

LAWRENCE CHAN



The Art OF CHART READING

A complete guide for day traders and swing traders of forex, futures, stock and cryptocurrency markets

**The Art of Chart Reading:
A Complete Guide for Day Traders and Swing
Traders of Forex, Futures, Stock and
Cryptocurrency Markets
By Lawrence Chan**

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First Edition, June 2018

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In memory of Priscilla

Acknowledgements

This eBook is made possible with help from Amy Baker and Peter Osterlund. Their dedication to turn my original manuscript into something enjoyable to read is greatly appreciated.

I also like to thank Beth McAuley (<http://www.theeditingco.com>) for helping me out on editing the extra section on such short notice.

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Preface

Countless books have been written about price chart analysis. But I have yet to see a book that explains the structure of price movement, as represented in the price chart, and then shows how to apply that analysis to the financial markets in a consistent way.

Until now.

This book has been written to guide you in the development of a practical, structured framework that will enable you analyze price charts proficiently and, it is hoped, profitably. So with that, let's dive right in.

Section 1: Introduction

An Introduction to Chart Reading

When it comes to price charts, most traders hold one of two views. They either dismiss charts as fancy presentations of historical data with no real analytical value. Or they give chart reading too much weight, believing that all they need is a price chart in order to perfectly predict the future of a market.

The truth lies somewhere in the middle. Charts are one of the best tools available for analyzing a market. They present an unbiased and accurate history of price changes without any of the spin that comes from company representatives, Wall Street analysts, and their ilk.

Charts don't tell the whole story, of course. They cannot provide every type of information that a trader could possibly use to assess a market, like the other players' intentions or the cost of their holdings. But they do offer that rarest of commodities: the facts. And that means that, against all the bluster of the markets, a price chart can be your anchor.

If you know what to look for.

Learning to read charts can be confusing. And often, consulting books on technical analysis—with varying indicators, charting styles, and the like—can make the process *more* confusing. What you need is something that cuts through the clutter. While many websites detail different indicators and various chart patterns, no one has produced an incisive guide on how to effectively analyze price charts. I hope to remedy that dearth with this book: A clear, concise summary of the most important elements of chart reading.

Once you have mastered these elements and are able to interpret a chart correctly, you can go on to expand your chart-reading skills in a number of ways. You can explore more complex chart patterns to expand your basic tool set. You can add indicators and other data to your charts and learn to incorporate them into your decision making. And you can explore concepts like price structures (e.g. market profile and STOPD) and breadth analysis to further enhance your precision in market timing.

But first, you need to master the basics. This book aims to help you do just that.

The Ten Commandments of Chart Reading

Before we go any further, I would like to share my *Ten Commandments of Chart Reading*.

Commandment I

You shall know the specifications of the symbols you are reading off your charts.

Commandment II

You shall not decorate your charts with squiggly lines, pretty colors, and indicators of any sort until you understand the principles of chart reading.

Commandment III

You shall use your mastery of chart reading to determine the balance of power among the market's most influential participants.

Commandment IV

You shall not be tricked into thinking you've kept Commandment III simply by identifying the "swing highs" and "swing lows" on a chart.

Commandment V

You shall not be "fooled by randomness." Prices go up. Prices go down. Sometimes there really is no discernible meaning behind the madness.

Commandment VI

You shall recognize those situations when Commandment V does not apply.

Commandment VII

You shall remember that the trend is your friend until, and unless, it ends.

Commandment VIII

You shall know how to determine the end of a trend.

Commandment IX

You shall not get "lost in the ticks" of the chart. You shall always keep the big picture in mind.

Commandment X

You shall know when to step away from the charts and clear your head.

As you progress in your command of the art of chart reading, you may come up with some additional commandments of your own. Write them down!

In Order to Interpret a Chart, You Need to Understand Basic Chart Patterns

Before you can read a chart properly, you will need to build up your knowledge of basic chart patterns. I'm not talking about simply *recognizing* the patterns that the technical analysis books describe. I'm talking about *understanding* those patterns and all of their implications.

Let me offer an analogy: Anybody can tell the difference between someone who has a fever and someone who does not. But only a medical professional would be able to go beyond something as simple as an elevated temperature. Only someone with training and experience would know what other symptoms to look for in order to make a precise and accurate diagnosis. And that diagnosis is the key to treating an illness properly.

So, too, does the trader need to go beneath the surface of chart patterns and build up expertise in what those patterns are actually saying. Only then can you be sure that you're "diagnosing" the market correctly. And only with a proper and thorough diagnosis can you make the choices that will lead to success.

Having a solid foundation in chart reading first, and then adding further analysis will allow you to refine your skills systematically. Here is the goal: to be as objective as possible, to look at a chart with an eye to not just *what* has happened, but *why*.

Let the Chart Tell You the Story, Not the Other Way Around

The most important rule in using price charts is to believe what the charts are telling you. That may sound obvious, but it can be incredibly tempting to see what you want to see, rather than what the charts are actually indicating.

So when deciding whether or not to commit to a trade, you should only "pull the trigger" when your chart tells you that manageable scenarios are producing actionable conditions.

And when you are already in a position, the information you gather from your chart should be used to guide you on when to bail out of that position. Frequently, traders with an open position look only for signs that will confirm their decision to hold on to that position. This is a mistake. It means you are no longer letting the charts tell you what is actually

happening.

Some day traders like to keep a marginally profitable position on with a stop-loss when they can no longer recognize or interpret potential future scenarios. This is another common mistake. If you are no longer clear about what may happen next in the market or you do not know what to do under likely future scenarios, it is time to fold your position.

Keeping a position on with a stop-loss in place when you have no clue about the market's likely direction simply means this: You are just as likely to take a loss on the trade as to make a profit. When you think of it that way, isn't it much smarter to close the position and jump back in later, when you have a better read of the market?

Remember: Context matters. Never place a trade without understanding how your trade fits with the market's overall direction.

The Importance of Internalizing Your Analysis

When you are trading in real time, you have no opportunity to stop and think. You can't hit a pause button in order to consider whether or not your chart is showing a pattern you recognize. That is why you have to internalize the recognition process. You must study and practice until you get to the point where your responses are reflexive, automatic. The challenge is to go beyond the rudimentary tools of chart reading—like determining whether a market is “bullish” or “bearish”—and develop the skills that will enable you to identify what the market is most likely to do and when.

Keep in mind that it is possible for more than one chart pattern to form at the same time on the same part of a chart. If several potential patterns converge to suggest similar potential outcomes, you have a higher probability that those outcomes will turn into reality. If the different patterns diverge into drastically different potential outcomes, that tells you the market is entering a decision point, where the future price moves will greatly depend on the outcome of the current situation.

In that event, the best course of action is usually no action at all. Wait until the market has figured out what it wants to do, and then respond accordingly.

Trading with a Probabilistic Mindset

To trade successfully, you have to be able to know whether the odds of success are with you or not. The future of the market you are trading will have a range of possible outcomes, and each outcome will have a different probability weighting. This can feel daunting. Many beginners get overwhelmed by the number of various outcomes and end up making the wrong choice.

To those beginners, and to everyone else, I have good news: It's not that difficult to get a fix on your odds of success.

Understanding the Weather Forecast

To better understand a trader's decision-making process, let's look at something that most of us are familiar with: the weather forecast.

When we consult the weather forecast, we typically want to know how to dress, or whether we should bring a coat or an umbrella that day. But we don't simply follow orders given to us by the weather report. We come to our own conclusions based on information the forecast provides. And the fact is that many different scenarios can lead us to the same course of action.

For example, if the forecast says it is likely to rain, you will probably take your umbrella in case you need it. Or if you can see that it is already raining, you know you will definitely need the umbrella. You might also bring an umbrella even if the weather forecast says it won't rain, because the sky is filled with dark clouds. In that scenario, you don't trust the forecast.

When you make a decision after considering facts you have gathered, you are acting on inference.

The Complexity of Trading Decisions

This is the way many traders make their decisions. They gather information and draw a conclusion that leads to a specific action. The problems come when traders oversimplify this decision-making process. That is why people can correctly forecast where a market is heading and yet fail to profit from that insight.

Forgoing an umbrella on a day you end up needing one rarely has serious consequences. The same goes for bringing an umbrella when it doesn't rain. Either you get a little wet or you're inconvenienced by carrying

around something you don't actually need. No real harm done either way.

But in trading, the consequences of making the wrong decision can be much more significant. That's why oversimplification is such a problem. If a trader simplifies all the information he gets into just "buy" or "sell" action, he can easily find himself in a scenario he is not prepared for. And that often translates into a losing trade.

Losing trades happen to every trader at some point or another, but they happen much more frequently to traders who oversimplify their analysis.

This is how many beginners get wiped out. They read a few trading books, feel like they understand the basics, develop a false sense of empowerment, and head off into the market to make overly simplistic decisions. And then they lose everything.

This does not need to be your experience. In fact, it is eminently avoidable. But you need to begin by understanding that trading decisions are actually quite complex.

Start with a Range of Possible Outcomes

To trade well, you need to think in terms of a range of possible outcomes.

For example, instead of concluding your analysis of a market with a simple, "It's bullish" or "It's bearish," which can make you itchy to jump in and buy or sell, turn your inference into a spectrum of scenarios. They should include:

- High-risk long
- Low-risk long
- High-risk short
- Low-risk short
- Stay long
- Stay short
- Neutral
- No idea what is going on

Now you can strategically plan your actions around your range of scenarios. You can pay more attention to the market when it is getting close to the point at which you might take action. And when the market is doing something that does not require intensive focus, you can relax and save your

energy. Notice that in most of the potential scenarios, you do not need to do anything at all. “Wait and see” is the right course until the market offers you a low-risk trading opportunity.

For example, a chart indicating that the market is moving up strongly is likely to be a good candidate for staying long. (The same chart should definitely not suggest a low-risk short.) So instead of only giving yourself the option of jumping on a trade to buy or sell, you now have a third possibility, one that dominates most of the inference results: Do nothing.

It can be difficult at first to approach trading this way. But once you start thinking in terms of a range of scenarios, you will find that it’s an easy method to practice. And not just easy, but relaxed. By processing the trading information through the lens of multiple scenarios, you will greatly reduce any impulsive urge to pull the trigger.

The Acceptability of Failure

Of course, impulsivity is not the only challenge that traders face. Many are also inclined to overlook less likely (or losing) scenarios because the likely (or winning) scenarios are more attractive. The problem with this approach is that we have to face the consequences of losing scenarios quite often. And we’re not conditioned for it. Imagine if there were a 50% chance that all of your dishes would spontaneously break every time you washed them, regardless of how careful you were. It’s hard to imagine. In fact, it’s preposterous. But that is what it’s like in the markets every day.

Fortunately, overcoming the tendency to focus on winning scenarios is not particularly difficult. You just need to be sure that you always consider two things:

- The scenarios that contradict your bullish or bearish bias.
- The criteria you will use to determine when those scenarios have been contradicted.

Looking at the current market condition from both of these angles will allow you to assess the objective risk for your current position or for the trade you are about to take. That risk will be easier to accept because you have gone through the process of clarifying the conditions necessary to stay in the trade.

This common-sense approach to assessing a trade offers a number of

benefits. It reduces the stress you feel while monitoring the position. It allows you to adjust your position size properly—as opposed to using a generic stop—because you know the exact amount of risk. It makes it easier for you to accept a loss if the trade doesn't work out. And most importantly, it allows you to pass on the trade completely should the objective risk make it too uncertain, even with the smallest position size.

Conclusion

Trading is a game that only occasionally rewards the lucky, but consistently rewards the well-prepared. The best traders do not trade to lose. They wait for optimal conditions before they enter the market. They expose themselves for the minimum amount of time and reap the greatest profit with the smallest amount of risk.

To be prepared in trading means not only being aware of what you think will happen, but also being fully prepared for what you think will *not* happen. It is not that difficult to remain clear-headed and to analyze the market objectively. All it takes is a willingness to incorporate objectivity into your daily trading routines.

Stop Looking to Gurus for Opinions on Whether Something is a Buy or Sell

Many people like the comfort of a guru's opinion, especially when that opinion agrees with their own. But if the opinion has been reduced to a simple "buy" or "sell," it has lost most of its meaning, and will probably undermine your own trading decisions.

Again, in trading, oversimplification is the enemy—no matter what the source.

A Trading Decision is a Complex Decision

Trading decisions are complex. In fact, they are many times more complex than choosing between two—or even three—choices.

Let's look at just how complex they can be.

The decision to open a position (or to stay on the sidelines) is composed of many separate, but related, decisions:

- Buy / Sell / Stay out (three possible choices)
- How Much Money to Commit to the Trade (many possible choices)
- Stop-Loss / Scratch Consideration (many possible choices)
- Profit-Taking Strategy (many possible choices)

When you break down a trading decision into the four components above, it becomes clear that even if you only have two choices per component, the complexity of the overall decision is at least 16 times that of a simple yes-or-no decision. This means that any definitive yes-or-no choice recommended by someone else—even if that someone is an expert—is of no practical use to a person faced with a trading decision.

Simplified Opinions Do More Harm Than Good

Assume a famous guru is known to be successful at analyzing a particular market. Hearing his opinion on whether to buy or sell that market does not really enforce your own belief at all. You might be comforted by that opinion if you're holding onto a position you feel uneasy about. You might also be comforted if you're thinking about initiating a position in that market. But the guru's opinion does not provide you with a single piece of substantive information to improve your own analysis. In fact, the guru may

have in mind a scenario that is the exact opposite of your desired outcome.

Here is an example:

You are considering a stock that has been beaten down badly and you view the stock as cheap at \$10. You're thinking about buying the stock, but you're afraid the price might drop even further or, worse, go belly up. Then you hear a well-known analyst say that she is bullish on this stock. Her opinion strengthens your belief that you should buy, and so you do, at a bigger size than you had originally planned. Of course, the notion of stop-loss never enters your mind.

What went wrong in this decision?

You were nudged into buying a stock with absolutely no dependable information, which means you took a leap of faith. It was not a sound decision at all.

The analyst's bullish view of this stock could have sprung from her belief that the stock would be headed up . . . after it dropped by 50% first! You focused on the bullishness because it agreed with your bias—this is comfort thinking, by the way—and then jumped into a trade, even though you might not have been able to afford the risk.

It's also possible that the analyst *was* bullish, but she was looking for a sign before committing to the stock. The sign could be a technical signal or the price of the stock rising above, say, \$12. Many people would assume that if \$12 is a buy, they should get in at \$10. But the analyst has reasons for waiting for the higher price before she is willing to buy the stock. What are they?

Don't you think it's important to understand the analyst's reasons for saying what she did before you commit to that trade?

It's also possible that this person is not a particularly good analyst, in which case her opinion is nothing more than a sound bite. Even worse, she might have an ulterior motive for voicing that opinion publicly.

I am not going to list all the possible motives for "experts" to share opinions. Just remember that buy-side brokerages need people to trade in order to earn commissions. Sell-side brokerages need people to absorb the liquidity from new issues. And fund managers betting heavily that a stock will move in a particular direction are not going to tell journalists anything

that might undermine their position.

You get the picture.

The bottom line? There is nothing straightforward about taking another person's oversimplified opinion about where the market is headed. It does not matter who that person is.

Watching Your Risk Will Go a Long Way

If you find that you just can't stop yourself from following expert advice, you can minimize the dangers by approaching the process from the perspective of risk control.

First, identify how much money you can afford to risk with that one trading idea. A simple rule of thumb is one percent or less of your trading capital. Work out the other parameters—like number of shares to commit—from that starting point.

If possible, find out the details of the guru's opinion, such as the exact price levels he considers a good entry point. This extra information can make a significant difference, as it gives you further insight into the guru's reasoning. For example, if he liked a stock when it was trading at \$8 and now that the stock has risen to \$10, he is still bullish, you know that buying at \$10 may not reflect what this guru really thinks at this particular moment in time.

You also need to know how the guru is managing his risk. If he has no risk-control method, that does not necessarily mean that the trade is a sure bet. You should understand that you still might lose all the capital you commit to that trade. Using the one-percent rule stated above, you can determine how many shares you should really commit to the trade. (Hint: It's much smaller than you think!)

If you cannot risk that amount due to lack of capital and yet were seriously considering this trade, you are clearly still fuzzy on some of the basic principles of trading. Please read my book *Know Your Odds Before You Trade* before committing to your next trade.

Can I Still Make Money Trading When the Markets Are So Manipulated?

Non-traders commonly believe that excessive corruption and manipulation at the top prevent anyone from making money by trading the financial markets. Similarly, inexperienced traders who may have benefitted from beginners' luck in easier environments often complain that market manipulations have spoiled their success. Even the media reports on the difficulties that "professionals" are experiencing in the current market environment.

Is it really true that you can't make money in manipulated markets?

Absolutely not!

Markets Are Always Being Manipulated

To begin with, you should understand that every market on earth is manipulated to a certain extent. Government regulations and clearinghouse requirements suppress some kinds of manipulations, but they can never purge all manipulative activities from financial markets. Furthermore, rules and regulations don't actually sanitize a market. They are themselves a form of manipulation imposed by governments or hosting organizations so that certain outcomes in the price-discovery process do not come to pass.

People complain about market manipulations because at some point or other certain manipulations have produced unfavourable outcomes for them. Please note that you never hear a word of complaint from these people when the manipulations work in their favour.

The moment you learn to stop complaining about market manipulation and just deal with it is the moment you begin to act like a real trader.

In fact, if you can actually embrace the presence of manipulation, you can use it to your advantage.

Manipulations Create Short-Term Chart Patterns

Manipulators try to hide their actions, but the truth is, they take those actions in order to ensure that certain outcomes happen over and over again. That is, after all, their goal. These covert operations work either because they have disrupted the balance between the other market participants, or because they have intentionally trapped one side of those participants into a no-win

situation. Either way, the manipulations create pre-conditions to which market players are forced to react.

These pre-conditions show up in charts all the time. As long as you are willing to read charts objectively, you can find the signs. The more manipulated a market, the easier it becomes to spot the manipulation in the charts of that market. Remember that you may not get all the information you need from your analysis of the chart. But you *can* tell whether or not a market is behaving like its normal self. This alone should be enough to compel you to stay out of the market and wait until the manipulators have finished doing their thing.

You do not need to profit every time there's a strong move in the market. And you definitely do not need to profit from a move you consider to be a result of manipulation. Minimizing your losses more often by taking fewer hits from manipulations is exactly the same as netting more profit.

And if you can let go of your opinion and follow the lead of the manipulations, you will be even more profitable.

Manipulations Create Long-Term Trading Opportunities

Systematic manipulations in a market will create abnormal behaviour among its participants. If such abnormal behaviour is permitted to continue for years, it will metastasize into structural problems that destroy the market—either by driving away participants (thus drying up liquidity) or by triggering a crash. This means that identifying abnormal behaviour among the players in a market can be a long-term trading opportunity.

Take, for example, the 1998-2000 Internet bubble, which created a golden opportunity for long-term profit.

Multiple manipulations led to the creation of this bubble, among them artificially low interest rates that encouraged investors to take risks and an unregulated real-time margin requirement that allowed people to gamble money they didn't have. These and other manipulations prompted bubble participants to engage in abnormal behaviour. Traders who identified that behaviour early on were able to jump in and profit from the euphoria. And those who successfully recognized the end of the manipulative activity were able to profit from the market's collapse.

Summary

Whether they're direct interventions or policy changes that modify how a market functions, manipulations alter the behaviour of a market. Price patterns inevitably emerge, reflecting a change in behaviour among market participants as they adapt to their new, manipulated environment.

It can be comforting to know that these patterns are nothing new, because market manipulation has always been an integral part of market activities everywhere.

Trade as a Chart Trader

So what makes chart traders different from other traders?

First, let's look at what a chart trader is not.

You Are Not a Macro Trader

The world is a complicated place, and the ways in which countless financial markets around the world interact with each other is beyond almost anyone's comprehension. This is especially true if you do not have the requisite training—and the Ph.D. to show for it—to allow you to truly understand macro market dynamics. To be blunt, any trader who doesn't understand the intricate details of the world's interconnected markets has an invalid macro view of the markets. He might pretend to know something, but in truth, he has no idea what he's talking about.

Real-world macro traders need the macro view in order to move size. They need to lean on something that will eventually work in their favour. Their theories or worldview may not necessarily be correct, let alone their projections on future world events. But for size players, none of that really matters. All they need is a few hundred percent gain on capital over a five-to-ten-year time window in order to be considered a great performer.

A typical home-based trader (often referred to as a “retail trader”) does not have the capital, expertise, or time horizon to trade this way. He most likely has a small stake that he wants to grow by 100 or 1,000 times for a retirement fund or to have enough capital to trade full-time. To put it another way, that retail trader's job is to build an account through base hit after base hit. Grand slams are not an option.

You Are Not a Professional Trader

Many people believe they need to trade like a professional trader. Again, this is an unreasonable goal. Like their hedge fund brethren, most professional traders are firm traders who are given sizable capital to trade.

Many of these traders do not really perform all that well in relative terms. They often take unjustified risks and end up blowing all their trading capital. Of course, it's hard to blame them, since the better they perform, the bigger their year-end bonus. And failing to perform means that they will probably get fired. No wonder they risk it all!

The truth is, not many professional traders have stellar performances year after year. And that means that “trading like a professional” is not really anything to aspire to.

You Are Not a Hedge Fund Manager

If you listened to the media, you would probably think that when famous hedge fund managers aren't performing, the markets are completely untradeable. But it's important to remember that reporters highlight the most extreme stories in order to sell newspapers. In actuality, the media's ability to find people who are not performing does not in any way mean that nobody is performing.

Large hedge fund managers trade large portfolios. They are also constantly being pushed by investors to perform, regardless of market conditions. They are forced to take on risk because they are paid to do so.

But you are not a hedge fund manager. That means you can trade with much lower risk and outperform large hedge funds in terms of percentage gain. You can do this for two reasons: First, you get to pick your battles. Second, you are able to take trades that large fund managers cannot.

An individual trader can exploit market behaviours that are much shorter in duration, which makes it impossible for too many players to participate. In other words, short-term trading opportunities are often too small to be considered by large funds. But that's where you have an advantage! You can do things the big players cannot. You can be quick and agile in a way they can't even contemplate.

So now that we've established what chart traders are not, let's explore what they are.

Good Chart Traders Are Great Detectives with Better Pay

Chart traders are armed with facts when they make decisions. These facts are derived from their analysis of historical price data, which enables them to identify price levels likely to be of particular interest to buyers or sellers (or both). To put it another way, chart traders' analysis of the chart allows them to see the market's “structure.” At this point, the rules of their trading system comes into play and their decision to place a trade, or stand aside, is determined by those rules—not by news, not by opinions, not by a finger to the wind. All analysis is based on known inference and expected

outcomes, both of which can be identified by recognizing recurring patterns in the data. The more frequently you trade, the more frequently your analysis and decision-making skills are tested and refined.

There are other jobs that require logic, reliance on empirical data, and most importantly, a willingness to change direction the moment new evidence suggests a different outcome. Good detectives need to do that, as do scientific researchers. But those jobs do not require the same intense level of continuous analysis and logical thinking as chart trading.

However, the good news is that if you trade well, you will earn more than any detective or scientist.

Chart Traders Are Still Traders

Being a trader means that you have to deal with the consequence of your decisions. If you do your job correctly, you reap the rewards. But if you fail, you have to deal with the losses. Few professions require a person to deal with the psychological impact of this stress so many times each day. And this stress can make becoming a good trader difficult.

To be successful as a trader, you must detach yourself from emotion. You must base your decisions on the facts as you see them, not the opinions as you hear them. Your charts will help you do this. In fact, you will find those charts to be indispensable once you've honed your skills in reading them.

Learn to read the charts and you will have learned how to be a successful trader.

How to Read Your Charts Objectively

Remember my Ten Commandments of chart reading? They all serve the same goal: to get you to read your charts objectively. If you can detach from your emotions, you will be able to avoid most of the problems that people experience when they try to become a chart trader.

The fact is that removing emotion from your chart reading is not just a good habit. It is fundamental to making chart reading work.

How to Avoid Constant Setbacks

If you learned to trade on your own, this experience will probably sound familiar:

You find a new way to read your charts and have success using the idea to trade. However, after several weeks of consistent performance, the new approach falls apart. You can't get a single trade to work and everything you thought you knew about the market suddenly seems to be wrong. You get burned. Badly.

At this point, the not-so-smart trader keeps pushing forward with his flawed approach and eventually blows up his trading account.

The smarter trader decides to take a break and return to the market later. But these setbacks keep happening again and again. Why?

It's simple. Setback episodes occur because of the way the trader trades. A trader with a predefined set of trading skills and beliefs is no different from a mechanical model. And no mechanical trading model works all the time, because no model is compatible with every possible set of market conditions. The same is true of people who trade discretionarily.

So why don't traders who experience constant setbacks take a different approach? Because they are controlled by their emotions. They allow themselves to get attached to every trade and they become too emotionally invested in the system they've created. In the end, they are so invested that they can't let it go and move in the new direction the market now requires.

So how does a chart trader learn to be less emotional and more objective?

Let's break it down.

Hold on to Your Equilibrium

First, you need to understand that humans are built to spot the highs and lows in a chart at first glance. It's part of our animal instinct to be able to process that kind of information quickly. The original purpose of this ability was not to analyze abstract data. It was to identify potential dangers—like sharp objects, incoming predators, and the like. It was directly linked to human survival.

But in trading, this ability can actually be harmful. Why?

Two reasons:

The first involves emotional equilibrium. You have to remember that not just our brains are wired to respond to highs and lows. Our bodies are too. When a sharp object or a dangerous predator comes hurtling toward you, your body will react before you can even stop to think about what's happening. You will experience a surge of hormones and chemicals that put you in “fight or flight” mode.

Hormonal surges might be great for fighting off predators, but they are not at all helpful when you're trying to engage in clear-headed, logical thinking. That means the more you use your natural ability to spot price extremes, the more you will knock your emotional equilibrium off balance.

Have you ever felt residual anxiety after staring at a screen of choppy price action for the entire day? That's what I'm talking about.

To trade well, you must let go of anything that threatens your emotional balance.

The Importance of Context

Here's the second reason that focusing on price extremes is harmful: lack of context.

Without context, you can extract no real meaning from the highs and lows on a price chart. They are a *part* of history, but they are not the complete historical record. So you gain very little by focusing on them.

Think about getting a new novel to read. What would happen if you decided to consult the table of contents and read the chapters with the most interesting sounding titles first? That approach might give you a vague impression of what the novel is about. It might even work well if the story is

a simple one. But if the plot is complex, you will not be able to understand the book without starting at the beginning and reading straight through to the end.

The same is true of thinking you can make sense of a price chart by picking out the extremes and focusing on them for your analysis. Sometimes it works. Sometimes it doesn't. And if it doesn't, you lose money.

Is that really what you want?

From Mindful Practice to Habitual Routine

It can take time to break the habit of noting price extremes as soon as you look at a chart. But there are ways to retrain yourself.

First, start your chart-reading process by focusing on the left side of the chart and then scanning towards the right—one bar at a time. This will show you what happened to the price movements chronologically. The price extremes won't seem so significant—and you won't react to them so emotionally—because you will be seeing them in context.

If you read a lot of charts every day, you will pick up this practice quickly. Soon it will turn from intentional to habitual, and you will no longer need to remind yourself to do it. You can speed up the process a bit by studying more charts each day, but it will still take time for this approach to become automatic. Don't get discouraged. At some point, the transition will happen naturally.

How to Know That You Have Moved Beyond Emotional Chart Reading

You will know that your chart reading is no longer driven by emotion when you carry in your head a very clear picture of the overall context of your charts. It will feel like being immersed in an interesting book, where you know the characters and plot so well that you can pick up the book at any point and jump right back in where you left off.

When you reach this state of mind, you will be analyzing your charts from a completely different perspective than you did before. From this point on, your chart reading will be much more balanced. You will be able to see, not only what you want to see, but also many alternative scenarios.

Summary

Learning to detach emotions from your analysis of the charts will allow you to accept uncertainty and the possibility of mistakes. It will permit you to accept defeat and walk away with only a scratch or two, rather than with crippling losses. And it will enable you to let go of your opinions quickly and change course when market conditions require it.

It all starts with reading your charts properly. Read them left to right, bar by bar, and most importantly, do not fixate on the price extremes.

Section 2: The Building Blocks of Chart Reading

The Three Aspects of Price Movement

Learning to work with price charts might seem overwhelming, like adopting a new language or mastering musical notation. But the good news is that charts are made up of a handful of basic components. I'm going to explain these components one at a time, and when I'm done, those charts won't seem overwhelming at all.

The essential component of any price chart is, of course, price. Specifically, the movement of price. More specifically, three key aspects of the movement of price: direction, range, and momentum. In order to understand a price chart, you need to have a firm understanding of this trinity.

We won't talk about momentum until later. First, we need to explore direction and range. So let's start with range, or how far price moves.

Free-Range Price Movement

Price goes up. Price goes down. How far and how fast depends on the buyers and sellers in the market.

Sometimes, eager buyers are ready to pay any price, and the market obliges them by soaring to new highs. Sometimes, desperate sellers seem ready to sell at any price. The market obliges them, as well, and prices fall. When motivated buyers chase the market up or anxious sellers drive it down, we call it an expansion in the range of price.

At other times, buyers don't seem terribly eager to buy, and sellers don't appear terribly anxious to sell, so prices don't rise or fall much at all, bobbing like a cork in the water, drifting with the tide of time. We call that a contraction in the range of price.

Financial markets cycle between these states of expansion and contraction. The art of chart reading begins with an ability to distinguish one state from the other, and to understand what they reveal about the tug-of-war between buyers and sellers.

Contraction: Time to Think

Contraction means that price movement is trapped between buyers and sellers, resulting in very little movement. It represents a temporary equilibrium of committed buying and selling that will not last. That's because, as time passes, current position holders and potential speculators

will change their opinions.

Even though price is calm during contraction, that stillness belies activity going on beneath the surface. Both buyers and sellers are positioning themselves for the next big move. They might be building up an existing position, or unloading an existing position, or adjusting their risk management of an existing position. And eventually, this activity will ignite the next round of expansion.

Expansion: Time to Act

Expansion means that price is pushing beyond the range in which it was contained during the contraction period. This happens when one side of the game is cornered, or when opinions change drastically in favour of one of the sides.

In other words, expansion is the direct result of the aggregated decisions made by market participants. Once set in motion, the expansion period has a limited number of ways in which it can unfold with predictable outcomes.

Expansion will end naturally when the imbalance of buying and selling subsides.

Transition from Contraction to Expansion

The essential trading setup for the chart trader is the transition from contraction to expansion. This scenario provides a controlled environment with a reasonably limited number of outcomes to contend with. That's because, in many ways, this type of transition represents the arrival of clarity in the market. A victory of sorts has been won in the contest between buyers and sellers: One side has prevailed. The other side has lost. What had been murky is now clear.

In trading, clarity is good.

Transition from Expansion to Contraction

The transition from expansion to contraction, on the other hand, represents the opposite of clarity. It signals the emergence of entropy. This is when things get murky.

For example, a market can be expanding to the upside (i.e. the price is moving higher) while showing signs that the rate of its rise is decreasing.

However, that does not necessarily mean that a contraction is about to begin. The market's expansion can continue for some time even as the momentum behind that expansion wanes.

This means it can be very difficult to recognize when and how the transition from expansion to contraction is beginning and where the market is headed. For that reason, this kind of environment is the most challenging in which to trade.

Up, Down, and Sideways

Now that we've considered range, let's take a look at the second important aspect of price movement. Direction.

I'm sure you know the difference between up and down and I've little doubt you can look at a price chart and tell whether price is rising or falling *right now*. But your job, as a trader, is to formulate a hypothesis as to where price might go *in the future*—and to make money off that insight. That's when a price chart becomes your indispensable partner.

A chart can tell you when price:

- is likely to continue in the direction in which it is already moving.
- is likely to reverse direction.
- may hesitate before it chooses a direction.

The simplest chart—one comprised of nothing more than vertical bars plotted against time and price—can give you what you need to take on the world's financial markets and win. But before you're ready for that challenge, you have to equip yourself with an understanding of the way range and direction come together to create the most powerful heuristic in trading: the chart pattern.

Range + Direction = Chart Pattern

Look at any price chart and you will see the path that price has taken over time. At first glance, it might seem like that path is just a series of squiggles and zigzags. But if you were to look at hundreds of charts, you would begin to see certain configurations of price and time appearing over and over again. And you would notice a tendency for price to behave in a certain way once it has moved on from each particular configuration.

In other words, you would discover certain patterns in your charts that

would enable you to project, with profitable consistency, the future trajectory of price.

Fortunately, others have already discovered those patterns, which means that you don't have to. Later, I'll get into the specifics of some very potent chart patterns. But for now, let's make sure we're clear on chart pattern basics.

In general, chart patterns can be classified into three essential types based on their direction: continuation, reversal, and compression.

Continuation

A continuation pattern is just what it sounds like: a pattern indicating that price will continue to move in the same direction it is already moving. Continuation patterns usually occur within a longer-term contraction period. And sometimes, these shorter continuation patterns might actually show price moving in the opposite direction of that longer-term contraction.

This might sound confusing. So let's look at it from a different angle.

Think of continuation patterns like the breaks you take during a long road trip. Say you're on your way from Toronto to New York and you need to stop for gas. You might be able to find a rest stop right next to the highway. Or you might need to drive away from the highway for a mile or two in order to find a gas station.

Either way, your ultimate destination hasn't changed. You're still going to New York. But under certain circumstances, you might need to drive in the opposite direction for a little while before you can turn around and continue on your way.

Continuation patterns are similar to these breaks in that they sometimes show price moving in one direction for a short while within the context of a longer-term contraction moving in the opposite direction. But don't worry. Continuation patterns are quite easy to identify. And just as there are a limited number of ways for you to stop for gas on any given road trip, there are a limited number of ways that the markets can behave in order for continuation patterns to form.

