutral or up direction, and as



such we expect the CCI corresponding to any shakeout to drop below the CCI corresponding to point **2**. The reason for this is that if we assume the worst case that the shakeout is actually a continuation of the trend, the momentum better shift strongly downward. If, however, the momentum at the shakeout point (**4** in this example) fails to be stronger than the strongest downward momentum, usually at the minor support (**3** in this example) prior to the signal point; then the drop to the shakeout point is unlikely to be sustainable.

In other words the momentum of the drop to point **4** is weak relative to the momentum of the drop from point **1** to point **2** and thus a reversal is likely.

Another secondary indicator reinforcing that point **4** is likely to be a shakeout, is the widening of the channel between points **Z** and **W** relative to **X** and **Y**. When the stock falls, the channel tends to narrow significantly, and a widening of the channel during a price fall is in a way a channel width divergence indicating a likely reversal. This is actually the main reason we require the channel be quite narrow, since the narrower the channel the less likely a post signal point drop will be sustainable since that requires formation of an even narrower channel.

Having concluded that point **4** is a shakeout point we will stay with the trade. Our exit signal occurs when a negative CCI divergence occurs as the price rises from point **5** to **6**. Take note of the drop in CCI at point **E** relative to point **D**. Our exit will be around 2100 for a profit of almost 30 percent.

Some traders may wonder whether to exit before point **5** between May and June of 2009 when a flat price was countered with a slight drop in CCI peak as shown on the chart. Remember what I said before, trading signals should be obvious to the point of almost jumping at you, so if an entry or exit signal is not clear wait for a clear signal to act.

Of course, if the shakeout at point **4** was to result in a negative CCI divergence from the minor support point **3** relative to the prior signal point **2** we would have exited the trade.

## **Short term trading using “Falling knife” signals**

Most stocks do not fall by fifty, sixty or seventy percent in a single step. The fall is usually interrupted by pauses in the form of a consolidation pattern and minor bounces or counter trend moves before the downtrend reasserts itself. These counter trends can often produce good profits if traded appropriately. “Falling knife” signals can be used to trade such stocks as they are falling. Of course not all bounces and counter trend moves can be captured by this technique, but if you are able to execute few trades with 20 percent profit or more, that is likely to boost your trading profits.

A hallmark of a tradable “Falling knife” stock is the formation of multiple ADX “Mountain bulge” and PPO “Valley bulge” channels during the price drop. This is to be expected since such formations are needed to trigger a trade.

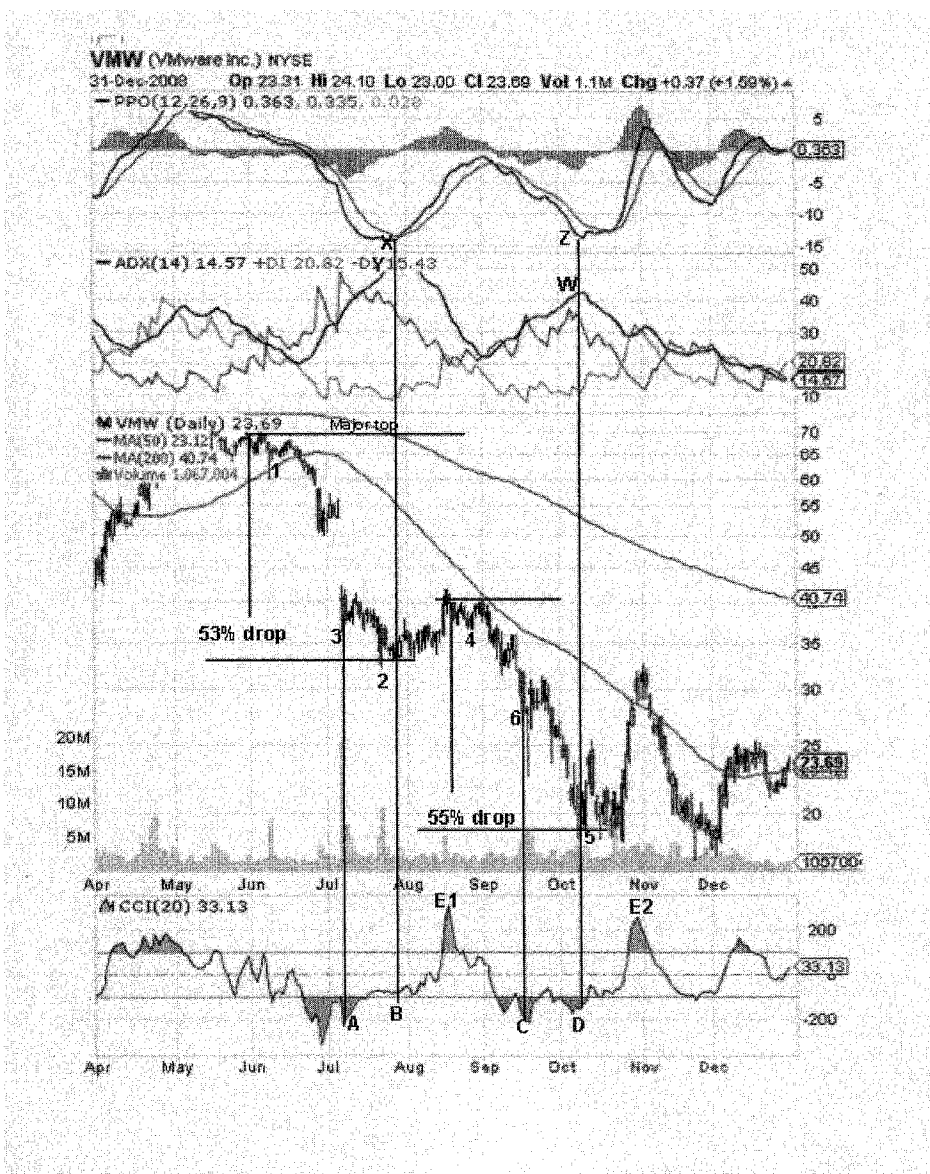
It is important when using this method to scalp stock profits during a significant fall, that only signals that meet the “Falling knife” criteria are traded. If you are tempted to trade other bounces then a different approach should be used.

Once a “Falling knife” stock stops moving lower and enters into a consolidation or flat pattern, this system can no longer be used and an alternate trading method should be employed.

The example below demonstrates how a stock on its way down can be traded using the system described in this chapter.

### **Example 7: VM Ware (VMW)**

The daily chart page 283 shows a 53 percent drop from a major top at \$70 to point **2** on the price chart at \$33. It is evident that point **2** on the chart meets all the requirement for it to be a tradable “Falling knife signal”. Notice the formation of a narrow channel between **X** and **Y**. This channel satisfies the width requirement since the ADX “Mountain bulge” forms at 50 and the PPO “Valley bulge” is located in the lower one third of the range below zero. By extrapolating the **XY** line to the price chart and onto the CCI chart at point **B**, a clear positive CCI /Price divergence is formed. The price at point **2** is below the intermediate support price at point **3** but the CCI moves higher from point **A** to point **B**. This signals a momentum shift at point **2** and a likely



move higher. Since point **2** satisfies all the “Falling knife” trade signals we enter the next day at \$33.00.

Our exit signal is given by the CCI moving above +200 at point **E1** on the CCI chart and a corresponding price of around \$40 for a profit of 30 percent in fifteen days.

After our exit the stock continues its downtrend reaching point **5** where another narrow ADX/PPO channel is formed. This channel also meets the width requirements with the ADX “Mountain bulge” forming at above 40 and the PPO “Valley bulge” forming between -10 and -15 which is the lower third of the zero to -15 range. In addition the drop from the intermediate top at point **4** to point **5** is 55 percent meeting our minimum requirement of 40 percent.

The only requirement remaining for a “Falling knife” signal at point **5** is a momentum shift as exhibited by a CCI /Price positive divergence. This is clearly seen with a significant price drop between the minor support at point **6** and point **5**, resulting in a shallower CCI valley at point **D** than point **C**. Since point **5** is now a “Falling knife” signal and is a tradable point we will enter the trade the next day around \$20.

Our exit is again determined by another CCI move above +200 at point **E2** with a corresponding price of \$34 for a profit of almost 75 percent in one month.

Notice that after our second exit the stock pulls back again but this time no discernible ADX/PPO channel forms and thus is not tradable using this method. Although the stock moved back again from \$15 on December 20 to \$22, it entered a sideways pattern where “Falling knife” trading signals are not effective.

For the purpose of illustration, let us consider the hypothetical situation where the stock does not give us an exit signal after our entry at point **2**. In other words the CCI did not cross the +200 mark at **E1** and we saw the stock drop from our original entry at \$33.00 to around \$30 near minor support point **6**. Our course of action will be to compare the CCI at point **C** corresponding to point **6** to the CCI at point **3**, which is the minor support prior to signal point **2**. We require a clear and strong positive CCI /Price divergence of point **6** relative to **3** otherwise we will

exit the trade.

Notice that the CCI valleys at points **A** and **C** are relatively similar in depth and as such the CCI at point **C** relative to point **A** is neutral. Our hope is to see a strong CCI increase between points **A** and **C** corresponding to the price drop between points **6** and **3**. Remember that when we are holding a position, our requirements are much more stringent than entering a new trade since protecting capital is the number one concern when trading.

## **Final Word**

In this chapter I have presented a trading system specific to predicting reversals in “Falling knife” stocks. Such stocks are characterized by a minimum 40 percent drop from a major top to a signal bottom. It is important when using this system that all requirements for a tradable signal are satisfied including the ADX/PPO channel width threshold criteria, and the momentum shift criterion as represented by a CCI /Price positive divergence, in addition to the 40 percent minimum drop mentioned previously.

Be aware that the method in this chapter should not be used in range bound stocks where support and resistance points are confined within a rectangular shape.

When using this method to scalp some profits during counter trend moves in a falling stock, you should enter trades at “Falling knife” signal points only when all the aforementioned conditions are met and use other methods to trade setups that do not fall within the parameters of this system.

My years of experience using the “Falling knife” reversal system, have shown it to be quite effective if used properly. I recommend that you initially paper trade this method and then move into live trading after you have gained some experience and have demonstrated profitability.



## Chapter 12

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### **Combining Fundamental and Technical Indicators for Explosive Profits**

You are probably wondering why am I including a chapter on fundamental analysis in a stock trading book. Isn't short term price movement independent of a stock's fundamentals and mainly dependent on the rules of supply and demand? The answer to this question is obviously yes in the short term; in the long term, however, being sure that the stock you are trading is fundamentally strong will shield you from catastrophic losses. This is especially important if you are trading short term but have not yet developed the discipline to follow your stop and exit rules.

Let me first assure readers that this will not be the usual fundamental "learn how to read and analyze a company's balance sheet" chapter. The objective is to learn how to extract and interpret the right bits of information. As you will find out later in this chapter, only three parameters are required to identify stocks with solid fundamentals that when combined with technical strength will result in explosive profits for months to come.

I have noticed that many beginning traders seem to have some sort of fundamental requirement a stock must meet before they buy it even for a short term trade of few weeks.

This stems mostly from the fact that many of these traders started as long term investors. Having realized that the dynamics of the markets have changed with the fast flow of information, they decided to branch into trading. Unfortunately many of these requirements have no bearing on the intermediate price movement of the stock.

The key to moving from a struggling to a successful trader

is to “perceive” that a system that can deliver profits is a “sure winner”. To accomplish this task with the traders I coached, I attempted to replace their “sure winner” myths such as P/E with a more solid fundamentally based criteria that can deliver consistent profits. Of course no system including this one is fool proof, but based on my trading experience I have achieved a success rate of 80 percent provided the system’s criteria are followed closely.

By shifting the traders convictions from the fundamental criteria they were using before to a more consistently profitable system that they perceive as a sure winner; significant improvements in trading profitability resulted.

In essence, the trading style that fit the personality of these traders required some sort of fundamental criteria be incorporated. The problem was the conditions they used and perceived as sure winners were not so, but they had no problem pulling the trigger due to their false perception. The solution rather than to try convincing them that fundamentals have no place in trading, was to add proven fundamental criteria that they now “perceive” as sure winners. When the trigger is now pulled most trades are profitable since the system is a consistently profitable system..

Before presenting the parameters I use to evaluate the fundamentals of a company, I will discuss the most common criteria that average investors look at when considering a stock.

It is important to point out the drawbacks of some of these criteria and why the stock often does not behave as expected. Remember my statement before about the “perception” of a sure winner being the reason why traders cling to using such criteria. Thus, if a trader is to be convinced to switch to other evaluation parameters, they will have to see the weaknesses in the ones they are using right now and why they are not the road map to selecting sure winners.

Even though some of the fundamental criteria often used seem logical in that they actually do contribute to a company’s earnings, they are limited in scope and time. It is thus critical to use different time frames when evaluating the fundamentals of a company. This will be clarified when the method I use is pre-



sented later in this chapter.

### **The myth of popular fundamental criteria**

Price to Earning ratios: It is not surprising that investors gravitate towards P/E ratios. In regular daily life everyone is looking for a bargain and low P/E stocks present what looks like a great one. In addition P/E ratios seem deceptively logical; since stocks rise based on earnings power, a low P/E stock has a lot of upside while a high P/E stock has little upside potential since all the good news is already factored in.

The main reason P/E ratio is not a good gauge of a growth stock's future performance is the simple rule of supply and demand. There is a limited number (usually a couple of dozen) of leading stocks with revolutionary products that can change the way we work and live, yet there are thousands of funds with trillions of dollars looking to invest in such stocks. The result is that these stocks are bid up to stratospheric prices in a running bull market.

When a company is growing rapidly, it is common for investors to underestimate future growth. This results in positive earnings surprises that propel the stock even higher due to the perception of much higher earnings in the future. This usually continues until a hint of a slowdown becomes apparent at which time the stock comes crashing down. For this reason I consider such stocks as intermediate time frame trading stocks held for few months to a year and not a long term type investment. As I will show later with examples, struggling short term traders have found phenomenal success in my trading group with such stocks since they fit their trading personality better; a longer time frame with fundamentals entering into the picture.

Needless to say, if you have used P/E to buy growth stocks you probably have missed the biggest winners of late such as: CRM, NFLX, VMW, APKT, ARUN, TSL, ISLN, FFIV and others.

### **Fooled by good earnings**

Many traders look for increased quarterly earnings to buy a stock. They often see the company beat expectations and buy

the stock based on that, however, the stock goes the other way. The reason for this is that some earnings come from unsustainable sources. The most common are:

Earnings increase from cost cutting: Some investors look to cost cutting as a criteria for buying a stock since this boosts the company's quarterly earnings. While reducing labor costs and making factories more efficient is likely to result in keeping the company competitive with its rivals, increases in earnings from cost cutting are not likely to be sustainable. One can produce a significant earnings increase one quarter through cost cutting, but to sustain that through coming quarters even deeper percentage cuts will have to be made.

It is hence important to look at a company's performance over a period of time. I will demonstrate how you can do that later in this chapter by performing few simple calculations.

Earnings increase from capital spending reductions: If a company reduces capital spending, it is in effect cutting investments in its product and services. This will result in lowering expenses and improvement in cash flow and hence an increase in earnings. Unfortunately this kind of cost cutting causes the company to fall behind in competitiveness over a period of few quarters. This is again why it is necessary to know where increased earnings are coming from to avoid nasty surprises when buying a stock.

Earnings increase from financial restructuring: Income can also be boosted by paying off debt and thus eliminating interest expense but this is also unsustainable over time. Actually, the only way a company can increase its income by restructuring is by shrinking through selling or spinning off slow growth divisions to reduce debt and concentrate on high growth areas of the business.

Again this is a one time improvement that is hard to sustain year over year.

Earnings increase through tax rate reductions: Change in tax laws can lower rates for a specific industry giving the company a one time tax boost. Obviously, this is a nonrecurring benefit and often tax breaks are reversed when congress looks for tax

loopholes to help shrink growing deficits.

In essence, there are many ways, some of which have been presented in the section above, by which a company can boost earnings temporarily but are not sustainable over time. A trader may buy a stock based on what looks like a great earnings report just to be disappointed. The reason is usually “poor earnings quality” which essentially refers to one time boost in earnings using methods similar to the above.

The question to be asked then is: Is there a way whereby a company’s fundamental picture can be evaluated quickly for a trade entry without going through the balance sheet with a fine tooth comb.

In the next section, I will present the RESHE system based on a combination of Retained Earnings and Stockholders Equity that can accomplish this goal. Using this system the trader can pick fundamentally strong stocks quickly by performing few simple calculations.

In latter sections of this chapter, I will show how combining a stock’s fundamentals using the RESHE filtering system with the right chart patterns can significantly boost intermediate term profits.

### **The RESHE Stock Filtering System**

The RESHE stock filtering system is based on two parameters: Retained earnings and Stockholders equity that are reported on the company’s balance sheet.

Before presenting the details of this system, it is important for the reader to understand the significance of these two parameters, namely retained earnings and stockholders equity and their relationship.

Retained earnings: Retained earnings are earnings that are not paid out in dividends but are retained by the company to re-invest in its core business or to repay debt. It is recorded under stockholders equity on the balance sheet.

One important feature of the retained earnings is that they are cumulative in nature. They are actually the sum of a company’s profits after dividends since inception. They are represented

by the formula below:

**Retained Earnings(RE) = beginning RE + Net income – Dividends.**

For example, consider company ABC that has been in business for four years. It reported net income as follows:

Year 1: \$7000

Year 2: \$8000

Year 3: -\$5000

Year 4: -\$2000

If company ABC paid zero dividends then its retained earnings is the sum total of income since inception, which in this case is \$8000. In the following year company ABC's retained earnings will change by each year's net income after adjustments for dividends.

Based on this explanation it is clear that retained earnings in a specific period (quarter or year) are a reflection of the company's performance up to and including that quarter or year. In addition an increase or decrease in retained earnings from one period to the next is a reflection of the company's performance trend. A decrease in retained earnings may reflect a slowdown in growth while an increase can reflect an acceleration in growth.

### **Shareholders Equity**

This is the figure in the balance sheet that represents the difference between assets and liabilities. Assets include paid in capital as well as retained earnings. Shareholders equity is represented as follows:

**Shareholders equity =: Total Assets – Total liabilities**

**Where Assets = Paid in capital + retained earnings.**

When assets are greater than liabilities shareholders have positive equity and the company has positive book value. On the other hand when liabilities exceed total assets then shareholders have negative equity and the company has a negative book value.

Notice that company assets include retained earnings and

as such the shareholders equity must increase by an amount at least equal to retained earnings unless part of these earnings have been used to satisfy certain liabilities.

This observation can be used as a metric to evaluate potential company growth. As we mentioned retained earnings are reinvested in a company product or service. If the increase in retained earnings from one quarter to the next is not totally reflected in stockholders equity, this is an indication that they were used for other purposes such as debt payment. This leaves less to re-invest in the company's product or service making it less competitive.

### **RESHE Filtering criteria**

I believe that by now you probably have a general idea of what the filtering criteria of this stock picking system may be. They are based on the following two requirements:

(1) Increase in retained earnings from quarter to quarter for the past two quarters and year to year for the past two years.

(2) The dollar amount of retained earnings must be totally reflected in the stockholders equity for the past two quarters and for the most recent year.

Based on my three years of experience using this system, I have noticed that stocks that performed well had a minimum of 8 percent sequential retained earnings increase quarter to quarter and 20 percent increase year to year.

More specific requirements can thus be summarized as follows:

(1) An increase in retained earnings of at least 20 percent year to year for the past two years.

(2) An increase in retained earnings of at least 8 percent sequentially for the most recent two quarters, the present one included. Remember that we are entering a trade after earnings are reported, so the two quarters of interest include the current quarter.

(3) The dollar amount of retained earnings increase for

at least the latest year must be totally reflected in the increase in stockholders equity.

(4) The dollar amount of retained earnings increase in the last two quarters must be totally reflected in the increase in stockholders equity.

It is important to understand that yearly reports override quarterly reports. For example if you wanted to consider a stock for March 2009, and you find that the total increase in retained earnings between 2007 and 2008 is not reflected in the stock holders equity increase, the trade should not be taken even if quarterly conditions are satisfied.

In the next section I will give specific real market stock examples on how to utilize this system. At this point, however, it is worthwhile giving a hypothetical example to be certain that this system is clear to you.

Let us assume that you are considering company ABC for an intermediate trade after first quarter 2010 earnings are out on April 15, 2010.

The first step is to check if the company meets annual earnings requirements, they are:

$$[(\text{REY } 2008 - \text{REY } 2007) / (\text{REY } 2007)] 100 \geq 20 \text{ and} \\ [(\text{REY } 2009 - \text{REY } 2008) / (\text{REY } 2008)] 100 \geq 20$$

This requires a sequential increase in yearly retained earnings (REY) of at least 20 percent for the past two years.

The next annual requirement is that the dollar amount of the retained earnings increase in at least the last year is totally reflected in stockholders equity. Or

$$\text{SHEY } 2009 - \text{SHEY } 2008 \geq \text{REY } 2009 - \text{REY } 2008$$

As can be clearly seen the increase in annual stockholders equity (SHEY) in the last year is equal or higher than the retained earnings.

If the Annual criteria are satisfied, the quarterly criteria can then be checked out after earnings are out on April 15, 2010.

$$[(\text{REQ } (1,2010) - \text{REQ } (4,2009)) / (\text{REQ } (4,2009))] 100 \geq 8 \text{ and} \\ [(\text{REQ } (4,2009) - \text{REQ } (3,2009)) / (\text{REQ } (3,2009))] 100 \geq 8$$

Where REQ (i ,n) = Quarterly retained earnings for quarter i of year n.

This satisfies the requirement that retained earnings must increase by at least 8 percent sequentially in the last two quarters. At this point we will check if the increase in retained earnings is totally reflected in increase in stockholders equity for the last two quarters as follows:

$SHEQ(1,2010) - SHEQ(4,2009) \geq REQ(1,2010) - REQ(4,2009)$   
and:

$SHEQ(4,2009) - SHEQ(3,2009) \geq REQ(4,2009) - REQ(3,2009)$   
Where  $SHEQ(i,n)$  = Stockholders equity in quarter i of year n.

These criteria will be clearer when applied to the actual examples that follow. These examples are actual trades made in one of the trade groups I run in the area. This group specializes in Techno fundamental intermediate term trading of few months to one year duration, and was formed from struggling traders in my short term trading group. This was in effect an experiment to find out whether changing the type of trading to fit a trader's personality will lead to better success. The results as you will see were quite remarkable.

The ideal way to implement the fundamental filter discussed in this section is to scan for stocks with annual retained earnings increase of at least 20% and quarterly retained earnings increase of at least 8% in the past two periods. Check then visually whether the total dollar increase in retained earnings is reflected in stockholders equity.

### **Example 1: Acme Packet (APKT)**

I have selected this example to illustrate several fundamental aspects of this filtering system, as well as some of the technical chart setups that will be discussed later in this chapter.

This stock was selected by our scanning system on several occasions. For the purpose of illustration we will use the first quarter 2010 earnings date since it fits exactly into the general example formulas we used. The annual balance sheet for APKT is provided on page 296.

(1) The first step is to check whether the stock shows at least a 20 percent increase in retained earnings each year for the past two years. Using the general formulas

# Acme Packet, Inc. (APKT)

Source: Yahoo Finance

## Balance Sheet

View: Annual Data | Quarterly Data

All numbers in thousands

Period Ending	Dec 31, 2009	Dec 31, 2008	Dec 31, 2007
<b>Assets</b>			
<b>Current Assets</b>			
Cash And Cash Equivalents	90,471	125,723	136,420
Short Term Investments	39,990	-	-
Net Receivables	27,171	27,425	31,344
Inventory	4,372	7,006	5,784
Other Current Assets	6,110	1,362	2,095
<b>Total Current Assets</b>	<b>168,114</b>	<b>161,518</b>	<b>175,643</b>
Long Term Investments	44,526	-	-
Property Plant and Equipment	6,437	5,485	7,343
Goodwill	-	-	-
Intangible Assets	11,228	-	-
Accumulated Amortization	-	-	-
Other Assets	799	467	347
Deferred Long Term Asset Charges	15,622	6,540	3,242
<b>Total Assets</b>	<b>248,726</b>	<b>174,010</b>	<b>186,675</b>
<b>Liabilities</b>			
<b>Current Liabilities</b>			
Accounts Payable	13,156	10,229	13,169
Short/Current Long Term Debt	-	-	-
Other Current Liabilities	31,506	15,283	9,974
<b>Total Current Liabilities</b>	<b>44,662</b>	<b>26,512</b>	<b>23,143</b>
Long Term Debt	-	-	-
Other Liabilities	-	-	-
Deferred Long Term Liability Charges	1,841	1,687	265
Minority Interest	-	-	-
Negative Goodwill	-	-	-
<b>Total Liabilities</b>	<b>46,503</b>	<b>27,199</b>	<b>23,408</b>
<b>Stockholders' Equity</b>			
Misc Stocks Options Warrants	-	-	-
Redeemable Preferred Stock	-	-	-
Preferred Stock	-	-	-
Common Stock	65	61	60
Retained Earnings	48,811	31,705	20,133
Treasury Stock	(37,522)	(37,522)	-
Capital Surplus	188,971	152,567	142,974
Other Stockholder Equity	(2)	-	-
<b>Total Stockholder Equity</b>	<b>200,223</b>	<b>146,811</b>	<b>163,167</b>
<b>Net Tangible Assets</b>	<b>\$188,995</b>	<b>\$146,811</b>	<b>\$163,167</b>



above:

$$[(\text{REY } 2009 - \text{REY } 2008) / (\text{REY } 2008)] 100 \geq 20$$

$$[(48,811 - 31,705) / (31,705)] 100 = (17,106 / 31,705) 100 = 53\%$$

and

$$[(\text{REY } 2008 - \text{REY } 2007) / (\text{REY } 2007)] 100 \geq 20$$

$$[(31,705 - 20,133) / (20,133)] 100 = (11,572 / 20,133) 100 = 57\%$$

Thus the stock meets the annual retained earnings criteria.

(2) We now check whether the dollar amount of retained earnings in the most recent year are totally reflected in the stockholders equity for that year using the requirement that:

$$\text{SHEY } 2009 - \text{SHEY } 2008 \geq \text{REY } 2009 - \text{REY } 2008$$

$$200,223 - 146,811 \geq 48,811 - 31,705$$

$$53,411 \geq 17,106, \text{ thus satisfying this condition.}$$

Since the annual requirements are all satisfied we will now check the Quarterly requirements. The quarterly balance sheet for APKT is on page 298.

(3) The first quarterly requirement is that retained earnings should increase by at least 8% sequentially in the last two quarters. Remember that March reflects the earnings in the first quarter of 2010. Again using the formulas in the general section:

$$[(\text{REQ } (1,2010) - \text{REQ } (4,2009)) / (\text{REQ } (4,2009))] 100 \geq 8$$

$$[57,144 - 48,811] / (48,811) 100 = (8333 / 48,811) = 17\%$$

and

$$[(\text{REQ } (4,2009) - \text{REQ } (3,2009)) / (\text{REQ } (3,2009))] 100 \geq 8$$

$$[(48,811 - 39,736) / (39,736)] 100 = (9075 / 39,736) = 23\%$$

So the increase in earnings is at least 8 percent for the most recent two quarters satisfying this condition.

(4) Our last requirement is that the dollar amount increase in retained earnings for both quarters is totally reflected in the corresponding stockholders equity. We will thus use the conditions listed in the general example as follows:

# Acme Packet, Inc. (APKT)

Source: Yahoo Finance

## Balance Sheet

Get Balance Sheet for:

GO

View: [Annual Data](#) | [Quarterly Data](#)

All numbers in thousands

Period Ending	Jun 30, 2010	Mar 31, 2010	Dec 31, 2009	Sep 30, 2009
<b>Assets</b>				
<b>Current Assets</b>				
Cash And Cash Equivalents	90,533	80,570	90,471	158,801
Short Term Investments	126,796	108,000	39,980	-
Net Receivables	29,065	31,107	27,171	27,278
Inventory	5,855	5,178	4,372	8,303
Other Current Assets	10,404	6,293	6,110	4,191
<b>Total Current Assets</b>	<b>262,643</b>	<b>231,148</b>	<b>168,114</b>	<b>198,573</b>
Long Term Investments	-	-	44,526	-
Property Plant and Equipment	12,812	7,796	6,437	6,847
Goodwill	-	-	-	-
Intangible Assets	10,358	10,793	11,228	10,557
Accumulated Amortization	-	-	-	-
Other Assets	783	793	799	215
Deferred Long Term Asset Charges	15,622	15,622	15,622	10,578
<b>Total Assets</b>	<b>302,218</b>	<b>266,140</b>	<b>246,726</b>	<b>226,568</b>
<b>Liabilities</b>				
<b>Current Liabilities</b>				
Accounts Payable	14,542	11,949	13,156	14,869
Short/Current Long Term Debt	-	-	-	-
Other Current Liabilities	31,762	31,737	31,506	22,157
<b>Total Current Liabilities</b>	<b>46,304</b>	<b>43,686</b>	<b>44,662</b>	<b>36,836</b>
Long Term Debt	-	-	-	-
Other Liabilities	-	-	-	-
Deferred Long Term Liability Charges	4,023	1,622	1,841	3,259
Minority Interest	-	-	-	-
Negative Goodwill	-	-	-	-
<b>Total Liabilities</b>	<b>50,327</b>	<b>45,308</b>	<b>46,503</b>	<b>40,095</b>
<b>Stockholders' Equity</b>				
Misc Stocks Options Warrants	-	-	-	-
Redeemable Preferred Stock	-	-	-	-
Preferred Stock	-	-	-	-
Common Stock	59	67	65	65
Retained Earnings	66,873	57,144	48,811	39,736
Treasury Stock	(37,522)	(37,522)	(37,522)	(37,522)
Capital Surplus	222,434	201,157	188,871	184,194
Other Stockholder Equity	37	(14)	(2)	-
<b>Total Stockholder Equity</b>	<b>251,891</b>	<b>220,832</b>	<b>200,223</b>	<b>186,473</b>
<b>Net Tangible Assets</b>	<b>\$241,533</b>	<b>\$210,039</b>	<b>\$188,895</b>	<b>\$175,916</b>

$SHEQ(1,2010) - SHEQ(4,2009) \geq REQ(1,2010) - REQ(4,2009)$   
 $220,832 - 200,223 \geq 57,144 - 48,811$  or  $20,609 > 8333$   
 and:  
 $SHEQ(4,2009) - SHEQ(3,2009) \geq REQ(4,2009) - REQ(3,2009)$   
 $200,223 - 186,473 \geq 48,811 - 39,736$  or  $13,250 > 9075$

It is thus seen that the increase in retained earnings during the first quarter of 2010 and the fourth quarter of 2009 are at least 8 percent and the total dollar amount is reflected in the Stockholders equity for both quarters.