Reversal

Like continuation patterns, reversal patterns are just what they sound

like: patterns that indicate the price will reverse direction. Unlike continuation patterns, reversal patterns come in many forms, which make them more challenging to deal with. The difficulty comes from the fact that the reversal might occur for a number of different reasons.

Most reversal patterns are the product of exhaustion. In other words, all of the participants who want to get on board with the current direction have already gotten on board. So there's no one left to push the market further in that direction. In fact, all of the open positions of the players who are already on board will become fuel for a move in the opposite direction – because those players will scramble to cover their bets when the market moves against them. You won't find it very difficult to capitalize on this type of reversal, as there is often time to position yourself properly before the bulk of the reversal takes place.

Other types of reversal patterns are typically driven by surprise. Surprise events change the stances of market participants. As the first batch of players exit their positions and push the market to move sharply against the original direction, this will induce others to do the same. Some will exit willingly. Others will be forced to exit by their stop-loss orders or margin calls. This type of reversal is more difficult to jump into, because you get no warning before the reversal starts. However, the price movements resulting from such a situation are surprisingly well structured, once the ball gets rolling.

Compression

A compression pattern is not really a pattern. It's characterized by an absence of direction and, often, a contraction of range. But not always. Sometimes, a compression pattern can incorporate an almost violent range expansion that, just as suddenly, snaps price back into a previously defined contraction range. In other words, it is a mash-up of continuation and reversal patterns.

Compression patterns often result from continuation patterns that have failed to create enough energy to expand their range, but at the same time have failed to collapse. Then price is trapped, because the market doesn't generate enough fuel to push it in either direction.

Traders can lose a lot of money during a compression. That's because the beginning of the compression is often a surprise or a low probability

outcome generated by a continuation or reversal pattern. Thus traders are often stopped out for a loss already, if they're not actually trapped in a losing position. Then it gets worse: Patterns develop within the compression range and then turn into false signals because no side is gaining control. Hence, more stop-outs and losses.

The Purpose of Classification

Knowing how to classify chart patterns will help you to simplify your analysis. You will be able to think in terms of the overall structure of the price movements you're observing, instead of concerning yourself with minute details that may or may not be important.

Later, when we examine basic chart patterns more thoroughly, we will discuss certain general tendencies that these three types of patterns—continuation, reversal, and compression—demonstrate across all markets. This classification system and those guidelines will enable you to handle the majority of movements fairly well. You may encounter problems when dealing with exceptional situations, but you will be able to control your losses in those cases. So think of this system of classification as the foundation on which to lay more complex chart-reading techniques.

Swing Highs and Swing Lows

Now that we've covered the basic elements of price movement, let's explore two key concepts you will also need to understand in order to master the art of chart reading. Namely, swing extremes and trend.

If these terms are unfamiliar to you, don't worry. I'm about to tell you everything you need to know about them. If you think you already know everything there is to know about swing extremes and trend, I urge you to read through this section anyway. I'm reasonably confident you will find information here that you've not encountered anywhere else.

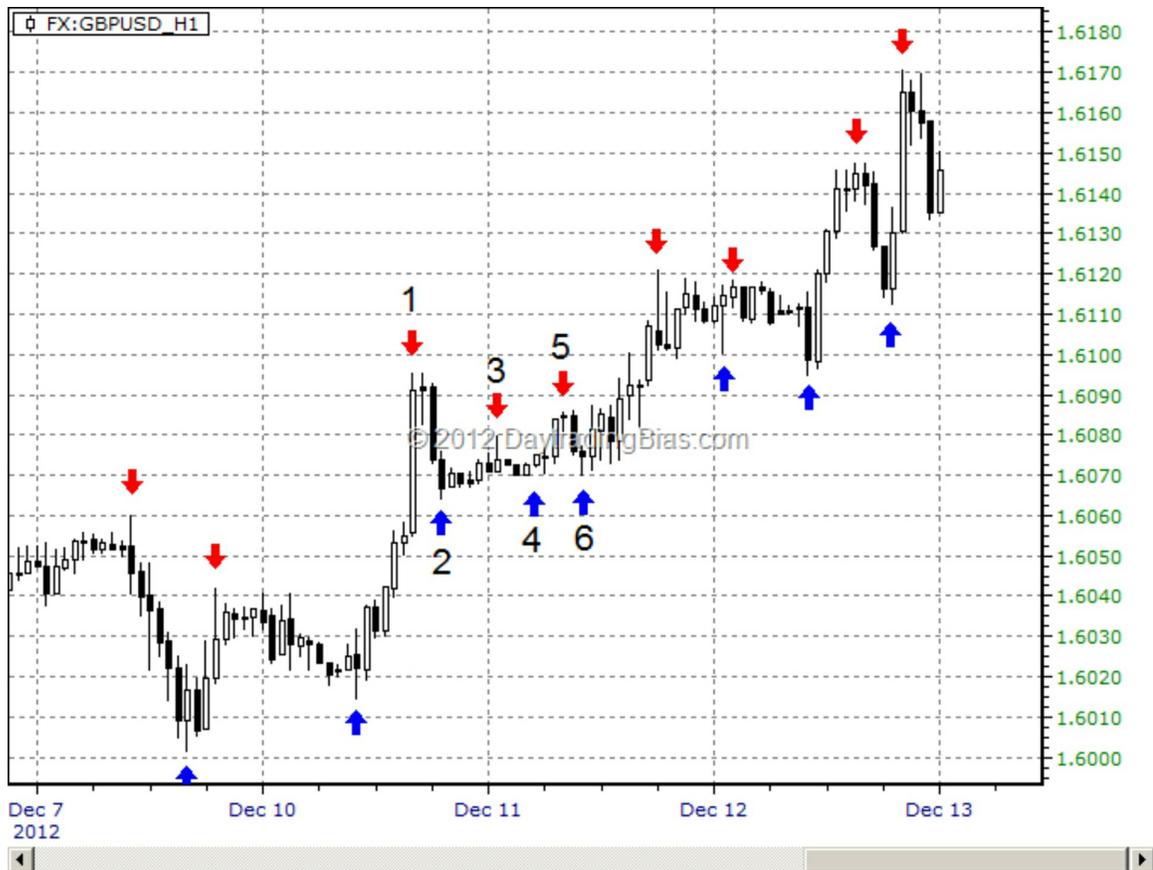
Let's start with swing extremes.

As you know, a chart tells you where price has been so you can draw an inference about where it might go—up, down, or sideways. Before you can determine this, you have to be able to spot the point at which price has changed direction. That point is called a “swing.” When price is going up and then turns around and goes down, we call that a “swing high.” When price is going down and then turns around and goes up, we call that a “swing low.”

It may seem like I'm stating the obvious. And I am. But the nuance comes in when you're asked to decide which is the *important* swing high and which is the important swing low.

Defining the Extremes

Let's take a look at this 1-hour chart of British Pound to US Dollar (GBP/USD).



Many of the swing highs (marked by red down arrows) and swing lows (blue up arrows) in this chart are quite easy to identify. However, if you don't have clearly stated rules to follow, you will find it difficult to label some of the other important swing points marked above. Don't try to guess. Without specific criteria defining swing highs and swing lows, you simply won't know which swings to pay attention to and which swings to ignore.

Mechanical Rules

The standard approach to defining swing extremes involves comparing the extreme to a certain number of bars near it. For example:

1. A swing high should be higher than the high of the nearest N bars to both its left and right sides.
2. A swing low should be lower than the low of the nearest N bars to both its left and right sides.

Common choices for N are 3, 4, 5, 8, 20, etc.

This approach to defining swing highs and swing lows works most of the time. The exceptions involve situations where the market is swinging

very quickly. In those cases, you would miss many important swings, because using the number of bars to identify swing points is equivalent to counting the amount of time that has passed (or the number of transactions, if you use volume or tick bars).

In the chart shown above, for example, we would miss swing low #2 if we used the definition of four bars minimum for the swings. But we can see on the chart that this is an important swing point.

So how do we resolve this issue?

There are several options.

The conservative approach is to look for the missing swing point when you have two consecutive swing highs (or swing lows). For example, imagine you've just detected, according to your criteria, swing high #3 on the chart. You realize you've also detected swing high #1, but you haven't noticed a swing low in between. So you count N bars forward from swing high #1 and N bars backward from swing high #3 and—*voila!*—you call that point swing low #2.

Here's another approach: If a swing extreme is exceeded by a subsequent swing extreme, there ought to also be a swing extreme in the opposite direction. So instead of waiting for swing high #5 to occur, once the price level defined by swing high #3 is exceeded, we know there must be a swing low (#4) somewhere after swing high #3. This method compensates for the shortcomings in both the standard and the conservative approaches by identifying swing points earlier, at least in some cases.

The Chart Readers' Way

Do we really need to be so precise in defining every single swing point?

No. And actually, computers can do it much faster than you can. They are designed to uncover information by mass scale scanning of data, and any human who attempted to focus that intensely would get very stressed out very quickly.

The good news is that humans have something computers don't: insight. That means we don't need to duplicate a computer's method for finding swing points. Simply by using charts on one instrument with different timeframes, we can identify the important swing points.

We'll get into this more explicitly in a minute, when we talk about trend. But for now, just remember that in order to keep things simple, you should follow these rules:

1. Choose your timeframe (e.g. a chart made up of five-minute bars, a chart made up of 15-minute bars, an hourly chart, etc.). You'll know a swing point on that timeframe when you see it.

2. If you think you see a swing point but you're not quite sure, then you're looking at a swing point in a lower timeframe.

3. If you don't know whether you can see any swing points at all in your chosen timeframe, look to a higher timeframe for clues.

The Importance of Swing Extremes

Swing extremes are turning points at which price stops moving in one direction and reverses. These extremes convey important information. A swing low, for example, tells you that buyers stepped in at that price to send the market back up. That swing low is now considered to be a "support level." Conversely, a swing high tells you that sellers stepped in at that price to send the market back down. That swing high is now considered to be a "resistance level." This information is available to all the participants in the market—like a public broadcast. That means other players will be taking these swing points into consideration when making their trading decisions.

As chart readers, we care about how price swings from point to point. The way it swings will tell us whether or not it's about to move in a particular direction.

And that brings us to the second important concept that any good chart reader needs to understand: trend.

The Classic Definition of a Trend

Ever since the early 1900s, when the first generation of technical traders introduced the notion of trend, this idea has been a controversial topic. Because it is possible to define trend in many different ways, some people find the concept itself to be confusing.

Some even go so far as to say that trend does not exist, that it's just a label—like the economic terms “recession” and “depression”—where the event has to have ended already before you can name it.

I disagree. My understanding of trend is not based on price patterns or chart patterns but on my work on mass-market simulation studies. I can assure you that trends exist, and that understanding what trend is will give you proper perspective in reading your charts.

Let me share the version of trend that I was taught, along with how to use it.

Swing Trend Definition

As I've said, *trend* can be defined in many ways. In general, when we read a chart, we can classify a part of the chart as uptrend, downtrend, or no trend.

Using swing extremes as the basis to define trend is called the “swing trend” method. Here's how it works:

You need at least two swing highs and two swing lows to form a trend.

An uptrend is a series of swing highs and swing lows in two rising sequences, higher swing highs with higher swing lows.

A downtrend is series of swing highs and swing lows in two falling sequences, lower swing highs with lower swing lows.

When the swing highs and swing lows are not trending either up or down, the scenario is then recognized as no trend.

Example of an Uptrend

The following is the same chart used in the previous section, except that it occurs in a 4-hour timeframe.



Starting from the leftmost swing low (the first blue up arrow), this market is clearly trending up.

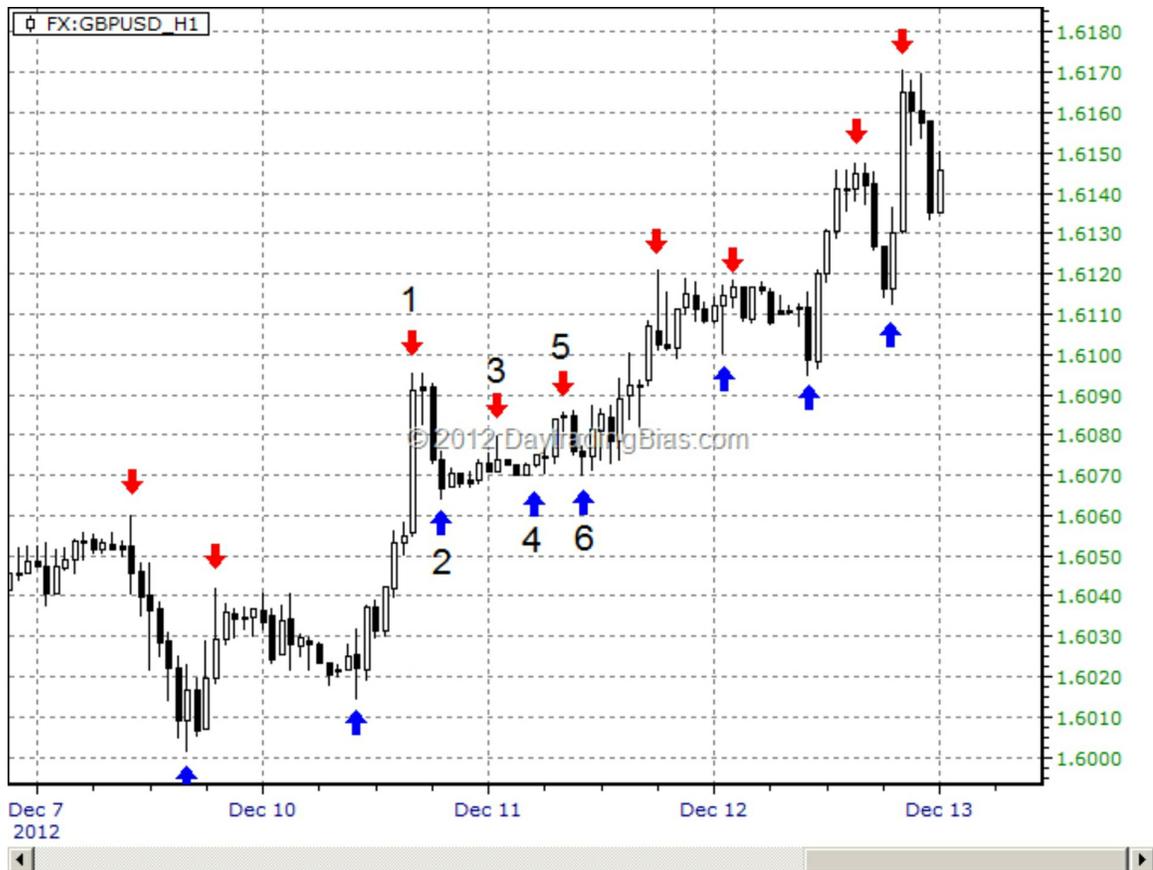
First, the swing highs (red down arrows)—starting from the second to the left—have occurred in a rising sequence.

Second, the swing lows (blue up arrows) have occurred in a rising sequence as well.

That means this part of the chart is trending up within the 4-hour timeframe.

Trend Exists in the Timeframe of the Beholder

Now let's compare this 4-hour chart with the 1-hour timeframe chart we looked at earlier.



Covering the same period of time with higher resolution, this chart tells quite a different story.

As you can see, the higher resolution of this 1-hour chart enables us to see quite a number of extra swings. Indeed, instead of showing one single uptrend, it includes three separate periods of uptrend. Compare the two charts and notice how the 1-hour chart shows one short period of downtrend (near the Dec 12 vertical line) and one short period of no trend (#1 to #4), while those details are hidden from us in the 4-hour chart.

These differences are important. They mean that when two traders are arguing about whether or not a market is trending up, the whole disagreement is moot if the traders haven't clearly stated their timeframes and trend definitions. After all, they might be using entirely different methods to define the trend. Or they might be talking about completely different timeframes, like a 15-minute chart vs. a daily chart.

In fact, once the rules and timeframe have been agreed upon, you actually *can't* disagree about how the market is trending. Unlike a field such as economics, trading involves no assumptions. If the historical data is

accurate, the charts will be the same. So when the rules have been agreed upon, conclusions are objective and easy to follow.

The Importance of Trend Identification

So why do you need to be able to recognize a trend? Two reasons. A good trend identification method will:

1. Suggest which direction the market is headed.
2. Provide a clean structure for chart pattern definitions.

The swing trend method that we've just discussed satisfies both of these goals. I know because I have backtested the results provided by this approach across all markets in almost all timeframes.

In regard to where the market is headed, here's what I have found:

- When a market is trending up, look for higher swing lows.
- When a market is trending down, look for lower swing highs.
- When the market is trending either up or down, look for an exponential increase in the odds of a reversal after the fourth swing extreme.

As for using trends as a structure for chart patterns, we will discuss that in later sections.

Other Trend Identification Methods

Of course, the swing trend method is not the only way to identify trend. In fact, trend definitions exploded in the late 1990s, when the proliferation of personal computers enabled almost anyone to play around with historical price data and try out new ideas.

Let's take a look at two of the better-known approaches to identifying trends, along with their limitations.

Moving Average Trend

The moving-average-based trend definition was big back in the 1970s and 1980s, when it was the new game in town, so to speak. It worked very well then and is still pretty effective in certain markets, such as forex (foreign exchange).

With this method, a trend is defined by the direction of the moving average and by its relationship to price. If the moving average of the price is going up and the price is trading above it, you have an uptrend. If price is trading below the moving average and the moving average is going down, you have a downtrend. Anything in-between is defined as no trend.

It is very easy to calculate moving averages quickly, which is one of the reasons this method was so popular in the 70s and 80s, when computers were much slower than they are today. You can also choose what kind of moving averages you want to use, along with the related parameters. In fact, any combination of settings you choose can be used to justify your personal, subjective bias. That's another reason this definition was so widely used in the past. Many firms wanted to justify their market calls by throwing in techno mumbo jumbo that sounded sophisticated.

Moving-average-based trend identification actually works quite well if it syncs up with the dominating cycle in the underlying instrument. However, the dominating cycle in a market changes over time, and that means this approach requires a whole host of extra confirmation techniques to check its accuracy.

Linear Regression Trend

The linear regression method is another popular trend definition, one that came into play after the moving average's 15 minutes of fame were up.

This method was devised by engineers who thought the financial markets behaved like subatomic particles. The public, of course, figured that the application of a scientific method to anything must be a good idea.

The linear regression method primarily defines a trend by its slope over a predetermined duration or sample points. If the slope of the linear regression line is rising within a certain positive range, the market is trending up. If the slope of the regression line is falling negatively within a certain range, the market is trending down.

Linear regression is still used by many long-term funds and by academics in their research papers. This is unfortunate. The hard truth is that summarizing transactions in a market for an arbitrary period of time and classifying them with user-chosen parameters does not produce sensible information. It produces what you think is relevant. Worst yet, if you use historical data to fine-tune the trend definition, you get curve-fitting results that are of no use in the future.

Like the moving average trend, the linear regression trend proves only moderately useful in producing reliable information for a trader. It involves a much more tedious method for processing price data and identifies a trend that turns out to be no better than that identified by the moving average method.

Remarkably, many chief researchers and system developers with advanced scientific backgrounds at big hedge funds fervently believe in this approach, even though it does not improve their production trading models. And, ironically, this belief has actually made the effectiveness of the linear regression method something of a self-fulfilling prophecy. Due to this method's popularity among traders, the price movements in many markets have shown better responses with the most common settings for this trend identification method—as they have with the moving average approach.

Stick with the Tried-and-True

I started my chart-reading education using the swing trend method because that was what my mentors used. It worked well back then, and it works even better now. I have tested many other methods with historical data and none of them really do better than the good old swing trend method.

So why do people keep trying to come up with something better?

The answer is obvious. Traders want to get into moves earlier, with a better entry price. And they want to exit earlier, with a better exit price. As far as I know, the exit price part is possible if you have a good understanding of price dynamics. But there's a fundamental problem with the entry part.

Think about it: A swing extreme is not yet a swing extreme if price hasn't reacted to the price level. Before a swing can be called a swing extreme, you must first have a retracement for a period of time to confirm that the swing extreme is in place. This confirmative movement is required for any trend identification method to work.

By definition, trend is a confirmative concept because you need at least a few bars of price movements going in a certain direction to establish a trend. Any attempt to guess if a trend will change is not trend identification. It's trend prediction. Trend prediction can work, but it typically requires information outside of price data to improve its accuracy.

Many traders think they're creating new price trend identification methods, but actually, they are making the mistake of mixing trend identification with trend prediction. Any such move into the realm of predictive methods will inevitably produce less consistent and less reliable results.

Price data can only offer so much in the way of trend identification. It's important to accept what trend is and to understand its limitations, including the unavoidable fact that the identification of a trend will necessarily be delayed by the wait for its confirmation.

The Psychology of Swing Extremes

At this point, you might be asking yourself why the swing trend method works so well.

I can answer that question in two words: mass psychology. Put simply,

the swing trend method works because of human nature—more specifically, expectation (or greed) and disappointment (or fear).

Let me explain. Once a swing high is in place, you know that a particular price stopped the upward movement of the market. But all of the other people monitoring that market know this as well. Many of these people are still holding onto their long positions (i.e. those who bought as price was going up). And they have the same goal that you do: to make money. This particular price has created an expectation among all these “longs”: They want to sell and take their profit, and they want to get no less than that swing high price—or very close to it. Why? Because it’s there! Because it was “printed,” to use common traders’ parlance. That’s why you’ll so often see an increase in trading activity the next time the market approaches that price. It’s evidence of traders’ anticipation—and sometimes stress—at a swing high.

One source of that stress is the prospect of giving back profit already in hand. Another source is the prospect of missing out on more profit to come! Yes, a swing high also creates an expectation among potential buyers, who think that this new high price signals the possibility of even higher prices to come. If enough potential buyers decide to jump on board, any pullback in price will be higher than any previous pullback because these buyers will have absorbed the selling of those anxious to lock in their profits.

To put it in chart-speak, a “higher low” will be in place. And this higher low will have come after the “higher high” of the swing high we just discussed. Higher highs, followed by higher lows. These are the building blocks of an uptrend.

A similar psychology is at work with swing lows, although there is a subtle difference in the emotion they can trigger.

For starters, think about the reason a swing low has formed: Buyers have been more aggressive than sellers. These buyers bought before the swing low was confirmed as a swing low: Someone has to buy at the very bottom, after all. So once that swing low has been confirmed, those who have already bought feel a sense of relief, even elation. They’re making money!

But what if this price is revisited again?

That’s when disappointment and fear kick in. Some of these longs will hold on. For how long depends on their personal tolerance for pain. Some will give up their positions. But others will sell. If enough of them decide to

dump their positions, the selling will break through the swing low, resulting in a lower low. Eventually, this lower low will result in the next swing low. Lower lows followed by lower highs. If this process continues, you will have a downtrend.

As for the Shorts

That covers the emotions of those who wish to buy low and sell high—the longs. Now let's consider the market from the perspective of those who wish to sell high and buy low—the “shorts.”

These people experience the opposite emotions.

When the market has printed a swing high, the short sellers feel relief, even elation. (To “sell short” means to sell shares you don't own but have essentially borrowed from your broker. Your intent is to buy those shares back at a lower price and keep the difference as your profit.) If that swing high is challenged, these short sellers experience disappointment and fear. Some of these traders will “cover their shorts,” buying the stock back to close their positions. But others—again, depending on their tolerance for risk—will hang on.

These short sellers may be eyeing the last swing low printed on their charts and looking at it as a possible target. If the swing high looks like it's going to hold, others will join them. If enough people sell into the market—whether they're short sellers or they're longs abandoning their positions—price will be pressured back down to the swing low.

The Deciding Factor: When the Swing Trend Breaks

The truth is that price extremes control the emotions of many market participants. This is the primary reason why the so-called “fundamental factors” of the market—those metrics measuring economic performance—do not really matter. In fact, fundamental factors are essentially useless in projecting price movements.

Let's consider a profitable company with good management and no foreseeable change in its presence within its own industry. Its stock price is dropping, yet people are buying. “The market will come to its senses,” they say. They're convinced that the price of this stock will rise as it “should.” Consequently, they buy more of it on margin, borrowing from their broker so they only need to put down 50 cents for every dollar's worth of stock they

acquire.

But the stock keeps dropping. Why?

The answer is simple: As long as there is not enough capital flowing into the stock to push prices up, the downtrend will continue. Those traders who've bought the stock on margin will be forced to unload their long positions as the price falls. They will have no choice but to sell, because their brokers will require them to do so in order to keep the cash balance in their accounts at the level required by regulation.

The bottom line: Fundamental factors alone cannot tell the world to push the price higher—or lower.

Yes, the news can be bad, but once the price of a stock or futures contract has broken a downtrend by printing swing high, the psychology of the market participants will change. They will not feel pressured to sell. Short term speculators may find this particular company worth their time—and money—to bet on potential higher prices.

Remember this: Higher prices come when buyers, for whatever reason, are more aggressive than sellers at those higher prices. Lower prices come when sellers, for whatever reason, are more aggressive than buyers at those lower prices.

Human Nature

I should point out here that our psychological reaction to price extremes stems from more than just fear and greed. As I mentioned in Section 1, this response is also a part of human nature—our survival-related ability to identify sharp objects moving toward us.

The unlucky translation of this recognition into emotion is just an extension of that hardwiring. Thus, swing extremes are natural features we recognize and react to. We don't really have a choice in recognizing or reacting to them. What we can choose, however, is to use logic and a trained response to override our natural reactions.

This isn't easy, of course. Not only are our brains hardwired to react emotionally, but our money is on the line. However, the truth is that the more you're affected by your emotions, the worse your decision-making will be.

Trend Drivers and Trend Quality

To recap: Trend is the ability of a market to persist in a particular direction of movement. A trend does not have to be well structured in terms of swings, price patterns, or some other aspect of price. All a market needs to do is keep pushing in a direction again and again within a particular timeframe to be experiencing a trend.

So what produces these trends?

Trends of all durations and in all markets are the result of two components and their interactions.

The obvious driver of price is the relative holding strength of the existing long and short positions. I call it obvious because the trading game has a ground rule called margin requirement that limits the power of individual players. You have to cough up enough money to support an open position in order to stay in the game. This constraint drives existing players to take action—whether that means taking profits or cutting losses—as the price fluctuates.

(It's important to remember that a committed position is immediately converted into potential force against the position itself. For example, a long position will have to be liquidated at some point. That is potential sell pressure, even though the pressure may be very small.)

The second driver of price is not so obvious. It concerns those ready to follow in your footsteps. In other words, if you've bought, how many more buyers are ready to buy, how much are they willing to buy, and at what price? (Players who have already committed their capital with existing positions can also be part of this component if they have more capital to add to their existing positions.)

Remember, if you're a buyer, you will be looking to sell to someone who's looking to buy at a higher price. If you're a short-seller, you'll be looking to buy from someone who's looking to sell at a lower price. A trend can be sustained if and only if this second driver packs enough fuel to keep the market from reversing.

Bear in mind that potential participation in a market is not a stable quality. Participants can change their minds based on on-going developments. A large hedge fund might be forced to unload a position in a company (or in

several companies) because one of its clients suddenly closes its account. Traders privy to a timely heads-up can profit handsomely from this information, which is why they almost never get it.

Other methods used to estimate potential participation include market breadth analysis, tick data analysis, and exotic concepts. Some rely on astrology, for example, to predict the ebb and flow of collective human psychology and its impact on the markets.

The Strength of the Trend Matters

The strength of a trend is important because it imbues the trend with characteristics that offer clues about where the market is likely to go. That's why it's so important to have a method in hand that enables you to classify trends according to their strength.

I divide trends into three categories:

1. The first type of trend is the extreme strong trend. This kind of trend results from a surprise breakout and is often preceded by unusual price activity—sometimes it's a quiet consolidation of price followed by an eruption—instead of the typical swing behavior we've already discussed. The breakout will take the price to the next nearest price target quickly. Extreme strong trends do not last. Most of the time, price will need to consolidate after one or two swings in the direction of the trend.

Once you can identify an extreme strong trend in the making, the breakout play of the setup will be the easiest way to capture the move. Some people like to trade this type of setup exclusively.

2. The second type of trend is the strong trend. This is the kind of trend that behaves in the “classic” swing manner we discussed. The expectation is that the swing extreme made before the pullback will be at least retested or exceeded if the trend does not last for too long.

This is a favorite setup for short-term traders. By estimating the exhaustion of the pullback, traders can jump on board in the direction of the trend. The advantage is that risk can be tightly controlled while the profit potential can be estimated well ahead of time.

3. The third type of trend is the weak trend. When a trend has been in place for a long time, its ability to attract support decreases, as it has pushed quite far in its particular direction. Weak trend is the necessary condition for

trend change, but weak trends do not always lead to change. Under certain circumstances, a weak trend can attract enough renewed interest from other traders to turn it back into a strong trend.

A weak trend can be a deathtrap for traders, luring them in only to fishtail on them. That's why it's a good idea to stay out of the market when it's trending weakly. Don't make the mistake of thinking you're wasting an opportunity. In actuality, you're doing what the smart traders do.

Summary

For beginners, it is best to wait for a strong trend to develop before hopping on board to get a part of the move. This method promotes discipline and risk control. Most of the time, you will find yourself playing a waiting game. Don't get discouraged. You will gain a lot from training yourself to be patient. As traders, we should only act on the best setup we recognize and be careful not to trade until we have a good grasp of the situation and all of its possible outcomes. By learning to observe and wait patiently for the setup, you will develop the temperament you'll need to progress to the next level.

Section 3: Trading with Trend Lines

Before There Were Chart Patterns, There Were Trend Lines

There was a time when “Head and Shoulders” meant shampoo, pennants belonged to baseball, and diamonds were forever. Yes, there was a time when traders hadn’t christened chart patterns with those names because they hadn’t yet discovered them.

And yet these traders still made money. How?

They knew how to identify trends, and they knew how to use trend lines to make the most of those trends. Trend lines were, for many years, the chart reader’s primary technique for chart reading. The original trading techniques based on trend lines have been forgotten by modern day chart readers, and comprehensive reference materials on the subject are no longer available.

Yet these techniques are still quite effective. That’s why I am going to share with you the basic ways to use trend lines.

At Long Last, Momentum

In the last section, I spoke of the three key aspects of price movement: how far price moves, the direction in which price moves, and how fast price moves. We’ve already discussed range and direction, and how they affect the dynamics of price action. Now let’s bring momentum—or “rate of change”—into the picture.

More specifically, let’s explore one of the best ways to determine rate of change quickly and accurately. Trend lines.

What Are Trend Lines?

Trend lines are quick estimates of the average rate of change between price and unit of time. To create a trend line, you don’t just arbitrarily connect points on a price chart. Trend lines need to be properly drawn, and when properly drawn, they can serve multiple purposes. Trend lines are useful as quick filters for identifying the current trend. They can also be used to estimate price targets.

The most interesting use of trend lines, however, is in providing the current “accepted” rate of change—the rate of change that price has demonstrated during a price swing. From there we can estimate what must

happen to precipitate a break in the trend.

Common Methods for Drawing Trend Lines

Classic trend lines are drawn by connecting two important swing highs or swing lows. Choose two successive swing lows, draw a line between them, and you have a support trend line. Choose two successive swing highs, draw a line between them, and you have resistance trend line. Draw a line segment parallel to the trend line—one that touches the swing low between the two swing highs or the swing high between the two swing lows—and you have a trend channel. Easy. Powerful.

But just as some swing extremes are more significant than others, so are some trend lines. The trick is to know how to let the trend lines themselves tell you which ones are important, which ones aren't, and why.

I'll show you what I mean with this illustration, on a 6-hour chart of the currency pair EUR/USD.



As you can see, I've drawn a series of resistance trend lines, each of which extends from the initial swing high (A). The first resistance trend line connects with the second swing high (C). It's a steep line and, not surprisingly, price breaks through after the swing low (D). Clearly, this not an important resistance trend line. Nevertheless, we know we're trending down. Lower highs and lower lows leave little doubt about that. But we're looking to see if our trend lines can tell us when the trend is going to change.

The next resistance trend line connects with the next swing high (E). It, too, is broken right after the next swing low (F). Once again, we see lower highs and lower lows, which tell us the downtrend remains in force, even

though price keeps breaking through these resistance trend lines to the upside. Right now, our trend lines don't appear to be telling us much of anything except that they're not very important trend lines.

We draw a third trend line from A, this time to the new swing high (G) and, for a good part of the next 24 hours—remember, each “candlestick” on this chart represents six hours of price activity—we wonder whether we might finally have something.

Take a look: After this third swing high, price slaps back to swing low H, which is almost as low that previous swing low (F).

Almost. In other words, it's a higher low.

The downtrend is now in question. If price reverses at this swing low and breaks through the resistance trend line, and if the next swing high (I) is higher than that previous swing high, we'll have a higher low and a higher high. The stuff of a trend reversal!

But it's not meant to be. The new swing high (I) is lower than the previous swing high. Higher low and lower high and another broken resistance trend line means we don't have anything at this point but more questions. So we dutifully draw a fourth trend line from that first swing high (A) to this latest swing high (I). Price now drops to a new lower low (J), reconfirming the existing downtrend.

We draw our fifth trend line at the next swing high (K) and, immediately, we're struck by the fact that these the last two trend lines are very close together, especially compared with the ones that preceded them. This suggests that we may finally have an important resistance trend line on our hands. (That hunch is reinforced at the next swing high (M), which honors our resistance trend line quite precisely.)

Now we're on alert. This is could be an important trend line. If it doesn't hold the price back, that could signal a reversal in trend. In fact, we might now see the criteria we need to initiate a long trade. (In the next section, we'll talk about chart patterns and the role they can play in just such a scenario.) But how can we be certain that the move down is really over?

Accepted Rate of Change

In order to answer that question, we first need to understand another important concept: the accepted rate of change.

Up until this point, we've talked about the actual rate of change in price. That is, how quickly price has already moved during the course of an uptrend or downtrend. But because chart reading is all about predicting what might happen in the future, what do we call our best estimate of how fast price is going to *continue* to move? Will it speed up, will it slow down, or will it continue to move at exactly the same rate? Nobody knows.