In this case APKT meets all the fundamental criteria for the first quarter of 2010 to be considered as an intermediate trade. The next step is to evaluate the technical criteria to be discussed later in this chapter.

For the purpose of illustration, let us assume that our scanning program picked APKT as a candidate in the first quarter of 2008. If we check the annual balance sheet on page 296, we can see that retained earnings increased from 20,133 to 30,705 between 2007 and 2008 which is more than 20 percent. On the other hand the stockholders equity dropped from 163,167 in 2007 to 146,811 in 2008 indicating that the increase in retained earnings was not reflected by at least an equal dollar amount increase in stockholders equity. The stock does not pass our filter and thus cannot be considered a potential trade candidate. Even though the price was at \$10 in March 2008, which seems quite low, the stock fell to around \$2.5 by the end of the year before recovering. Not many traders will be able to withstand more than 75 percent drop and keep holding onto the stock for seven more months.

What if we did not notice the stock until the second quarter of 2010. From earlier calculations we already know that the stock passes the annual criteria as well as quarterly criteria for the first quarter of 2010. What remains is to confirm that the stock passes the quarterly criteria for the latest quarter which is the second quarter of 2010. Using the data in the quarterly balance sheet on page 298.

$[(REQ(2,2010) - REQ(1,2010)) / (REQ(1,2010))] 100 \geq 8$

$$[(66,873 - 57,144)/(57,144)]100 = 17\%$$

and

$$\begin{aligned} \text{SHEQ}(2,2010) - \text{SHEQ}(1,2010) &\geq \text{REQ}(2,2010) - \text{REQ}(1,2010) \\ 251,891 - 220,832 &\geq 66,873 - 57,144 \\ \text{or } 31,059 &> 9,729 \end{aligned}$$

This implies that both conditions are satisfied and the stock is a candidate based on the fundamental filter of this system. By June 2010, the stock has already made a huge run from the consolidation pattern, so you are likely to wonder whether it is too late to enter. The decision to enter or not will have to be made on technical merits taking two criteria into account: (1) The nature of the post earning chart pattern that appears. (2) Did the chart flash a sell signal prior to earnings being announced.

The technical aspects of this system will be the focus of the rest of this chapter.

## **Bullish earnings chart patterns**

Most profitable and experienced traders will tell you that they do not like to take a position right before, or hold a short term trade after earnings. This is not surprising since there is a high probability of failure of any technically based trading system or chart pattern, depending on the market's reaction to earnings.

Our purpose in this system is to gauge the stock's technical reaction after earnings are released, to determine whether a multi month advance is in the cards.

Once you have used the scan to obtain a list of stocks that pass the fundamental criteria as determined by retained earnings and stock holders equity parameters discussed in the previous section; the next step is to zero in on those that form chart patterns signaling continued strong price advance. These types of patterns are usually formed in the few days before and after earnings release. Certain patterns are straightforward while others form as a result of those in the know trying to shake out retail investors to purchase the stock at lower prices.

Although there are several patterns that can form around earnings time, in my three years of leading a group trading this system, I have run across three patterns that occur frequently.

The significance of these patterns is that they indicate that a stock meeting the fundamental criteria, is likely to rally for a period of few months. To keep this chapter short and to allow readers to focus on the most profitable chart setups, I will only discuss these chart patterns. They are as follows:

Type 1: A post earnings advance or gap up that breaks above strong resistance. It is preferable that this resistance is defined by a multi peak upper boundary of a consolidation pattern.

A consolidation pattern for a few months is an indication of a period of comfort with the stock's current price level. This is an implication that most investors believe that the range within which the stock is trading is a good reflection of the company's value. A break above the top of a consolidation pattern is a signal that investors perception of the company's future growth is much more positive. In such cases, a stock that passes the fundamental criteria, and exhibits this chart pattern around earnings time goes on to new highs.

Type 2: Pre earnings shakeout followed by a reversal to break above the shakeout day's high.

Institutions and market makers realize that many retail investors watch the behavior of their holdings prior to earnings time. If the stock drops few days before earnings, they usually interpret this as some bad news has leaked and the stock is likely to tank after earnings, so they sell their shares. What happens after earnings is usually the exact opposite and the stock puts in a strong move. I have seen this trick occur with leading stocks quite a number of times.

Remember that institutions want to own market leading stocks at the lowest prices possible. Contrary to what most think institutions are usually late in taking positions in market leading stocks. For that reason they orchestrate as market makers, or through electronic communication networks (ECNs), shakeouts on the way up to accumulate shares at favorable prices.

Some of my trade group members questioned the logic of saying that institutions are late to the party since usually the price

continues higher after they buy a stock. The reason for this is once large amounts of money are invested in a stock, it is a self fulfilling prophecy, the stock moves up leading to other institutions putting more money and so on. As a retail investor, you should see this as a potential last leg of the advance and look for potential exit opportunities based on clear sell signals.

Type 3: Post earnings shakeout resulting in a down gap on heavy volume with an immediate reversal and move to the high of the down gap within few days.

I have also seen this pattern materialize quite often. A fundamentally strong stock reports what seems to be great earnings just to see the price gap down the day after. Most retail investors panic and sell, just to see the stock close the gap in few days and move to new highs.

This phenomenon is a result of internet commentary by market gurus and financial websites such as: the street.com, Motley fool, Seeking alpha, Reuters, Barron's etc. It is not surprising to see conflicting titles after earnings such as "Company reports record revenues and earnings" or "Revenues below expectations and earnings below last year". While both can be true one has a positive and the other a negative spin. Many investors have short attention spans reading just the titles and take action immediately selling the next day. In doing that they have overlooked the fact that these sites have their own agendas.

When everyone has had a chance to examine the details in a day or two, cool heads prevail and the stock closes the gap and moves higher.

Our strategy using the system described in this chapter is to first scan stocks meeting the fundamental criteria defined by the retained earnings and stockholders equity parameters. This will narrow the number of candidate stocks significantly, often to less than fifty. The next step is to wait until earnings are reported, look for one of the three described chart patterns and take a position at the appropriate point. We usually hold the position for several months until a sell signal appears on the chart. Since we are taking a position after earnings are released, we are immune

to any pre or post earnings shakeout or any other games market makers may play at earnings time.

Although these chart patterns are self explanatory, I will provide an example on each one taken from actual trades done in one of my trade groups. This will help the reader visualize how these occur when trading live in the market.

### **Example 2: Acme Packet (APKT). Technical Breakout**

The chart on page 305 shows the behavior of the stock near earnings reporting date of February 2, 2010, however, before making a decision we will have to first verify that the stock meets the fundamental conditions described earlier in this chapter.

We already know from previous calculations in example 1 page 295 of this chapter that the annual retained earnings and stockholders equity requirements are met. We have also confirmed that the quarterly requirements for the September 2009 to December 2009 quarter were also satisfied. However calculations for the quarter between June 2009 and September 2009 were not performed.

We first need to confirm that the quarter ending September 2009 shows at least 8 percent increase in retained earnings that are totally reflected in stockholders equity.

The data retained earnings and stock holders equity data is as follows (in thousands). Source: Yahoo Finance

	<u>June 30, 2009</u>	<u>September 30,2009</u>
Retained Earnings	36,200	39,736
Stockholders equity	180,000	186,473

We will first check for the 8 percent requirement in retained earnings:

$$[(39,376 - 36200)/(36,200)] 100 = ( 3536/36200) 100 = 9.8\%$$

Since this is greater than 8 percent the condition is satisfied.

We will then check whether the dollar increase in retained earnings is reflected in stockholders equity:

$$186,473 - 180,000 \geq 39,736 - 36,200$$

6473 >= 3536.

This condition is thus also satisfied for the quarter ending September 2009. Hence all the fundamental requirements are satisfied for APKT after earnings are reported on February 2, 2010. The next step is to look at the chart pattern formation during that period.

By studying the chart on page 305, it is clear that APKT has been confined in a trading range between the beginning of December 2009 and February 2010. It is interesting to note that on February 2, 2010, the day when earnings were scheduled to be reported after the close, the stock finished near the bottom of the trading range. On February 3, 2010 after earnings were reported, the stock gapped up on heavy volume breaking above the top of the consolidation boundary as seen on the chart. This is an indication that investors perception of future growth has changed to a much more optimistic view signaling higher prices ahead.

Our entry point will be near the mid point of the gap day. Remember that based on the Chaikin money flow (CMF), if the stock is under accumulation, it is unlikely that a drop below the midpoint of the day's trading range will occur. We will thus enter on February 4 at around \$13. The stock moves to around \$18 within a couple of months and proceeds to go much higher.

### **Example 3: Acme Packet (APKT) pre earnings shakeout**

The chart on page 305 also illustrates a pre earnings shakeout where APKT dropped from around \$12.00 to \$10.5 or 12.5 percent in 5 trading days before earnings were reported. It is very likely that during the drop from \$12 to \$10.5 many holders of the stock sold thinking that a nasty earnings surprise will come out, and the stock is likely to drop, but the exact opposite took place. Notice that between mid December of 2009 and just prior to earnings, multiple shakeouts occurred some of which were at above average volume. These were orchestrated to instill fear in investors and shake them out of their shares so those in the know can accumulate shares at favorable prices. In fact I have seen these kind of shakeouts occur often with high momentum leading



**APKT (Acme Packet Inc.) Nasdaq GM**

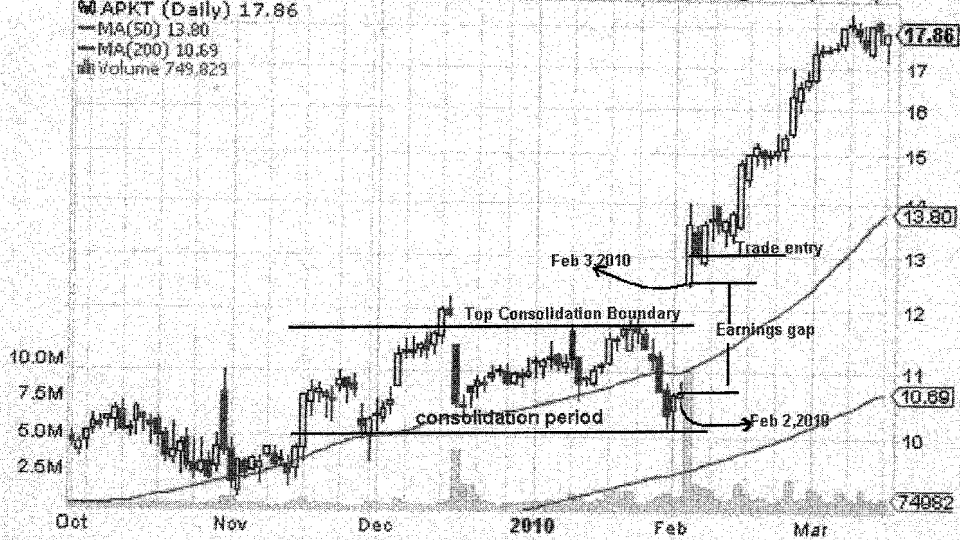
15-Mar-2010 **Op** 17.82 **Hi** 17.87 **Lo** 17.17 **Cl** 17.86 **Vol** 749.8K **Chg** -0.12 (-0.67%)

**APKT (Daily)** 17.86

MA(50) 13.80

MA(200) 10.69

Volume 749,823



market stocks on no news. It is thus important to have an exit or sell strategy as I will discuss later in this chapter.

#### **Example 4: Acme Packet (APKT) post earnings shakeout**

The chart on page 307 shows the stock's behavior around earnings report date on July 29, 2010 after the close. We already know from the calculations in example 1 in this chapter that the stock meets all annual and quarterly fundamental requirements in relation to this earnings date to warrant consideration.

Our focus next is to decipher the type of chart pattern that formed in the few days before and after earnings time. Earnings came out on July 29, 2010 after the close, and the stock gapped down the next day, July 30, 2010 from above \$32 to almost \$28 eventually dropping intraday to near \$27 before recovering. Three trading days later the stock recovers to the down gap day's high of around \$30 indicating that there is a high probability the gap will be completely closed. Note that the label "gap closed" on the chart refers to the gap between the low of the down gap and the high of the gap down day. In situations like this a break above a down gap's day high after earnings is almost a guarantee of a total closing of the gap and this is what occurs in this case.

Our entry will be on a break of the high of the gap down day on Friday July 30 around \$30 marked "entry point" on the chart. The stock is now near \$40 at the time of writing this section early October for a profit of over 30 percent to this point.

I have used the same stock to illustrate the three different common earning time chart setups for two reasons (1) To avoid repeating the fundamental requirement calculations that are related to retained earnings and stockholders equity, since they are quite simple; and mainly (2) to illustrate how common these chart patterns are, to the extent they can be found in the same stock chart at different earnings report dates.

As with any trading system, this too is not always perfect and failure can occur. The fundamental criteria can be satisfied and the chart can manifest one of the three most bullish patterns at earnings time and the stock can still fail to behave as expected.



One way to avoid being caught in this kind of situation is to exercise caution when entering a trade in a stock that has already had a big run. Unfortunately, this is easier said than done since stocks that satisfy the criteria in this chapter tend to move further and longer than expected due to strong fundamentals and institutional participation.

The best way to minimize potential losses is, in addition to being cautious on entry, to adopt a well defined exit strategy by observing the guidelines listed below.

(1) Avoid taking a trade if the stock is far in its third leg of the advance. How do you know how far is too far? Compare the time of the advance that has already elapsed in the third leg, if it is equal to or longer than the second leg, it is better to avoid the trade. If the stock is beyond the third leg of the advance, a major correction is highly likely and as such these trades should not be taken. A first leg is defined as a run up from a low to a period of consolidation. Second and third legs usually run between two periods of consolidation or pullbacks.

(2) Place a stop after entering the trade, the location of which depends on the chart pattern that forms around earnings. Below are rules to follow when placing stops for the three types of pattern formations:

Type 1: Place a stop at or near the top of the consolidation range.

Since the stock broke above the high of the consolidation range after earnings, any pullback to within the range is an indication that the initial reaction to earnings may be temporary, and a sign that a sustained price advance is not likely.

Type 2: Place a stop near the initial pre earnings shakeout price or at the highest resistance price if broken.

On occasions, a shakeout is followed by a strong move usually in the form of a breakaway gap that moves the price above resistance. A close below resistance few days after it was broken, is a sign of aggressive distribution and a likely trend reversal as will be demonstrated in the example that will follow.

Type 3: Place a stop at the high of the shakeout or gap down bar.

A fall back below the high of the down gap day after a break above it, is an indication that the down trend is likely to re-assert itself.

If the stock has completed the second leg of the advance, then use the Convergence Divergence charts explained in my previous book “generate thousands in cash on your stocks before buying or selling them” to decide whether an entry is justified. You accomplish this by checking if a sell signal has been given using this system in the past month using daily CD value calculations.

For the convenience of those readers who do not own my previous book, I have included a section of the chapter that discusses CD charts in Appendix B.

Your objective is to look for signs of potential trouble as manifested by: (1) a negative divergence of the CD value and price. This is where a higher price peak corresponds to a lower CD value. (2) If the slope of the CD chart starts turning negative, which is usually a leading indicator, followed by a price trend reversal.

### **Example 5: Atheros Communications (ATHR)**

I have chosen this example to illustrate the importance of observing risk reduction and stop loss rules when using this system. As I mentioned before institutions are usually late in entering a leading stock, but they exit quickly at the first sign of trouble since they are very focused on keeping their profits. If an individual trader waits until the dust settles they are likely to face a significant loss especially with the kind of fundamentally and technically strong momentum type stocks traded in this chapter.

Remember that perception is the key, so even if the stock passes the fundamental criteria and the chart exhibits one of the three bullish patterns at earnings time, things can still go wrong. If for some reason institutions with big holdings perceive any future sign of slowdown in growth, no matter how small, they may decide to exit quickly. This should be no surprise since these stocks tend to move in their last leg on institutional money late to

the party.

In the case of ATHR the fall of the stock was attributed to potential revenue growth slowing from the PC sector. Unfortunately if a trader waited to find out the reason why the drop occurred, they would have lost 30 percent of their investment. This is why it is important to stick to the entry and exit guidelines discussed in the previous section.

Before examining the charts near first quarter 2010 earnings report around mid April; we will need to verify that the stock meets the Fundamental annual and quarterly requirements.

Annual data : in thousands (source : Yahoo Finance)

	<u>12/2007</u>	<u>12/2008</u>	<u>12/2009</u>
Retained Earnings	1,238	20,110	66,517
Stockholder equity	401,457	471,478	731,860

I will now perform the calculation in a similar manner to previous examples. If you cannot follow the calculation details please review the first part of this chapter.

Increase in retained earnings 2008 to 2009

$$[(66,517 - 20,110)/(20,110)] 100 = (46,407/20,110) 100 = 230\%$$

Increase between 2007 and 2008

$$[(20,110 - 1238)/(1238)] 100 = (18,872/1238) 100 = 1524 \%$$

Both results satisfy the 20% minimum annual increase requirements.

We will then check if the total dollar amount increase in retained earnings in the most recent year is reflected in the stockholders equity increase.

For 2008 to 2009:

$$731,800 - 471,478 \geq 66,517 - 20,110$$

$$260,332 \geq 46,407$$

Both conditions are satisfied and thus the annual fundamental requirements for this stock are satisfied.

It is worthwhile noting the phenomenal earnings acceleration and the fact that all those retained earnings, were reflected in stockholders equity. Actually our initial signal to enter the stock

was after the second quarter earning report of 2009 leading to a profit of over 250 percent.

In a similar manner we will now perform the quarterly calculations:

Quarterly data : in thousands (source : Yahoo Finance)

	<u>9/30/09</u>	<u>12/30/09</u>	<u>3/31/10</u>
Retained Earnings	50,884	66,517	86,256
Stockholder equity	544,443	731,860	786,661

Retained earnings increase between fourth quarter 2009 and first quarter 2010

$$[(86,256 - 66,517)/(66,517)] 100 = (19,739/66,517) 100 = 29.7\%$$

Between the third and fourth quarters of 2009

$$[(66,517 - 50,885)/(50,884)]100 = (15,633/50,884) 100 = 30.7\%$$

This indicates that the 8% minimum quarter to quarter earnings increase requirement is met.

We will now check if the dollar amount increase in quarterly retained earnings is reflected in the stockholders equity as follows:

For the change between the fourth quarter of 2009 and the first quarter of 2010:

$$786,661 - 731,860 > = 86,266 - 66,517$$

$$54,801 > = 19,749$$

and for the change between the third and fourth quarters of 2009

$$731,860 - 544,443 > = 66,517 - 50,884$$

$$187,417 > = 15,633$$

This indicates that both conditions are satisfied for quarterly earnings and hence ATHR is a potential trade candidate based on passing the fundamental criteria on both annual and quarterly basis. Our next step is thus to look at the chart and examine whether the stock is a good trade candidate near first quarter earnings report date of mid April 2010.

By examining the chart page 313, the stock moves lower in the three trading days prior to earnings announcement. This move appears to be a traditional shakeout taking the price from a high above \$41 to an intraday low around \$38, and a final close of \$39.5 the day of the earnings report.

The stock gaps up the day after earnings to above \$43, breaking above the \$41 resistance marked on the chart, and triggering an entry signal as indicated on the chart. Recall that the stock meets all the fundamental requirements in addition to exhibiting a type 2 bullish chart pattern at earnings time.

Unfortunately this happened to be one of the rare occasions when our trade went wrong and the stock reversed downward moving below the resistance point of \$41.5. If we followed the stop loss rules, we would have placed a stop just below the resistance high around \$41 thus limiting our loss to 5%.

We also could have avoided this loss by following the entry guidelines. If we check the chart page 314, we can clearly see that the stock has been in a strong uptrend for almost a year. Lately it has completed its third leg of the uptrend between points **3** and **4** on the chart, and has entered the fourth leg as of March 2010. Based on our entry guidelines, a stock that has completed its third leg of the advance should be considered a high risk trade and should be avoided.

For the sake of illustration, let us assume that the stock is in its second leg of a strong advance. One way to decide whether a trade entry is a low risk is to check whether there are any sell signals appearing on the chart during the advance. The best way to do this is using Convergence/Divergence charts or (C/D) charts discussed in chapter 14 of my previous book "Generate Thousands..." In case you do not own this book, I have included few pages of this chapter in Appendix B to help you follow the rest of this chapter.

Our goal is to look for a sell signal manifested as a divergence between the price chart and the CD chart. In other words a positive sloping section on the price chart corresponds to a negative sloping section of the CD chart.



# ATHR (Atheros Communications, Inc.) Nasdaq GS + BATS

28-May-2010 Op 35.73 Hi 35.73 Lo 33.33 Last 34.00 Vol 3.0M Chg -1.71 (-4.79%) ▼

ATHR (Daily) 34.00

MA(50) 37.86

MA(200) 32.50

Volume 2,955,108



**ATHR** (Atheros Communications, Inc.) Nasdaq GS + BATS

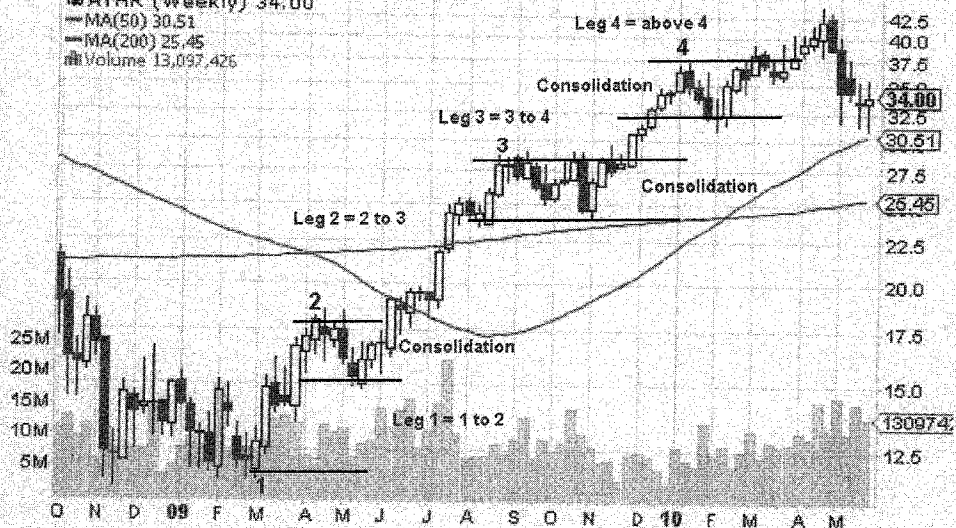
28-May-2010 Op 33.41 Hi 35.73 Lo 31.06 Last 34.00 Vol 13.1M Chg +0.42 (+1.25%) ▲

ATHR (Weekly) 34.00

MA(50) 30.51

MA(200) 25.45

Volume 13,097,426



In constructing the data, it is recommended that a minimum of twenty weekly data points be used. Preferably, the construction of the CD chart should start with weekly data beginning at the end of the most recent consolidation period. In the case of this example we started constructing the CD chart on November 2, 2009, near the end of the last consolidation period between August and November of 2009, and ended on April 19, 2010.

Below are closing prices for ATHR and the Nasdaq during the dates in the range of interest. The C/D value in the last column is a normalized number calculated for each data point.

<b>Date</b>	<b>ATHR (price \$)</b>	<b>Nasdaq</b>	<b>C/D value</b>
11/2/2009	26.7	2112	1.26
11/9/2009	28.3	2168	1.31
11/16/2009	27.6	2146	1.28
11/23/2009	28.1	2138	1.31
11/30/2009	30.6	2194	1.39
12/7/2009	31.0	2190	1.42
12/14/2009	32.7	2212	1.48
12/21/2009	34.2	2286	1.50
12/28/2009	34.2	2269	1.51
1/4/2010	36.4	2317	1.57
1/11/2010	34.9	2288	1.52
1/19/2010	33.7	2205	1.53
1/25/2010	32.1	2147	1.49
2/1/2010	32.1	2141	1.50
2/8/2010	35.1	2184	1.61
2/16/2010	36.8	2244	1.64
2/22/2010	35.9	2238	1.60
3/1/2010	38.2	2326	1.64
3/8/2010	37.2	2368	1.57
3/15/2010	36.2	2374	1.52
3/22/2010	36.7	2395	1.53
3/29/2010	38.1	2402	1.58

4/5/2010	39.4	2454	1.60
4/12/2010	40.3	2481	1.62
4/19/2010	39.8	2480	1.60

To plot the data we will now follow the stepwise procedure in Appendix B:

(1) Calculate C/D values = Stock closing price/Index value =  $26.7/2112 = 0.0126$

(2) Multiply this value by 100 to bring the number to between 1 and 10.

Normalized C/D value =  $0.0126 * 100 = 1.26$

(3) Plot this value on the Y axis of a Semi logarithmic graph paper.

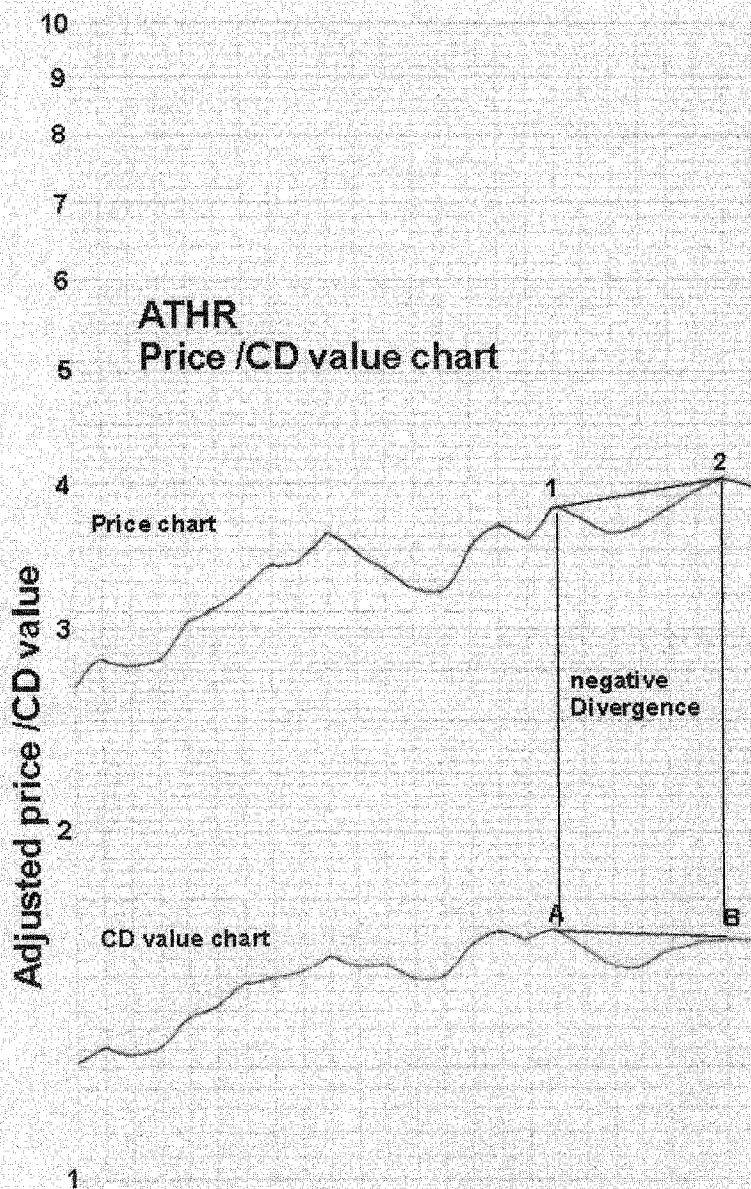
(4) The above 3 steps are repeated for each of the data points. The data points are then connected by a smoothed curve.

To get a better separation between price points, we will divide the price by 10 and plot the resulting numbers on the Y axis of the same semi log graph paper. Since the price range of ATHR is 28 to 40, the price points on the Y axis will fall between 2.8 and 4.0, while the CD values fall between 1 and 2. Normalizing the price by a division by 10 permits the use of a one cycle semi logarithmic chart paper with adequate separation between the two charts.