For lack of a better option, participants in the middle of a trend call the current rate of change—the rate of change that price has demonstrated during the last price swing—the “accepted” rate of change. This is really just a way for market players to estimate where the market should go if the current trend continues. (Remember that there were no calculators back when trend lines were invented, so trend lines were probably the most efficient way to develop dependable trading rules.)

So what is the accepted rate of change on our chart? Well, by the time the confirmed strong resistance line is in place, the Euro/Dollar has dropped about 400 pips over ten trading days—from over 1.3400 pips at the red arrow to less than 1.3080 pips at the blue arrow. This means that in this particular down move, the accepted rate of change is -40 pips per day.

The most important thing to remember is that this kind of rate-of-change estimate tells you what is *not* supposed to happen if the trend is to continue. In other words, the rate of change should not slow down.

However, by comparing the steeper slope of our first trend line with the shallower slope of our last trend line, we can see that it has. And then, as we suspected, comes the reversal.

But how can we know that this reversal is for real? After all, price has gone up several times during the course of this downtrend without triggering a reversal. So what kind of move up would make sellers feel sufficiently uncomfortable to give up on their positions?

The Reversal Criteria

The answer is simple. You need a break of the trend line, but not just any break. You need a move that breaches the trend line quickly—like a move with the speed of the accepted rate of change in the opposite direction. In this case, 40 pips per day.

In other words, the break should be at least as fast as a mirror image of

the trend line you used to establish the accepted rate of change in the downtrend. This characteristic makes it very easy to spot a potential trend change on a chart—without calculators or exact measurements.

I'll show you what I mean.



As you can see, simply by flipping the fourth trend line into a mirror image and laying it against the move up, we can easily determine that this break is strong enough to signal a reversal. That's because it is moving up at least as quickly as the down move had been moving down.

(You'll notice that none of the earlier, steeper trend lines were breached by a move this strong. That's because the steeper a trend line is, the faster the accepted rate of change. Hence a stronger move in the opposite direction would be needed to break the down move. It's only when the downtrend slowed considerably that a reversal became possible.)

You can also see that with the last two trend lines, the breach of the trend lines themselves at 1.2840 did not trigger a panic among the short sellers. It was the extended move above the trend line—by about the magnitude of the accepted rate of change at 40 pips per day—that started the panic buying. In other words, the confirmed break happened when EUR/USD

printed 1.288.

The Higher Timeframe Rules

Something else to keep in mind: When it comes to rate of change (and a lot of other things, in fact), the next higher timeframe rules. Let's say, for example, that this swing down and swing up on the six-hour chart was part of a larger swing up on the daily chart. Moreover, let's say that on the daily chart, the rate of change of this larger swing up was lower than the rate of change on the previous swing down.

In that case, you would want to be wary about any long position you might initiate based on the rate of change you see on the six-hour chart, because you would be "swimming against the current" established by the higher timeframe.

The Swing Trend Line

Another helpful weapon in our chart analysis arsenal is known as the "swing trend line." Let's take a look, using the same 6-hour EUR/USD chart that we've been studying.

You will remember that our fourth and fifth classic trend lines signaled a possible reversal with their decreased slope and increased proximity. At that point, we can make use of a swing trend line to confirm the likelihood of reversal. First we identify the high extreme swing point of the move down (A on the previous chart). Then we pinpoint the low extreme of this drop: N. Connect the two and you have a swing trend line.



On this chart, the green swing trend line—drawn from the highest swing high to the lowest swing low—is shown with the top, 50%, and bottom price levels highlighted. The 50% line makes it easier to see that the move is, in fact, two separate swings—first the initial drop (the blue line on the left) and then, after a consolidation around the low of the first move, a continuation drop down to the second leg target.

Notice that I've drawn a second diagonal blue line from the top to the bottom of this continuation drop. This second line is drawn parallel to the first line, so we can compare the first leg's rate of change with that of the second leg. The comparison reveals that this second leg is dropping at a slower rate than the first leg, which is a sign that the move down is running out of steam. That means a reversal is possible—even likely—at this point. (If the Euro had dropped in the second leg at the same rate as the first leg, a reversal would be unlikely, because the down trend would still have plenty of momentum behind it.)

You May See Only One Trend Line, but There Are Many

Many chart readers reject the concept of trend lines because deciding where to draw them can be pretty arbitrary. Others swear by their own specific trend lines, acting as if the lines have magical powers that control how price will move. In truth, trend lines have one genuinely effective purpose—to highlight the persistence of the price direction currently in force. Remember to be reasonable and objective when applying trend line analysis to a chart.

One other important point about trend lines: There can often be more than one trend line defining the exact same trend. In other words, you may see one obvious trend line in your chart, but others with slightly different chart configurations will see slightly different trend lines. Don't fall into the trap of thinking that yours is the trend line that rules them all. Be aware of the potential for ambiguity.

Let me show you what I mean.

There Is Often More Than One Trend Line for the Same Price Extremes

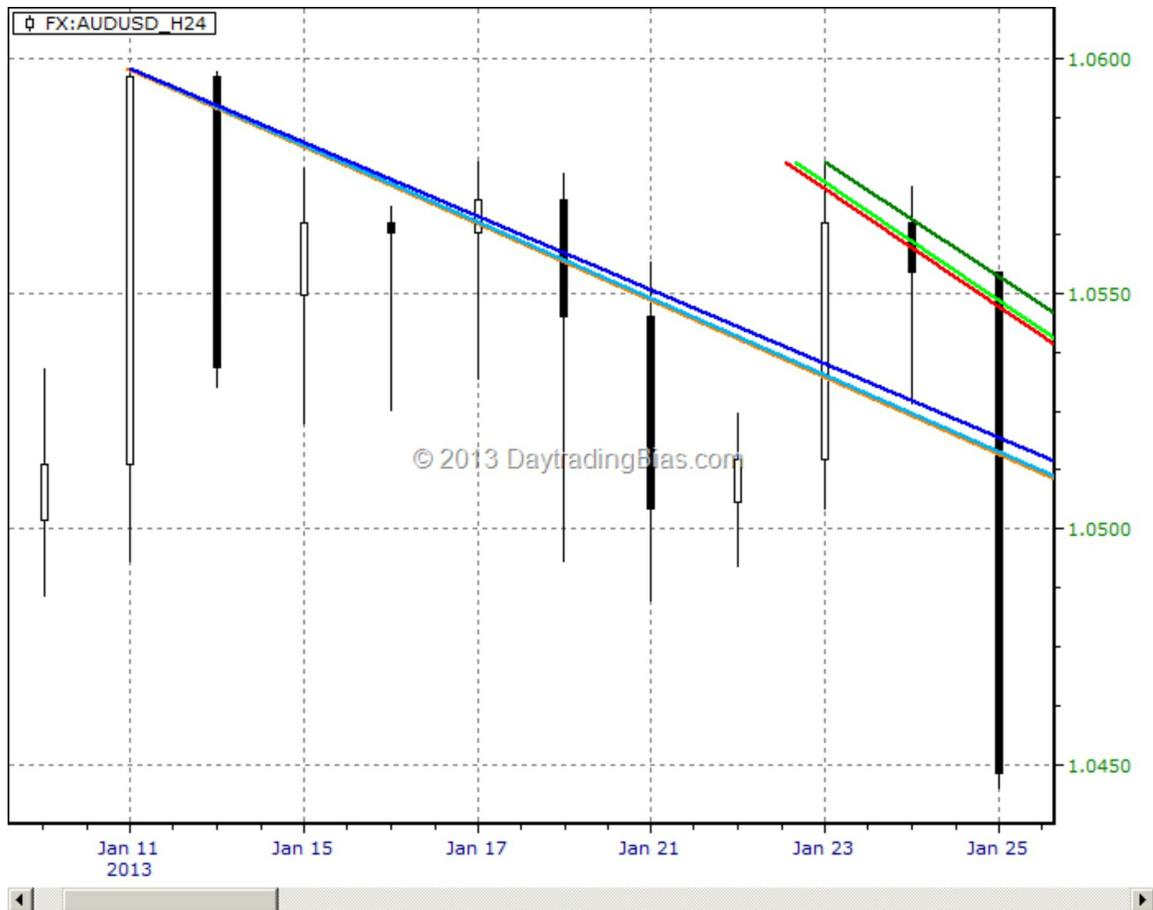
The following is a chart of the Australian dollar.



Here, I have a total of six trend lines grouped into two sets.

I did not draw these lines arbitrarily. They are all anchored to the swing extremes of the price bars. The lines on each set of three trend lines are anchored to the respective 1-hour, 4-hour and 24-hour bars of the Aussie. That's why their starting point lines are not perfectly aligned on top of the 24-hour bars.

Here is a closer look:



Notice that the set of trend lines drawn from Jan 10th all start at the same spot. That's because the high of that day was printed at the end of the trading day. Thus, all three timeframes show the price extreme occurring at the same bar position.

The set of trend lines drawn from Jan 22nd did not display the same felicitous alignment. Thus the 1-hour version and the 4-hour version start at an earlier time in the chart. (I have the underlying 1-hour and 4-hour price bars hidden on the chart to make it easier to read.)

(Note: These alignment artifacts have nothing to do with the configuration of my charting platform. Without going into the technical details, I can assure you that trend lines are based on geometric relationships. Your charting platform may not be sophisticated enough to properly display on a single chart, trend lines from multiple timeframes as I have here.)

This difference in the way the lines are drawn would lead to significant differences at the point where you need the lines most—the test of the trend lines. Take a look at the chart below to see how the difference is amplified

over time. The supposed decision point on one line is, in fact, a zone of almost 20 pips. That means three different traders—each using a different chart from these three different timeframes—would come to three different conclusions about the key inflection points in this market.



Let the Market Validate Your Trend Lines

The moral of the story? Simply this: As a trader, you should not assume that your trend line will act as support or resistance. You must be sure to wait for the price to react to the lines you have drawn in order to confirm their validity. You may have a good idea that the line you've drawn will be an important support / resistance reference, but other market participants may not recognize that. Sometimes your analysis is incorrect. Sometimes the market condition is pushing the price to move through your trend lines quickly, as if they are not there.

In that last chart, for example, it is clear that price has been reacting to the blue line. Thus, that line becomes the reference you should use. The first close above the line gives you the signal that the blue line resistance is probably ending and you should be prepared for the consequences.

How to Trade with Trend Lines

When price breaks through a trend line moving in new direction, that signals the potential start of a new trend. This setup can trigger a trade entry, but you need to know the projected target of the trend line break so you can decide if the trade carries an acceptable level of risk. If your target is two points and the risk is four points, it's probably best to sit that one out. But if the target is 20 points with that same four-point risk, that's a different story.

So how do you find the projected price target? You have two options—the classic method and the modernized approach. But they don't work in the same way. Let me explain.

Classic Trend Line Break Projection

Here's the classic approach: When price breaks through a trend line, find the last swing extreme and measure its distance from the trend line. Add this distance to the point where the trend line break occurred. You now have the projected price target.



On the chart above, I highlighted the maximum distance of the last

swing extreme from the first trend line with the first red vertical bar (A). Then, at the point where price breaks through the downtrend line, I placed a green vertical bar (B), which is the same length as A. This vertical bar B gives us the classic trend line break projection. But you'll notice that the price didn't get that far. Instead, it dropped back down again.

The second trend line is drawn at the next swing high (down arrow). Orange vertical bar C represents the maximum distance of the next swing low from the trend line. As before, we measured that distance from the point on the second trend line where price breaks through, a point marked by the light green vertical bar (D.) This time, the target was reached quickly.

(I have also highlighted the target prices with two yellow patches on the chart. Notice that the price levels are definitely important and people did react to them.)

But here's the problem with this classic approach: Classic trend line break projections of this type just don't happen very often anymore. Those who invented this method developed it in a world that had far fewer swings and much slower market-making activities. (The method worked well until, perhaps, the 1950s, because in those days, many stocks saw their biggest drop in the final flush of a down swing.) My own research on trend line behaviour across all data and timeframes has found that the classic projection method does not really work very well nowadays.

Clearly, it needs an update.

Modernized Trend Line Break Projection

The scientific method that I have developed for projecting a trend line break is more robust than the classic approach, and it works quite well in the current bots-driven market environment. My method solves two issues related to trend lines:

- It gives you an objective threshold to quantify the trend line break.
- At the same time, it gives you a high-probability projected price target.

Let's look the same chart again, this time with my version of trend line break projections.



Instead of using the distance of the last extreme from the trend line as we did for the classic trend line projection technique, I have used the maximum distance from the trend line throughout the lifetime of the trend line—in other words, the distance between the first swing extreme from which the trend line was established to the point on the trend line where price broke through to establish a new trend direction. I’ve found this to be a better yardstick for producing useful projections.

On the chart above, I highlighted the maximum distance from the first trend line with the first red vertical bar (A) from left.

At the next major swing low, I’ve placed a second red vertical bar (B) that is the exact length of vertical bar A. As you can see, vertical bar B doesn’t stop at the trend line like vertical bar A. Why? Because the swing low marked by vertical bar B does not extend as far from the trend line as did the swing low marked by vertical bar A.

So what has this accomplished? Two things. It has established a high-probability price target, and it has established an “Uncle” point for the

downtrend. Once the high of vertical bar B is broken, the trend line can be considered truly broken and the downtrend over.

And that's precisely what happened. Price broke through the yellow horizontal resistance line (1), never to revisit the old trend line again. Notice that the subsequent price drop did not exceed the same threshold. The third red bar (D) from the left shows the projected downside measurement, with the price target highlighted by the second yellow support line (2). This is the high probability reversal zone. Traders who weren't alert to this geometry would probably think the reversal had come out of nowhere.

The second trend line has its own maximum distance in place, which I've highlighted with orange vertical bars (C/E). After this trend line broke to the upside, notice how price reacted precisely to the projected target again (horizontal resistance (3)). It bounced right off that line.

Because of its simplicity, this approach can easily be automated. From my observations of the way many markets are now moving, I can safely guess that bots are already taking this high probability setup into account. That's why it is important for traders to keep an eye on the levels projected from trend lines, as I have done here.

Summary

Trend lines were created to identify the existence of a persistent trend. They were not designed to produce price projections; that was an afterthought. So the classic trend line break projection is of limited use, especially in today's markets.

My modernized trend line break projection method, however, is a different animal altogether. It has been developed on a solid, statistical foundation, so it's better adapted to the current market environment than the classic method. Of course, it is not the be-all and end-all. No one tool is. But you'll find it to be an indispensable complement to the chart patterns that we'll be discussing in the next section.

Trend Lines Gone Wrong

The use of trend lines first began in the scientific community. Geologists utilized them in the early 1800s to estimate whether a trend was developing in land mass movements or whether the current phase of a tidal cycle was over. The concepts of prevailing trend and trend reversal on price charts are simply techniques have been adapted from the analysis of natural data to the analysis of financial transactions.

Not always done well.

To illustrate how a logical concept borrowed from scientific methods was turned into voodoo chart play, we should look at the peculiar trend line method called the Right Angle Turn. Once upon a time, some market technicians contended that a trend would break if the market's path took a 90-degree turn. The problem with that kind of "analysis" was that it ignored the not-so-small problem of the established rate of change. Instead, it was completely dependent on the physical parameters of the chart itself, which meant that one trader, say, using a chart with a linear price axis would draw a completely different conclusion if he then turned to a chart with a logarithmic price axis.

Or take a look at these two charts:





Both present a linear price axis, but with different scales due to different screen sizes. In the chart on the left, you see a clean 90-degree angle. On the right, look closely and you'll see that the angle is not quite 90 degrees, which means it doesn't quite pass muster.

I have a hunch about where this idea came from. It was likely an attempt to identify a move whose slope is perpendicular to the current trend. But the simple fact is, that approach doesn't work. To obtain a genuine right angle, you have to calculate the slope mathematically. Strangely enough, some people actually believe in this concept, and all kinds of crazy techniques have been developed around it over the years.

There is, however, one variant of this approach that can yield a useful result.

The Mirror Image Method involves drawing a trend line that mirrors the rate of change of the original trend line. If you draw a vertical line at the point where the two trend lines meet, you'll see that the trend lines veer away from the vertical line in opposite directions at the same angle.

As an example, take a look at this US bond future 5-minute chart on which I have drawn three trend lines with their mirror images.



Now, pay close attention to the proximity of the price bars to the three upward lines.

Price hugs the upward blue line, suggesting that price movement is not fast enough to produce a strong reversal.

Price moves slightly away from the upward red line, suggesting slightly stronger price movement. (This will allow that line to act as a support for one more push higher).

Price moves well away from the upward green line, indicating the start of a strong reversal.

Usage Modernization

The classic interpretations of trend lines were very logical and quite scientific. It's kind of amazing that more than 100 years ago, traders were resourceful enough to develop such an effective tool using only human psychology, objective reasoning, and some creative geometry—and that this tool continues to be effective today. In fact, bots are now created to trade with considerations based partially on trend lines. Even academic papers have been written about their effectiveness.

Because the markets have evolved since trend lines were first developed, we do need to adapt the principles of trend line trading to fit our current environment. For example, due to the liquidity in many major markets around the world, we will probably see a reaction move to retest a trend line after it has been breached, even with the reversal criteria in place.

(In the old days—when the game was being played by fewer players with fewer opinions – a trend line break would typically be followed by a rapid continuation of price in the direction of the break. But now there are many more players with deep pockets and diverse trading strategies, which means that price no longer moves so decisively. There will always be people who try to counter the break to see if the move can be stopped.)

Keep in mind that the trend line was created to analyze the market with specific goals in mind. Its original purpose did not include precise binary decisions (e.g. breaking the trend line by a tick to determine if the current trend is over), so you don't want to focus on the minute details of a trend line. It is very important to remember this.

Here's an analogy: Think of trend lines like rulers, which were created to measure length and draw straight lines. We know that the readings we get from rulers are approximations. We also know that when we draw a line along the edge of a ruler, that line is only reasonably straight. With both rulers and trend lines, the precision we are able to achieve is limited.

But both tools can prove to be very useful as long as we remain aware of their limitations.

Section 4: Basic Patterns

Essential Chart Patterns

Many people think of a price chart pattern as an abstract formation that flashes signals to buy or sell. I'm sorry to have to tell you that those people are wrong.

Chart patterns certainly can help you predict what the market is likely to do. They can—and should—be a core component of your profitable trading strategy. They can even help you decide whether to buy or sell. They just won't do your job for you.

Patterns work across all kinds of trading instruments and timeframes because trading is essentially a game, in which every player has the same goal: profit. As long as this fundamental goal doesn't change, and as long as there are rules in place that create a level playing field for everyone, chart patterns will continue to work just as they always have.

It takes most professional traders years to understand how to use chart patterns effectively. Many of them are afraid to give their “secrets” away, so they carefully guard their hard-earned knowledge. I don't share their concern, so I'm going to introduce you to some of the most essential and powerful price chart patterns in existence.

Not Just Another Book of Chart Patterns

There's a big difference between knowing a pattern and knowing how to *use* a pattern. That's why I am not going to present you with the sort of copycat chart pattern explanations that you'll find in countless books and on innumerable websites. Instead, I'll provide you with a trader's-eye view of these patterns—exactly what they can do and exactly how you can use them to maximize your potential reward and minimize your potential risk. I'll also share something you're unlikely to find in any other publicly available discussion of chart patterns: Their performance statistics, both in terms of price targets and trade duration.

But before we get into that, a word of warning: Just as chart patterns aren't meant to be followed blindly, neither is the information in this book. Chart patterns—and anything else that might influence the trades you take—must be considered in the context of your own tolerance for risk. To put it another way, be sure you can afford to trade these chart pattern setups before you actually trade them.

That means taking financial market conditions into account. For example, say the market you plan to trade shows a massive upside expansion of its price range. In this case, take time to consider the potential of a sharp drop in price, not to mention a crash. You may be contemplating a trade with an 80% probability of success, but if there's a 20% chance that the market will move against you and wipe out your account, is that a risk you really want to take? Yes, a trade with 80% odds of success is attractive—indeed, about as close to a sure thing as you're likely to encounter. But it is not a sure thing. Nothing in trading ever is. Remember that.

Your goal in trading should not be to strike it rich through one-off “bet the farm” opportunities. It should be to consistently extract profit from the markets throughout the course of your trading career by controlling your risk.

The Minimalist Approach to Chart Patterns

Some chart readers use a lot of patterns. In fact, they use so many patterns that you have to wonder how they recognize them all. Of course, a trader can have a computer automate the recognition of their patterns. But most retail traders don't have the programming skills or equipment for that kind of setup.

Personally, I am a minimalist when it comes to chart patterns. I prefer to study them in a simple and straightforward way so my decision-making process can be as efficient as possible. I have been reading charts for a long time, and I can tell you that the most basic chart patterns work best.

The Simpler, the Better

The classic chart patterns are tried and true standards, free of the complexities that only a computer can recognize. This is very important to me. Even though I trade only a limited number of markets, I do not like to customize my chart patterns for each individual market. That would be just like having too many patterns to deal with.

You might wonder how simple a chart can really be when it's essentially giving you an infinite combination of possible price movements.

Well, I don't care if there are infinite possibilities in the ways a chart can develop. All I care about is whether the patterns *I can recognize* are actionable and profitable. Patterns that are not actionable are useless to a trader. So there's really no point in keeping track of them.

The criteria for actionable patterns is quite simple. As traders, we want to enter a trade with as much confidence as possible in a successful outcome. Obviously, we would also like to minimize the risk of loss. Minimizing risk and maximizing potential gain naturally reduces the number of chart patterns that are actually tradable.

This is a key point to remember: Not all patterns will be useful. In fact, many do not produce any actionable patterns at all.

A good trader is a boring trader. You should spend most of your time monitoring the markets, waiting for the best scenarios to present themselves, and managing existing positions. You only want to act when you see a scenario that you've identified as potentially profitable.

A Few Good Patterns

You don't have to know a lot of chart patterns to make money from the markets. All you really need are a few good patterns in order to make a living or to generate enough to grow your nest egg.

The most important pattern for you to be able to recognize is a continuation pattern. This is the type of pattern that occurs most frequently, which means you will have many opportunities to trade them. If you trade multiple markets that are not directly related, you will often get a minimum of one continuation intraday signal across a basket of three or more markets. The goal in trading continuation patterns is to get at least a piece of the action while maintaining tight control on risk.

Continuation patterns require the simplest decision-making process. And the risk and reward with them are well-defined, whereas the risk profiles and purposes of other types of patterns vary. That's why it is important to master continuation patterns first. Then, after you've been properly trained in trading them, you can use that training as a platform from which to learn to trade other kinds of patterns more efficiently.

Rules of Engagement

You will also find it very helpful to know that the three basic types of chart patterns—continuation, reversal, and compression—demonstrate certain general tendencies across all markets.

1. Continuation patterns are more likely than not to produce range expansion.
2. Reversal patterns seldom follow a fresh reversal in the other direction.
3. Continuation patterns occur much more frequently than reversal patterns in any market. Keep this in mind when you see a swing, and don't immediately jump to the conclusion that it must be a reversal.
4. Continuation patterns that fail to produce range expansion can result in either compression or reversal. You don't need to move in the opposite direction until after a reversal pattern is produced.
5. Reversal patterns that fail to produce range expansion in the opposite direction will likely lead to a retest of the swing extreme. That, in turn, may

cause range expansion in the original direction. There is no point in hanging on to the reversal play until after you get secondary confirmation—in other words, another continuation pattern that finally breaks the initial trend.

6. Compression is more common in forex (foreign exchange) and in thinly traded markets. You will want to stay out of compression until the market has made a clear choice of direction. Once price has escaped the compression zone, you will find the continuation setups you're looking for.

7. Initial breakouts from compression—if they are moving in the opposite direction from the original range expansion—are often False Breakouts.

Complex Chart Patterns: Don't Be Fooled

While it's true that you don't need a lot of patterns to trade successfully, don't make the mistake of oversimplifying this principle. For example, some traders actually believe there's a secret uber chart pattern that would give them superior returns with virtually no risk at all. If you are one of those traders, please reread what I have written so far. There are no shortcuts in trading.

Foolproof patterns might exist, but if they do, they occur so rarely that you will never be able to produce enough profit to make trading them worth your while. As for the patterns that recur more frequently, there is simply no escaping the fact that no one can perfectly predict the future.

Instead of concerning yourself with complex chart patterns, I suggest you focus on simple chart patterns and their combined predictive power. Think of each individual chart pattern as a tool you can use to help manage your risk. Each different pattern you recognize on the chart gives you certain clues about what might happen in the future.

Sometimes these patterns tell a coherent story, and other times they provide conflicting projections.

Let's explore how to handle each of those scenarios.

When Patterns Agree with Each Other

A group of unconfirmed patterns telling you the same story does not necessarily translate into a better trading setup. At best, this scenario boosts your confidence that you have a handle on what will happen next. Many traders confuse this boost in confidence with a higher probability that the outcome they are expecting will come to pass. This assumption is wrong.

Until your expected outcome has been confirmed, your expected outcome has not been confirmed. Really, it's that simple. The simultaneous development of multiple chart patterns with a similar expected outcome does not make that outcome any more likely.

What is really important in this situation is that you know exactly how your prediction can go wrong. (You should also remember that if the expected scenario does not play out, you can almost certainly predict a breakout in the opposite direction. That's because most of the other market

players will be trapped on the wrong side with you.)

When this happens, it's imperative that you accept the invalidation of your premises quickly. Some traders find this difficult. That's because visualizing the likely scenario for a prolonged period of time has wired that scenario into their brains. If you can train yourself to visualize what will happen if you are wrong, that will help to balance out your expectations and make it easier to shift gears quickly when necessary.

Hidden Order in Conflicting Patterns

When developing chart patterns give you conflicting projections, stand back and look at them again—but this time, organize the patterns from lowest (in other words, shortest) timeframe to highest (or longest).

Patterns, like price charts, exist in timeframes. Specifically, a chart pattern belongs to the highest timeframe in which you can identify that pattern. In other words, if Pattern A exists on a chart made up of five-minute bars, a chart made up of 15-minute bars, and an hourly chart, the timeframe of Pattern A would be said to be on the hourly chart.

Once you order the patterns according to their timeframes, you'll see that lower timeframe patterns play out first and put the higher timeframe patterns in motion immediately afterwards. In other words, the aforementioned Pattern A will unfold first on the 5-minute chart, then the 15-minute chart, and then on the hourly chart. This concept is very important.

Beginners assume that they cannot tell what is likely to happen when confronted with conflicting projections. But by prioritizing the patterns by timeframe, you'll be able to visualize the simplified outcome of those lower timeframe patterns, and thus eliminate other projections that conflict with that outcome.

Well-Known Complex Patterns are Well-Studied Combinations of Basic Patterns

Complex patterns are simply combinations of basic patterns. They don't follow special rules that violate the principles of basic chart patterns. A chart pattern principle is a chart pattern principle. It applies to all patterns, great and small.

You may notice that some of the more well-known complex patterns have been given names. The reason for this is simple: When a complex

pattern occurs often enough, traders give it a name in order to facilitate discussing that pattern with other traders—much the way chess players name and discuss certain frequently used combinations of opening chess moves.

The point to remember is that you don't have to be able to recognize complex patterns (although they can help you analyze a chart faster when they show up). Become proficient in a few foundational chart-reading tools and you will find that you can recognize many complex patterns.

The Essential Patterns

Now without further ado, here is a list of the basic chart patterns that I consider essential for getting a grip on any market.

Chart Pattern Name	Bullish Version	Bearish Version
1-2-3	1-2-3 Buy	1-2-3 Sell
Flag	Bull Flag	Bear Flag
Double Extreme	Double Bottom	Double Top
Wyckoff Extreme	Wyckoff Spring	Wyckoff Upthrust
Measured Move		
Channel	Up Channel	Down Channel
Wedges	Falling Wedge	Rising Wedge
Pockets		
Three Pushes	Three Pushes Down	Three Pushes Up
Head and Shoulders	Head and Shoulders	Inverse Head and Shoulders
Spike and Ledge		
False Breakout		
Parabolic Run		© Lawrence Chan

Let's take a look at them.

1-2-3: The Foundation of Potential Change in Trend

Summary

If you could only learn one chart pattern, I would recommend that it be 1-2-3.

1-2-3 is often a reversal pattern that marks the end of a trend. It is made up of three swings, where the first and third swings point to the opposite direction of the current trend. Once the third leg has exceeded the first one, the setup is triggered in the direction that the swings point to. If the 1-2-3 setup happens at an important support/resistance price level, that often signals a major reversal, or at least a more significant pullback in the making.

1-2-3 Sell

Here is an example of a 1-2-3 Sell pattern from a 5-minute chart of E-mini S&P.



The first leg is marked in red, the second in blue, and the third in orange. The green horizontal line is the triggering line based on the start of the second leg. Once the pattern is confirmed and triggered—meaning the

orange line has breached the green line—the end of the second leg should act as resistance (the purple line). Sometimes that will be violated, but the 50% level of the first leg acting as resistance can still keep the pattern intact. As long as this resistance zone is not breached, the price will probably continue to move lower.

It is important to remember that the first leg must be at least as strong as the previous upswing to make this a good reversal pattern. In this example, the first leg has taken out the previous swing low in one quick drop.

1-2-3 Buy

Now let's look at an example of 1-2-3 Buy.



I've used the same colour scheme. The first leg is marked in red, the second in blue, the third in orange. The green horizontal line represents the price level at which the pattern is confirmed and triggered.

Notice how the first leg takes out the previous swing highs in one quick swing before the start of the leg.

Also notice that a mini 1-2-3 Buy (marked in light green) appears at the

start of first leg, as well.



The Big Picture

Now let's look at how these two setups played out.



The 1-2-3 Sell setup appears at the beginning part of this chart.

After the setup, the price began to move lower, and at the bottom of the price move, it kept failing to move higher until the 1-2-3 Buy setup finally showed up to break the downtrend.

Many bots are programmed to monitor this kind of swing structure. The moment a downtrend—defined by lower low swings and lower high swings—is broken, these bots will quickly bail out of their short positions in order to protect profits. They might even jump onto the long side if other considerations support the idea of going long.

The 1-2-3 Failure

Keep in mind that a 1-2-3 pattern can fail. When this happens, the pattern will turn into a continuation pattern for the original trend. That's why it's not a good idea to add to your position hoping that price will reverse course yet again so that the pattern succeeds—especially if your trigger occurred when the pattern was confirmed by price crossing the green line.

For example, a 1-2-3 Sell formed after a top produced by an explosive

up move may not work out, even if it occurs at some important resistance price zone. The reason is quite simple: Traders with short positions are trapped and now they're anxious to get out. What do they do? Buy to cover their positions, which means these trapped shorts have become new buyers, driving the price back up. The result: What was once an impending reversal into a downtrend is now a powerful continuation of the previous uptrend.

1-2-3 as Primary Entry Method

Most self-taught traders prefer to enter trades early. I don't necessarily mean trading against the trend (or "fading a move" in traders' parlance) or picking a top or bottom (i.e. buying at the very bottom or selling at the very top), but rather, entering a trade at a more favourable price level after early signs have suggested that a setup is in place. This isn't particularly good or bad in terms of trading technique. It's just personal preference.

If this happens to be your personal preference, you should remember this: When you enter a trade—specifically a potential reversal—at the early stage of the formation, you risk reducing your probability of a winning trade. Why? Because if the pattern is not yet fully formed, the statistics of its success do not apply.

On the other hand, an early entry probably gives you a better entry price and, therefore, a bigger potential profit. So there's the trade-off: With higher potential return comes more risk. Your job is to manage that higher risk with an exit plan, one that dictates the conditions under which you will close the trade. Decide this before you trade. Base your decision on your carefully considered tolerance for risk. And then, do not deviate from it.

If you are this kind of "early bird," you may find that the 1-2-3 pattern is one of the easiest setups to manage. Think about it. Once you've entered the trade, you know precisely what needs to happen if the pattern is to be confirmed: Price must cross that green line in the direction of your trade. If that happens, you will know you're in good shape.

On the other hand, sometimes you'll see a mini 1-2-3 (we'll discuss this next) forming in the opposite direction of your trade. This could be an early sign of reversal. Your 1-2-3 expertise will now enable you to take action, and quickly.

Those traders who choose to wait for the pattern to be confirmed in order for their trade to be triggered need to be alert to different

considerations. On the one hand, you can count on a higher success rate: The pattern is complete, after all, so you know your odds of success based on the statistics. On the other hand, your entry price is quite far away from the actual start of the move you're trading, which reduces your potential profit.

Like the early bird, however, you can alter the balance of risk and reward with a carefully considered exit strategy, based on your own risk tolerance. For example, you might decide to take a quick profit—sometimes called a “scalp”—with a portion of your position, and stay with the rest of the position until your exit strategy tells you it's time to close.

Indeed, you can also use a 1-2-3 confirmation signal simply to scalp off the signal itself. Instead of waiting for an important reversal to attempt an entry on the first 1-2-3 setup, a scalper would trade mainly the second, third, and sometimes fourth continuation break. The advantage here is that the entry and exit rules are well defined and can be executed in higher frequency timeframes mechanically.

Mini 1-2-3

Many reversal patterns in longer timeframes start with a 1-2-3 formation that's only visible in a shorter timeframe.

For example, take a look at this chart.



It shows a Double Bottom formation visible on an hourly chart. If we zoom in on the bottom of the right leg (B), and take a look at it on a 15-minute chart, we can see the mini 1-2-3 Buy signal that starts the move.

The moral of the story: You can often anticipate the development and completion of price patterns by paying attention to shorter timeframes that show a 1-2-3 in the making. Wait for the mini 1-2-3 pattern to be confirmed, and then you can join the run before the price pattern on the longer timeframe fully develops.

Think of this as a waterfall effect, where the shorter timeframe reversal gives the market a shock that in turn catches the longer timeframe players by surprise and triggers their stop orders. The big picture chart above is a good example. The Double Bottom formation of that chart was started by a tiny 1-2-3 Buy that rocketed the price higher, which in turn broke the Double Bottom neckline in one swing. That developed into a bigger 1-2-3 Buy, and the snowball effect quickly forced the price much higher.