Remember that we are mainly interested in the price and C/D value relative trends. Thus using the actual or normalized price (price/10), will not affect the trend of the chart.

By examining the Price and C/D chart for ATHR page 317, it is evident that as the price trends higher between points **1** and **2**, the CD chart slopes slightly downward between points **A** and **B** indicating a negative divergence between price and C/D values. This is usually a signal that the price trend is about to reverse direction. In this example, the price reversal happened faster than usual, most likely due to earnings. Nevertheless this was a valuable warning to avoid this trade near earnings time.

This example clearly shows that by observing entry guidelines and setting stops as described in the previous section; the likelihood of getting into losing trades is significantly reduced.



11/02/2009 to 04/19/2010

## **Final Word**

If you are the kind of trader that feels that a company's fundamental picture must be a part of your trading system; the ideas in this chapter can help you accomplish this goal.

Using the concepts described here, you can quickly screen a stock for fundamental strength without spending hours to study the company's balance sheet in detail. Using a simple parameter measuring retained earnings appreciation and their effect on stockholders equity, you can efficiently determine if the company's fundamentals are strong enough to justify an intermediate time trade. Combining these fundamental criteria with specific chart patterns at earnings time can screen for stocks that can deliver strong profits over several months.

When applying this system, it is important that you only trade stocks that pass both the fundamental and technical criteria. Keep in mind that there are stocks that do not pass these requirements that can still deliver profits. However, as with every market system our goal is to increase the probability of success, and stocks that satisfy the conditions outlined in this chapter have a much better chance of delivering highly profitable trades.

It is also critical to observe entry and stop loss guidelines since these stocks are very strong and can rise on momentum from institutional money pouring in. Unfortunately, once institutions smell trouble, they bail out quickly, thus it is wise to use entry criteria based on the leg of the advance and C/D chart signals to alert you to potential trouble. In addition stops should also be used based on the type of chart pattern seen at earnings time.

## **APPENDIX A**

### **CANDLESTICK CHARTING**

IN PREVIOUS CHAPTERS we discussed how using chart patterns combined with technical indicators can pinpoint trend continuations and reversals. In some situations whereby a stock has dropped or moved up quickly and significantly, no discernible chart pattern can be identified. These are usually called V reversals; however, by the time this fact is recognized, the trader is too late to the party.

An effective way to predict such reversals is using candlestick charts in combination with selected technical indicators discussed previously. In this chapter a short review of the most common candlestick patterns will be given to illustrate how they can be used to pinpoint sudden reversals.

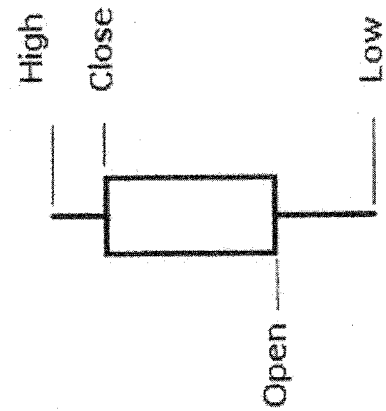
It is important to point out that this chapter presents only the basic patterns. If you are interested in learning Candlestick charting in depth, please refer to any of the books by Steve Nison.

#### **Basic Candlestick Features**

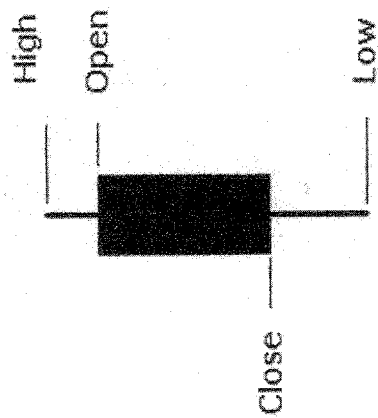
**Four price points are displayed:** Open, close, highest price and lowest price. These prices can cover any time period, be it five minutes, one day, one week or one month.

#### **Three types of patterns:**

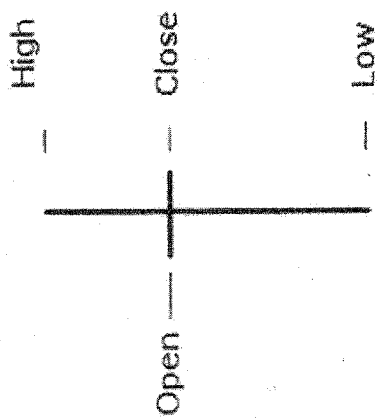
- (1) Closed Candlestick: This is usually displayed in black or red and is a candlestick where the closing price is below the opening price.



Open  
Candlesticks



Closed  
Candlesticks



Doji  
Candlesticks



- (2) **Open Candlestick:** This is usually displayed in white or green and is a candlestick where the closing price is above the opening price.
- (3) **Doji Candlestick:** This is where the opening price and closing price are very close or the same and usually appears in the form of a cross or a spinning top.

A schematic of the different kinds of candlesticks is shown on page 320.

### **Heavy Buying Pressures**

Periods of heavy buying pressures are displayed as a white marubozu candlestick. In this type of candlestick the open is located in the bottom 20% of the range while the closing price is located above the top 20% of the range.

A schematic of a white marubozu is shown on page 322.

### **Heavy Selling Pressures**

Periods of heavy selling are displayed as a black marubozu candlestick. In this type of candlestick the open is located above the 20% of the range while the closing price is located below the bottom 20% of the range.

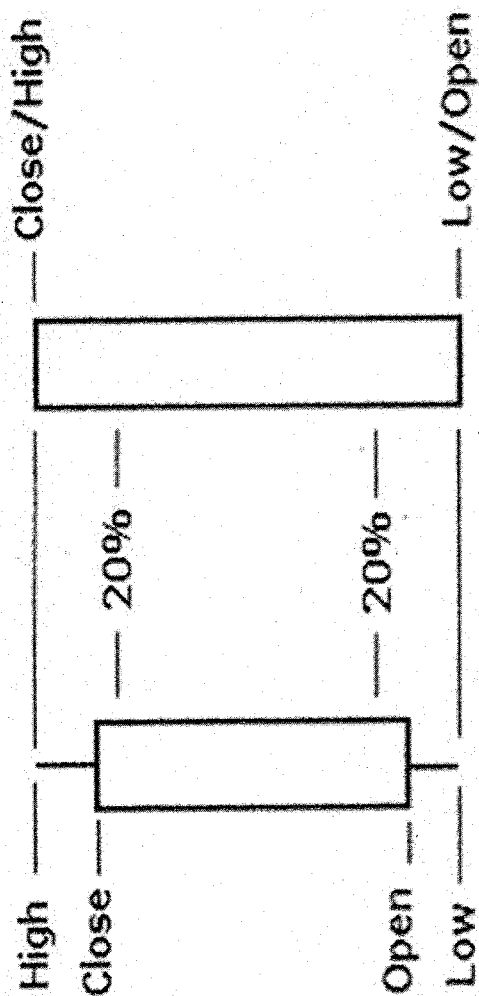
A schematic of the black marubozu is shown on page 323.

Both white and black marubozu candlesticks have special significance when appearing after an advance or a decline. A white marubozu appearing after a decline can signify an upward reversal while a black marubozu appearing after an advance can signify a downward reversal.

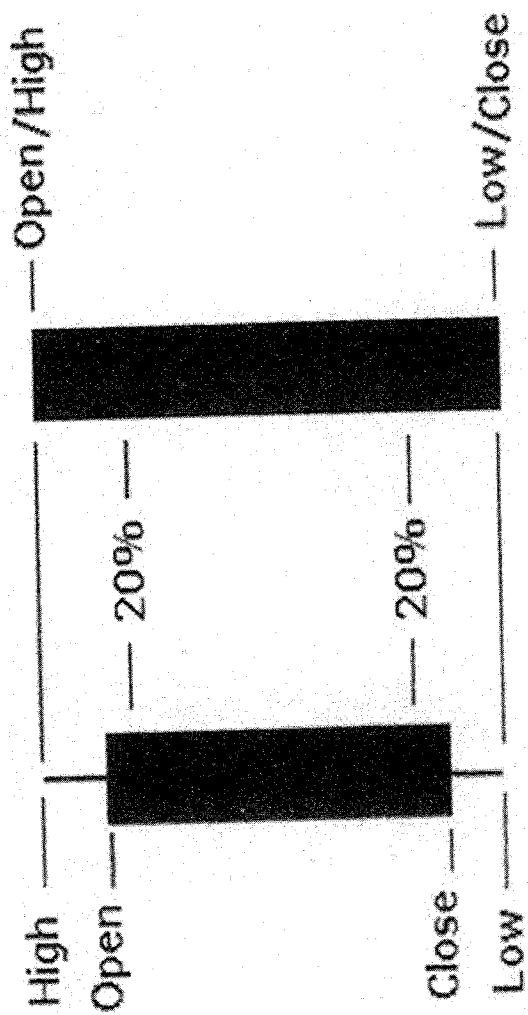
### **Indecision Periods**

Dojis and their cousins, the spinning tops, have special significance in candlestick patterns since they indicate periods of indecision. These candlesticks provide important signals, especially when they appear in combination with others.

There are several types of Doji patterns shown in the diagram



White Marubozu



Black Marubozu

on page 325. The perfect Doji is where the opening and closing price are the same and the upper and lower tails are of the same length. In this case neither buyers nor sellers won at the end of a trading period. Long-legged Dojis are similar to ideal Dojis except that the tails are a lot longer. In this case also neither buyers nor sellers had the upper hand at the end of the period.

Spinning tops or hi waves are candlesticks similar to dojis characterized by a small body, long upper shadow and long lower shadow. This shows a standoff between bulls and bears at the end of the trading period.

These patterns indicate a loss of momentum in an advance or decline and the possibility of a reversal. This is especially true where a significant move with little consolidation or retracement has taken place.

A more detailed discussion of the different kinds of Dojis will now be given.

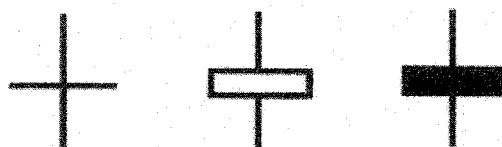
### **Hammer or Hanging Man**

Both patterns are a form of Doji with a long lower tail and a small or nonexistent upper tail. The closing price should be near the open with both at the upper end of the period's range, resulting in a small body at the top of a long tail forming a hammer.

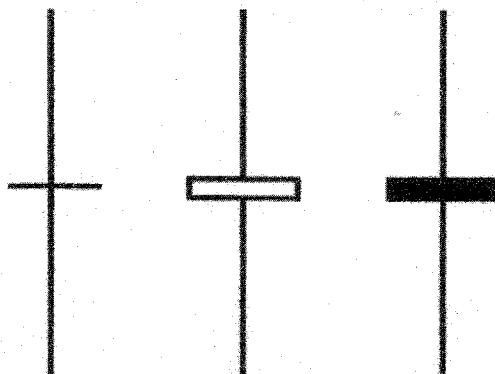
Whether the pattern is called a hammer or a hanging man is dependent on previous price movement. If this pattern is seen after a decline, it is called a hammer. This is a bullish signal indicating an upward reversal. This indicates that sellers were unable to keep the price at the lower end of the range even though they were present during the period. Buyers stepped in and moved the price to the top of the range at the end of the period.

If this pattern forms after an advance, it is called a hanging man. This is a bearish signal indicating a downtrend reversal. The long lower tail indicates that after a long advance sellers were present during the period, which may be a clue to possible exhaustion of the buyers.

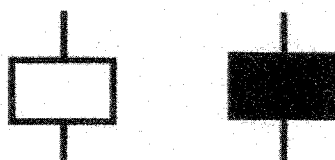
Both hammer and hanging man require a confirmation candle-



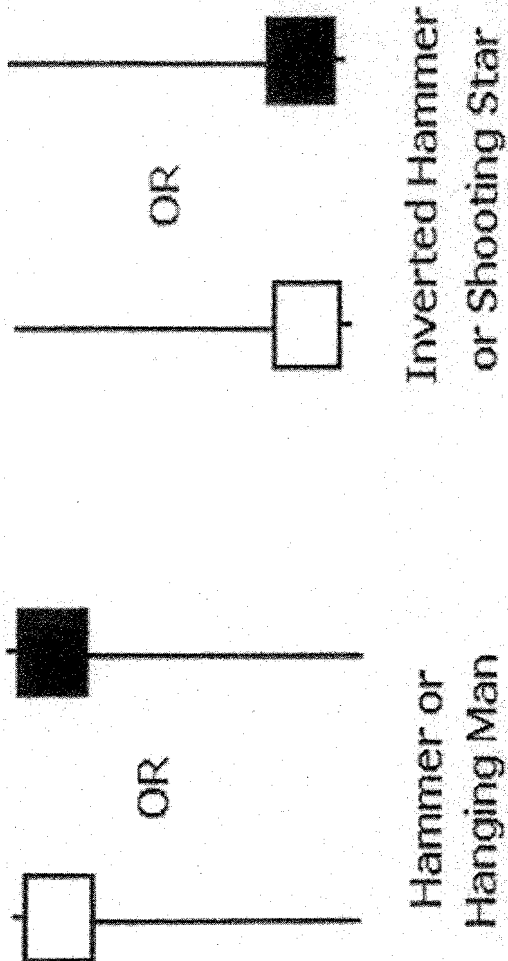
**DOJI**



**LONG LEGGED DOJI**



**SPINNING TOPS**



stick before taking action. This comes in the form of a white marubozu or a gap up in the case of a hammer. A black candlestick or a gap down is likely to appear in case of a hanging man.

The figure on page 326 shows a hammer or hanging man.

### **Shooting Star or Inverted Hammer**

These patterns are essentially a hammer or hanging man turned upside down. They have a long upper tail and a small or nonexistent lower tail. The closing price should be near the open with both at the lower end of the period's trading range, resulting in a small body at the bottom with a long tail forming an inverted hammer.

Whether the pattern is named hammer or shooting star depends on the previous price movement. If the pattern is seen after a decline, it is called an inverted hammer. This is a bullish signal indicating a possible reversal. The long upper tail indicates that even though sellers prevailed at the end of the period, buyers were present. This presence of buyers should raise concern in case of a short position.

If the pattern is seen after an advance, it is called a shooting star. This is considered a bearish indicator signaling a potential downward reversal. The long upper tails indicate that buyers were present but sellers prevailed at the end of the period. This should raise concern in the case of a long position since the presence of sellers after a long advance indicates that momentum may be weakening.

In a manner similar to the hammer or hanging man, these patterns require confirmation before taking action. This comes in the form of a white marubozu or a gap up in the case of an inverted hammer and a black marubozu or a gap down in the case of a shooting star.

The figure on page 326 shows an Inverted Hammer and Shooting Star.

### **Gravestone or Dragonfly Doji**

A gravestone Doji forms when the low, open and close are the same. This results in a long upper tail with an inverted T shape.



**Dragonfly  
Doji**



**Gravestone  
Doji**



This pattern implies that although buyers were present during the session, they were unable to hold the gains. Sellers were able to push the price at the end of the period to session lows. This pattern indicates a possible reversal especially after an uptrend. The long upper tail and the close near the low of the period indicate that buyers are exhausted and sellers have gained the upper hand.

A dragonfly Doji forms when the high, open and close are the same. This results in a long lower tail with a T shape.

This pattern indicates that although sellers were present during the session, they were unable to push the price lower. Buyers were able to push the price to the session high at the end of the trading period.

This pattern indicates a possible reversal especially after a downtrend. The long lower tail and the close near the high indicate that sellers are becoming exhausted and buyers are gaining the upper hand.

A schematic of the Dragonfly and Gravesone Dojis is shown on page 328.

## **Relative Candlestick Positions**

The position of a candlestick relative to the one before carries special significance. There are two main classes of positions: (1) Star position and (2) Harami position.

(1) **Star position.** A candlestick is in a star position when its open gaps away from the previous candlestick. The “star” candlestick usually has a small body relative to the previous candlestick. If the gap is up, the star candlestick usually follows a white marubozu, while if the gap is down it usually follows a black marubozu.

The gap indicates that momentum has carried over to the next day but was mostly absorbed resulting in the formation of a small body. In effect, there is a close balance between buying and selling pressures. There are different types of star positions that can indicate bullish or bearish reversals and will be discussed later in this chapter.

(2) **Harami position.** Harami, or inside range candlesticks, form when the Harami candlestick has a body within the range of the previous candlestick. The Harami candlestick has a body smaller than the one preceding it.

It is preferable but not required that the upper and lower tail of the Harami candlestick be within the body of the previous candlestick. There are several Harami patterns that can give bullish or bearish signals and will be discussed in the coming sections of this chapter.

Illustrations of the Harami and star positions are shown on page 331.

## **Candlestick Combinations**

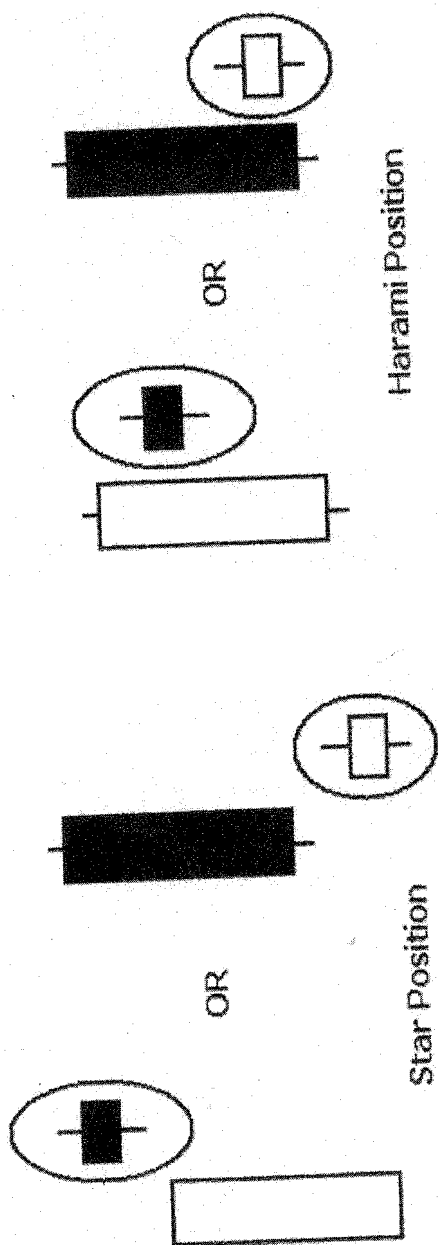
The most reliable predictions are made by using candlestick combination patterns. These patterns are in most cases made of three candlesticks: the current period's, the last period's and the next period's, also referred to as the confirming candlestick. It is important to become proficient at recognizing such combinations if you expect to successfully predict future price trends.

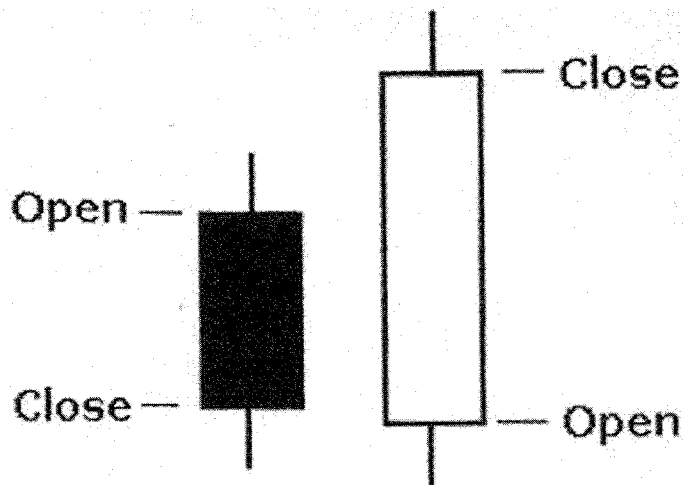
In this section I will discuss the most prominent candlestick combinations.

### **Bullish Engulfing Pattern**

This pattern usually occurs after a decline and indicates a possible reversal. The first candlestick is black indicating the continuation of the decline. The second candlestick is white with an open below the close of the first and a close above the first candlestick's open. The body of the second candlestick is hence larger than the first and completely engulfs it.

The first black candlestick indicates that sellers were still in control. This carried to the open of the next period with a slight gap down. The sellers, however, weakened throughout the period and buyers stepped in taking control by the end of the trading session. The buyers were so strong that the closing price exceeded the open of the previous session. This pattern is most reliable when used





Bullish Engulfing Pattern

after a strong decline and in combination with oversold technical indicators such as MACD and stochastics.

The bullish engulfing pattern is shown on page 332.

### **Piercing Candlestick Pattern**

This pattern is also a bullish reversal pattern not as strong as the engulfing pattern. This is why in this case a confirming candlestick is also needed. As with the engulfing pattern, the first candlestick is black indicating a continuation of the decline. The second candlestick is white with an open below the first and a close above the mid-point of the first. This is where the difference between the piercing and engulfing pattern lies. In this case the buying pressure was not strong enough to move the price above the open of the first candlestick. The third or confirming candlestick can be in the form of a white marubozu or a gap up.

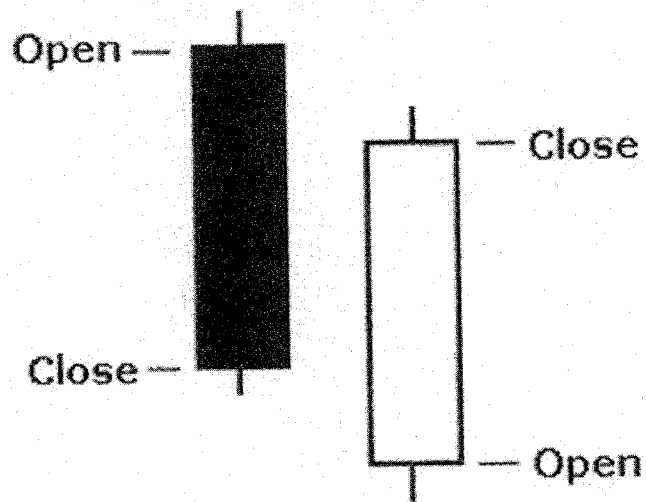
A schematic of the bullish piercing pattern is shown on page 334.

### **Bullish Harami**

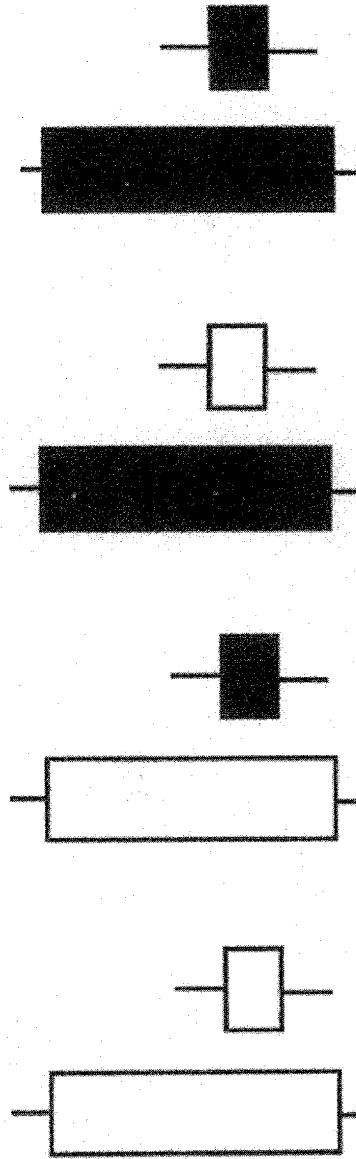
In this pattern the second candlestick is in a Harami position which implies that it falls within the range of the first candlestick. The second candlestick has a small body relative to the first and can even be a Doji or a spinning top. In fact, the smaller the body of the second candlestick, the more bullish the pattern is. A Doji or a spinning top indicates a very high possibility of a reversal.

Of the four possible Harami combinations shown on page 335, the most bullish combinations **after a decline** are the black/black or black/white Harami. The first black candlestick indicates that the sellers are in control and were quite aggressive. The small body of the second candlestick indicates that the sellers were unable to push the price lower, and a fight between buyers and sellers ensued resulting in close to a draw. This is then resolved by a confirming white marubozu or a gap up to assert the reversal.

White/ black and white/white combinations are the most bullish signals. The first white candlestick indicates buying pressure during



Piercing Pattern



Possible Harami Combinations

the period. This is what you expect in a continuation pattern after a reversal has been confirmed. The second small bodied candlestick signifies consolidation before further uptrend takes place.

### **Three White Soldiers**

This type of pattern usually occurs when a short squeeze is taking place. It is formed by three white Marubozu candlesticks in a row indicating that buying pressures have become extremely high.

The importance of this pattern is in its ability to predict possible break of resistance after the start of a reversal. If the three candlesticks have equal or increasing ranges, then a break of resistance is very likely. If, on the other hand, the range of the candlesticks is decreasing, this implies that buyers are becoming less aggressive and resistance may hold. This is especially true if the stock has already made a significant advance, in which case caution should be the order of the day.

A schematic of this pattern is shown on page 337.

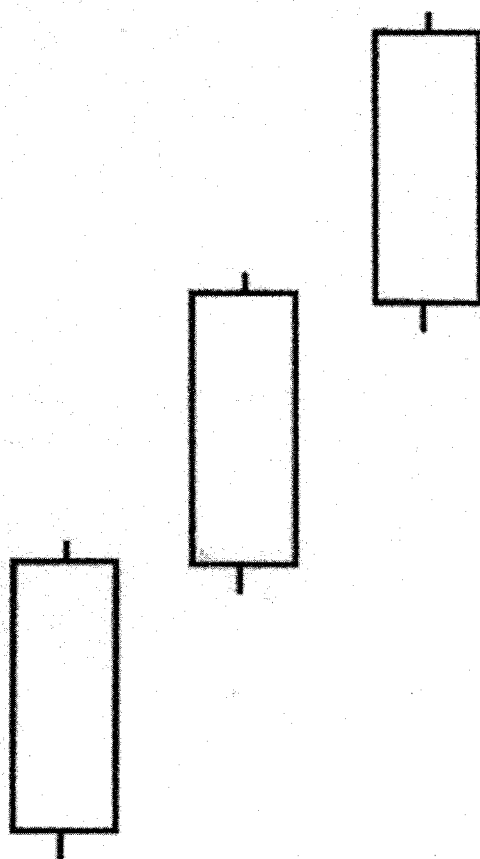
### **Bullish Morning Star**

This pattern usually appears after a downtrend and indicates a possible reversal. The first candlestick is a black Marubozu in the direction of the trend, while the third or confirming candlestick is a white Marubozu in the opposite direction of the trend. The middle candlestick is a Doji or spinning top. This indicates that after sellers were in control in the first period and at the open of the second period, they were unable to push the price lower. Buyers came in and put up enough of a fight to be able to push up the price near or above the close of the first day. The small-bodied middle candlestick indicates a standoff between buyers and sellers which is then resolved by the last confirming white candlestick.

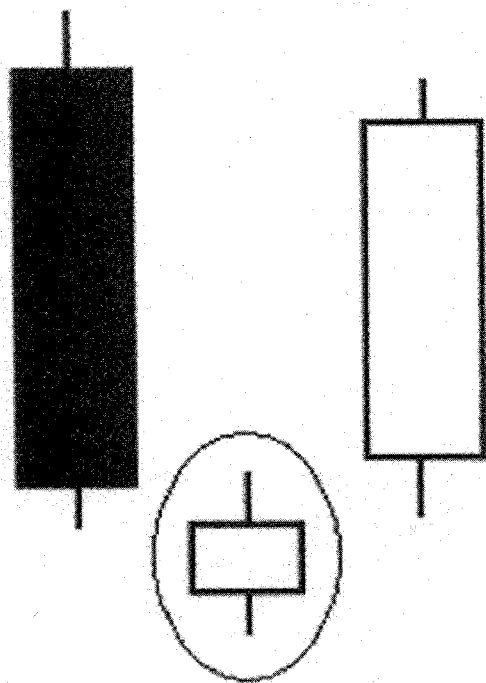
Notice that the candlestick in the star position has part of its tail within the range of the first. This is what is known as the star position.

An illustration of the Bullish Morning Star is shown on page 338.





Three White Soldiers



Morning Star

### **Bullish Abandoned Baby**

This pattern is mostly similar to the bullish morning star, except that the middle Doji or spinning top gaps away from both the first and the last candlesticks.

The gap between the first and the middle candlestick indicates that significant selling pressure carries over to the next period. The small body of the second candlestick implies that those pressures were absorbed as buyers started stepping in. Reversal is then confirmed by the third white candlestick.

The diagram on page 340 shows a bullish abandoned baby.

### **Bearish Engulfing Pattern**

This pattern usually occurs after an advance and indicates possible reversal. The first candlestick is white indicating a continuation of the advance. The second candlestick is black with an open above the close of the first and a close below the open of the first.

The body of the second candlestick is thus larger than the first and thus completely engulfs it.