Bear Flag / Bull Flag

Flag is one of the most common price patterns in charts across all

timeframes, Bear Flag is a continuation pattern that occurs during a downtrend. (And Bull Flag is a continuation pattern that occurs during an uptrend.) It's a good idea to identify this pattern early in its development. That way, if it is mistaken for a bottom, you can still bail out before the downtrend resumes.

Example

The following chart shows two Bear Flags and how the market unfolded after they were broken to the downside.



Typically, Bear Flags produce a Measured Move if the market is not very close to an important support price level. In the chart above, the down move on the left (highlighted in red) moved into a consolidation phase (marked by the blue lines). The consolidation kept trying to push higher, yet failed to generate much movement. This kind of consolidation after a down swing is called a Bear Flag. Notice that this Bear Flag was comprised of a series of higher lows and higher highs that ended when price broke down (at the red arrow) beneath the last higher low to a lower level. (The lower red line ends with the target. We'll discuss the concept behind this powerful

technique later in this section, when we examine the Measured Move.)

I have highlighted a smaller Bear Flag in green and marked the related Measured Move in orange. (Markets do sometimes move in a very well-structured fashion like this.)

How to Trade a Bear Flag

Sell the break of the rising lower support line. This gives you controlled risk, a higher probability of success, and it enables you to fine-tune the balance of risk and potential reward to your comfort level.

Pro Tip

Don't try to short an upward price spike in a Bear Flag! You may find out that what you thought was a Bear Flag was actually a Rounding Bottom formation or an inverse Head and Shoulders.

Double Top

Double Top is a classic technical price pattern that features two swing tops that stop at almost exactly the same price, a level commonly referred to as the “neckline.” Once the neckline is breached to the downside and turns into resistance, you get a strong downside bias with a clear projected target to work with.

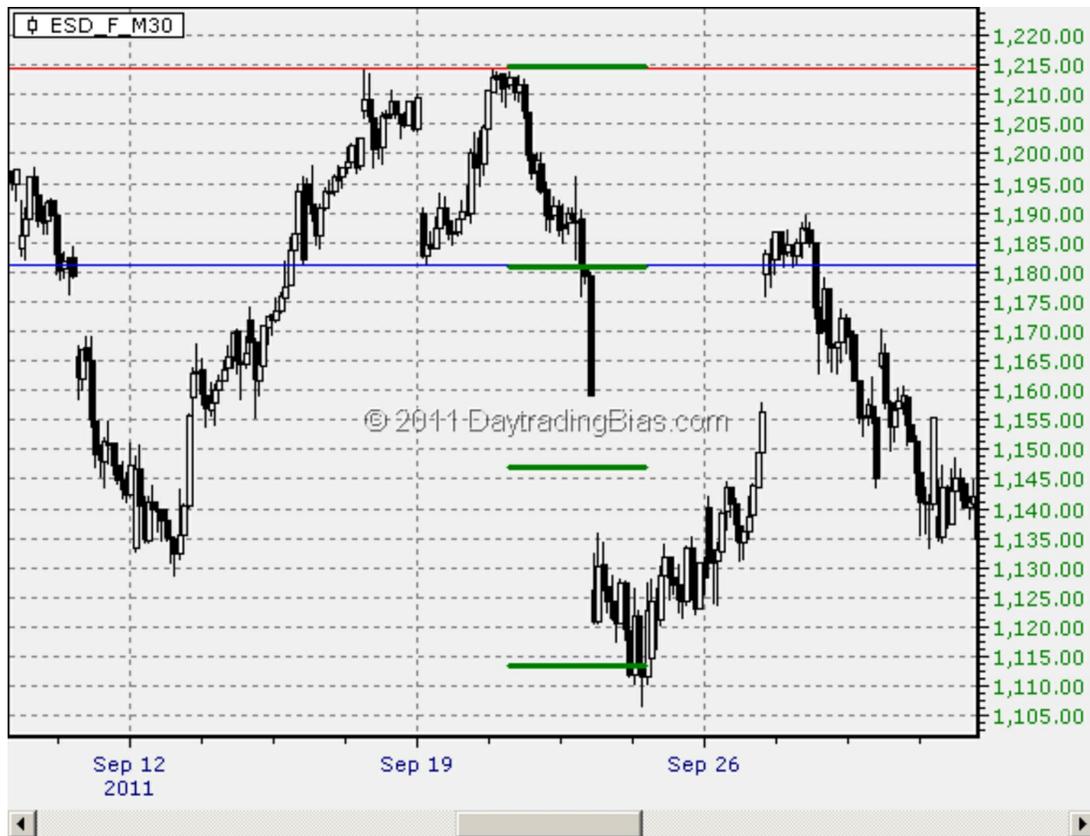
Example

The following is a 15-minute RTH (Regular Trading Session) only E-mini S&P chart.



In this chart, the first swing top created a resistance price level (marked in red) that was retested a few days later, leading to a selloff that moved price back down to the lowest level between the two peaks. This level (marked in blue) is called the neckline. A decisive break below the neckline put the downside target in play.

The next chart shows what happened after the double top neckline was breached.



The green lines are meant to give you a better perspective of what the Double Top formation leads to in terms of height. Typically, Double Top has a strong bias leading to a drop of the same height as the Double Top itself. If the break happens very quickly, then the drop can be as much as twice the height before a significant bounce occurs, as you can see in this example.

How to Trade a Double Top

As with the 1-2-3 pattern, shorting in the early stage of a Double Top—after the second swing top is in place—gets you in early on the ride down. But your risk increases dramatically. The formation would not yet be complete, so the likelihood of price moving downward would not be very strong.

The formation is complete once price breaks below, and remains below, the neckline. At this point, the neckline is said to present resistance to price, blocking attempts to drive price back up to its previous level. You can often see this dynamic play out on the chart itself. Look closely and you may find a 1-2-3 Sell formation at the neckline. To put it another way, a 1-2-3 break down below the Double Top neckline maximizes your prospects of

achieving your target while minimizing your risk.

Pro Tip

Double Top is one of those formations that can be scary to sell into. By the time it triggers, many traders think they've already missed a significant part of the move. That's why many people pick the trigger of a Double Top as a bottom instead of a break down, buy instead of sell, and find themselves on the wrong side of the market.

But, as the saying goes, "That's what makes a market!"

Wyckoff Up Thrust

Wyckoff Up Thrust (a.k.a. Wyckoff Thrust or W. Thrust) is a pattern that marks the end of an uptrend. It is not a type of False Breakout or Double Top or any other classic topping formation. Wyckoff Up Thrust is unique in terms of both its characteristics and the strength of its expected outcome.

A Picture is Worth a Thousand Words

Take a look at this 24-hour chart on the forex pair Australian Dollar / US Dollar.



The red down arrow on the left marks a top that induced a strong retracement reaction, which lasted for two months before another attempt in July to challenge it.

This is the first characteristic of Wyckoff Up Thrust: The top being challenged must be a virgin swing high. This is different from a False Breakout pattern, which can happen to a resistance price level that has already been challenged many times.

The purple down arrow marks the Wyckoff Up Thrust itself. The test of

the top turned into a marginal breakout to the upside. Remember, in a typical upside breakout formation, price rallies above resistance and heads higher. It does not struggle above and below the original resistance price level. In this example, you can see that multiple attempts to rally higher all failed.

Here is the second characteristic of Wyckoff Up Thrust: The test must breach the original top but fail to hold above it.

Once the price starts to retrace back down, a fast selloff landing below the lowest price level between the two tops (the red horizontal line) is very likely.

The third characteristic of Wyckoff Up Thrust: It should result in a breakdown below the support price level between the two tops.

Once this pattern is in place, we can consider two events very likely.

First, the market in question will not be able to breach the original top for a period of time that's at least as long as the period it spent between the two tops.

Second, the market is very likely to print a lower low below the swing low produced by the breakdown.

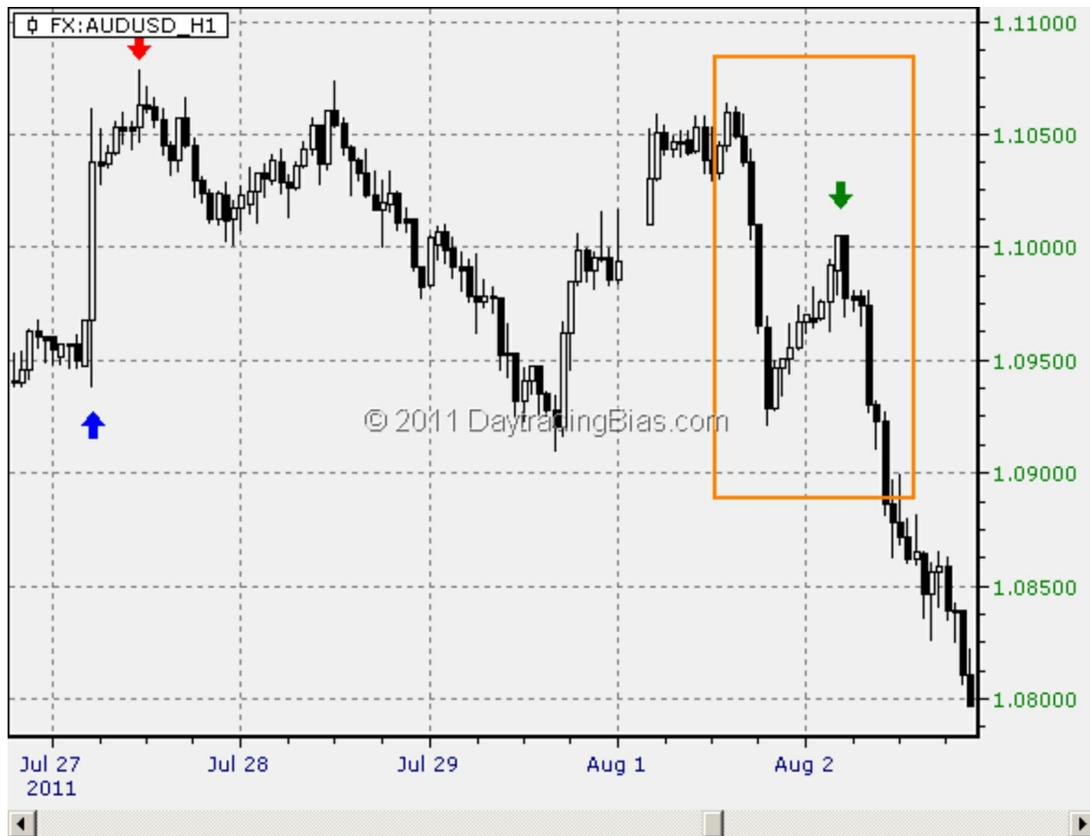
These events together can also be viewed as the start of a longer-term downtrend.

The Devil is in the Details

We've covered most of the things you need to know in order to identify a Wyckoff Up Thrust.

But there's one key element missing in the summary above. Without it, the pattern is not complete and will not carry the full statistical bias I've described.

The following is the 1-hour chart of the second top (which was marked by the purple down arrow on the previous chart).



Here on the 1-hour chart, you can see how a short squeeze or stop run from the blue arrow produced the higher high point marked by the red arrow. The rest of the struggle to stay above the original top from the previous chart was weak, and the high marked by the red arrow was never breached in the topping process.

You could effectively go short with a stop anywhere above the high point (marked by the red arrow) and come out ahead. However, because this is an historical chart, we already know that going short would be a winning trade. In another situation, after the low made on July 29 with the quick rally back up, the market could break out to the upside.

The key to Wyckoff Up Thrust is the signature test of the original top within a 1-2-3 Sell formation to start the break down. The green arrow in this chart marks the retest of the original top in the first chart—the formation is still valid even if it's a bit lower—and then the 1-2-3 Sell was triggered when 1.090 was breached. After this, the long side gave up and a clean selloff started.

You can now see why Wyckoff Up Thrust is frequently confused with

a False Breakout – the finer details of the retest of the original swing high are often hidden in higher timeframes. Without this last element in place, Wyckoff Up Thrust is not much different from a False Breakout.

The projected downside target for a False Breakout is simply the previous support level, but in that case, there is no statistically valid reason to assume that a longer-term trend change is in place. A Wyckoff Up Thrust, on the other hand, offers the potential of much greater rewards. It's important to keep this in mind, or you run the risk of short-changing yourself.

End Notes

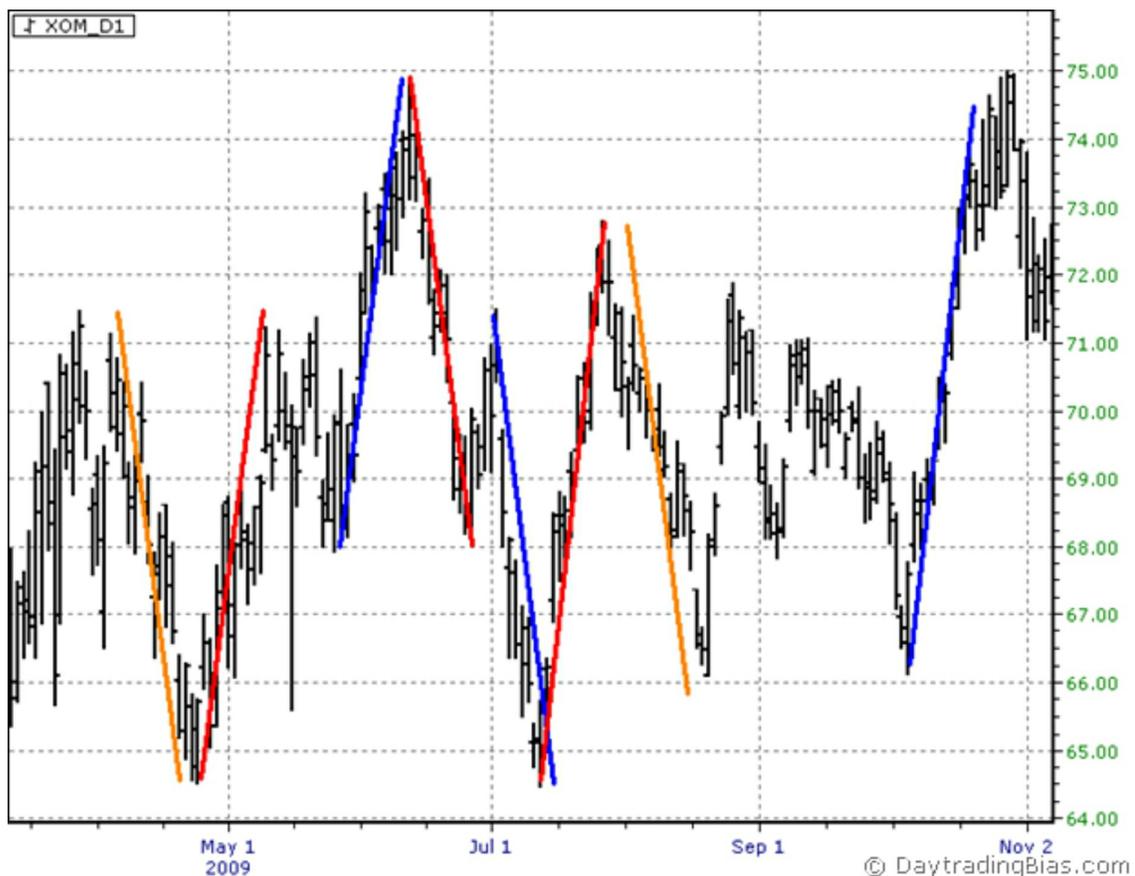
Wyckoff Up Thrust is often misunderstood by chartists and technical analysts because they have not paid enough attention to the details of the pattern. Many technical analysis textbooks simply copy the pattern definition from another source without verifying the concept. And that, of course, leads to an ambiguous interpretation of the charts.

Measured Move (a.k.a. 1-to-1 Swing, ABCD Move)

A Measured Move is highly structured price movement that consists of two swings in the same direction with a pause between them. The two swings must be very similar to each other, meaning that the time spent and price travelled by both swings are about the same. Measured Moves are very easy to spot on a chart. They are also pretty much useless if you wait until after the fact to label the swings. The whole point of a Measured Move is to establish where price might go, not where it has already been.

Textbook Formation

Here's a chart with three pairs of Measured Moves marked with red and blue starting from the left side.



The first red-and-blue pair is a Measured Move going up. The second pair is a Measured Move going down. The third is a Measured Move rising with a huge pause between the two.

In this instance, the lines were marked on the chart after the fact, which

is pretty easy to do with this pattern. But how do you predict when a Measured Move is likely to happen?

Before the First Swing

The key to predicting a Measured Move with a high degree of accuracy involves what happens right before the first swing of the pattern.

Take a look at the first red swing (farthest to the left) on the chart.

Where did this move start? The orange downswing.

In fact, the red upswing completely retraced the orange downswing. That is the hint. If the pause can start a run from above the low point of the red upswing, especially those that start from above 50% of the red swing, there is a strong likelihood the upswing that follows is at least a Measured Move in terms of price change only.

Other scenarios can lead to similar potential setups, but keep in mind that the Measured Move is not a certainty. Always remember that you are dealing with probabilistic outcomes in trading.

After the First Swing

Once the first swing is in place, don't try to take advantage of the situation by picking the starting point of the second swing. Instead, hop on board when the second swing breaks outside of the range established by the first swing.

Similarly, you don't want to try to pick the low during the pause. That can be quite risky if you are trading highly leveraged financial instruments, like futures. As you can see from the chart, the pullback between the first pair of red and blue upswings was quite erratic.

The pullback could be driven by news. It could also be driven by stop runs, margin calls, or other reasons. It could simply be the case that your assumption is wrong and there's not going to be any Measured Move.

Buying the breakout will allow you to have a tight stop right below the top of that red upswing. And you can take profit quickly when the swing reaches the target price level. In this situation, you will have sacrificed a bit of profit potential with a higher probability of winning and lower risk per trade.

Note that if price pulls back more than 50%, the risk/reward ratio will

quickly deteriorate. It's a good idea to predetermine if the risk (stop from the breakout point) would justify taking the trade.

If You Must Pick the Start of the Second Swing

For the pause to stop at a particular price level and then resume in the direction established by the first swing, that price level has probably seen a bit of activity in the recent past. Thus, you need to identify that price level beforehand and wait for the reaction at that level. If price actions at the level you identified confirm your prediction, you can then hop in with a much better control of risk.

For example, the orange downswing in the middle of the chart identified a support level for you. When a second test of that level occurred (on the right side of the chart), it resulted in a strong reversal bar. At that point, you could hop in to go long, knowing that if you're wrong, the risk is clearly defined as a price level right below the low of that reversal bar.

Obviously the probability of the trade working out in your favour would be lowered, because your prediction of a continuation of the first swing could be wrong. However, by strictly controlling your risk and having much higher profit potential, the overall performance would be comparable to the safe-entry method.

Fading the End of the Second Swing

Many people like to fade a market when the Measured Move is complete in an attempt to detect a potential change in trend. This specific use of the pattern is actually part of a more complex chart pattern setup that I will discuss later.

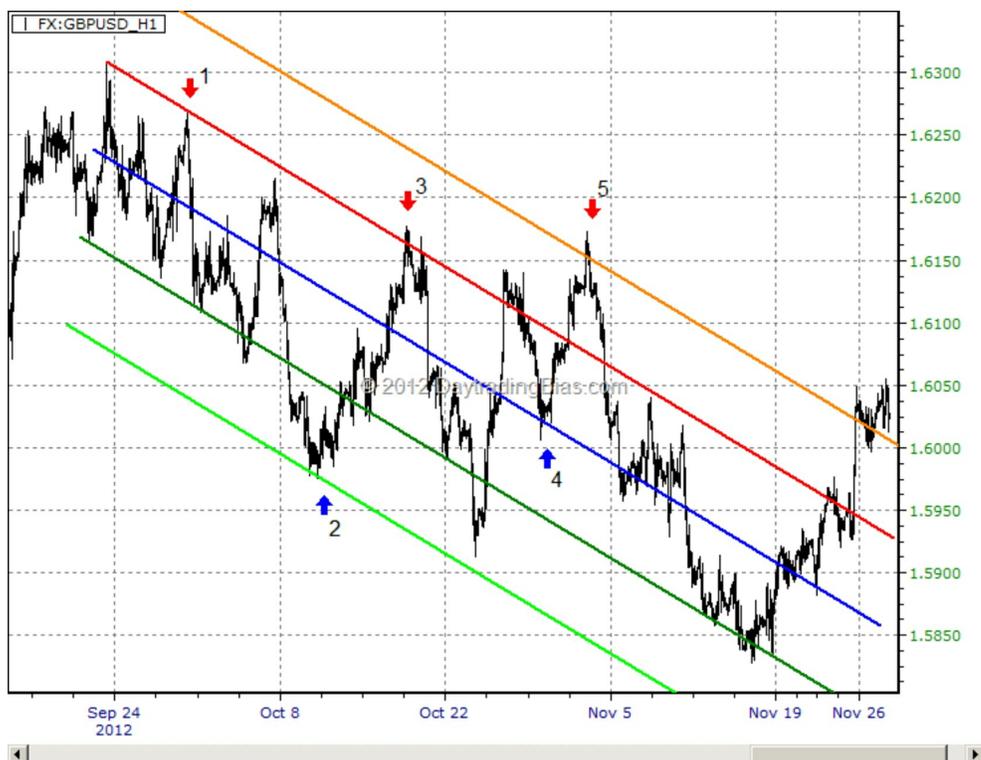
Channels

Channels are actually another way to use trend lines. Channels can appear to “trap” prices between their upper and lower trend line boundaries, yielding useful trading setups that aren’t possible if you use trend lines alone. Indeed, channel trading is a complete methodology all by itself. Many traders simply master this one method and stop using other setups. So you shouldn’t underestimate the channel concept just because it looks simple!

(It’s interesting to note that the humble channel actually rebuts the argument that price behaves in a largely or entirely unpredictable manner. That’s because channels rarely show up in randomly generated data series. So the fact that we see them frequently in price charts is important evidence that markets are not at all random.)

An Example of a Down Channel

Here is a British Pound hourly chart.



After the second swing high (arrow #1) was established, a Down Channel was formed—with the red line being the “channel top” and the dark green line being the “channel bottom.” Typically, once two swing highs and two swing lows can be lined up with two parallel lines, you have a channel.

The blue line in the middle of the channel is often called the “channel mid.” (For those of you who are mathematically inclined, the channel mid often approximates the linear regression line of price activity for the period covered by the channel.)

When the price turns without tagging either the channel top or bottom, it tends to breach the channel by an additional 50%. And, sure enough, that’s precisely what it does here, dropping to the level of the light green line before turning up again at arrow #2. Now that the channel has been breached, however, those original boundaries have weakened, which means we can expect price to venture beyond those boundaries once again.

And that’s precisely what happens at arrow #4, where a mid-channel bounce leads to a second breakout from the channel structure, this time to a 50% extension up, marked by the orange line and arrow #5.

And then what? There are many possibilities, and I could fill a book with all the different setups based on channels. But here is the key idea to remember: Channel trades build off the same concepts we’ve discussed with regard to trend lines and chart patterns.

For example, if you look at the far-right edge of the chart, you will see price holding just above the orange line. How will we know whether price is more likely to head up and out of the channel zone, or turn around and head back down again? We’ll look to see if something develops on this chart—or a on a faster timeframe—to tell us whether this line is going to hold. Perhaps we’ll find a mini 1-2-3 Sell signal, or a mini 1-2-3 Buy signal. Or something else.

The point to remember is: These concepts all build on one another.

One final note: You will often find several channels coexisting across multiple timeframes – and even within a single timeframe. When the boundaries of these channels line up, they become strong support resistance zones that don’t need other kinds of confirmation.

Wedges

Wedges are chart patterns that lead to violent breakouts. They come in two varieties, rising and falling. Because the breakout direction is usually opposite to the direction of the wedge, these are often called reversal patterns —although that is not necessarily true.

Rising Wedges are also known as Upside Wedge or Rising Triangle. The breakout direction is often to the downside. Many people simply refer to the pattern as a top formation.

Falling Wedges are also called Downside Wedge or Falling/Dropping Triangle. The breakout direction is likely to be to the upside. Most people regard the pattern as a bottom formation.

An Example of Falling Wedge

Let's look at a 4-hour chart of Euro/Dollar with a Falling Wedge.



1. Typically, you will see a resistance line (green line) developing a downward slope with price testing at least three times against the line from

below. Remember that you need at least two swing tops to define the resistance line, hence the need for a third push to confirm its existence. Of course, the price can touch the line while falling.

2. A support line (red line) develops at about the same time as the resistance line, but with a more moderate slope. Again, two swing bottoms are needed to define the support line, with at least one more test of the line from above to confirm its existence.

3. Price will continue to move between the two lines until either a breakout occurs or the apex of the two lines is tagged, which means the wedge has expired.

4. Once a breakout occurs (blue up arrow #2), the price will move away quickly from the wedge. Sometimes the lines defining the wedge can be quickly retested. The retest might be visible only in smaller timeframes. In this chart, for example, the struggle that led to the reversal at arrow #2 took place over just two bars.

5. A confirmed reversal 1-2-3 signal (blue up arrow #3) often happens right after a normal breakout.

6. On occasion, a retest (blue up arrow #4) of the extreme formed before the last one (blue up arrow #1) in the wedge will occur. This is simply a normal market dynamic, as stated in my book *Special Theory of Price Discovery*.

7. The target of the normal reversal is the starting point of the wedge (red down arrow #2) You will often find that it takes price about twice as long to reach its target as it did to form the wedge.

8. The chart does not show the rare scenario in which the breakout occurs in the direction of the wedge. When that happens, the wedge often becomes a channel, oriented in the same direction as the original wedge. The minimal target then becomes the other side of that channel. Remember that the price can move much farther than the minimal target, because many players who thought they were the cat in this game have just realized that they are, in fact, the mouse.

In our example, let's say the breakout happened to the down side. In that case, imagine a line parallel to the green line drawn from the start of the red line and extending downward. The minimal target would be that channel

bottom.

How to Trade a Wedge

If you only see a wedge pattern without any other confirmation, it's not a good idea to simply fade the wedge. It would be better to wait until the breakout occurs, and use a smaller timeframe to hop on the boat.

The risk of using the confirmed entry is defined by the breach of the wedge extreme before breakout. Sometimes, a violent Double Bottom (on a Falling Wedge) or Double Top (on a Rising Wedge) is needed to finish the move. In that scenario, the wedge extreme should not be breached.

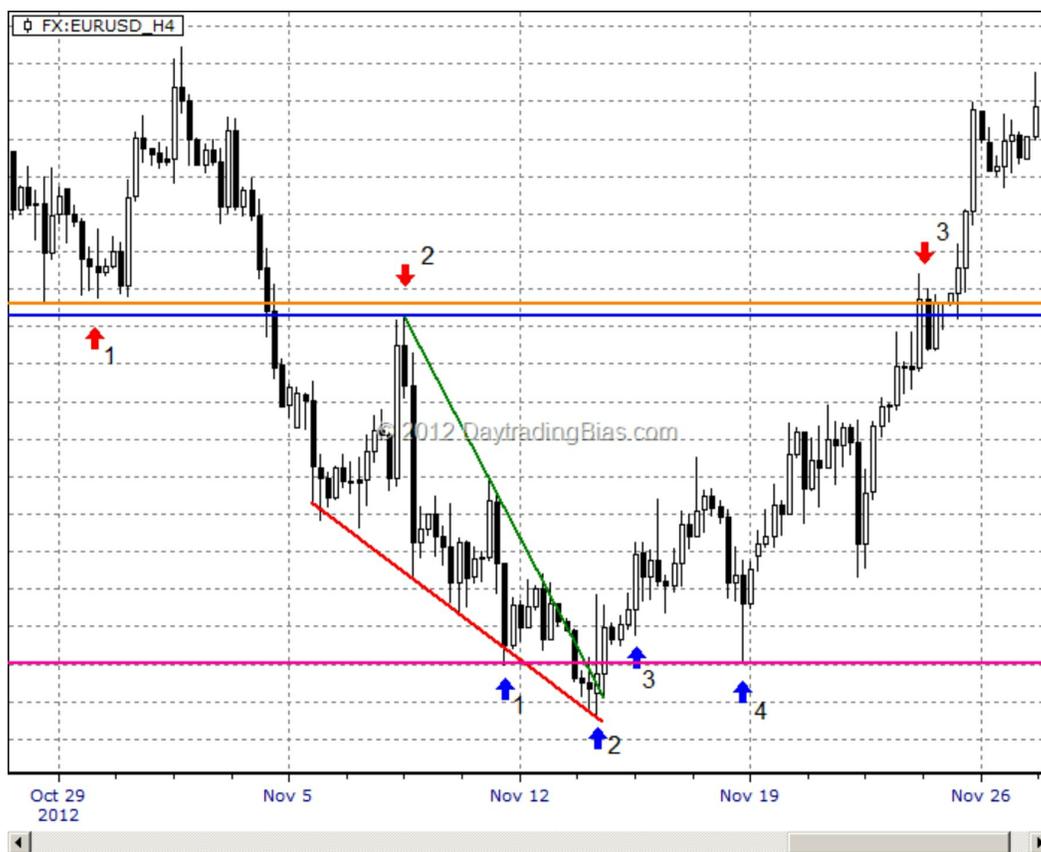
Pockets

Pockets are unique among the core set of chart patterns because they are the only pattern defined not by what is present, but by what is missing. Even though pockets are very powerful price magnets, they are often ignored by chart readers because they are so subtle. However, because pockets can change market dynamics at critical price zones, it's important to pay attention to them.

Pockets are also called Hidden Gaps and Voids. They probably have other names as well, as they are not a classic chart pattern with an agreed-upon name.

An Example of a Pocket

I am going to use the same 4-hour chart on Euro Dollar that I used in the Falling Wedge example. This time, however, I will zoom out a bit to show what happened before the wedge developed.



1. A market finds support (red up arrow #1) at the price level defined by the orange horizontal line.

2. The market then breaks below the support without a pause.
3. Subsequently, a test of the support zone is made (red down arrow #2) but never quite makes it to the resistance. The price stops right below resistance at the blue line.
4. This small price range between the orange and blue horizontal lines is called “the pocket.”
5. This particular chart shows a pocket created by a selloff. A pocket can also be created by a rally.
6. Pockets are seldom left behind without price moving back to fill them—as in the chart above (red down arrow #3). They typically act as price magnets that pull the price towards them when the market moves near them again.
7. Three consecutive pockets oriented in the same direction constitute a pattern in and of itself. Once the last pocket has been filled, there is a strong bias for the other two to immediately be filled as well.
8. Because pockets develop right above a swing high (or right below a swing low), they serve as powerful indicators that those extremes will be breached easily should price move back towards them.
9. In some markets, a pocket can be as small as one tick. This points to a strong likelihood that the market will fill the pocket later.

No engagement method is associated with pockets because they are not good entry setup on their own.

Section 5: Complex Patterns

Three Pushes / Three Drives

Three Pushes (also known as Three Drives) is a chart pattern that consistently works well across almost all financial instruments. It is easily recognizable, and many of its formations can be computerized, which is why bots frequently use it in their exit strategies.

Basic Formation

As the name suggests, Three Pushes is comprised of three pushes in price movement, each in the same direction, each retracing from an extreme that is greater than the last.

Here's a classic example of the bearish version of the pattern:



Push One takes out the prior low, then retraces. Push Two takes out the low of Push One, then retraces. Push Three takes out the low of Push Two. A bullish Three Pushes pattern unfolds in the same way but, obviously, in the opposite direction.

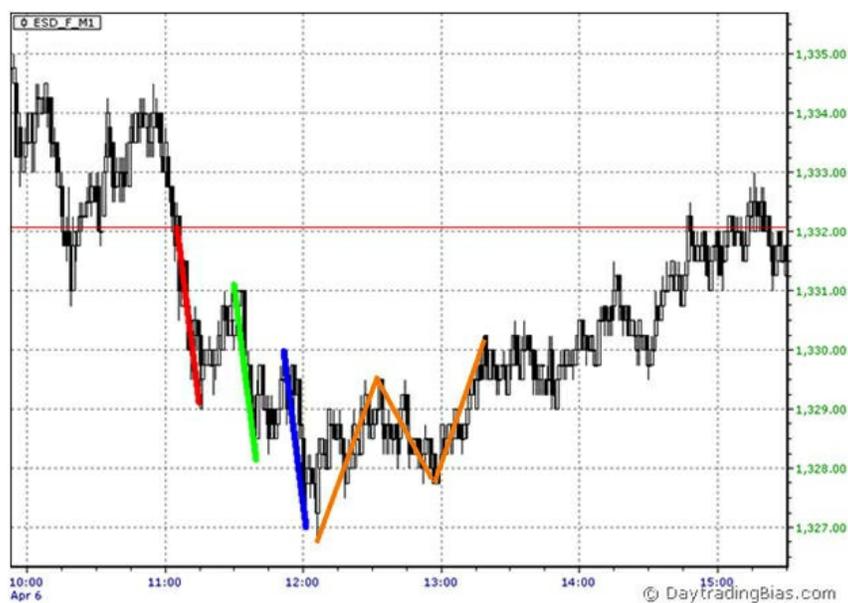
Two key points to remember:

You cannot really know whether a Three Pushes pattern has emerged

until after the start of the third push. At that point, you can use the height of the second push (green line) to determine the expected height of the move (blue line). That same distance applied to the first push will give you the starting point of the pattern (red line). Generally speaking, the push of the third leg should never push price more than twice the length travelled during the second push. If that happens, you probably don't have a Three Pushes pattern.

After the third push, the market usually gets stuck. That's because all of the sellers who are willing to sell at the current price level are exhausted, but a majority of buyers are not yet ready to step in to change the trend.

To set the retracement in motion, the market must reject the idea of creating a fourth leg. In this example, the down move was broken with the appearance of a 1-2-3 Buy pattern at 13:15 (shown below in orange). From that point on, the likely price target is the start of the Three Pushes pattern, marked here by the red horizontal line.