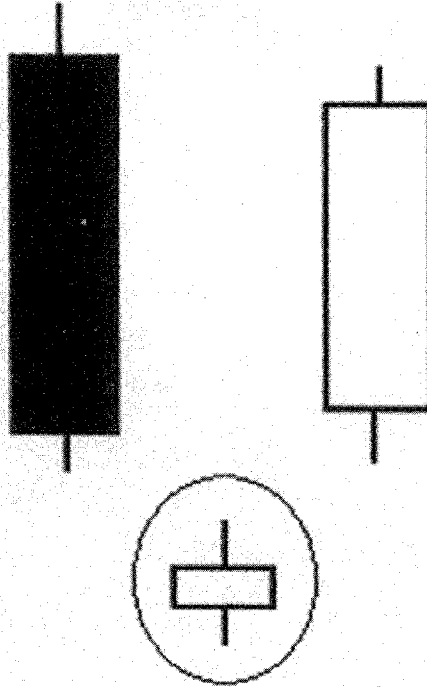
The first white candlestick indicates that buyers were in control. This carried to the open of the next period with a small gap up. Buyers, however, weakened throughout the period, and sellers stepped in taking control by the end of the trading session. The sellers were so prevalent that the closing price was below the open of the prior period.

This pattern is most reliable when used after a strong advance and in combination with overbought technical indicators such as MACD and stochastics.

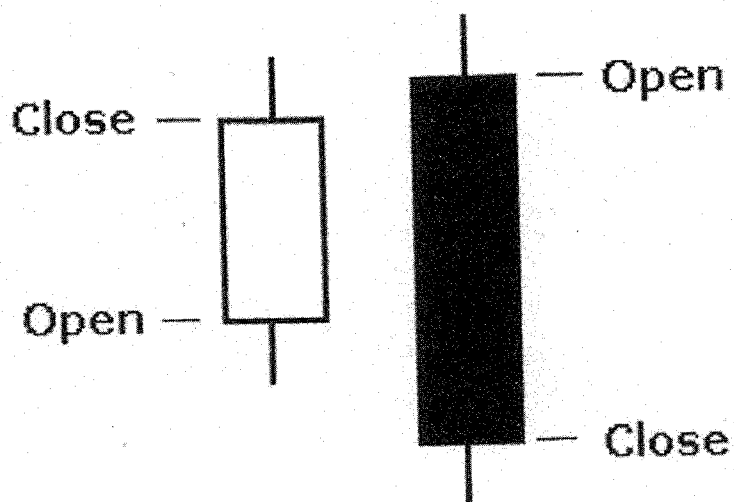
An illustration of the Bearish engulfing pattern is given on page 341.

### **Dark Cloud**

This is a bearish reversal pattern not as strong as the engulfing pattern. This is why it is essential to have a confirming candlestick before action is taken. As with the engulfing pattern, the first candle-



Bullish Abandoned  
Baby



Bearish Engulfing Pattern

stick is white indicating the continuation of the advance. The second candlestick is black with an open above the close of the first and a close below the mid-range of the first. In this case the selling pressure was not strong enough to move the price below the open of the first candlestick. The third or confirming candlestick can be in the form of a gap down or a black Marubozu.

An illustration of this pattern is shown on page 343.

### **Bearish Harami**

In a similar manner to the bullish Harami, the second candlestick falls within the range of the first. Also the second candlestick has a small body such as a Doji or spinning top.

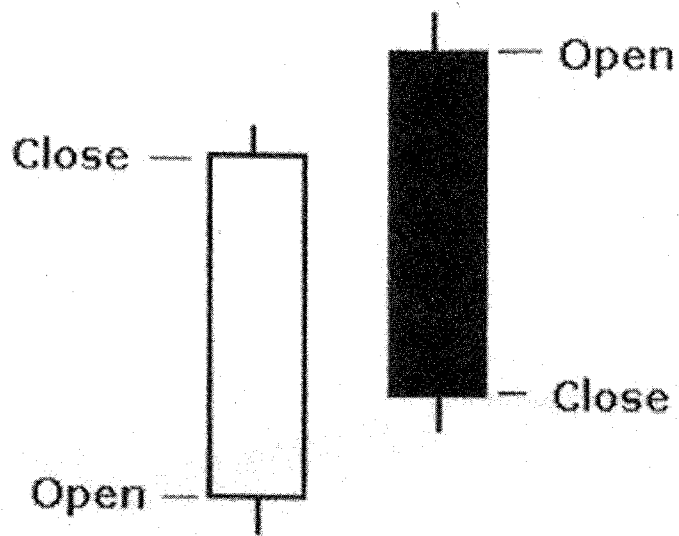
Of the four possible Harami combinations shown on page 344, the most bearish is the white/black or white/white Harami. The appearance of this pattern after *an uptrend* can signal a possible downtrend reversal. The first white candlestick shows that buyers are still in control. The small body of the second candlestick combined with a slight down gap indicates a control shift from buyers to sellers with a struggle taking place. A confirmation in the next period usually comes in the form of a black Marubozu.

Black/white and black/black Harami combinations are the most bearish as continuation patterns. The first black candlestick indicates that strong selling pressures persisted during the period. The small body of the second candlestick signifies consolidation before a continuation of the trend.

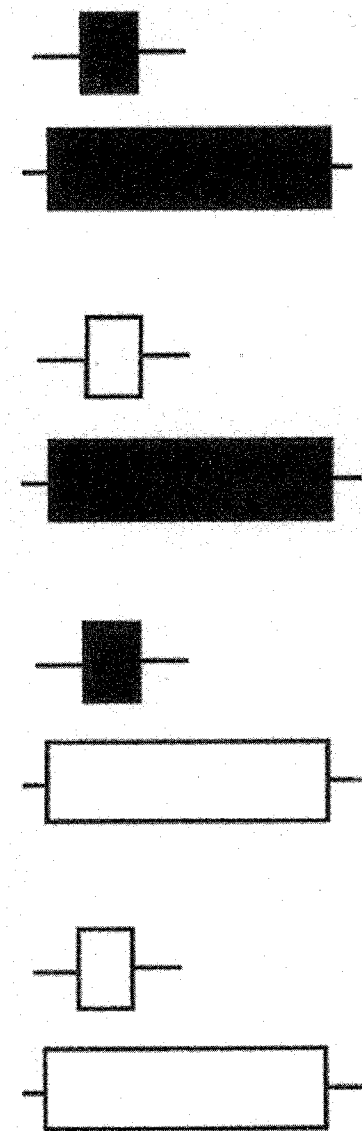
### **Three Black Crows**

This type of pattern usually occurs when a long squeeze is taking place. This is a situation where the stock shows deteriorating technical indicators with a low level of short interest indicating little fuel for further advance. This pattern is formed by three black Marubozu candlesticks in a row indicating that selling has become urgent.

The importance of this pattern lies in its ability to predict pos-



Dark Cloud Cover



Possible Harami Combinations



sible break of support after the start of a down reversal. If the three candlesticks have equal or increasing ranges, then the break is very likely. If, on the other hand, the range of the candlesticks is decreasing, this implies that the sellers are losing momentum and the support may hold. This is especially the case if the stock has made a major decline. In this case a trader should exercise caution if a short position is in place.

A diagram of the three black crows is shown on page 346.

### **Bearish Evening Star**

This pattern appears after an uptrend and is usually an indication of a downward reversal.

The first candlestick is a white Marubozu in the direction of the trend, while the third or confirming candlestick is a black Marubozu in the opposite direction of the trend. The middle candlestick is a Doji or a spinning top. This indicates that after buyers were in control in the first period and the beginning of the second, they were unable to sustain the advance. Sellers came in and were able to push the price near or below the close of the first day. The narrow range middle candlestick indicates that a fight for control between buyers and sellers ensued which was then resolved by sellers taking control as evidenced by the appearance of a black Marubozu.

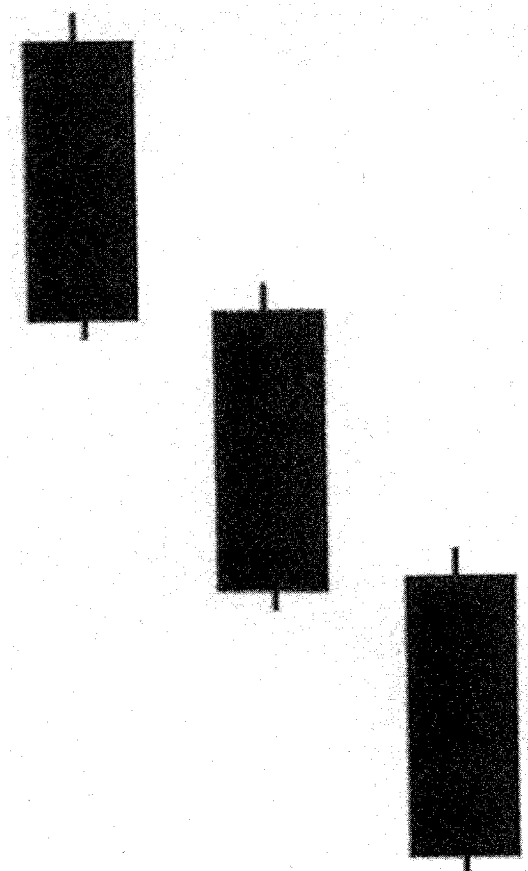
Notice that the middle candlestick has part of its tail within the range of the first. This is what is known as a star position.

An illustration of the Bearish evening star pattern is shown on page 347.

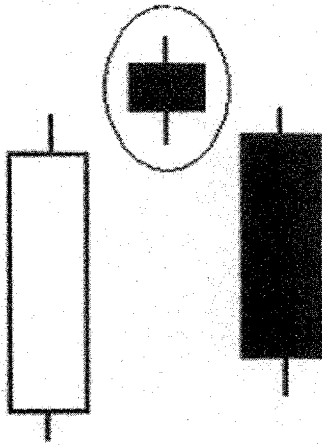
### **Bearish Abandoned Baby**

This pattern is similar to the bearish evening star except that the middle Doji or spinning top candlestick gaps away from both the first and last candlesticks.

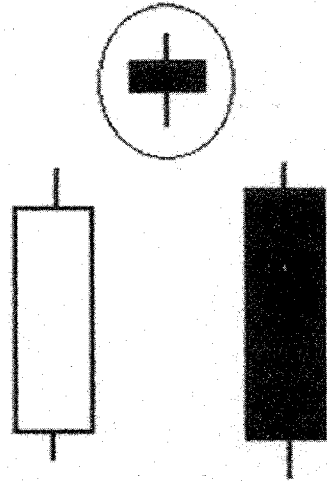
The gap between the first and second candlesticks indicates that buying pressure carried over to the next period. The small body of the second candlestick indicates that buying pressures were ab-



**Three Black Crows**



**Evening Star**



**Bearish Abandoned Baby**

sorbed and sellers started stepping in. Reversal is then confirmed by the third black candlestick.

A diagram of the Bearish abandoned baby is shown on page 347.

## APPENDIX B

### CONVERGENCE DIVERGENCE CHARTS

What I am referring to is a simple fact that you probably are already familiar with. It is based on the following premise:

“If a stock is moving higher in a weak market, it is expected that it will show further upward momentum in a strong market. On the other hand, if a stock is moving lower in a strong market, it is expected to show further downward momentum in a weak market.”

Let us assume you are holding shares of Cisco (CSCO). You notice that on a certain day while the Nasdaq (the index in which CSCO trades) was up 50 points, CSCO was down \$0.50. This is an indication that Cisco is performing poorly in a strong market. Consequently, you will expect that if the Nasdaq were to drop in a few days, Cisco’s downward price momentum will accelerate.

The major question to address here is whether this is just a short-term correction or a long-term downtrend and a cause for concern.

To address this, we will need to quantify the extent of strength or weakness of a stock relative to the market as expressed by the index it trades in.

To do this, we calculate the **Convergence/Divergence** or **(CD)** value on a stock as follows:

### **CD Value = Stock Price/ Index value**

Where the index value is the value of the index in which the stock trades at the close. It could be the Nasdaq, Dow, Semiconductor index, Biotech index, etc. The stock price is the price at the close of trading on the chosen day.

As long as the CD chart is in an uptrend, the stock shows increased convergence in a strong market and increased divergence in a weak market. This is what we want to see in stocks we are holding or intending to buy.

On the other hand, if the CD chart is in a downtrend, this indicates increased convergence in a weak market and increased divergence in a strong market. This is a sign to sell the stock you are holding or to short if you do not own the stock.

### **Convergence Divergence (CD) Chart Signals**

To decide the action to take, pay attention to the following signals exhibited in a CD chart:

- (1) As long as the CD chart is trending upward with an increase in price, it is a signal to hold onto the stock if you own it.
- (2) If the CD chart starts flattening out and trending downward after a prolonged uptrend, this is a warning sign of possible downward price reversal. In this case check for the following:
  - (a) Decrease in CD value even as the stock price is going higher.
  - (b) The CD value is lower at a specific price (whether extrapolated or actual) when the CD chart is in a downtrend than for the same price when the chart is in an uptrend.

**If either one or both of these signals occur, you should be either looking to sell the stock or raise cash on it by selling calls.**

These criteria will be much clearer when you study the examples later in this chapter.

Now you are probably wondering what kind of a computer program you need to do this? The answer is that you do not even need

a computer. You will have to perform a simple calculation once a week on each of your stocks. You can then connect data points **by hand** to get the CD value chart for that stock.

### **Constructing a CD Value Chart**

To construct a CD value chart, follow these steps:

**Step 1:** Every week divide the closing price of the stock by that of the index it trades in. Although you can use any day of the week, it is best to have the first data point on a Friday, the second on a following Monday and then each Monday thereafter.

**Step 2:** Normalize the value to a number that ranges between 1 and 10. You can do that by multiplying the above quotient by an appropriate factor.

**Step 3:** Plot the point on a semi logarithmic chart paper. You can get this paper from the free website: [http://www.humboldt.edu/~geodept/geology531/graph\\_paper\\_index.html](http://www.humboldt.edu/~geodept/geology531/graph_paper_index.html)

**Step 4:** Connect the data points by a hand-drawn smoothed curve. Note that when you connect data points, the extrapolated CD values will not correspond to the actual values on a daily basis. This is not an issue since we are interested in the week-to-week trend rather than the actual values in between.

### **Understanding CD Values**

As a stock trader and investor with an engineering background, I am always interested in understanding the logic behind any technical indicators I use. In this section, I will explain the significance of the CD value introduced at the start of this chapter and its usefulness in the decision making process.

We already defined the Convergence Divergence or:

$$\text{CD Value} = \text{Stock Price/Index Value}$$

In a strengthening market where the index is moving higher, it is essential for the stock price to move up if we are to get an increase in CD value. This is an indication that in a strong market a rise in CD value implies that the stock is behaving well relative to the index. In

other words, it is showing an increased convergence in an up market. If the market were to experience a powerful move, the stock will have to show a high level of strength to maintain a higher CD value.

It is thus clear from this argument that it is necessary to see a higher CD value with increased stock price for an uptrend to continue.

In a weakening market where the value of the index is moving lower, a higher CD value can result from an increase or a flat stock price. It is also conceivable that a higher CD value can accompany a small drop in the stock price combined with a relatively large drop in the index. This kind of behavior indicates that the stock we are considering is showing considerable strength in a weakening market. In this case the stock is showing increased divergence in a weak market.