A safe play of the pattern would be to enter the countertrend long—at or after the 1-2-3 Buy trigger at 13:15—with a target of the red horizontal line and a stop below that third push extreme.

You could also consider a more aggressive play if the reversal has been confirmed by other information, like a third push landing on a major support zone, or some kind of breadth-based divergence signal. In that case, you could buy the second push extreme price level once the bounce from the third

extreme has begun.

The safe play is based on the price pattern itself with a strong bias in favour of the target being tagged.

The more aggressive play requires synergy of multiple trading signals or setups to improve the odds of picking a bottom.

When It Comes at the End of a Strong Move

When a Three Pushes pattern comes at the end of a rally or selloff, it signals a pause, not a reversal. Only after the formation is broken will it turn into a fully formed reversal pattern.

This type of Three Pushes features pointier extremes and shorter pauses.

Google made such a move back in 2008. Let's take a look:



Notice that the third leg does not have to be perfectly equal to the second one. It can be shorter, as it is in this case. The more important criterion is that third leg ends before it extends to a range exceeding twice that of the first leg.

As you can see, in this instance the target (red horizontal line) was tagged, and marked the start of a continuation selloff.

When It Happens within a Retracement Context

A Three Pushes formation that develops within a retracement typically features less pointy extremes and longer pauses. This kind of Three Pushes pattern signals the continuation of the original trend. It is effectively the same as a Bull Flag or Bear Flag.

CAT had a prolonged bull run back in 2002 to 2008:



The pullback here is a perfect example of a Three Pushes pullback. It also shows another property of the pattern: When a breakout occurs, the likely target is found at the end of a range that measures twice the range of the first leg (orange line).

Spike and Ledge

Spike and Ledge is a terminal pattern that happens most often in indices and in a post-news shock environment. The concept is simple and easy to follow. It is also one of the best short-term trading patterns in terms of risk/reward payoff.

Traders have given this pattern many names. I prefer to call it Spike and Ledge for one reason: I took the time to explore this pattern extensively after reading about it in the book *Street Smarts*, by Linda Bradford Raschke and Laurence Connors. Using the name that Ms. Raschke prefers is my way of honouring her as one of the few educators in the financial industry whom I respect.

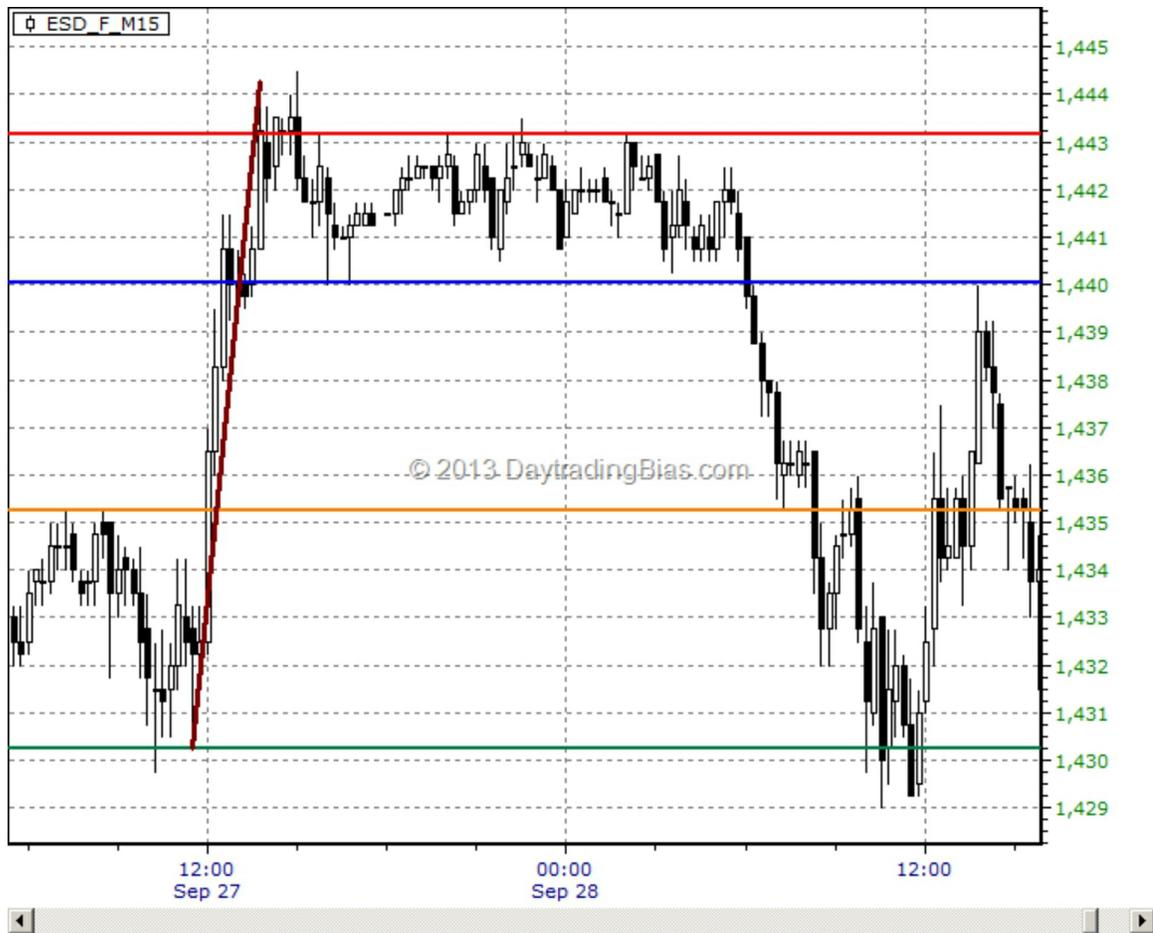
Spike and Ledge Top

The spike part of this pattern requires a quick run far away from the previous swing extreme.

The spike is a short squeeze / melt-up move (the dark red line in the chart below) that clears the previous swing high (the orange horizontal line) with lots of room in-between.

Then the price simply falls. It is important to remember that the price action here has to be a quick drop, not a slow downward drift. The price will find support at the usual pullback area (as marked by the blue horizontal line).

At this point, things get interesting. Instead of retesting the high made from the spike—as you would expect—all attempts fail. The first lower high becomes the resistance (as marked by the red horizontal line). Once the market tries and fails to push price up through this resistance, the pattern is in place.



The resistance can be retested a few more times while the support defined earlier will continue to act as support until it breaks.

Once support is broken, look for the first high probability target at the original swing high before the spike. Look for the next high probability target at the start of the spike (as marked by the green horizontal line).

The Spike and Ledge support that was broken turns into resistance itself. Hence, any first touch to the support line after it is broken to the down side is a high probability setup for another move lower—as you can see on the right side of the chart.

A slightly different way to measure the targets would be from the height of the spike top down to the ledge support. Usually it coincides with the swing-based method, but in some situations, we just don't have enough data to locate the swings.

For example, let's look at this chart of the SP500 e-mini:



First the spike up (indicated by the red arrow), followed by the drop down to the base of that impulsive move up. Then what happens? Price tests the 50% level of that move, slams back down to the base, up again, down again, up again . . . quite a ping-pong match. One side is going to give in. This is our “ledge.”

At last, it breaks down through the base. What next? The first high-probability target: the red line at the 50% expansion of the height from the spike top down to its support. The next high-probability target is the red line at the 100% expansion level.

On intraday charts, the high probability targets are usually 100% and 200% expansions, as opposed to just 50% and 100%.

Spike and Ledge Bottom

The exact opposite of Spike and Ledge Top.

False Breakout – The Most Misunderstood Pattern

Most traders focus on the accuracy and potential profitability of the chart patterns they plan to use. More experienced traders also consider the risk/reward profile of those patterns. But many traders—even those with a great deal of experience—fail to consider one of the most important elements of chart reading: What to do when a pattern fails to produce the outcome they expect.

This is one of the most challenging aspects of chart reading, because it goes against human nature. We are not accustomed to planning for outcomes that are the direct opposite of what we expect. That's why many traders fail to master this mindset.

Take your time in understanding this. It will pay off.

False Breakout Definition

False Breakout (FBO) is simply a breakout that fails to convert into an expansion of the existing price range. Before a False Breakout can occur, a range must first be established. Once that range has been established, the boundary of this range must be challenged and breached. If price returns to that broken boundary and bounces off from it, you have a case of range expansion on your hands. If, instead, the market returns to the previously defined range, you have a False Breakout.

As far as most traders are concerned, that's all there is to know about a False Breakout. It's just a formation used to control risk—a guide for placing stops—and nothing more.

Most traders are missing the gold mine.

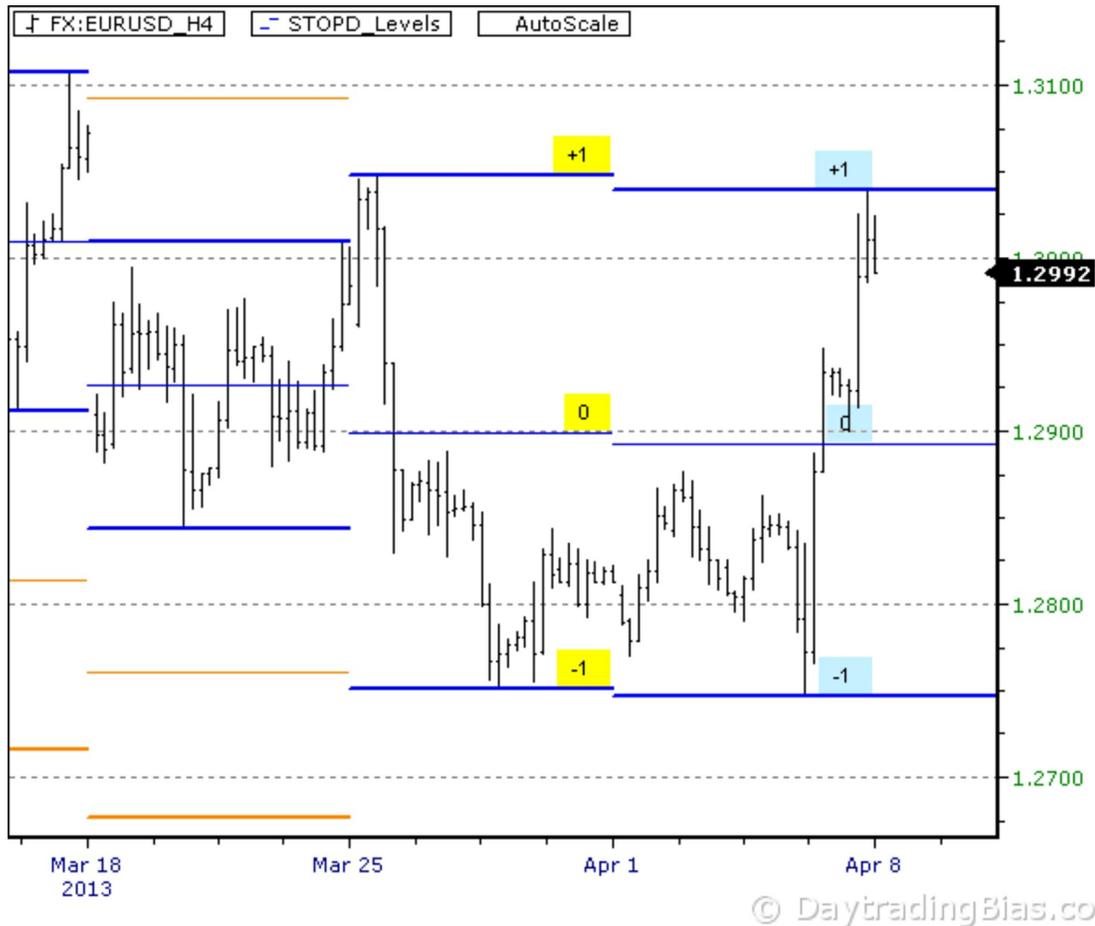
That's because there's one key component missing from the popular concept of a False Breakout: A high probability target that any trader can project and, therefore, act upon. That target is the midpoint of the original range. Moreover, if that midpoint is breached by a certain threshold, it unlocks the potential for price to tag the other extreme established by that range. In fact, some well-known trading algorithms are designed around this phenomenon, using a breach of the midpoint to trigger a breakout trade in the opposition direction.

So just what is that threshold? It differs from one market to another.

That said, my simulation-driven price experiments have shown a threshold of 10% of the established range to be a reliable starting point.

Examples of False Breakout

Let's take a look at this Euro/Dollar 24-hour chart in a 4-hour timeframe.



The thick blue lines mark the high and low of the week. They were put in place after the fact, making it easier for us to see if the following week(s) reacted to the specific price levels. The thin blue lines mark the midpoints of those weeks.

Two obvious FBO setups appear on this chart. Can you find them?

The first one happened in the beginning of the week of March 25-29. Notice that at the third bar into the week, the Euro has collapsed back into the range of the previous week. Given the right condition—in this case a strong down bar—one would look to the midpoint of the previous week as a likely first target. And, indeed, it turned out to be just that.

The second FBO setup occurred during the week of April 1-5. Notice how the thick blue line marked with yellow (-1) was breached just a little and then violently rallied back. Yes, there was a news shock. But the chart pattern gave us a warning the moment price rebounded from the previous week's low (yellow -1). As in the previous case, the Euro rallied back above the previous week's midpoint.

In both setups, price zoomed all the way to the other end of the established range. Notice that the FBO resulted in a rejection of the previous week's low, which left us with targets at the previous week's midpoint and the previous week's high.

False Breakout Targets are Independent from Chart Patterns

Of course, not every swing extreme offers the potential for a False Breakout. The chart example depicts a situation in which the previous week's high is, in itself, a very important price level. This raises a significant question: You'll find all sorts of price extremes in various timeframes, so which ones should you paid attention to?

Here's the answer: In general, you will find two sources of support and resistance. One source will be higher timeframe structural price levels—like the previous trading day's high and low, and the previous week's high and low. The other source: trend lines and swing extremes. It's not often that you see multiple structural price levels line up together within a very close range. So when you do, watch out. You can expect the market to react much more strongly under such circumstances than it will when confronted with a single reference price.

It's important to remember that these price levels come in pairs. For example, you might look for the two swing extremes preceding a FBO. Or if you're looking at a trend line, you could look to see if the market is developing a channel. (Remember, a channel is comprised of two parallel trend lines. So, for example, if a down trend line consistently acts as resistance, a FBO against that line will often drop to a parallel line running beneath the prices printed throughout the duration of the trend line.)

The Moment a Pattern is Not Unfolding Properly

When a bullish continuation pattern like a Bull Flag breaks out of its short-term resistance, price should hold that resistance line as support. If it

fails to hold that line, it should—at a minimum—hold the swing low and form a mini Double Bottom there to fend off the selling, and push back above the resistance line quickly. A decided break of that Bull Flag low will invalidate the conjecture that the market is going higher to retest the recent high.

Traders who do not fully understand the concept of False Breakout will hold on to their long positions in this scenario and fixate on the potential of a rally. They may also choose to stop out of their existing long positions and leave it at that—simply because they don't know how to take advantage of the False Breakout potential.

By identifying the swing extremes of the chart in higher timeframes, you can prepare to cut losses and jump into the opposite direction. Those two opportunities do not necessarily happen at the same time. Often, the original trade is stopped out first. Then, when the signs line up, the trigger to the opposite direction occurs.

Summary

False Breakouts are the bane of many a trader. But with these insights, you can turn them to your advantage.

Perhaps you are profitable trading the basic chart patterns, allowing yourself to be stopped out—as per your trading plan—when they are not working. You may end up keeping only 50% to 60% of your profit because 30% or more of your trades are stopped out.

If, however, you make the extra effort to pay attention to potential False Breakout setups, the losses from your stopped-out trades are likely to be offset by your FBO trades. That means you get to keep most of the profits from the normal setups when they are profitable, and you realize extra profit from the False Breakout trades too.

Not bad, huh?

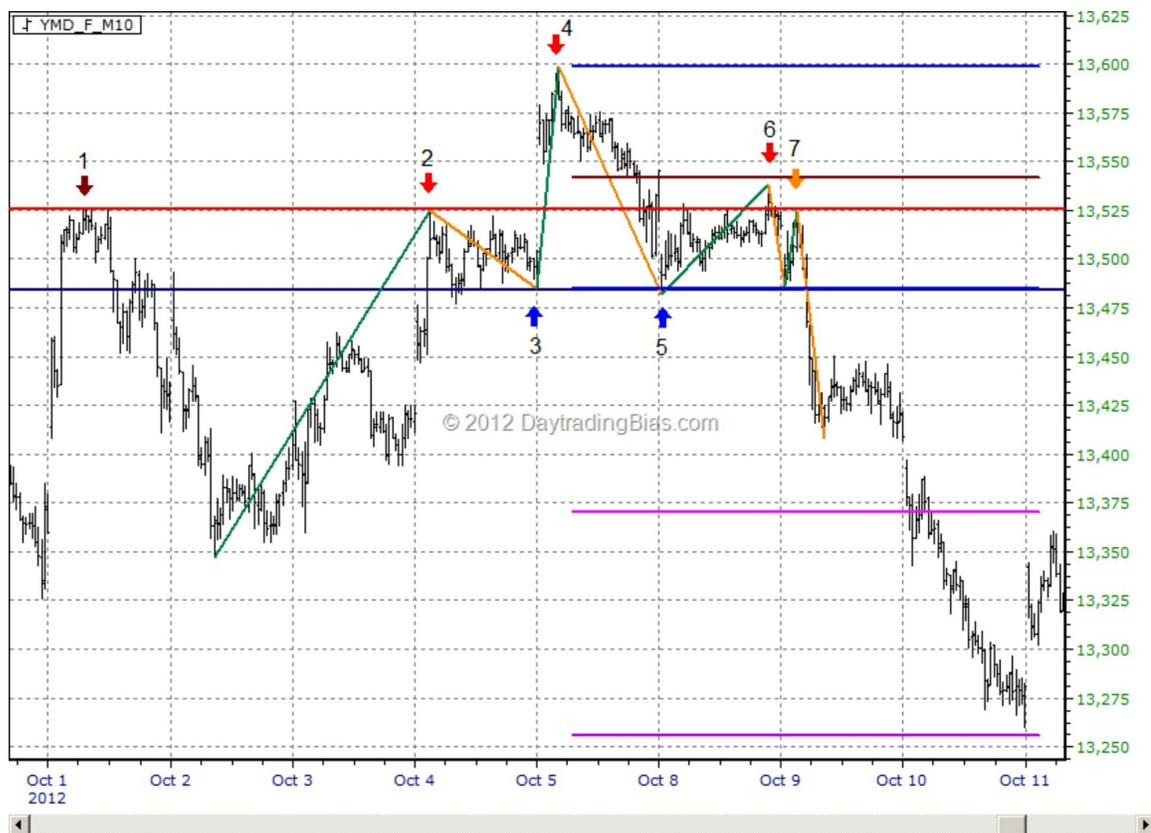
Head and Shoulders – Not the Shampoo

Head and Shoulders is a frequently discussed formation. In fact, it is discussed so much that many websites showcase example after example of it that are actually not Head and Shoulders patterns at all. I don't recommend mixing up different kinds of price chart patterns if you want to trade successfully.

Let me show you what the classic Head and Shoulders pattern looks like, and how to use it properly.

The Formation

The following is a chart of a 10-min E-mini Dow futures contract that features a pretty standard Head and Shoulders Top formation. As usual, the devil is in the details.



Point 1 – Typically, a significant top will have been created quite some time earlier.

Point 2 – After price successfully pushes back to challenge #1, you will see (at least) a pause. This is known as the left shoulder.

Point 3 – All selling is absorbed within a tight range and then forces an upside breakout.

Point 4 – The spike high almost always drops back down quickly without even a mini Double Top. This is a sign of exhaustion. This spike and drop formation is known as the “head.”

Point 5 – As the price drops quickly back down to the same level as #3, it is natural to see some buying.

Point 6 – The push higher fails, with all buying absorbed within a tight range. This is known as the “right shoulder.”

Point 7 – A mini retest of #2 before a flush. This is optional, but serves as a very good indication that this pattern is, indeed, a real Head and Shoulders.

In this chart, the standard Head and Shoulders formation appears from #2 to #6, with a break of the horizontal price level—called the “neckline”—as defined by #3 and #5.

Remember that the left shoulder, head, and right shoulder are after-the-fact labels. They do not exist until after the pattern is fully formed.

A potential Head and Shoulders formation is considered to be in place after #2, #3, #4, and #5 have occurred.

Once the break occurs, the pattern is confirmed, and you will likely see a drop equal to the height of the formation. This price level is marked on this chart by the light purple line.

The typical, likely target for the formation is 200% of the height of the Head and Shoulders pattern, as marked by the dark purple line.

Preferably, the shoulder height should be less than 50% of the head (as marked by the dark red horizontal line), so there is more fuel for the break down.

The right shoulder (#6) should always be very close to the price level of the left shoulder (#2).

The neckline must be very close to horizontal for the pattern to have any statistical significance.

The Real Reasons Why Head and Shoulders Works

The Head and Shoulders formation is a composite of the two patterns we've just examined:

A False Breakout. The movement of price (against a prior important price extreme) back down from #4 has already confirmed a potential False Breakout against #1. The Head and Shoulders formation is simply a special case for this kind of top. The left shoulder—consolidation from #2 to #3—is not necessary for the FBO to be triggered, and the potential downside target is the same as it would be with a classic Head and Shoulders formation.

A Spike and Ledge. In the case of Spike and Ledge, a spike high (analogous to the #2 stage in the Head and Shoulders formation) is driven by an unexpected news event. This is followed by an exhaustion run (analogous to the #4 stage in Head and Shoulders) that sees price collapse back to where it was before the spike. Such a pattern has the same target potential as the Head and Shoulders pattern.

So if you find it difficult to spot Head and Shoulders patterns on your chart, don't worry. Focus on our core set of chart patterns and you'll be fine.

How to Trade Head and Shoulders

You have two options.

The Standard Method - Initiate a short trade once the neckline has been broken and the breakdown has been confirmed. The risk is defined by the possibility that the right shoulder is more complex than anticipated, so #6 and 50% of the head should not be breached.

The "Deluxe" Method - If you have more than just the Head and Shoulders pattern to go on, you can reduce your overall risk with better profit potential. For example, resistance defined by #1 in the chart would enable you to look for early entry at #7 if you get a mini 1-2-3 Sell off the resistance area. Such opportunities do not happen very often, which means this is not something you can take advantage of every time you see a potential Head and Shoulders pattern forming.

Myths About Head and Shoulders

Myth 1: Head and Shoulders is the most common chart pattern.

Actually, it is not. It's not even the most common top or bottom pattern. It may be the most well-known pattern, perhaps because it shares a

name with a ubiquitous brand of shampoo. Ironically, its very prominence is the cause of its relative scarcity, which is why you will have a hard time finding it on any daily or weekly charts.

Myth 2: Head and Shoulders is very reliable.

If—and only if—the Head and Shoulders pattern is fully triggered, it is a very strong reversal signal. However, most of the Head and Shoulders formations that people recognize do not take the proper form (e.g. the neckline rising in an obvious up slope). These weakened versions of the pattern are quick to fail. People might like to talk about them after the fact, but they have proven to be pretty useless for trading.

Myth 3: Anticipating the right shoulder is an excellent trading setup with controlled risk.

Absolutely untrue. Unless you have very good reasons to support your conjecture that the supposed right shoulder price level can be faded (as in the example cited above) you will have no reason to assume that the market will move in your favour. You will be gambling, nothing more.

I cannot state this strongly enough: A left shoulder, followed by a spike up and collapse back down again—a “head”—in and of itself offers no structural bias or price pattern bias on which you can rely. It does not foreshadow the appearance of a right shoulder. And if price begins to rise again, as if forming the left side of a right shoulder, you have no reason to assume that it will pause and reverse at the same level as the left shoulder. Going short there is nothing more than an excuse to lose money.

End Notes

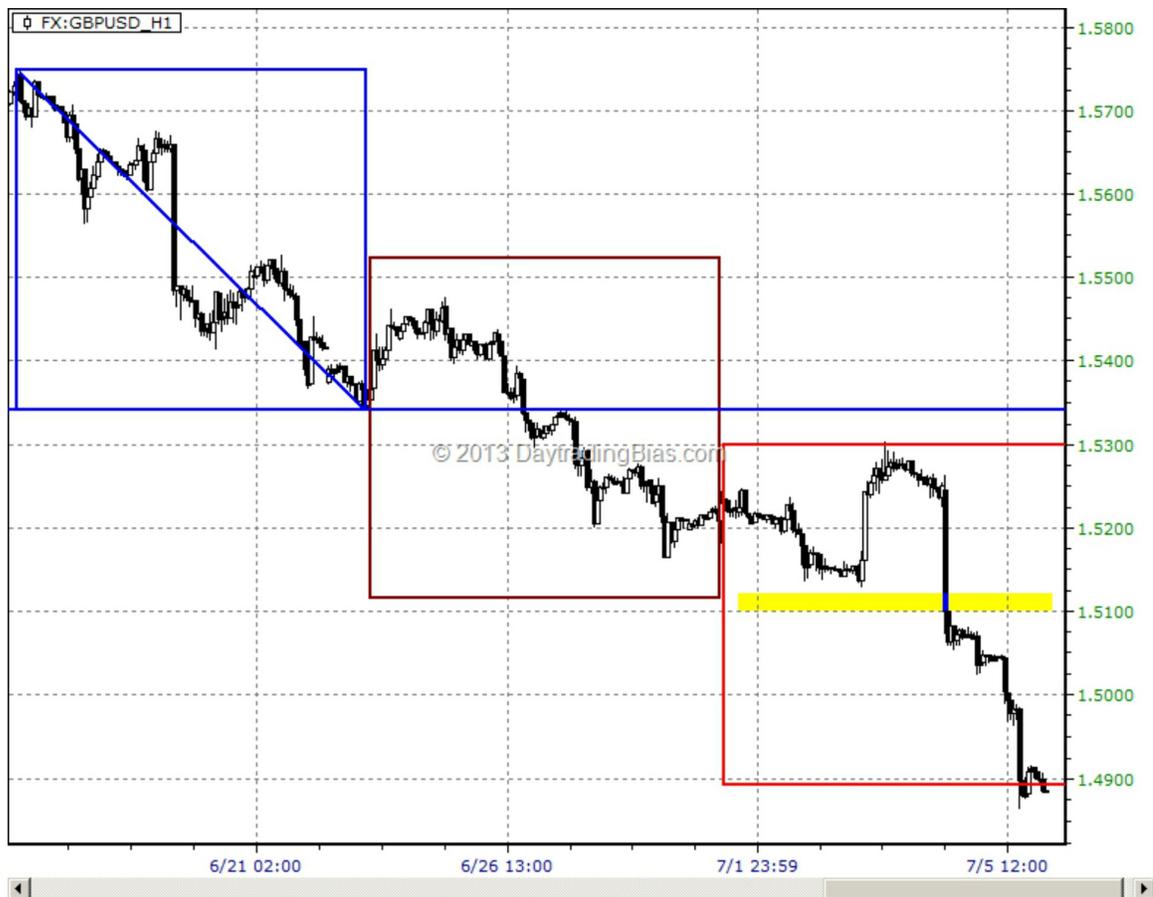
Mark these words carefully. They may offer the only correct representation of the Head and Shoulders pattern you’ll find anywhere, especially on the web.

Parabolic Run

Parabolic Run is a complex chart pattern that classic chart patterns often fail to capture.

Example Chart

Here it is on a British Pound / US Dollar hourly chart:



The Trend Starter (the move in the blue box) – In most cases, it begins with a Three Pushes formation that defines the impending swing trend.

The Death Channel (the move in the dark red box) – This stage is the death of many a trade. Most traders see the Three Pushes formation of the Trend Starter and anticipate a consolidation ledge or a countertrend signal, as we've discussed. Indeed, the Death Channel formation often fools traders into thinking that this is precisely what will transpire – only to find that price continues to move in the direction established by the Trend Starter. This second stage unfolds over the same length of time as the first stage, but the distance traveled by price must be less than half that covered during that first

stage.

In other words, the Death Channel is characterized by a slow grind that continues in the original direction.

The Run (the move in the red box) – Characterized by a sudden, very powerful directional move in the same direction. Frequently, this run will transpire after a dramatic countertrend thrust (as seen in the chart) that often fools traders into thinking the move is over. As long as that countertrend thrust does not exceed the end point of the Trend Starter stage, do not be fooled: Your assumption should be that the trend remains intact.

The culminating thrust of this last stage should take price to a target that is at least a 50% extension of the first stage range (highlighted by the yellow line). The very likely outcome is a full 100% expansion, either from the first stage range or the countertrend swing extreme (as in the above chart). As with stage two, this third stage transpires over the same length of time as the first stage.

Variations

The Death Channel often looks like a thin channel in the direction of the trend, which makes the whole sequence of moves look like a single directional push.

It can also look like a wedge, as it does in the above chart.

It does not matter if, during the Run stage, price tags the 50% expansion and bounces – as in the chart. The overall setup has trapped enough players in the wrong direction that the countertrend move is most likely destined to fail.

If a False Breakout against the end point of the Trend Starter occurs, the trap can be partially defused, which means the probability of a 100% range expansion will drop significantly.

Here's another example:



Temperament

The key to capturing these powerful moves is patience and a hands-off approach.

Many good short-term traders would be able to capture the drop within the Death Channel above, but rarely do traders have enough patience to wait for the better trade offered in the Run.

How to Spot a Death Channel . . . and Live

In my weekly commentaries, I will sometimes say that I am expecting a “consolidation week” after a “directional week.” If that consolidation week plays out in the form of a Death Channel, you can look for a potential swing trade setup. Simply think of the first week as the Trend Starter and the second week as the Death Channel, and you will get the picture.

In day trading scenarios, it is more difficult to identify the moves quickly unless you have somehow programmed a computer to identify the first two parts of the move for you. There are, however, workarounds that can be achieved using market-specific techniques.

For the e-mini futures contract, the Death Channel can be spotted after a Three Push formation, when the NYSE \$TICK index registers an extreme countertrend reading (in other words, extremely negative after a strong move up, or extremely positive after a strong move down), while price itself continues to crawl in the direction of the existing trend. Once the Death Channel's time slot has expired, the market will usually explode in the direction of the trend again.

For forex, it is important to quantify the move by calibrating the overall strength of the currency you're trading against the other major currency pairs. For example, if you think GBP/USD is going to have a strong bearish Parabolic Run, it is important to note the visible strength of USD vis-a-vis other major currencies.

How to Trade a Parabolic Run

You will see one of two scenarios after the Death Channel phase has ended.

1. Price immediately breaks the 50% expansion. This points to an explosive move towards the 100% expansion level and will likely exceed that. So your stop order must be in place to capture that move.

2. Price continues its slow drift down, setting up a strong countertrend move. If this move fails to bring price back to the midpoint of the Death Channel, you are likely to see a low-risk opportunity to enter a new trade in the same direction established by the Trend Starter.

As a Bailout Tool

The Death Channel can help you play defense, as well.

Think about it: If you have taken a countertrend trade, and you see that price is not remaining within the Trend Starter range, you will know that it's time to close your position, as you probably have no compelling reason to think that the market will turn in your favour.

There is no point in letting your trade be stopped out if you already know it is likely to fail.

Summary

The Parabolic Run is one of those chart patterns that you don't hear much about. It's complex, and it can be somewhat subtle. But if you go to the

trouble of keeping an eye out for it, you will be rewarded for your efforts.

Section 6: Working with Multiple Timeframes

How to Create Context

Now you know how to recognize the signals you'll get from the most essential chart patterns. Next up: How to use those signals in a way that minimizes your risk while maximizing your profit potential.

The secret weapon? Context. And how do you get that context? By working with charts from more than one timeframe.

The truth is that chart patterns from a single timeframe will never be able to provide all of the information you need to trade successfully. That's because they can only tell you part of what's going on in a market and why. The rest of the story usually involves players in higher timeframes acting on price levels that you can't see. So in order to trade effectively, you need to know what those players are looking at.

Typically, you only need to work with two timeframes in order to make informed decisions. They are:

- Your main timeframe
- Your dominating timeframe

Once you're comfortable working with these two, you may want to add a third to help improve the timing of your entries and exits. I call this third timeframe the "money-management timeframe," because it enables you to establish your potential target (your reward) and your potential loss (your risk) so you can manage your balance of risk and reward. In other words, to manage your money. But you should only add this step after you've mastered working with the two more important timeframes.

Let's take a look at how to do that.

Choosing Your Timeframes

Your main timeframe is the timeframe from which you get your signals. Your dominating timeframe should be the next longer timeframe that you have decided is significant. A quick rule of thumb is that each timeframe you use should be at least four-to-five times the resolution of the immediately longer one.

For example, if you trade on daily chart patterns and signals, your main timeframe would be a daily chart and your dominating timeframe would be a weekly chart. (Later, when you're ready, you would also want to add an

hourly (for forex) or 30-minute (for stock indices) timeframe to help manage your positions.)

Choosing timeframes for intraday chart patterns and signals is a bit more complicated because it depends on your own personal trading style.

For example, if you trade 5-minute setups, then a 5-minute chart would be your main timeframe. Your dominating timeframe could be 30-minutes / hourly if your style is closer to scalping, or it could be daily if your style is closer to swing trading. Typically, day traders will consult both of these longer timeframes because they are likely to trade both scalping and swing setups simultaneously, depending on market conditions. (For the money-management timeframe in this scenario, one minute or some kind of tick / volume-based timeframe would work.)

The Importance of Consistency

Your primary purpose in using multiple timeframes is to get a more accurate picture of trend conditions in the market you're trading. So it's important to employ the same method of trend identification across all timeframes. You can use the swing trend approach, for example, or the moving average trend method, depending on your personal preference. But you should only use one method at a time or you will have trouble applying your chart-reading techniques from one timeframe to the other. Also, it's not a good idea to keep changing your trend identification method. Stick to just one until you become proficient with it.

Identifying trend conditions in each different timeframe is not particularly complicated. After all, there are only three possibilities—uptrend, downtrend, or no trend. Where it gets tricky is when different timeframes give you conflicting information. Then it can seem impossible to use that information in any kind of meaningful way.

I assure you it is not. In fact, it's entirely possible to understand exactly what is going on no matter how many apparent trends you identify. But first, you need to understand the role of each of your timeframes and how they fit together.

The Roles of the Dominating Timeframe

Your dominating timeframe serves two important functions.

First, it tells you if your trade is a trend trade or countertrend trade. Let

me explain:

A trade entered in the current trend of your dominating timeframe is called a trend trade. Trend trades have the advantage of promising a run that can continue through multiple swings in the main timeframe, with weaker pullback against the direction you are riding. And once the trade has moved in your favour, you can protect yourself from loss by moving your stop loss above your entry (in the case of a long trade) or below your entry (in the case of a short trade).

A trade entered against the current trend of your dominating timeframe is called a countertrend trade. Countertrend trades seldom last beyond one or two swings in the main timeframe, with stronger pullback against the direction of your trade. Because these trades tend to be shorter in duration, they rarely offer you the risk-management flexibility of trend trades.

If your dominating timeframe shows no trend, any trade you take is considered countertrend. Why? Because if a trend moving *against* your trade emerges in the dominating timeframe, that immediately puts you in a countertrend position. And if a trend moving *with* your trade emerges in the dominating timeframe, the trade can still be killed by a stronger-than-expected first reaction at the swing extreme of the dominating timeframe.

Your dominating timeframe also provides you with the first targets for your trades. Traders can be tempted to rely on the main timeframe for everything, including the nearest targets. Big mistake. Consider, for example, a case where the nearest support and resistance levels on the dominating timeframe are closer to your entries than those on your main timeframe. In such a case, you might find that price stops far short of your intended targets. If your trades were countertrend, you could easily end up with a loss.

The Roles of the Main Timeframe

Your main timeframe is the one you look to for the chart patterns that serve as triggers to enter a trade. It also tells you when it's safe to stay in your trade: namely, as long as the trend of the timeframe agrees with your trade.

Keep in mind that trends rarely end abruptly. So even if price has been moving in a certain direction for a while, that does not necessarily translate into an overbought or oversold condition. It takes more than time to change the direction of a price swing.

Typically, trends end in one of three strength-related ways:

- A strong-trending market often ends the move with an exhaustion run (i.e. blow off top, spike low) before turning around to move in the opposite direction.
- A normal-trending market needs at least a retest of the last price extreme before it can start to move in the opposite direction.
- A weak-trending market does not need a retest of the last price extreme to turn around. Instead, it often tags the closest higher timeframe target and immediately moves away.

If you cannot identify one of these three scenarios, you should not enter trades against the trend of your main timeframe, as they typically require so much effort that they prove to be counterproductive. Better to save your energy for trades that allow you to join the existing trend.

The Role of the Money-Management Timeframe

Once you are consistently profitable using these two timeframes—main and dominating—you can consider adding a third timeframe to the mix: the money-management timeframe.

It is really important that you not jump the gun on this step. Think about it. If you're not performing well with just two timeframes, adding a third to the decision-making process will only serve to confuse you more. First become proficient in trading with the more important timeframes. Then you can refine your technique with a money-management chart.

Before we get into the details of how your money-management timeframe works, we need to talk a bit about *why* it works. Which brings me to the topic of “price discovery.”

Price Discovery

The textbook definition of “price discovery” goes something like this: The process through which buyers and sellers interact to determine the price of an asset.

Think of an auction. A seller offers an item to prospective buyers, who then compete to submit their bids. When the item is sold to the highest bidder, the value of that item has been “discovered” at the price of its sale.

Now, here is *my* definition of price discovery: The struggle among market participants to outsmart one another in order to squeeze money out of each other.

I prefer this alternative definition because it highlights the most important theme of the process—a struggle to make money. This struggle is not structured. This struggle is not orderly. It is a necessarily chaotic process.

The Price Discovery Cycle

Despite the chaos, however, the process of price discovery does tend to move in a cycle, although it’s not the kind of periodic cycle that some analysts imagine. The cycle typically incorporates the four different phases of the price discovery process within a single timeframe. These phases—which have no set time limit—can be roughly defined as follows:

1. Action: A push up or down, reflecting the imbalance of expectations among the buyers and sellers.

2. Exhaustion: In the case of a move up, the overwhelming majority of prospective buyers have already bought. In the case of a move down, the overwhelming majority of prospective sellers have already sold. There aren’t enough prospective participants waiting to jump in and propel the market farther in the same direction.

3. Reaction: Sellers, sensing exhaustion on the part of buyers—or buyers, sensing exhaustion on the part of sellers—jump in to drive price in the opposite direction.

4. Exhaustion again.

This cycle exists because at any moment in time, only a limited number of players—with limited capital or resources—are participating in the discovery process. The end result is this repeated swing of price from one

direction to the other.

Note that I said *repeated*, but not *regular*. When you think about cycles you might envision a periodic cycle, like a sine wave, oscillating from one extreme to the opposite extreme at regular intervals. Financial markets, however, are not governed by sine waves. Price discovery cycles change depending on which participants are entering and leaving the market. In other words, each price discovery cycle can be its own special snowflake, a unique expression of the hopes and fears of the buyers and sellers who happen to be engaging in the marketplace at any given moment.

So that's the theory. Now, how do you make money from it?

All Cycles Great and Small

Once upon a time, men (and they were always men) with starched collars and vested suits stood over glass-domed curiosities called ticker tape machines and “read the tape” as it clackety-clacked into a pile on the floor. The “tape” was an inch-wide ribbon of paper on which were printed the latest trades from the floor of the exchange, and “tape reading” became one of the high arts of trading. To read the tape meant to monitor the ups and downs of the price discovery cycle, to track that cycle through each of those four phases at the most granular level – from the individual trades themselves.

Equipped with nothing but the tape, traders followed the trades and tracked those four phases of price discovery. They didn't use that terminology to describe their technique. But that is, in fact, what they did, developing a keen sense of where the market was likely to go. The best of them made fortunes.

The moral of this story? The struggle of the players plays out trade-by-trade, just as it does when thousands of individual trades are aggregated and plotted on charts representing the action of price over much greater spans of time.

Well, more or less.

There is one rather profound difference between longer timeframe price discovery cycles and those price discovery cycles that occur in shorter timeframes: The shorter cycles move faster.

Before you dismiss that observation as self-evident, stop and think for a moment about its implications. The longer the timeframe, the greater the

potential for external factors to affect the behaviour of the market's participants. News, rumours, even lunch breaks, shape the contours of the market's price discovery cycle. As the timeframe shortens, that potential is diminished. At some point—depending on market conditions—the timeframe becomes so short that the price discovery cycle reflects nothing but the response of buyers and sellers to the existing structure of the market. In other words, price action is driven, not by new information, but by the participants' reaction to something like a looming trend line.

That's why chart reading of the shortest timeframes produces projections of the highest accuracy. Pull up a chart that bundles individual transactions—or “ticks”—into groups and plots one price bar for, say, every 13 transactions, and you will see that basic chart patterns and trend lines work beautifully.

Of course, only a computer can trade off a chart like this, at least when it comes to financial instruments that are bought and sold hundreds of times in a minute. But if you're only human, all is not lost. You can approximate the insight conveyed by old-fashioned tape reading through the use of a very fast-tick chart. (Many traders are partial to 13-tick and 34-tick charts.) Your fast-tick chart will allow you to track a particular variant of the price discovery cycle, one that will enable you to fine-tune the entries you've based on your main trading chart.

That cycle variant is called a “cycle inversion.” Stay with me as I tell you what it is and what to do with it.

Cycle Inversions

A cycle inversion occurs when a cycle moving in one direction breaks a cycle moving in the opposite direction on a higher timeframe. The cycle on the lower timeframe stops the cycle on the higher timeframe and throws it into reverse. In such a case, the higher timeframe price discovery cycle does not move from action to exhaustion to reaction to exhaustion, as we've come to expect. Instead, it pauses at the first exhaustion phase and then, instead of reversing, continues on in the direction it had been moving before the exhaustion phase.

The result: A new cycle is born in the higher timeframe, one that breaks the existing rhythm completely. Often, you'll see an existing trend line break as well.

Cycle inversions are powerful. The trick is to anticipate their emergence. Fortunately, it's a trick you can learn to perform—quite accurately. Here are the classic cycle inversion scenarios to watch for:

SCENARIO I

The existing trend is broken, and it's broken in such a way as to satisfy the Reversal Criteria (as set out in the chapter “Before There Were Chart Patterns, There Were Trend Lines”) of the last spike up or flush down.

Bottom line: 90% of the move should be erased in one swing within your main timeframe or dominating timeframe. That is a hallmark of cycle inversion.

Let's look at an example:



On a 15-minute chart (the dominating timeframe for many day traders who trade off a 5-minute chart), the uptrend is marked in blue.

The last leg up is highlighted in green.

The move down is highlighted in red. It erased 90% of the last leg up while breaking the uptrend line.

A downtrend on the 5-minute chart begins.

SCENARIO II

A low volume breakout that is not slapped back into the previous range: It's a sign that opposing players have either

- already entered their positions and are not prepared to add to them.
or

- decided they don't want to fight the nascent trend.

Either scenario augurs a dull market, bereft of the energy from new participants driving price. This constitutes the other classic cycle inversion, wherein the fuel for a continuation move comes not from the entry of new participants, but from forcing existing players who find themselves on the wrong side of the market out of their positions. This is what's known as a "squeeze," and it can result in sharp directional moves, seemingly out of nowhere.

Something to Remember

When it comes to cycle inversions, a "strong reaction" means that the move has been reversed because of a significant increase in activity by the players to reverse. But keep an eye out on lower timeframes for the "tell" that a seemingly strong reaction is not going to end up changing the dominant trend.

For example, a Spike and Ledge reversal might appear at the end of a long-running trend move. Or a "1-2-3" that breaks back into the previous range. Either can mark the start of a significant pullback in the main timeframe.

Let's look at an example, on a 15-minute chart of the SP500 e-mini.



First, shorts frantically cover their positions, creating a “squeeze” that spikes price upwards, leaving a gap at the open of the market session on August 27.

Next, a breakdown from the squeeze top. As you can see, that breakdown ended abruptly. Why? Because the remaining shorts took advantage of the pullback to cover their positions.

Then, the subsequent attempt to push through the squeeze top failed.

At this point, price had nowhere to go but down, leading eventually to the breakdown move to the 50% and 100% expansion of the range from the squeeze top to the forced bottom.

SCENARIO III

A gap in the opposite direction that clean breaks the trend of your main timeframe is also the sign of cycle inversion. Much like the cycle inversion in Scenario I, you can expect price to continue to move in the gap direction. The immediate target will come from the dominating timeframe, not from the main timeframe.



On this 15-minute chart, the gap up (blue arrow) created an open gap zone (cyan rectangle) and a trend line break to the upside.

Now, look carefully. If the trend line break were to work, we would expect price to move up from that trend line by the same distance as the greatest distance it had moved down from the same trend line.

You'll probably want to read that sentence again. But to make it easier for you, look at the chart. The vertical red rectangle to the far left shows the greatest distance price moved down from the trend line. The vertical red rectangle to the right is of the same dimensions. It shows the expected move up.

As we can see, price eventually reached the projected target.

But something is missing here. Maybe we can blame it on the events that happened back then. But is there something more to the chart that we are missing here about this subtle reversal? We'll have to look at the higher timeframe for clarity.

On the daily chart, you will discover how clean the setup really is:



The drop we see on the 15-minute chart was a continuation selloff coming from the rejection of August month close. This suggested that an attempt to challenge the August month low would kick in, based on my previous book, *Special Theory of Price Discovery*. Notice the Down Channel. A channel breakout occurred, forcing price to zoom higher back to the start of the channel.

That breakout also gives us a 1-2-3 Buy setup on the daily chart. The nearest target is the last swing high, the same target as the channel breakout play.

Now we're ready to put your newfound knowledge about price discovery to work.

The Money-Management Timeframe

The money-management timeframe is your shortest timeframe. Its purpose is to refine the timing of your entries and exits so you can take your profits at the early stage of trend termination and cut your losses if your signal is invalidated.

How should you analyze your money-management timeframe? The same way you analyze your main timeframe. Your money-management timeframe will generate trading signals using the same criteria as your main timeframe. In fact, since it's your fastest timeframe, it will generate more signals than you may know what to do with.

Here's my suggestion: Focus on those signals generated by your money-management timeframe that, first, are in the opposite direction of your trade and, second, have targets exceeding the risk parameters you've set in your main timeframe.

Think of it this way: Your main timeframe is about offense. It's the place where you launch your trade. Your money-management timeframe is about defense. It's the place where you look for a reason to get out of your trade.

For example, say that you're in a short position where the dominating and main timeframes are in agreement. You know the trend is in your favour. You have already adjusted your stop multiple times, locking in profit. But then you see an exceptional flush happening in the main timeframe. Knowing that a strong-trending market tends to terminate with an exhaustion run, you now look to your money-management timeframe to tell you whether the move is about to run out of steam.

Here's an example, from the ES e-mini:



Let's say you had the good fortune to initiate a short at about 1918 and ride it short all the way down to the green arrow. Now you have a problem—a good problem, but a problem nonetheless: You don't know where to close your trade.

Your potential downside target based on a Measured Move (orange lines) or down channel projection (red lines) has been exceeded. But if you decide to stay in the trade hoping for more downside, you'll have to choose a price level to place your protective stop orders. However, that presents another problem:

There's no logical place to put your stop. There's nothing below 1914 you can use to protect your profit. A buy stop order at 1920 would make sense . . . except for the fact that all profit would be wiped out if the stop order were triggered.

So what do you? Close the position. It makes no sense to hang on any longer. Profit has exceeded expectations and the risk, therefore, is no longer justified.

You're looking for the potential start of a countertrend move—a

countertrend move that takes price back up to the nearest resistance zone based on your main timeframe. If this target is located above your existing stop, you have a choice: Either force yourself out of the position completely, or close part of your position and prepare to close the rest of the position when and if the countertrend move is confirmed. Remember, if the countertrend move is confirmed, forcing you to close your entire position, you will have ample time to re-short at a better price once the countertrend move has ended.

So there you have it: Your money-management timeframe allows you to squeeze more profit out of your trades while reducing your risk. Before long, you will wonder how you ever traded without it.

Multiple Timeframes Bootstrapping Technique

Once you can read your charts using multiple timeframes with some level of proficiency, you will be able to make correct projections and properly assess your risk more often than not. As long as you are objective and use your analysis to wait for confirmed entries, you will no longer make the kind of choices that can significantly damage your trading account. And over time, you should experience fewer and fewer equity shocks.

So how do you take your performance to the next level? Good question.

To answer it, I'd like to talk for a minute about the players in another strategy-based endeavour: Chess. More specifically, the difference between an advanced amateur player and someone who has mastered the game.

Any chess player with a reasonable amount of skill can envision his or her tactical advantages over the next few moves. Such a player can figure out how to respond to any given situation by seeing several steps down the road.

But master chess players can beat those players handily. How? Because they are able to strategically position themselves to pick fights that will give them the advantage over their opponents – before those fights even begin.

It's the difference between reacting to situations and anticipating them far ahead of time.

How does this relate to chart reading? Well, if you think about it, all of the techniques we've discussed so far have been based on reaction. They require you to wait for evidence of a trend line break or the completion of a chart pattern in order to get a confirmed signal that certain outcomes are likely to unfold.

Good chart readers wait for confirmed signals before taking a trade because it gives them what is called "positive expectancy." In other words, they have reason to believe that the trade will turn out well—the "reason" in this case being the confirmed signal. This principle doesn't only work within a single timeframe; it is consistent across all timeframes. That means if you can anticipate future confirmed signals by reading multiple timeframe charts, you can choose those setups that have the highest likelihood of being profitable down the road. You can strategically position yourself to take maximum advantage of upcoming events—before those events even begin. Like a chess master.

And the best news of all? You don't need to learn anything new in order to do this. You simply need to apply what you have already learned in a more expansive way. You need to bootstrap.

Here's what I mean:

The Bootstrapping Method

After you've become proficient in chart reading and learned to successfully monitor three different timeframes, you will find that you've begun to develop a sense of when the market is about to turn—more often than not anticipating that trend change in your main timeframe. This intuition is your first step towards advanced chart reading. You have begun to sense the symphony of the charts.

What you need now is an understanding of the mechanism behind this synchronized movement so you can take advantage of it in a structured and consistent way. How do you do that?

Well, when you monitor the development of a market in a single timeframe, you identify likely outcomes from your chart. Typically, you will be able to recognize several scenarios that could unfold given the current market condition. Now, take this a step further. Identify likely outcomes from charts representing three timeframes, and you will get a complex, tree-like structure of possibilities for what could happen next.

Don't be overwhelmed. You don't need to see and analyze all of the possible outcomes in all three timeframes. After all, you're not a computer. All you really need to find among the many possibilities is one setup from your shortest timeframe with a confirmed signal that, in turn, would trigger a confirmed signal in the same direction in your next longer timeframe, which, in turn, would trigger yet another confirmed signal in the same direction in your longest timeframe.

This kind of setup will give you the lowest possible risk while promising the best possible outcome. Think about it. In the worst-case scenario, you would take a loss at your normal stop loss in the shortest timeframe. But if you have read your charts correctly, your expectancy for the trade at the shortest timeframe should be positive, meaning you can lock in profit easily and simply wait for the domino effect to occur in the longer timeframes.

Even if only one more timeframe kicks in with a confirmed signal, your profitability has increased significantly—a fact that immediately amplifies your reward-to-risk ratio many times over. In short, the more timeframes you can take into account, the better you can position yourself to find profitable trades with tightly controlled risk.

I call this method “bootstrapping” because it’s a bit like the approach a small company with limited finances will take, leveraging its growth through revenue. Here, you’re giving the trade enough leeway in the shorter timeframe to allow the longer timeframe to accommodate it.

How it Works

Let’s look at an example:

Often, the Emini S&P drops for two to three days in a row, breaking multiple intraday support levels quickly. This happens because the players in these intraday timeframes do not really study what the players in longer timeframes are doing. As a result, the stop orders of traders operating off multiple timeframes can end up sitting, more or less, at the same price level. What the players fail to consider is that when stop runs and reversal signals from a shorter timeframe are triggered, it will induce a selloff that breaks their own support levels quickly. That, in turn, will trigger stop runs and reversal signals in their timeframes. The domino effect is spectacular to watch. It is even more enjoyable when you are one of the shorts who joined the waterfall event early.

Now let’s compare this approach to looking for overbought or oversold conditions, a.k.a. picking tops and bottoms. Anyone can get lucky and fade the top in order to profit from the selloff. But doing this is likely to result in taking profit too early, as your courage has already been depleted by the effort you had to make to suppress your fear during the initial struggle. And, as we’ve discussed, emotional trading is counter-productive.

By contrast, a trader who can anticipate the waterfall by recognizing the potential chain of events would join the short side on the shorter timeframe, when its support level is broken. The rest is just money management. Or, as they say, "The profits will take care of themselves."

The primary difference between using multiple timeframe bootstrapping and top-and-bottom picking is that with bootstrapping, you are in full control of your risk at all times. You are still reacting to the price. You

are still following what the market is telling you to do. You are still waiting for confirmed signals before entering a trade.

When you pick tops and bottoms, you don't ever know precisely how much risk you are taking on. You can control your risk by setting stops within your risk tolerance, but this means you are not following what the market is telling you. You are merely making a guess about when a turn will come. But that scenario may not happen. Often, you need to pick the top or bottom several times before you can get yourself into a comfortable position. This increases the overall risk for that trade, as these small losses add up quickly.

Bootstrapping enables little trades to turn into big ones. Try it. You may like it!

Section 7: Applying Chart Reading

The Transition from Chart Reading to Trading

After you have learned the basic techniques of chart reading and have spent some time practicing them, you will probably be eager to jump in and put your newly acquired skills to the test. This is a terrible idea.

Before you make a single trade, you need to do two things.

First: You need to come up with a business plan.

Why? Because trading is a business.

Let me say that again:

Trading is a business.

And you are the sole proprietor of that business, which means that you are responsible for every decision it makes. Attempting to run a business without a proper business plan is a recipe for disaster. You will almost certainly do things in a disorganized way, or worse yet, in an emotional manner that reduces your chances of making money.

You need a method to keep the madness at bay. Hence, a business plan.

Second: You need to educate yourself about money management.

Some people don't want to buy life insurance, because they don't like to think about dying. Likewise, many traders don't like to think about money management, because money management protects them from losses, and they're focused on winning. The irony is that the focus on loss enables one to survive and win, whereas a focus on winning almost certainly ensures defeat.

That's why it is imperative that you educate yourself about money management, even if you find the topic to be boring. The only way to protect your trading capital long enough to become consistently profitable is by understanding how to manage that trading capital.

(I have written a series on the subject, "Defensive Money Management," which you can use to learn all about this topic.)

The Effective Business Plan

Here's what your business plan should clearly identify:

1. Your available resources (e.g. money, time, equipment, etc.).
2. The resources that you can realistically commit to trading, as

determined by a proper analysis of your financial situation.

3. A set of realistic goals that your business should achieve from one milestone to the next.

4. Absolute terms for when you will stop trading.

5. How you expect to engage the market—in other words, your very own trading plan.

As with any business, you should review your business plan every three-to-six months and make any needed adjustments. If this sounds like a lot of work, that's because it is. But if you are willing to take the time needed to think about how to approach the market from a business standpoint, you will have a much better chance of being successful in the long run.

The trickiest component of the business plan will almost certainly be the creation of your own personal trading plan. As a beginner, you may not have any idea what a trading plan should look like. Because trading plans are an almost endless topic, I won't go into details here. (You can Google the subject if you'd like to learn more). But, in short, a trading plan should set out your rules of engagement with the markets you expect to trade. Jumping in and out of positions without a set of rules will make every trade emotional, and that will impact the consistency of your chart analysis. So it's essential to "plan your trade and trade your plan."

Your Trading Style Will Shape Your Trading Plan

Although many of the chart-reading techniques we've discussed are fairly well known to most traders, your application of them will be unique. That means your trading plan will also be unique. It will fit only you. And it will be based in large measure on your own personal preferences.

Some people, for example, like to trade the pullback setup from a potential Measured Move run—a robust approach that works quite well in many markets. Others prefer a counter-trend trade against the end of a Measured Move because they like the potential of a bigger payout from the possible reversal, even though this type of trade has a lower probability of success. Neither choice is better or worse in trading terms. It's just a matter of personal preference.

As a beginner, you should limit the number of trading setups you use, and focus only on the setups that feel most comfortable. Immersing yourself

in only one or two setups will allow you to become consistently profitable much more quickly than if you try to master a variety of setups at the same time.

Eventually, you can expand into more setups. But don't forget that this expansion is a revision of your trading plan and should be undertaken only after a thorough review of your business plan. You may find that some of the changes you would like to make are not compatible with your available resources, which means you either need to delay the change or drop the idea altogether.

Often, a beginner will feel the urge to increase their trading size quickly after a winning streak has led to a significant increase in available capital. But a proper business plan will keep you from making such a mistake and guide you to increase size in a more gradual and low-risk way.

The Market You Choose

Many beginners fixate on trading a specific instrument. For example, a lot of people think that the E-mini S&P is sexy—because of the great potential for profit. But because the E-mini S&P is particularly complex, it may not be easy for everyone to understand or analyze. Some traders will be able to see patterns and structures there, while to others, that market may seem completely random. This is just the nature of our own individual abilities to recognize patterns—some of us are better at certain kinds of pattern recognition than others.

That's why it is important to choose markets that have a structure and patterns that are clearly recognizable to you in the timeframes you will depend on for trading.

Finding Your Own Way

Let me share the story of a trader I mentored several years ago. He had attempted to trade many markets before he asked me to show him how to trade forex and the U.S. equity indices. Over the years, he had lost money trading stocks, stock options, commodities, and many other markets. It was as if he'd entered a casino and had been so dazzled by the number of games available to him that he'd jumped into every one of them. The emotional rides he took while trading destroyed his confidence, and that negatively affected his career (as an engineer) and his relationship with his family.

You might expect this to be some kind of Cinderella story, in which I turned this man into a successful trader overnight and he went on to make millions. You would be wrong. It took more than a year—in which I cut this guy off from trading and re-trained his mindset—before he was ready to return to the markets, this time with the right attitude. It turned out that he had actually become addicted to the emotional rides he was taking, and had become something of a compulsive gambler.

The intervention eventually worked. His trading style settled down and, over time, we discovered that a shotgun approach to trading was more compatible with his personality. We also learned that he has a keen sense of direction in certain grain markets.

This trader now trades only a few grain markets. He makes one trade per day at the open and always goes flat by market close. He has been able to slowly recover all of his previous losses and is now consistently profitable. He decided to keep his engineering job because he likes the challenges and satisfaction it offers, but he earns a solid secondary income from his trading.

As you can see from this example, the process of finding your own approach to trading can be long and drawn-out. If you take a conservative approach, the entire journey could take as long as two or three years. Clearly, this requires discipline and patience. But keep in mind that the alternative is almost guaranteed to cause a great deal of damage both financially and psychologically. And it may actually prevent you from ever reaching your goal.

(Note: I asked for this trader's permission to share his experience here.)

Summary

Trading is not a game. It is a business, and a very serious one at that. Take the time to approach it with the seriousness it demands, and you will find yourself positioned for success.

With that goal in mind, here's my suggestion: If you've gotten this far, reading every page, read them again. And again. This book is a compact refraction of the things I've learned about the financial markets since my salad days as a floor trader. The ideas and concepts described here are grist for the models of some of the biggest and most secretive algorithms on earth.

So study this book until you have internalized everything it has to say. Apply its lessons to your charts—to static charts when the markets are closed, and to live charts when the markets are alive and thrashing.

Above all, take it seriously. The person, or robot, on the other side of your trade certainly will.

Secrets for Applying Chart Reading to Day Trading

Because of its many limitations, day trading will not permit participants to apply chart reading in the same way as a swing trader—whose primary timeframe is a daily or weekly chart. Many beginning day traders make the mistake of analyzing their charts using all kinds of tools provided by their trading platforms, a mistake that drives them to analysis paralysis. Good traders don't waste their energy like that.

So what is the best way to day trade with price charts? Read on!

Liquidity and the Long-Term Trader

First, it's imperative to understand that most players in the majority of financial markets are not day traders. They are working with longer timeframes and don't have the same restrictions as you do, especially in terms of capitalization. However, even though these longer-term players view the markets differently, their actions can move the markets significantly during the trading day. So you will need to pay close attention to what they are doing.

In other words, intraday or very short-term chart patterns are not as important as the longer timeframes—including some intraday ones—that the majority of market participants are focused on. For example, if you know that most of the size players in the market you trade like to key off their trades on a 15-minute timeframe, that means the details of your primary timeframe—like a 1-minute or 5-minute chart—don't matter very much. So even though you make your money off very small price movements, you really don't need to over-analyze your charts. What you need to pay attention to is the longer timeframe that dictates the moves in yours.

Theme for the Day

Beginners often waste energy during the trading day keeping an eye on higher timeframes. They have been told that they should know what happens in those timeframes; indeed, I myself have told you that you need to be aware of the bigger picture.

But if you analyze and re-analyze these higher timeframe charts during your trading session, you will only confuse yourself. The moral of the story is to do your higher timeframe homework in a relaxed environment before you trade. That's how you will be able to gain an understanding of what the

markets are more likely—and less likely—to do while you trade.

That understanding will enable you to grasp the market's "theme." And this is the kind of knowledge that you can lean on in the heat of the action.

The theme can be as easy as a follow-through day, where you are looking for continuation in the same direction. Or it could be a consolidation day after several days of extreme volatility. Of course, your expectations about how the day will unfold might be wrong, but that will be obvious to you from the start, when the day begins to unfold in a way you did not expect.

Having a theme to work with eliminates the need to analyze the higher timeframe charts on the fly. It gives you back time during the trading day that is better spent focusing on your primary and higher timeframe charts. The time saved also serves you well as you can pay more attention to executing your orders.

Have a Clear Precise Battle Plan

Most traders lose most of the time. Why? They make mistakes. To reduce the frequency of those mistakes, day traders need to be absolutely clear about their trading criteria. These criteria should never be improvised on the fly during the trading day. Yes, many traders have defined most of their trading criteria quite clearly. But "most" is not "all." And therein lies the opening for mistakes—and needless losses.

The precise conditions for a trade should include the following:

- the reasons to enter the trade.
- the price with which you will enter that trade.
- the scenarios under which you will exit the trade.
- the stop loss that you will employ.

Here is an example of a precise battle plan:

On a day you expect follow-through, you will buy the pivot if it is tested and holds up on a 5-minute closing basis if other trend conditions support the idea. The target is R1 with a stop 1 point below pivot.

This kind of explicit description is necessary because you don't want to be making these decisions while you are trading. By putting your trading method into a precise battle plan, you eliminate all unnecessary decision-

making during the trading day. This will improve your consistency in trade executions and reduce unforced errors—errors that can turn a profitable trading style into a losing one.

As a day trader, it is your job to clearly define in your trading plan all the trades you expect to take. During the trading day, you will only take trades that meet your pre-defined conditions. There should be no spontaneous trades. The goal is to protect your trading account.

How to Handle Exceptions

What happens when your theme for the day does not match what actually happens? It's a big warning sign that your battle plan may not work out.

But don't panic. Indeed, take heart in the fact that you see the day for what it is: an exception. Now you know to step back and re-evaluate to see if you have missed anything.

Remember, day trading offers an abundance of trading opportunities. So why force yourself to trade in a situation where you know you don't have an advantage? Instead, invest the time in observing and learning from the market. Then you'll have a better idea on how to handle a similar situation in the future.

As you gain experience, you will develop ideas on how to handle the exceptions. You'll begin to see that they betray patterns just like "normal" trading days.

Summary

The primary challenge in day trading is the limited amount of time that traders have to make decisions. This puts them under constant pressure to produce accurate analyses quickly, while also managing orders and positions. Although chart reading is a powerful tool for day trading, it can do more harm than good if it is used in a disorganized way, a scenario that puts too much stress on the trader to complete complex analysis in a very small window of time.

By offloading your market strategy formulation to outside of the trading session itself and having your battle plans pre-defined in your trading plan, you put yourself in control of . . . well, yourself. You can deploy chart-reading techniques strategically, tactically, and in a manner that doesn't leave

you overloaded, confused, and prone to error. You can now approach day trading like a business.

Differences Between Intraday and End-of-Day Charts

Price movements from different markets do not behave in the same way. They each have different characteristics. A lesser-known fact, however, is that price movements for a single market can behave in a completely different manner from one timeframe to another. There are many reasons for this.

Continuity in General

Once a trading session has started, the intraday charts seldom gap from one price bar to the next. This is an advantage that daily bars do not have. Some markets just love to gap every day, while others do not. That means even if a market gaps wildly on its daily chart, its intraday price movements can be quite orderly and tradable.

Because markets do not go crazy every day, the normal days will give day traders who operate within intraday timeframes a more stable trading environment. Conversely, end-of-day traders are bound to deal with the possibility of sudden changes from one day to another, which can consistently destabilize the outlook of their trades.

This general advantage of intraday price series stability is visible across all exchange-regulated instruments—such as stocks, futures, etc. Here are a few instruments that warrant extra discussion:

Agriculture Markets

I traded the agriculture complex when I was learning the channel method from one of my mentors. Grains, livestock, you name it. I survived the training, but I have to tell you that I hate trading these markets. Why?

The number one enemy of these markets is news shock. Whenever a weather forecast or a report from an authority shows that something is not happening according to plan, these markets respond with extreme volatility. I'm talking about intraday limit up and down here—a wipe out scenario for many undercapitalized day traders. So how do you handle this? With strict disaster stops placed well before the daily limit level is tagged, you can limit your own worst-case scenario to manageable losses when you find yourself on the wrong side of the market.

For end-of-day traders, instead of just limit up or down within a day, the worst-case scenario involves consecutive days of limit ups or downs, where almost no one can escape from the move if they're caught on the wrong side. In a situation like that, it's no longer a matter of not being willing to get out of the bad trade. Even if you want to, you can't close your position because there is simply no other side left to take your orders.

Relatively speaking, it is better to engage these markets with intraday charts due to the possibility of a sudden change in market conditions. This means you can only profit from a very small part of the daily swings each day, but that will be much more productive than trying to pocket the big moves all the time. Those days where you can ride to the limit are frosting on top of the stable daily grind.

In my experience, the best reference for identifying the major price levels for these markets are the continuous non-adjusted future contracts at weekly and higher timeframes. They are useful for highlighting the price zones targeted by the big guns. Due to extreme volatility at these levels, they are often breached and price will snap back violently (i.e. False Breakout).

Forex

A lot of people say that you don't have to worry about gaps when you trade forex because it's a 'round-the-clock market. In reality, it's not quite 'round-the-clock: Forex markets do take a break on weekends and, if geopolitical issues intervene, the resulting gaps between one week's close and a successive week's open can be substantial.

Of course, geopolitics does not wait for weekends. When news shocks hit, forex can react more sharply than commodity markets. And it tosses in a few additional challenges for good measure. As forex markets are not physical products that have expiration and delivery limitations, it's impossible to determine how much supply and how much demand is really on tap. Without that information, you can't know whether, say, the euro will shoot up 300 pips, 500 pips, or more when Euro Zone officials throw a hissy fit.

Being a forex trader who is not prepared to deal with volatility beyond your main intraday timeframes can be disastrous. There is no limit to the daily movement in the forex markets. Without a disaster stop in place, it's possible for you to be wiped out, unless no leverage is used to hold your

positions. The best example illustrating this point is the dollar yen pair. The multiple quick slides of 300+ pips over the past few years with no significant bounce whatsoever took out many traders who'd thought it impossible to have such a directional move—simply because it had never happened before.