Based on the above arguments, an increase in CD value is an indication that the stock still has upward momentum. In addition, an increase in price should be accompanied by a rise in CD value for that momentum to be sustainable.

A decrease in CD value with an increase in price is an indication that even though the stock is moving higher, its upward momentum relative to the market is weakening. This usually occurs if the stock price rise is small relative to the rise in the index.

A decrease in CD value in concert with a decrease in price is a sign of a short-term correction if it occurs during the uptrend cycle of a stock. On the other hand, significant drops in CD values take place during an extended down cycle. This is expected and is an indication of the continued weakening of the stock relative to the market.

By recognizing the early signs of weakening CD values while the stock is trading near its high, you can sell or raise cash by selling covered calls and avoid significant losses. This process will be illustrated in the following examples.



**EXAMPLE 1: JDS Uniphase (JDSU)**

Below are the closing prices for JDSU and the Nasdaq on the specified dates. The CD Value in the last column is the normalized value calculated for each data point.

<b>Date</b>	<b>JDSU (price \$)</b>	<b>NASDAQ</b>	<b>CD Value</b>
09/21/2001	5.36	1423	3.77
09/24/2001	6.32	1499	4.22
10/01/2001	6.92	1605	4.31
10/08/2001	9.04	1703	5.30
10/15/2001	8.12	1671	4.86
10/22/2001	8.77	1769	4.96
10/29/2001	8.41	1746	4.81
11/05/2001	9.17	1828	5.02
11/12/2001	11.6	1899	6.11
11/19/2001	11.71	1903	6.15
11/26/2001	10.08	1931	5.22
12/03/2001	10.53	2021	5.21
12/10/2001	8.53	1953	4.37
12/17/2001	8.45	1946	4.34
12/24/2001	8.46	1987	4.26
12/31/2001	10.02	2059	4.86
01/07/2002	9.02	2022	4.46
01/14/2002	8.18	1930	4.23
01/22/2002	7.16	1938	3.70
01/28/2002	6.99	1911	3.66
02/04/2002	6.6	1819	3.63
02/11/2002	6.07	1805	3.36
02/19/2002	4.98	1724	2.89
02/25/2002	4.98	1803	2.76
03/04/2002	6.37	1930	3.30
03/11/2002	6.10	1868	3.26
03/18/2002	5.85	1851	3.16
03/25/2002	5.89	1845	3.19
04/01/2002	5.58	1770	3.15
04/08/2002	5.06	1756	2.88
04/15/2002	5.48	1797	3.04

We Now follow the procedure outlined in the previous section to construct the CD value chart.

(1) Calculate the CD Value = Closing Price/Index Value

For the First point:  $5.36/1423 = 0.003766$ .

(2) Multiply by a factor of 1000 to bring the CD value to a number between 1 and 10.

Normalized CD value =  $0.003766 \times 1000 = 3.77$

(3) Plot the value on the Y axis of the semi logarithmic chart as shown on page 356.

(4) The above 3 steps are repeated for each of the data points. The actual data points are then connected by a hand-drawn smoothed curve.

For easy comparison the price data is also plotted and hand connected by a smoothed curve.

### **Reading Semi Logarithmic charts**

The X axis on a semi logarithmic chart is linear and can be read in a normal manner as any charting paper.

The Y axis is a logarithmic scale read in cycles. The first cycle is read 1,2,3,4...10; The second cycle 10,20,30,40...100. And so on.

### **Plotting the Data**

As indicated in the previous section, the first data point was chosen on Friday 9/21/2001, the next point on Monday 9/24/2001, with subsequent points representing one week intervals from this date.

Each large square on the X axis is divided into six small squares. Each two small squares represent a time interval of one week except for the first two squares that represent the transition from the first Friday to the following Monday. This will have no effect on the data since no trading occurs during the weekend.

You can use any day of the week as your reference day as long as you are consistent. The actual CD value will change, but the trend of the CD line will remain the same.

My preference for using Mondays is that any unexpected week-

end occurrence will be reflected in Monday trading. On the other hand, Friday trading may be affected by unanticipated external week-end events as well as option expirations. It is preferable that the data reflects the behavior of the stock itself than external factors.

In this example the Y axis has two cycles, 1-10 and 10-100. The graph paper shows the first cycle and the 10-20 part of the second cycle since all our data of interest falls in this range. As an illustration to plot 3.77, the first value on the Y axis, you will place a data point three-fourths of the way between 3 and 4. To plot 11.7, you will place a data point between the 1 and 2 (10-20) on the second cycle. Note that between the points 1 and 2 on the second cycle there are 20 divisions, indicating that each two divisions are 1 point. As an example, the point 11 will be two small squares above the 1 or (10) in the second cycle.

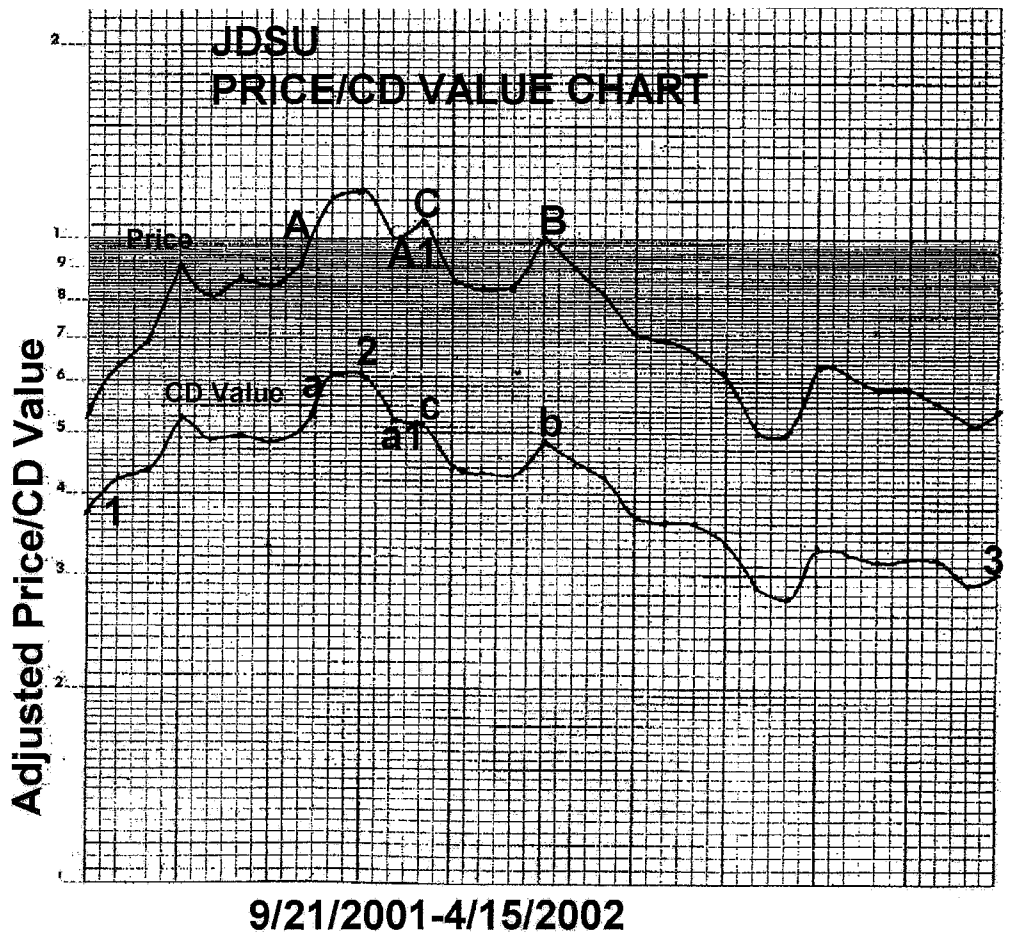
Be sure you clearly understand the charting rules on semi logarithmic chart papers before you start plotting and interpreting your data.

### **JDSU CD Chart Interpretation**

Between points **1** and **2** on the chart page 356, the Convergence/Divergence (CD) curve is in an uptrend in sync with the price. After reaching point **2** which is the CD value corresponding to the price maximum of \$11.71, the CD chart started trending down. This is an indication that the upward momentum of the stock is weakening.

Notice that even though point **C** on the price chart corresponds to a higher price (\$10.53) than point **A1** (\$10.08), the corresponding CD value at point **c** (5.21) is slightly lower than that at point **a1** (5.22). This is another sign of possible pending downtrend.

**ALERT 1:** At the start of a serious price reversal, you will start seeing lower or flat CD values with higher prices. If this occurs, you will want to keep an eye on the stock as a potential candidate for selling calls on to generate cash if you intend to keep holding it.



JDSU showed a flat weekly trend between 12/10/01 and 12/24/01 trading in the \$8.5 area. On 12/31/01, it closed at \$10.02 indicating a potential upward reversal. Note that on the CD chart point **b** corresponding to the price at point **B** (\$10.02) is at a reading of 4.86 which is significantly lower than the reading of 5.22 at point **a1** corresponding to the price point **A1** (\$10.08). This is a strong signal that the rise in price will not be sustainable.

In addition, the CD value at point **a** is higher than that at point **a1** even though both points correspond to a price of \$10. This is an indication of a lower CD value at a certain price in a downtrend than a similar price in an uptrend pointing to weakness in the stock.

***ALERT 2:*** It is important to realize that point **A** on the price chart as well as point **a** on the CD chart are extrapolated and not actual data points. Even though the daily readings may fluctuate, we are more interested in the weekly trend of the CD chart.

Point **b** on the CD chart was the last time you could have exited the stock at \$10 before a significant price drop occurred. If you were paying attention to the weakening CD chart, you could have had up to one month warning to exit the position or sell calls to raise cash.

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# Closing Thoughts

Every year in the first meeting of the two trade groups I run locally, I ask new members to introduce themselves and give a brief summary of their backgrounds. I am always amazed by the variety and breadth of backgrounds of the newcomers to the group every year. From retired individuals who are looking for an interesting and challenging endeavor to pursue while making extra income, to second and third shift blue collar workers and medical professionals who want to use some of their non sleep day hours more productively, to recently laid off engineers, managers, and other professionals who are tired of the corporate life and are looking for a new career and so on. I often get approached by individual members who ask me whether they can be successful in trading considering their background. My answer is that where they came from and what they were doing has no bearing on their success as a trader. To prove this point I usually give them a brief summary of my own journey into trading to make them feel more confident of the potential for their own success.

For those who are curious as to how I got into trading, I will give a short synopsis of my journey. The message I hope you take from this is that your background does not matter. To be successful in trading you will need hard work, determination, some creativity, and the ability to find your own comfort zone and mold your trading system to fit your own style. This is no different than what is needed to succeed in any business. Choose a business you are comfortable with, and with perseverance, hard work, some creativity and a little luck you are bound to succeed.

After graduating with a Doctorate in Engineering and a Masters in Economics, I worked for two major US corporations, the last of which was Koch Industries, the second largest privately held company in the world. During that time I was a real estate investor on the side owning properties near Columbus, Ohio and Amherst, Massachusetts.

I purchased my first property after graduating from college using funds left from my teaching assistant job as down payment.

It was a three bedroom home in the town of Amherst, Massachusetts where I graduated. After that, I moved to take my first job at Owens Corning Fiberglas Technical center in Granville, Ohio. I noticed that the nearby towns of Newark and Heath Ohio had a unique real estate market where most properties were owned by small investors with a shortage in rental housing, so I started buying property there. The real estate dynamics of this area were so unique that I continued accumulating property there even after moving out of state to take my next job with Koch in Kansas. Unfortunately the number of properties I was able to buy was limited by the cash available for the often required twenty percent minimum down payment.

I used some creative thinking and came up with the idea of having the seller guarantee the down payment with a certificate of deposit to be placed with the lending institution. The CD is then released to the seller when the loan was paid down by the amount of the down payment. The trick was to allow the seller to cash out in a short period of time and to do that I often took short term 7-10 year loans with 3 year balloons allowing the CD to be released within a short period of time. This idea worked so well that by the time I sold my holdings in 1997 I owned over fifty properties, most of which were free of any loans.

As you can see, by not letting the shortage of funds stop me and using some creative thinking to come up with an acceptable option to banks and sellers led to great success. Trading is no different, if you stay determined, and use some creativity to adopt the best trading methods that fit your own style, eventually coming up with your own trading system, you are on your way.

In the mid 1990s I became tired of working for large corporations, and after spending eight years at Koch, I started my own environmental sealant company, Lovoc group Inc. where we developed a product, Acidgarde, used to protect concrete against corrosion in wastewater treatment facilities, secondary containment and metal plating shops. This product was a result of recognizing an opportunity presented by cash strapped small towns, municipalities and mid size cities that could not afford to spend the significant funds required to use expensive epoxy based ma-



terials with the extensive prep work needed. You can still find information on this product by searching Lovoc group acidgarde on Google.

Be sure to use the same business principles in trading by always looking for opportunities that offer the highest profit potential based on your trading system and only risk money on those trades.

After having sold the business and while shopping in one of the area malls, I noticed a store with a bunch of people sitting in front of computer screens and a television set in the storefront tuned to CNBC, with the screen facing the mall main walkway. Out of curiosity, I walked in to find out what they do, and believe it or not, it was a day trading facility. Remember the late 1990's when that was the big rage? I decided to give it a shot, so I opened a small account and started trading. In the first three months I lost almost thirty percent of my total funds, but decided that this is a new challenge I had to conquer. I persevered and by learning from my mistakes and from other more experienced day traders, I was able to profit from few hundred to one thousand dollars per day in the fifth month and thereafter. Of course the market was much more friendly those days and lady luck probably played a role in my success. Any how, I got hooked and decided to continue trading on my own after the facility closed when day trading went out of style with the market collapse.

I kept at it for few years refining and re-refining my techniques until I was able to develop my own full trading system that I was comfortable with. I was so excited to share my new highly profitable endeavor that I helped many friends to achieve their own trading successes. Actually they suggested that I write my first book "generate thousands....." which is now in its third edition.

The idea for the current book came from some of my trade group members who wanted to share these methods with their friends who could not join the two groups due to limited space availability. Even though there is a two year limit on membership to allow as many individuals to join, the demand always far exceeded available openings.

After putting off this project for a while, I decided to meet this challenge and completed this book.

I hope this will motivate you to meet your own challenge by using ideas from this book to develop a trading method that fits your own personality and style. Alternatively, you can make improvements on the system you may be already using by introducing selected concepts you found interesting in this book.

All the information you need to implement the highly profitable trading strategies presented, is within the pages of this book. Numerous examples from my own trading diary were also included to increase your level of confidence in using these ideas. To help those who do not want to invest the time to implement these strategies, I have made available the subscription website **[www.generatethousands.com](http://www.generatethousands.com)**, where ideas from this book as well as the previous one are used to pick stock and option trades.