In this sense, intraday charts at hourly or higher timeframes in forex do not behave that differently from daily charts, due to the continuity of 24-hour trading, 5 days per week. Both have to deal with the same news shocks at the same time. The big difference in behaviour only shows up when we look at the next higher timeframe—weekly charts. Therefore, if you expect to hold your forex positions beyond a day, especially carrying over through the weekend, you must be sure to consult weekly charts. The daily timeframe would not offer you much more information compared to, say, the 4-hour charts.

Think of forex markets as a world with two distinct personae: The microscopic one at 5-minute or lower timeframes has its own structure and rules that work most of the time, until the macro one—at hourly or higher timeframes—swoops in and turns everything upside down for a short period of time. You can either trade the microscopic environment and focus on frequent scalping and controlled losses, or you can trade the macro environment and ride the swings. Anything in-between will be less reliable in terms of consistency from year to year.

Energy Markets

Energy markets mainly refer to crude oil and natural gas markets. These markets go through expansion and contraction phases throughout the year due to seasonal changes in supply and demand. This creates a unique behaviour not found in other markets.

In general, intraday timeframes in energy markets are pretty independent from the daily and higher timeframes. The reason: Seasonal support / resistance levels are very far away from each other. Weekly support / resistance levels from one season will be of no use to you once a new season has begun. Moreover, their effectiveness is undermined, even obliterated, by a change in weather conditions or some exogenous factor like a delay in oil delivery due to a storm . . . or war.

In other words, it's easier to play the energy markets with just intraday charts at 15-minute or lower timeframes following the current trend. When

there is a hard turn in the hourly or 4-hours, you can stay on the sideline and wait for the new intraday trend to be established. This can happen very quickly in these markets. Daily and higher timeframes are there for reference only—to show you which price levels should not be breached (just in case, when you look at your screen the next day, you discover that price has moved far from what you remember.)

If you choose to trade energy markets beyond intraday timeframes, it is much more important to pay attention to seasonal factors and fundamentals, rather than the higher timeframes.

Summary

I could go on forever about each of the different markets, but that would be of limited use. Because each combination of timeframe and market is so unique, you really need to study the charts yourself in order to identify the characteristics of the timeframes you are going to use.

For example, some combinations may have more False Breakouts than others. Some may have more trend moves than others. You will need to understand these intimately so that you can develop the most accurate forecasts and projections possible.

The more time you spent studying your charts and watching how they unfold, the better your analysis will be. Over time, you will gain more confidence in taking trades based on your own reading of the charts.

In Conclusion

We've covered a lot of ground here, from the very basics of the chart and its interpretation, to some of the more sophisticated analytical approaches to chart reading.

Make no mistake, a mastery of these techniques—and an understanding of the logic behind them—will place you in a rarefied category. Not many traders take the time and invest the effort to absorb these concepts, to know them inside and out. Perhaps it's a good thing: It makes it easier for the few of us who do.

My parting advice: Be one of those few.

Section 8: Putting It into Practice

Examples of Reading Charts Using Basic Chart Patterns

Had enough theory? A little practice goes a long way. So let's practice!

Using the Measured Move to Identify Price Targets

The Measured Move is your friend. Here's a look at how to apply the simplest of metrics to your analysis of the markets.

In this example, the same price move was measured twice in succession (2010 and early 2011). At the next major low (mid 2011), the same line segment (at the same angle) was applied to identify the next likely major price target. And, indeed, in early 2012, price hit that target almost exactly to notch a new, 52-week price high. Now, hindsight may be 20/20 and, yes, Google's stock nearly retraced its rise in full before ringing the bell at 660. But this would have served as fair warning to those tempted to "buy the breakout" expecting an immediate continuation of this move.



Bull Flag Breakout with Confirmation

Bull Flags, too, are easy to spot . . . and powerful to trade.



In this chart, we see price zig-zagging its way down the Bull Flag channel (in blue) before

1. breaking out to the upside,
2. pulling back slightly to retest the top of that channel,
3. committing to a resumption of the previous uptrend.

Step 2 provides confirmation that the breakaway move of Step 3 has a reasonable chance of success, and it is here that we have our entry (green arrow.)

When we wait for confirmation of the breakout move, we significantly lower the risk we would have assumed had we decided to pick the bottom of the potential pullback. (Consider that the first two bounces off the bottom resulted in no continuation move at all.)

Before we move on, take a closer look at this Bull Flag—specifically, the first half of the move down the channel. You’ll see a smaller and steeper Bull Flag that did, indeed, produce a confirmed breakout . . . only to slide back down into the Bull Flag consolidation zone. Yes, it’s a failed confirmed breakout, a disappointment, for sure, but one in which the risk of getting stopped out is defined and well-controlled.

What about simply entering long at the bottom of the channel? That can be a valid strategy, provided you have well-defined money management rules to go along with it. But you may see your capital tied up for a longer period of time than you would have if you had waited for the confirmed breakout.

Using the Measured Move as a Potential Support Trendline

Have I mentioned my love of Measured Moves? They’re so easy to use. For example . . .



After a confirmed Bull Flag breakout followed by a sharp spike up,

price often retraces in a predictable fashion by falling back to what might be called a “phantom slope line.” Here’s how to find it:

- Draw a line from the low to the high of the move up into the Bull Flag.
- Copy that line’s length and slope in a new line—the phantom slope line—and anchor it to the final bottom in the Bull Flag channel before its confirmed breakout.
- Watch as price retraces to your phantom slope line.

Really, it’s as easy as that. Traders often misinterpret that formation as a final top. In fact, price tends to move back up off your phantom slope line to continue in the breakout direction.

Using the Double Top / False Breakout to Spot a Trend Change

When is a “breakout” not a breakout, and how can you tell before everybody else?



The red down arrow points to a False Breakout. This setup triggered a break of the prior swing low (orange line), resulting in a break of the uptrend on the daily timeframe. The subsequent rally failed right at 50% of the breakout range (the blue line between red and orange). Not all bounces produce such a perfect lower high. The important thing to remember here is that, given the backdrop of the uptrend being broken already, any rally should be treated as counter trend until proven otherwise.

Another Tool for Beating the Crowd: Head and Shoulders

The following chart shows a classic example of an inverse (in other words, upside down) Head and Shoulders pattern on QQQ. Notice how the market sold off from a swing high (red arrow) to a lower low, then rallied back to that same swing high area (red line) and stalled (the orange arrow). Moral of the story: Pay attention to the potential development of a right shoulder (the green arrow) near the original left shoulder area (the orange line).



Silver Long Play Jan 29, 2013

As a rule, I review at least the daily charts on all the markets I trade. It does not matter whether or not I'm in a trade. It is important to have an idea of what the charts look like and how they move. In another words, get to know them, get to know their personalities, get to know their character. Familiarity pays.

Here's an example of how that works. What follows is a deconstruction of a trade in silver—a long—from 2013. The basic principles at work here could apply to any market.

The Opportunity

Here's how it all began, on Jan 28, 2013, when I found a potential long trade on this daily chart.



Reasons for being bullish:

1. Entered the down channel from an up move.
2. Pulled back to channel mid . . .
3. . . . as well as the swing low established prior to the most recent

touch of the upper channel boundary.

4. Has the potential to reach the channel top and, if that is breached, the previous quarter's high (start of the Down Channel/Bull Flag).

Engagement

So now what? To answer that question, I switch to a four-hour timeframe (one price bar for every four hours of activity).



Here's what I see: Silver has dropped hard, so unless it reacts to the 50% retracement level of its big rise, there's no possibility of a long here unless and until a reversal pattern presents itself.

(Note: I'm only paying attention to the 50% level. I do not use the additional Fibonacci levels that you see: They are just part of the standard drawing settings for this charting platform.)

So now I switch down to a one-hour timeframe. It's here that I see the reaction and reversal setup: A 1-2-3 Long off that 50% level.



Risk Management

1. I decide that if the 1-2-3 Long fails to pop silver above 31.20 quickly, instead dropping below that low, I'll take a small loss.
2. I identify two initial target points—31.40 and 31.80. These were swing lows on the retracement down. They can turn into resistance on the move back up.
3. I decide to take partial profit if and when price hits 31.40, and then move my stop loss up to break even.

Outcome

So far, so good. From this point forward, 31.2 should hold, so I adjust my stop accordingly to protect my profit. Clearly, the swing low at the channel mid materialized, so I'm looking for a move up to tag the channel top.

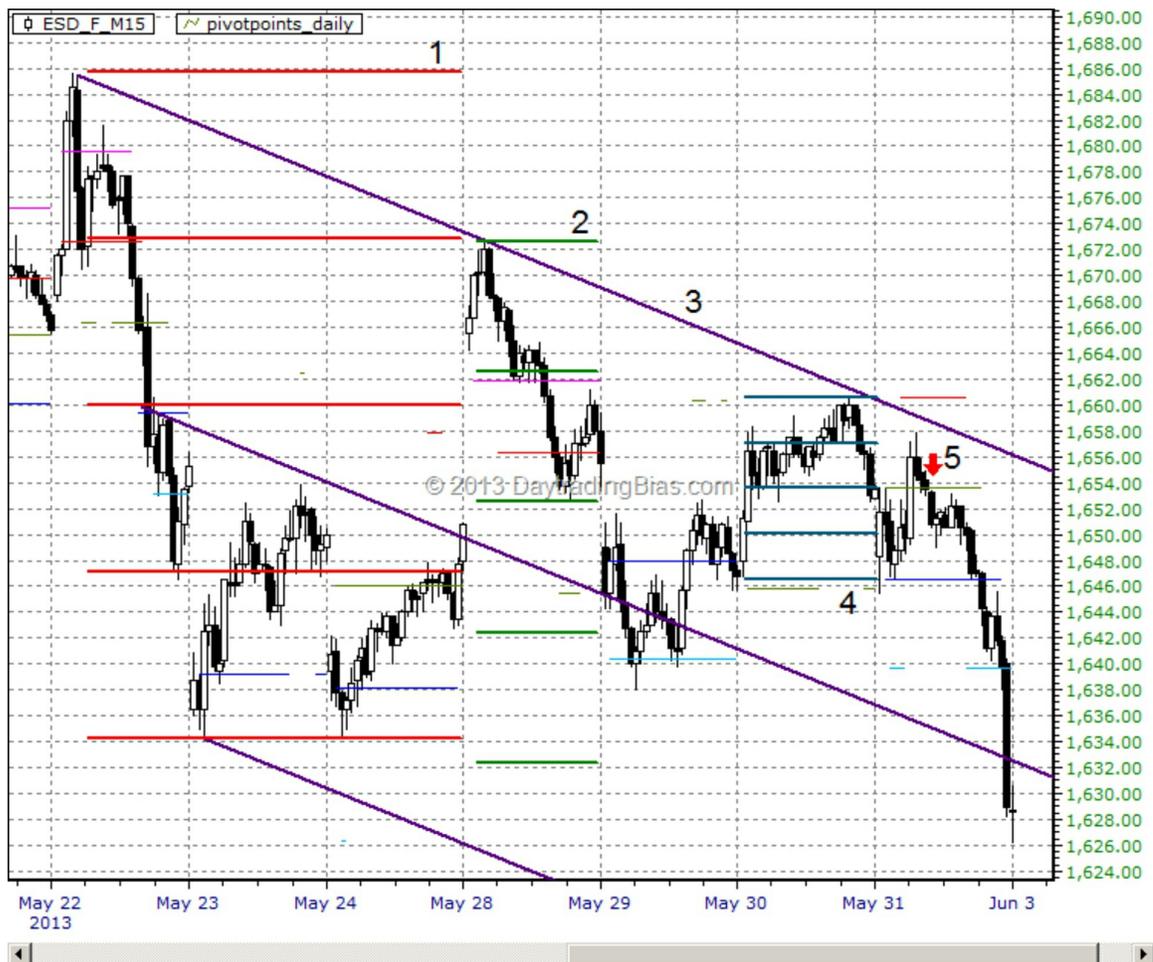


Important Points

1. Higher timeframes point us in the right direction.
2. Lower timeframes show us how to engage accordingly.
3. Risk control should be structured to allow room for the trade to develop.
4. Sound money management dictates profit-taking at predetermined price levels and stop adjustment to protect capital.

Emini S&P May 31, 2013

Here's another example, a deconstruction of a trade in the ES e-mini S&P 500 futures contract, a short from 2013. Again, the basic principles at work here could be applied to any market.



Sequence of Analysis

1. I mark the high and low of the previous week's range with two red horizontal lines, then divide it into four equal parts. Now we have a set of reference prices for this week.

2. Tuesday was the first trading day of this particular week. I put in the green horizontal lines to highlight that day's range and then mark 50% and 100% extensions of that range to the downside. Why the downside? Because price rejected the top quarter of the previous week's range, which led me to conclude the odds favored a test of the bottom of the previous week's range.

3. By Wednesday, we know we have a Down Channel in the making.

The channel in purple is now in place.

4. On Thursday, the ES e-mini showed us its hand when it pushed right up against the upper boundary of that descending channel and failed right at the 50% level of the previous week's range. The door to the previous week's low has now been opened. (I explain why that is the case in my book, *Special Theory of Price Discovery*). Our target, then, is the previous week's low. Interestingly, it looks as if that low will line up almost precisely with the channel's midline by the time price gets there.

By the end of Thursday, range has been defined, and I have highlighted the range with pale green horizontal lines.

5. Given the definitive way with which it rejected the previous week's mid, the ES e-mini "should" have remained below Thursday's mid. But it popped above that level on Friday, perhaps to clean out a constellation of short stops. Fortunately, our mastery of the art of chart reading tells us what to do next.

In order for a downtrend to be considered canceled, after all, price would have to stay above Thursday's midpoint, and quickly break the purple resistance line of the descending channel. In that case, our new target would be the high of the current week.

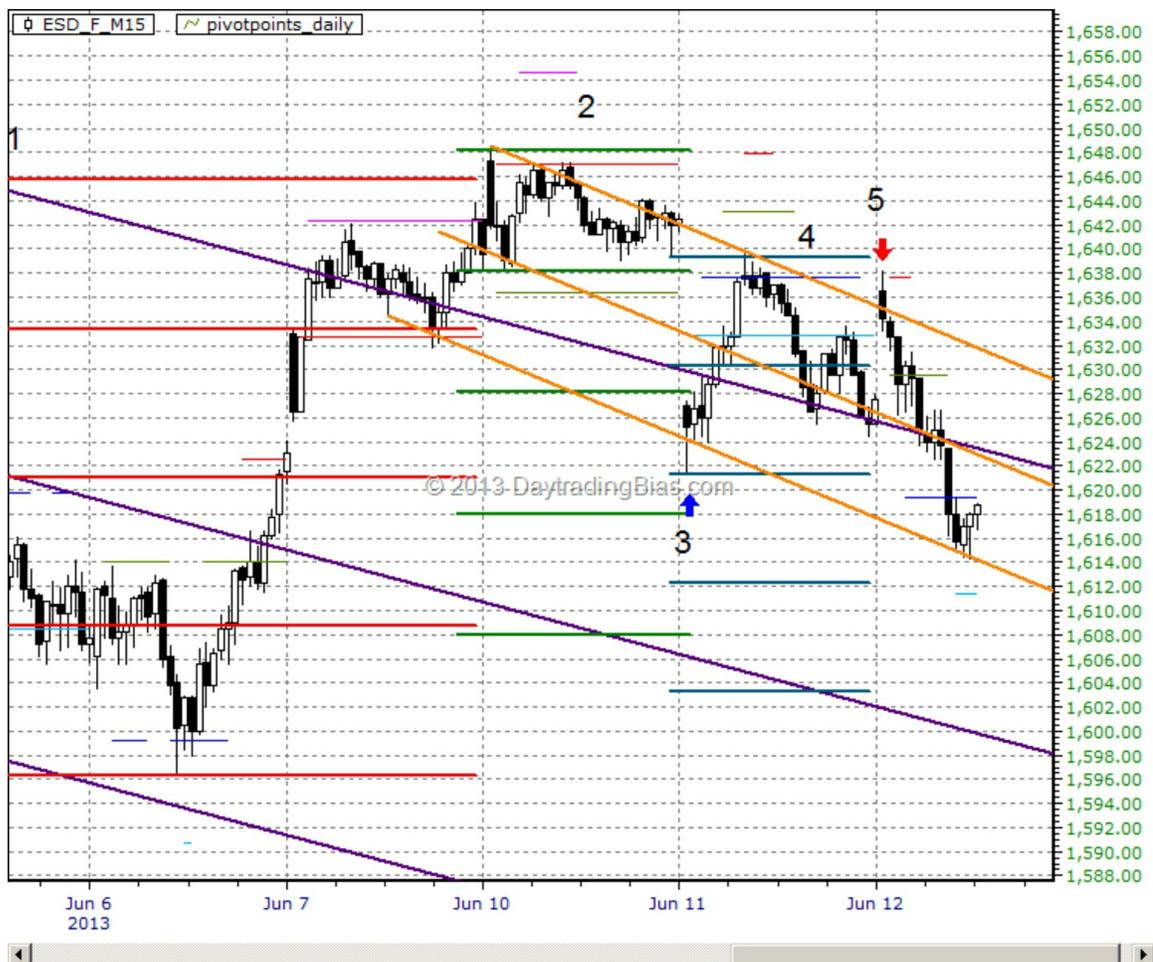
If, on the other hand, the ES e-mini falls back below the midpoint, we'll have a confirmed False Breakout on our hands. This will open the door to a retest of Thursday's low.

Lo and behold, that was, in fact, what happened, triggering the all-out selloff down to my target at 1633—the previous week's low (bottom red horizontal line) and descending channel mid.

By the way, 1633 was my first target, not the final target. The channel bottom, which you can see in the next image, was my final target.

Emini S&P Jun 11, 2013 and Jun 12, 2013

Let's continue from the last chart, using the mark-up scheme.



Sequence of Analysis

1. Note the previous week's range, red horizontal lines dividing the range into 4 parts.

2. After close of trade on Monday, June 10, note the day's range. It's a tight range with a gap below (between Thursday's close and Friday's open) and I'm expecting a breakdown. Accordingly, I have marked three likely expansion targets below this range. (If you'd like to know more about the logic behind those levels, you can read about it in my book, *Special Theory of Price Discovery*.)

3. On Tuesday morning, we have our trade setup when ES e-mini touches the previous week's midpoint, leaving a massive gap in its wake. As long as this level holds (my own rule-of-thumb allows a move below of as

much as 1.5 points), we can expect a run to at least half the gap. But because weekly supports have been triggered, we can expect weekly targets to be in play: That means the previous week's close, which suggests that we can expect something closer to a complete fill of that gap.

4. After Tuesday's close, we define Tuesday's range. Notice that Emini S&P closed right above the upper boundary of the descending channel that we studied in the previous lesson. That's a sign of strength, which is why Wednesday's gap-up is no surprise.

That was, however, short-lived strength, and when Emini S&P rejected Monday's low, it suggested the potential of a new descending channel, which I marked in orange. Next came Tuesday's move, from top to bottom, confirming it.

Is a bearish scenario unfolding before our eyes? Not necessarily. That descending channel emerged in the aftermath of the previous week's strong move up: We have every reason to suspect that our descending channel might turn out to be a Bull Flag.

Tuesday's action offers additional hints as to the market's intentions, as well. Notice how the day began with a rejection of the previous week's low. So long as that rejection is not reversed by Wednesday's open, we should look from here to the previous week's midpoint as the next likely target.

The moral of this story? Our job is not to guess what may or may not happen in the future, but to position ourselves to go with the flow whenever it happens.

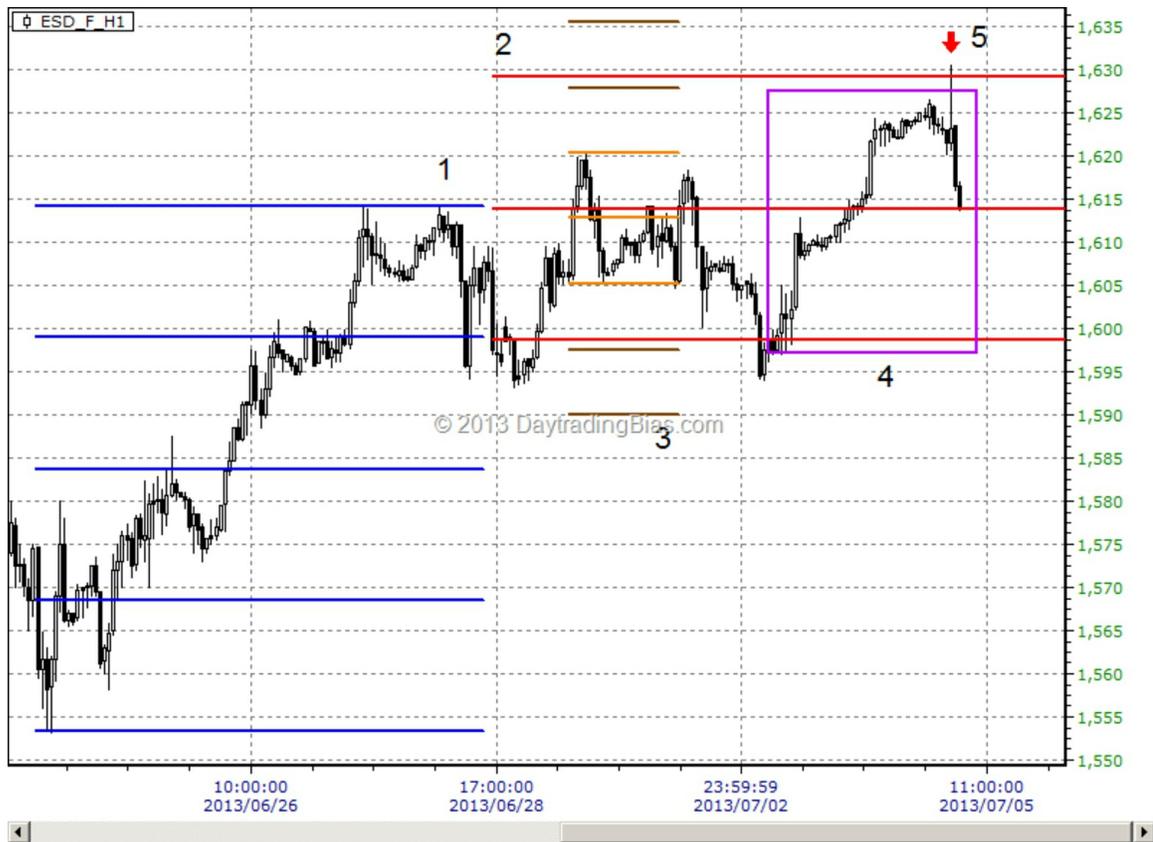
I pay close attention to the previous week's and previous day's close, noting where the new trading day opens in relation to those two reference points and choosing my course of action accordingly. So long as my expectations are met, there is no need for me to deviate from my course of action. And if my expectations are not met? I know the criteria by which my trade will be invalidated, so until and unless those conditions are met, there's little for me to do but wait for the expected price levels to be tagged. At that point, I'll evaluate my next options.

In real time, there is not much opportunity for you to make informed decisions. If you do not have your plan mapped out beforehand, on-the-fly decisions are often less than optimal: They tend to reflect emotions triggered in the heat of the battle. So when things are not unfolding in ways you

expected, don't curse the market. Take a moment, stand back, and observe. Learn from the behaviour. Take that into account for the next session. Every time you see something new in the market, you can avail yourself of the opportunity to understand something more about it.

Emini S&P July 5, 2013

Let's check out a counter-trend move setup from a consolidation week.



Here are the steps:

1. We define the previous week's range once it ends.
2. We note the 25% extension of the previous week's range. (Why? Because the previous week's trend was up, so we're alert to the possibility of a continuation in the trend and, as we've learned from the *Special Theory of Price Discovery*, the first target of a continuation is likely to be a 25% extension to the previous week's range.)
3. Now we define Monday's range, noting *Special Theory* expansion targets on both sides of that range. We recognize that Monday's failure to close above the previous week's range points to a potential end in the trend, and the potential beginning of a period of churn and consolidation at this price level. In this context, such a scenario would be called a "consolidation week."

As explained in my *Special Theory*, the price activity of a consolidation

week will likely be contained within a band that's half that of the previous week's range. (Take a moment to reread that sentence if it's not clear.) That consolidation will also be likely to oscillate around the previous week's high.

4. Ah-hah! Holiday drift (pre-Fourth of July) sends ES straight back up. We draw a box that's 50% of the previous week's range, as measured from this pre-holiday trading session's Regular Trading Session low.

5. Now that the weekly consolidation target (the high of the range) is tagged, the consolidation week counter-trend play can commence. Price obligingly drops to the primary target—the previous week's high.

What to expect from here?

So far, the consolidation week script is playing out as planned, so we can expect:

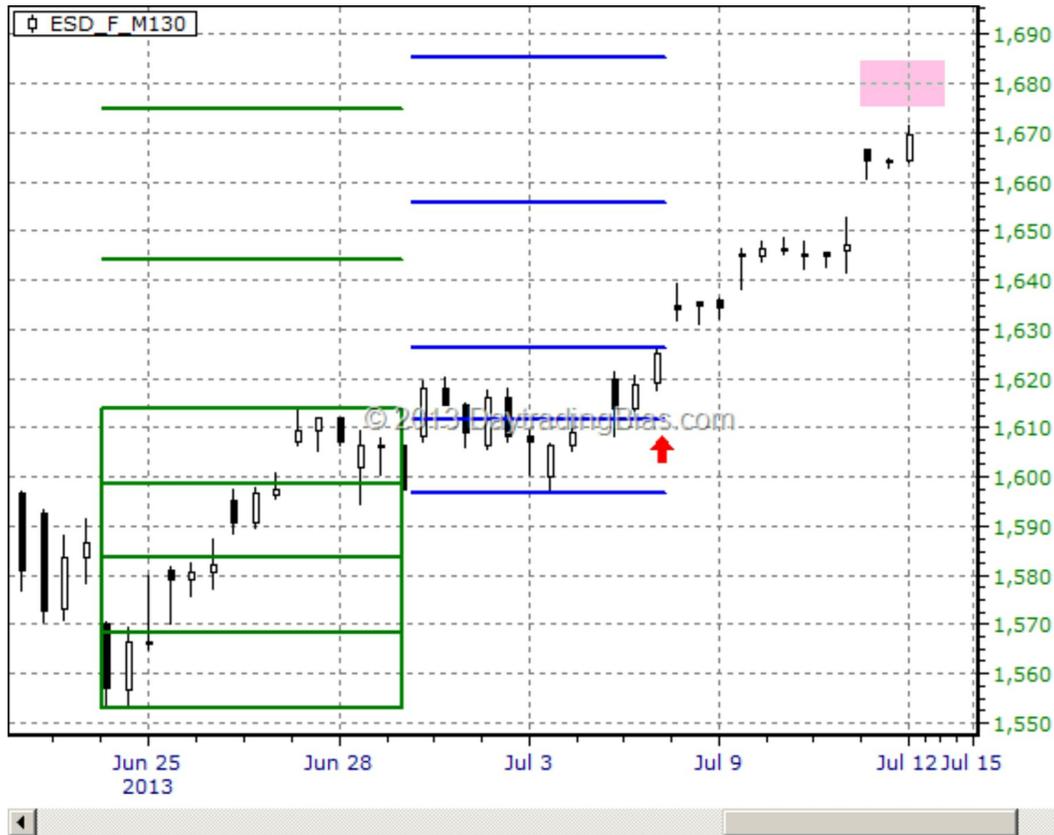
Monday's low will act as support.

A close around the previous week's high.

Only if this consolidation week turns into a reversal week will the ES go much lower. Anything is possible. But there's little reason to expect it.

Emini S&P Week of July 8 to July 12, 2013

This is a perfect example of a Parabolic Run. I noted on the Monday (July 8, 2013) of this particular week that we had a Parabolic Run in place in ES, and that all other seasonal and cyclical tools pointed to the same. Take a look at the chart with just one more day to go for the week.



All criteria are fulfilled at the completion of the bar marked by the red arrow.

Notice how the trend starter dominated the structure.

And now the move is mostly completed.

Sometimes chart patterns can be this simple and powerful.

Section 9: Taking It to the Next Level

Emini S&P Jan 17 to Jan 31, 2014 (Part 1)

A Word Before We Begin

If you've read and understood everything I've presented thus far, this is where the fun begins. Tying it all together. Following the trail of price action that leads to chart patterns that lead to the kind of trading opportunities that make all of this hard work worthwhile. Yes, good trading opportunities abound, but many chart readers fail to see them because they lack a mastery—or even a rudimentary comprehension—of the basic skills you've now learned.

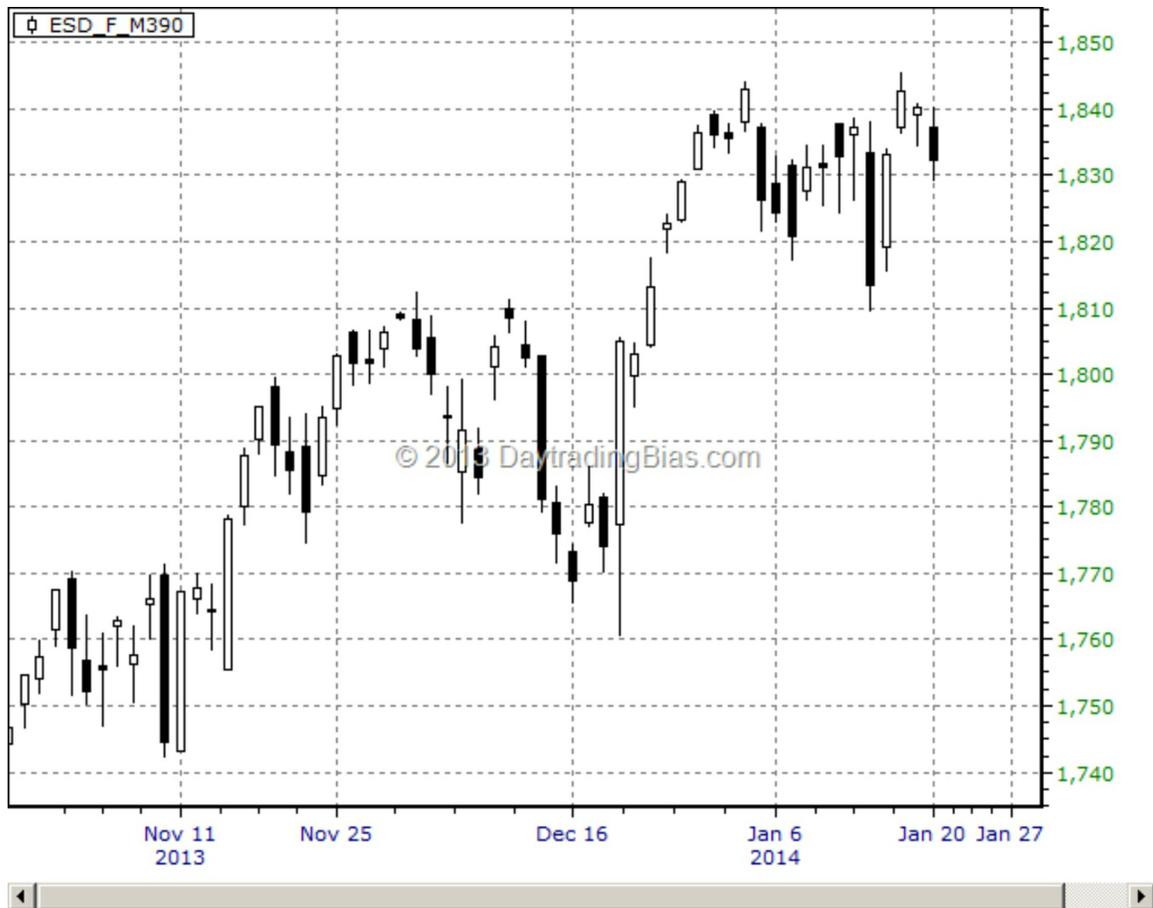
So here you are, ready to put all that hard-earned knowledge to work. And so we shall. In this lesson, we'll follow the activity of Emini S&P from Jan 17 through Jan 31, 2013, applying the lessons we've learned as we go. Watch how your knowledge of a few simple chart patterns can open the door to surprising opportunities for profit.

Let's Play Chess

In the “Multiple Timeframes Bootstrapping Technique” section, we considered the difference between amateurs and those who have achieved mastery, at least when it comes to the art of chess. The masters, we noted, are able to strategically position themselves to pick fights that will give them the advantage over their opponents . . . before those fights even begin.

Keep that in mind as we begin by looking at the daily chart of Emini S&P as of the Jan 17, 2013 close. (Indeed, feel free to go back and reread that section now or later as we progress through this example: You'll find that it's your Baedeker guide to what I'm up to here.)

Okay, so here's our “chess board,” the chart:



It is important to see the chart "as is." To that end, I've removed all drawings, indicators—anything on the chart that might distract you from the number one task: studying the price patterns and determining the most likely bullish, bearish, and directionally-neutral scenarios.

Bullish Scenarios

Let's go back to basics, just for a moment. As we've discussed, there are really only three ways for a market to move higher. They are:

1. Measured Move



2. Up Channel



3. Rising Wedge



So what elements do these three patterns share?

- Price must hold the various uptrend lines as support.
- Price must move higher quickly.
- The swing high must be taken out decisively.

Notice that the key here is not definitive proof that price is going higher. All you really know is that S&P *may* go higher if the uptrend lines hold.

Bearish Scenarios

Again, in the spirit of reviewing the basic knowledge that we'll want to take with us into the trading week, let's look at the ways in which price can move lower.

1. Double Top



2. Measured Move exhaustion



What are the common elements for these two bearish cases?

- A break of the 1810 swing low will trigger these patterns.
- The printing of a new high will invalidate these patterns.

The key point: These bearish scenarios are only possible if a new high is not in place.

Single Timeframe Bootstrapping

Breaking down the possibilities in a logical fashion like this prepares you for likely future scenarios.

So here we go. What do we see? We see that the trend for the higher timeframe (i.e. weekly) is up. That gives the long side an advantage. But that advantage will disappear should the market go nowhere over the next few days. This will become very noticeable if the S&P challenges that top part of the range and fails again.

So when or how will we know that the long side on daily has failed to maintain control?

We look for the void zone in the daily analysis for clues.

Remember: On the daily timeframe, the long side stays in control if and only if the up-trend is defended. To be specific, in this case, that is the midpoint of the top range in the 1825 to 1830 area. If it is breached, the S&P will likely drop to the next support level—15 points lower at the 1810 swing low area.

Take a look at this chart. See the yellow rectangle?



That's a "void zone" through which the S&P will easily slide.

Once the S&P trades into that yellow zone, two out of our three daily bullish scenarios will be invalidated. And that will leave just one: The Up Channel, as shown in the chart.

Now, here's the most interesting thing: Should the S&P drop to the Up Channel support, it will have triggered a Double Top pattern, with its target way down at 1775. That's a strong setup, difficult to overcome, with risk limited to an adverse price move to just above the Double Top neckline.

In other words, the break of the 1825-1830 area will likely lead to a run down to 1810. In turn, that can easily trigger a quick run down to 1775, because long-side players are not united enough to defend the 1810 area. Once selling starts, the risk is clearly defined: A breach of 1830 once the S&P has traded below 1825.

We have just discovered a sell setup for which we can control risk with great profit potential.

Confirmed Entry Beats Blindly Fading the Trend

The whole down-side setup is just a possibility—something we keep in mind while expecting the S&P to go higher still, because, as yet, we have seen no sign of weaknesses. Of course, if you have other measures like market breadth telling you that the S&P will have a hard time going higher, you would take a different approach.

Without additional information about the market to justify taking a short, your short will likely fail, because the weekly trend is up. In other words, odds favour an upside breakout.

So what is the point of picking tops when you know you're likely to lose?

Think about it: If your entry is at 1825 and your stop loss is at 1831, you'll give yourself a setup with 6-8 points risk and 15-50 points gain. A very good risk-to-reward tradeoff by any standard.

Countertrend Traders: Beware the Weekly Timeframe

While the sell setup is a break of the daily uptrend, it is still contained within the weekly uptrend. What does that tell you? Weekly players will likely step in above the last weekly swing low to stop the selloff. That limits the drop to somewhere around the target zone of 1775 down to the weekly

swing low near the 1765 area.

The reactions of weekly-timeframe and other long-term players are not something we can anticipate until after the selloff has started. The way that S&P moves down to the target will tell us what to do next.

Chess and the Art of Chart Reading:

Let's take a moment to consider what we've learned here. Yes, many people use chart reading to confirm their personal biases. They hope to see the charts validate their opinions, a natural human inclination. And the truth is, you can almost always find a scenario that will support your point of view.

But stop for a moment and think how such an approach would work in a game of chess. Unless you were playing against someone with a similarly reckless approach, you would almost certainly be destroyed. Now let's go back to the markets: Your "opponent"—the aggregate of market participants—could not care less about personal validation. Odds are, your opponent is a bot focused on one thing: Making money through the application of thoroughly researched principles in the framework of a rigorously back-tested methodology. If you look at your charts for validation of your personal opinions, your opponent in this game will destroy you. Guaranteed.

The good news, however, is that great trading opportunities happen all the time. Yes, you can beat the bot. But it's imperative that you approach your charts objectively, waiting for patterns to line up and give you those solid opportunities to engage. Look for the point of no return, where a chain reaction to the price level will give you the best possible outcome.

Now, let's continue . . .

Emini S&P Jan 17 to Jan 31, 2014 (Part 2)

Bootstrapping Your Way to Opportunity

In the “Multiple Timeframes Bootstrapping Technique” section, I spoke of the need for multiple timeframe analysis, and then offered this assurance:

Don't be overwhelmed. You don't need to see and analyze all of the possible outcomes in all three timeframes. After all, you're not a computer. All you really need to find among the many possibilities is one setup from your shortest timeframe with a confirmed signal that, in turn, would trigger yet another confirmed signal in the same direction in your longest timeframe.

This kind of setup will give you the lowest possible risk while promising the best possible outcome.

Before we engage the market in real-time, we have to be aware of the various potential scenarios. Daily chart analysis from Part 1 provides us with big picture setups, while day-to-day trading does not often trigger these powerful setups. So now we turn our attention to intraday timeframes. Only after we've done that will we be equipped to engage the market with high precision at the price levels closer to where the action is.

Ready? Here goes.

5 Minute Chart After Jan 17, 2013 Close

Let's look at the Regular Trading Session (RTH) only 5-minute chart of the Emini S&P after its Jan 17, 2013 close.



Once again, I've removed all drawings, indicators—anything on the chart that might distract you from the number one task: studying the price patterns and determining the most likely bullish, bearish, and directionally-neutral scenarios.

Now let's deploy a couple of basic tools to help us anticipate potential scenarios beyond the chart's "hard right edge."



Here I've added a Down Channel, or Bull Flag, to the chart. And I've applied basic price levels using the principles outlined in *Special Theory of Price Discovery*.

So what does this chart tell us?

Bull Flags, by definition, are bullish. That means that as long as the bottom of the channel is acting as support, there is a good chance the price will move back up to the channel top. In fact, breaking above the channel top is also likely, although not as likely as tagging the channel top itself.

This brings 1839, the current channel top, to our immediate attention.

Any opening next week can lead to only one of three scenarios: sizable gap up, sizable gap down, and somewhere near the close. Figuring out what to expect for each scenario will prepare you to handle them with ease.

Let's look at the various scenarios now.

Scenario 1

For an open near the close, we will watch out for the big picture trigger down at 1825. As long as it's not breached, we will look for excuses to go

long and ride it back up to the channel top. A stable open means there is no scenario change. Since we know the trend is up, and nothing on the chart tells us otherwise, going long is the plan.

However, this scenario can still bring surprises. For example, let's say that after a stable opening, the market plunges below our big-picture 1825 trigger point. And let's say that you have gone long. Here is where preparation can save the day.

If you have a bullish bias with no invalidation criteria, you will have no choice but to cut loss at 1825 or below. But if you start the day with a finely tuned plan that includes stop and reverse at the critical price level, you will have defined your risk ahead of time, and an adverse move will already have been accounted for in your trading plan.

Scenario 2

For an open gapping down hard, where the 1825 critical level is breached, we will have to make a choice depending on the opening price. If price moves way down into our target landing zone of 1810-1815, the bottom half of the void zone, the risk/reward no longer justifies going short. It would be unwise to do so. On the other hand, if the open is within 1820-1825, the risk/reward still favours going short, and we should do so.

You could find yourself surprised if, after an open like this, the Emini S&P zooms up, clearing our big-picture stop level above 1830. When that happens, we know it is a False Breakout (FBO) against the channel bottom. That tells you that a strong bottom is in place, and price will go up even stronger than the normal open. This is another stop-and-reversal scenario to watch out for.

This is the time to go aggressively long, as a well-defined risk is in place with very good upside potential.

Here's an illustration of that scenario.



The yellow zone marks the open price level.

The short horizontal red line shows you the stop-and-reverse point if the market indeed turns around from a sizable gap down.

The orange bar shows you the upside potential once the red line is breached.

Scenario 3

For an open gapping up strong, the price level at the open is important.

If the open price is somewhere between the channel mid and the channel top, it has a good chance to hold channel mid and shoot higher quickly to challenge the channel top. This scenario is a long, until proven otherwise.

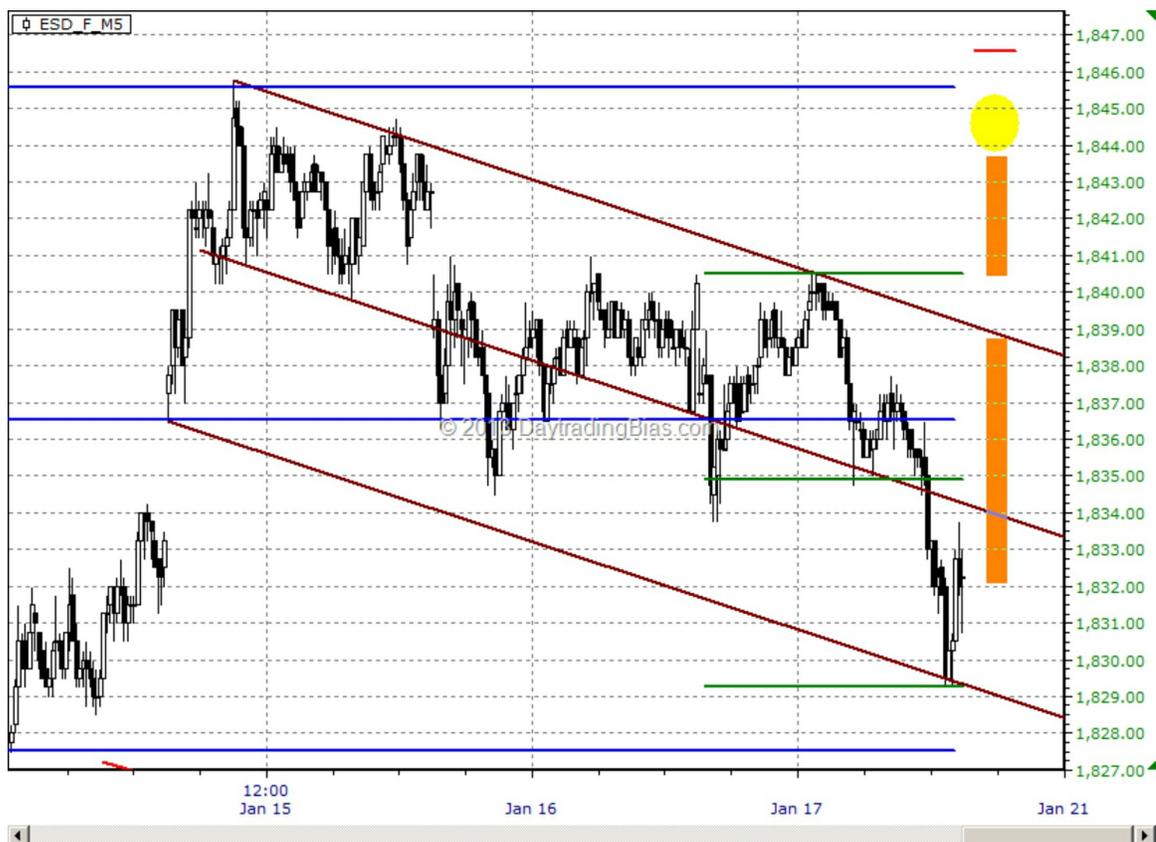
If price opens right at the channel top area, it will be very tricky to engage, because we have no idea if we are looking at an exhaustion or a strong gap-and-go setup. This is the time to wait 5 or 10 minutes to get a better read on the market.

If the open price is far above the channel top, but below the previous

week's high, we have a potential False Breakout of the channel top. It is more likely that price will retrace back down to the channel top first, even if it is going to go higher, based on higher timeframe upside breakout potential. Remember that can we rule out the possibility of a Double Top only after a break above the previous week's high.

In this situation, the proximity of the open price to the previous week's high will determine how aggressively you can go short. The higher the price, the better controlled the risk. So in that case, you can be more aggressive.

Here's an illustration:



The open price level is marked by the yellow zone.

The stop is marked by the red line at the top.

Two orange bars mark the potential targets. The top orange bar shows the likely gap fill action, where the previous day's high can act as support to stop the drop. The lower orange bar shows the continuation selloff target once the channel top is breached.

Multiple Timeframe Bootstrapping is Your Deadly Weapon

When analyzing intraday charts, the immediate higher timeframe (which, in this case, is the daily timeframe) often overrides the price action we see on our screen. The daily price level players do not really care about your 5-minute overbought / oversold indicators. They care about their price levels and indicators only. When they act, they would tilt the balance of the intraday liquidity.

The daily timeframe players care about previous day high and low more than you think. The green horizontal lines in the chart above highlight the Friday range. The moment price moves back into this range, we have to consider the possibility of a hard reversal. In fact, both of the strong gap reversal scenarios are strengthened by the daily timeframe boundaries.

This is one of the main reasons why many newcomers to day trading are punished from time to time: They cannot see the dynamics of the higher timeframes at work. But once you are aware of the importance of the higher timeframe price levels, you can use them to your advantage.

And It's Legal

Paying attention to the chart patterns from your intraday charts, as well the important price levels from the daily timeframe, gives you a road map for engaging the market on the next trading day. Of course, we're bound to miss some scenarios during our preparation. And personal bias will also affect our ability to accept our own analysis as-is. No one can do this perfectly all the time.

The important thing is to do it regularly. The more you do it, the shorter your preparation time will become. If you trade only a single market, it should take you no more than 10 to 15 minutes (after you've gathered the data you need) to review all your charts and come up with a plan for the next trading day.

Your daily preparation routine will allow you to see the possibilities, weigh the probability of various scenarios and, most importantly, force you to distance your emotion from the actions of the market. In other words, the key components of successful trading.

Okay. So we've bootstrapped our way to seeing an advantageous opportunity for profit. That's nice, of course, but it won't pay the bills. Not until we act on our insight. And quickly.

That's next...

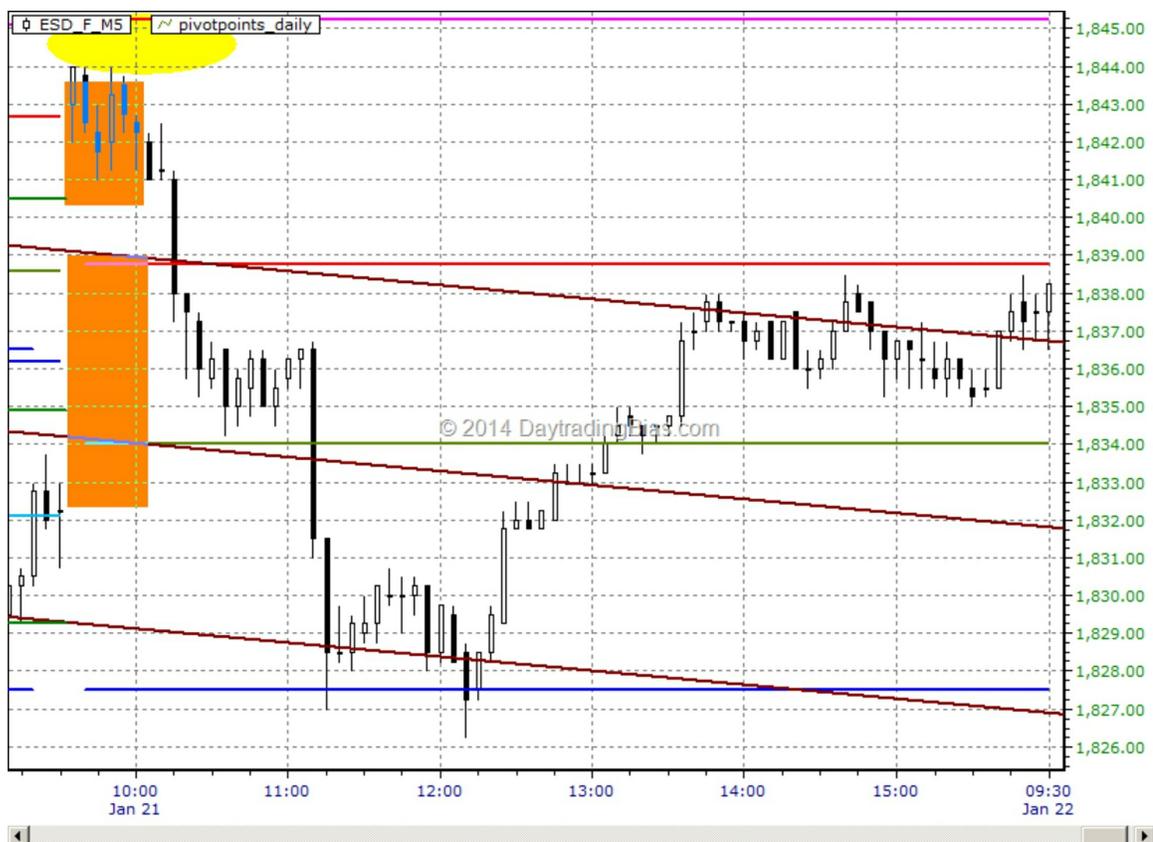
Emini S&P Jan 17 to Jan 31, 2014 (Part 3)

From Talk to Action

Actual engagement on Jan 22, 2014 was pretty easy. As you will see, successfully executing any battle plan is simply a matter of reacting to the possible outcomes you have already identified and paying attention to what happens next. Positive expectancy is built implicitly into this approach, because you know that, as long as you follow your plan, you will perform.

Opening Play

Here is the 5-min chart for Jan 22, 2014, incorporating the complete trading session.



The Emini S&P opened up at the top orange box, just as we'd contemplated in Scenario 3 the night before. So could we blindly short right after the open? Well, we could do anything we wanted, I suppose. But I would not recommend shorting out of the gate without something to suggest that the odds of success were in my favor. Which is why we'll now turn our attention to confirmation techniques.

When did we see some objective evidence that this opening strength was to prove short-lived? Look at the close of the 2nd bar (i.e. the end of the first 10 minutes). That bearish candle depicts selling and, consequently, resistance overhead. On that basis, you could initiate a short position at the close of that second bar (1842.50), with a stop just above the chart's yellow oval, at 1847 or so.

If our conjecture—that price is going lower after we take the short position—is correct, we should not see a strong retest of the day high (established in the first 10 minutes). At most, a mini Double Top-like pattern or a FBO against the day high would emerge. Such a pattern can be observed in a 1-minute chart. Any stronger price action, like 5-min bar closing at or above 1845, is a big warning sign that the market is stronger than we believed. What we eventually got was a mini Double Top before the price finally moved lower.

Notice that the half-gap often serves as a support level, especially when a day opens above the previous trading day's high. In our case, the half-gap of the day—1837—would be the first target zone, with a high probability of being tagged quickly.

Once the Emini S&P started to move lower, to 1839, we had a confirmed gap fill in progress. The day's high should not have been taken out until at least the half-gap was tagged. This gave us a good reason to immediately tighten our stop.

At this point, you should have focused on risk control and adjusted your stop to 2 points above the open range low, at 1843. Remember, you can always get back in a trade if you are stopped out.

When the Emini S&P tagged 1837, you could have taken your profit if you had multiple contracts. But the more important thing to consider was ensuring that risk was removed from this point onward. Making sure your stops were moved to breakeven or better should have been the top priority.

Post Opening Continuation

The morning move after the open was directional for an hour. That showed significant weaknesses, meaning that more weakness was likely.

It was clear that the Emini S&P had re-entered the channel. We knew that, in this case, the likely result would be a move to the channel bottom.

You should have minimized risk exposure by adjusting your stop to above the channel top (which, coincidentally, was also the midpoint of the day).

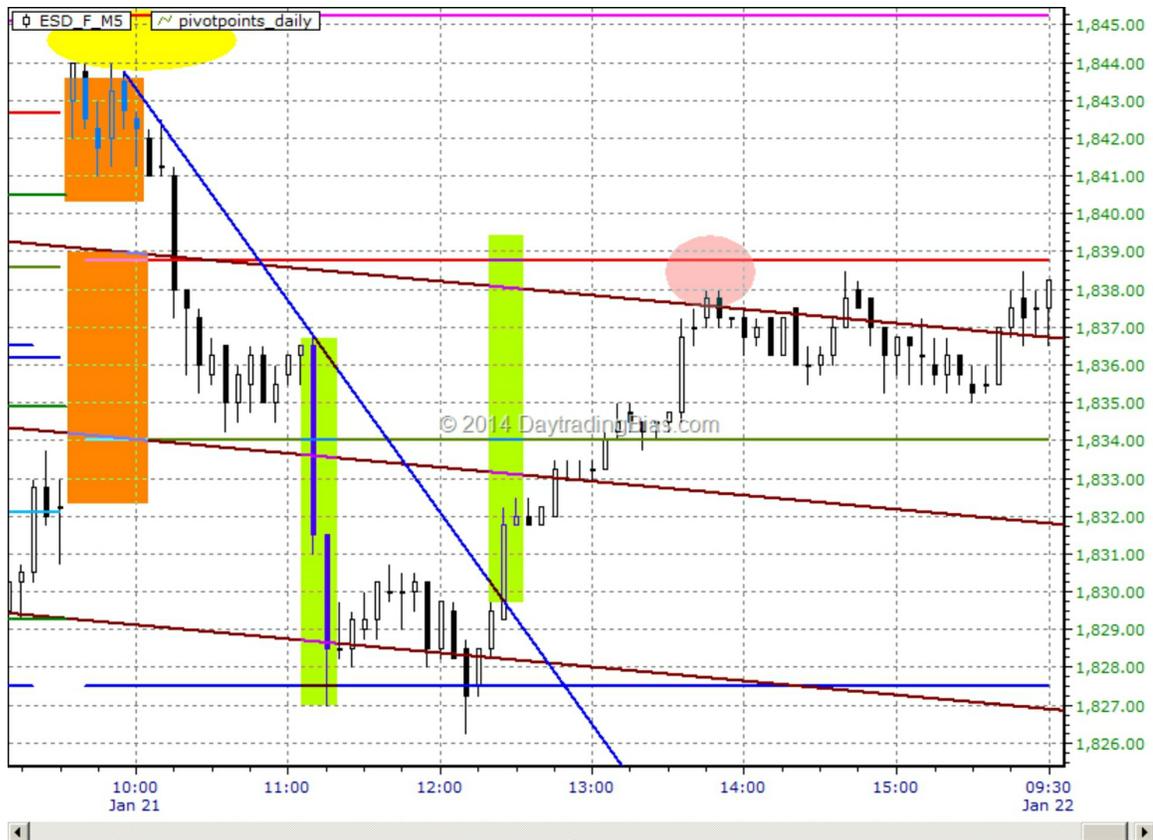
The second leg drop occurred shortly after 11:00 am. It dropped to our channel bottom target at 1828.75—our planned target. If you were trading multiple contracts, this was the time to take your profit. From entry to target: 13.75 points. Not a bad morning's work.

Once we retreated to the sidelines, price action flushed to important intraday support. Meanwhile, the day's range had already expanded to normal dimensions. Any short covering from here could have easily sent this back up to the pocket above. If you chose to hang on to the short position here, hoping for a home run, you would have given up about 5 extra points of profit.

Not everyone could afford to do that. If you traded a single lot, this was the place to take the profit and run.

Midday Analysis Update

Because the day had progressed with multiple swing highs and lows, you would need to update your chart now with significant intraday trend lines and projections.



At this point in time (around 11:20 am) you would only be aware of the first green bar at the left side and the blue downtrend line.

For risk control purposes, if your short position from the morning were still on, you wouldn't want to see either of the following events:

- break of the downtrend line by a steep run.
- rejection of S1 by either double bottom or FBO against the low made so far. (S1 is a common day trading price level project used by traders.)

Either one of these would trigger a run back up to the day's mid, with a potential target as high as the channel top.

To summarize, shorts should have lowered their stops further to just above the day mid and pivot, if they could afford to give up the 5 points profit and had enough reasons to stay short.

Lunch Hour Reversal

The retest of the morning low occurred right after 12:00 p.m. Instead of further range expansion to the downside, the morning low could not hold the market down. The combination of S1, morning low, and—most important of

all—the channel bottom, had stopped the drop.

At this point (around 12:20 pm), a break of the downtrend line at 1831 triggered a chain of events.

First, the trend line break projected target (2nd green bar) was activated.

Second, the midpoint of the day / pocket / pivot became the likely target—3 points higher than 1831.

Third, if the day mid failed to stop the reversal, Emini S&P could have eventually zoomed up to the channel top / trend line break target (red zone).

It was clear then that a potential setup of a buy stop at 1831 was a good long setup. The advantage: a high probability of moving quickly in your favour by 3 points. Risk was contained by the morning low. The bonus: The downtrend line turning into support by the time the breakout happened.

Post Lunch Up Drift

The quick run up to 1833 happened as expected, but not as strong as we might have hoped for. After all, it was the resistance zone where continuation short sellers from 15-minute and 30-minute timeframes would act. There was no sign of strong selling, as there was no strong reaction to the price level.

By 1:30 pm, the weak selling / up drift had translated into a stop-hunting rally. It was the expected outcome when key intraday price levels did not produce significant reaction (e.g. quick 1 to 2 points pullback) when price was moving towards them.

We got our channel top target without much difficulty, not even time for a stop adjustment.

The long was a counter-trend play. Therefore, you should have gotten out at the first favourable target here.

Late Day Price Action

From this point onward, there was only limited time left until the close of the regular session. This gave the long side an advantage, as all the shorts in the afternoon were trapped. Even those early shorts from the first hour of the day were not happy.

Late-day selling at the channel top triggered a messy tug-of-war

between buyers and sellers, giving us every reason to remain on the sidelines. But we'd already had a fine day, hadn't we? One shot, one kill, 13.75 points (at \$50 per point per contract, I'll leave it to you to do the profit math). All thanks to bootstrapping our analysis through multiple timeframes.

Yes, a mastery of the art of chart reading requires hard work and study. But it pays off in the end, wouldn't you say?

How to Win the Game

First comes chart analysis. Then the chart analysis-driven application of your trading methodology. Only then are you ready to take action, basing it on steps one and two. You won't place many trades this way—the number will be determined by the time frame in which you're trading, of course, although it will probably be lower than anything you've imagined or experienced. But that is to your advantage, if not to your broker's.

Your job is not to trade like a maniac. Your job is to trade like a chess grandmaster. You're not here to indulge neuroses. You're here to solve the puzzle.

Focus on what matters most. Ask yourself where price is likely to head based on your mastery of the art of chart reading. Yes, basic chart patterns and trend lines can make you a fortune, but only if you take the time to:

- Master your understanding of them.
- Learn to act when the low risk entries present themselves.

You can do it. So now, go do it.

Section 10: Bitcoin, Ethereum and Other Cryptocurrency

Many traders have asked whether cryptocurrencies follow regular chart behaviours like the normal financial markets. I can answer that with a definite yes. In fact, cryptocurrencies like Bitcoin and Ethereum behave extremely well thanks to the lack of fundamental players whose expectations can be very different from what is happening to the price of these cryptocurrencies. Aside from being very volatile in terms of price fluctuation, a basic chart reading works well to project their near-term price behaviour.

Bitcoin

Here is a Bitcoin daily chart.



From left to right, we can see how the basic chart patterns are successfully guiding us throughout the whole period.

The falling wedge (angled blue lines) breakout (green up arrow) at the upside points to testing the start of the wedge.

The consolidation zone (between the two horizontal blue lines) breakout points to the upside. The target (red horizontal line) is tagged (red down arrow) and leads to a pause of the move.

The strong up trend continues with an upside target projected by the yellow block that is fulfilled (orange down arrow) and begins a stronger pullback.

The rising wedge (angled purple lines) breakout points to the downside. The results are not shown on this chart. Instead, see the next chart.



The pullback from the prolonged rally is expected after the rising wedge break.

The multiple down leg is expected with a measured move (parallel green lines) target in place.

The wedge break target (where it started) that is tagged (green up arrow) also fulfils the measured move target. There is no longer any reason to go lower.

Since the falling wedge is not a normal topping pattern, a year-high test was expected and breaking above that was likely.

I could keep narrating what happened move by move, but I think you get the point.

As long as a standardized market exists for the trading of any instrument, the basic chart patterns will show up with reasonable forecasting power on near-term price movements. Or let me put it this way, as long as money is involved, where making money is the objective, a market will

behave in such a way that chart patterns will emerge with similar expected outcomes. Of course the price movements may not resemble the regular financial markets, since the group of people who trade the cryptocurrencies are not the same group of people who trade the regular financial markets, after all.

That is changing, however, thanks to the introduction of future contracts on Bitcoin. This enables the big boys from trading firms to participate in the cryptocurrency markets with the safe guard provided by the regulated exchanges like the Chicago Board of Trade and the Chicago Mercantile Exchange. I expect the existing major players in cryptocurrencies will be dominated by the well-capitalized financial firms very soon.

In short, it is very likely Bitcoin will behave much like a regulated derivative market going forward. Its price actions will become more synchronized with other financial markets thanks to the possibility of trading Bitcoin by using arbitrage algorithms with other major financial markets. As opposed to what the Bitcoin promoters promised, Bitcoin will lose its uniqueness and end up being one of the many financial markets serving a specific need.

And the big question remains: Since the crash of the Bitcoin from its all-time high of 19666, where is it heading next? Yes, I know, it is as interesting as the stock market bottom with S&P 500 printing a low of 666. I am not interested in commenting on whether there is a conspiracy or not in manipulating Bitcoin. I will make a few comments here on what I see from the chart.



Above is a weekly Bitcoin chart.

There are two pockets left behind by the huge rally going up to the blowoff at the top of year 2017. Tagging the higher one is likely, but it has not happened yet. This means we are much more likely to see Bitcoin trading at 5500-5600 before it trades above the close of year 2017 that was near 12600 (red zone).

Even if Bitcoin manages to stage a rally from the current level of above 7000 (end of May 2018) back up to the close of year 2017 (red zone), it will be a complex multiple leg move that uses up much of the fuel needed to push higher. This implies that further selling right after the attempt is likely to happen, with the pockets below being the likely targets.

Knowing that it took Bitcoin a few years to push higher into getting the final print above 19000, isn't it reasonable to expect it to spend a similar amount of time to digest the move?

Until we see that a weekly level bottom pattern is being formed, there is really no point in speculating whether Bitcoin has bottomed out yet. For

those permabulls on Bitcoin, waiting for the bottoming out pattern may feel like eternity, but it makes a lot of sense because you really do not know how far it is going to fall.

Ethereum

Ethereum peaked in January 2018, a month after Bitcoin, together with many other cryptocurrencies, thanks to the publicity from buzz about Bitcoin during that time. Even more spectacular is that Ethereum managed to double its value after Bitcoin collapsed. This creates a situation that is unique for Ethereum but not for Bitcoin.



The pullback structure of Ethereum is a clean three pushes down. It did not even reach the third downside target and terminated the move by breakout of the resistance trend line (steep blue line) marked by the green up arrow.

The breakout resulted in a nice rally back up to the channel top based on the swing lows formed during the pullback process.

This created a unique setup where the second swing low mattered a lot. Ethereum is trading at this zone now (end of May 2018). If this zone holds, the three pushes down pattern tells us a run back up to the start of the

pullback is in play. The start of the pullback is the all-time high of Ethereum. This scenario is totally different from the one Bitcoin is holding in its near future.

But there is a catch. The down trend is still in force on daily charts with the down channel top a very strong resistance. Until the channel top is cleared, Ethereum is not ready for going much higher yet. In fact, if the channel top is holding Ethereum down and forcing it to break the recent low made in May 2018, we are going to see much lower prices with the channel midpoint being the primary target. At this time (end of May 2018), the mid channel stands near 300.

Cryptocurrency Is Not Money

I think I have to make it clear that cryptocurrencies in their current form are not ready to “take over the world” as their promoters claim. They are not an asset or a form of money. The original idea that cryptocurrencies are the solution to resolving the problem of trust was a good one, but technological barriers and actual implementation issues have stood in the way. The resources being thrown at the problem itself, however, have not been totally wasted.

Many interesting ideas have emerged from this “gold rush” to pocket profit from this latest wave of technological innovation and will have a long-lasting impact in many industries. In fact, the technologies derived from cryptocurrencies today are likely to reshape the way we carry out transactions of all kinds in the future. So, unlike the dot.com bubble, certain survivors of which will eventually dominate the space, it is more likely the technological breakthroughs coming from the cryptocurrency concept is what will be the big wave affecting everything going forward.

It will be hard to figure out which cryptocurrency will survive this bear market today. Even if you pick the right ones, they may not be worth much going forward, as their usefulness will expire quickly and give way to the newer technologies several generations down the road. Think of the value of those social networks that disappeared before Facebook emerged as the dominant player.

If you choose to trade cryptocurrencies, treat them as a very high risk speculative play so that you do not commit more money than you can afford to lose on your bets. This holds true for all forms of trading. Once again, I cannot emphasize enough that managing your risk properly is the single most important factor that will determine whether you survive as a retail trader.

The Art of Chart Reading Online

The Art of Chart Reading Online is an ongoing project designed to complement the more theoretical side of chart reading that I have explained in this book. As I continue to add new chart lessons and examples in applying chart reading techniques, I will put them in central location for easier access. These chart lessons are written to supplement the chart reading techniques explained in this eBook.

My goal with the project is to create a very comprehensive library of actual applications of the techniques explained here, so that everyone can immerse themselves into the learning experience. As chart reading skill is more an art than an exact science, the mastery of the skill takes practice. The extra materials provided in The Art of Chart Reading Online can help one to forge better understanding of the chart reading skill through real-life examples.

<http://www.artofchartreading.com>

About Lawrence Chan

Lawrence Chan is a trader and researcher of financial technologies with over 25 years experience. His work on market breadth analysis, advanced trading techniques of stock market indices, and forex trading has been incorporated into the trading platform NeoTicker.

His work is frequently published in a range of prestigious trading journals and on a number of major financial websites. He has mentored hundreds of professional traders throughout his career and is always available to discuss the intricacies of his approach with new and aspiring traders.

You can find his eBooks, latest research and market commentaries at:

DayTradingBias.com

<http://www.daytradingbias.com>

About DaytradingBias.com

DaytradingBias.com's unique Emini S&P Real-Time Trading Assistant Tool, Real-Time Price Level Tool and Lawrence Chan's Real-Time Commentaries work in concert to offer its subscribers objective trading signals and statistical biases to lean on when the price charts alone cannot provide the complete picture of the current market conditions. Trading strategies are built from price patterns, custom market breadth and complex cycle analysis based on proprietary research. All the trading tools are browser based so they can be used anywhere independent from the trading platforms used by the traders.

For more information about the trading products and services offered, please visit

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