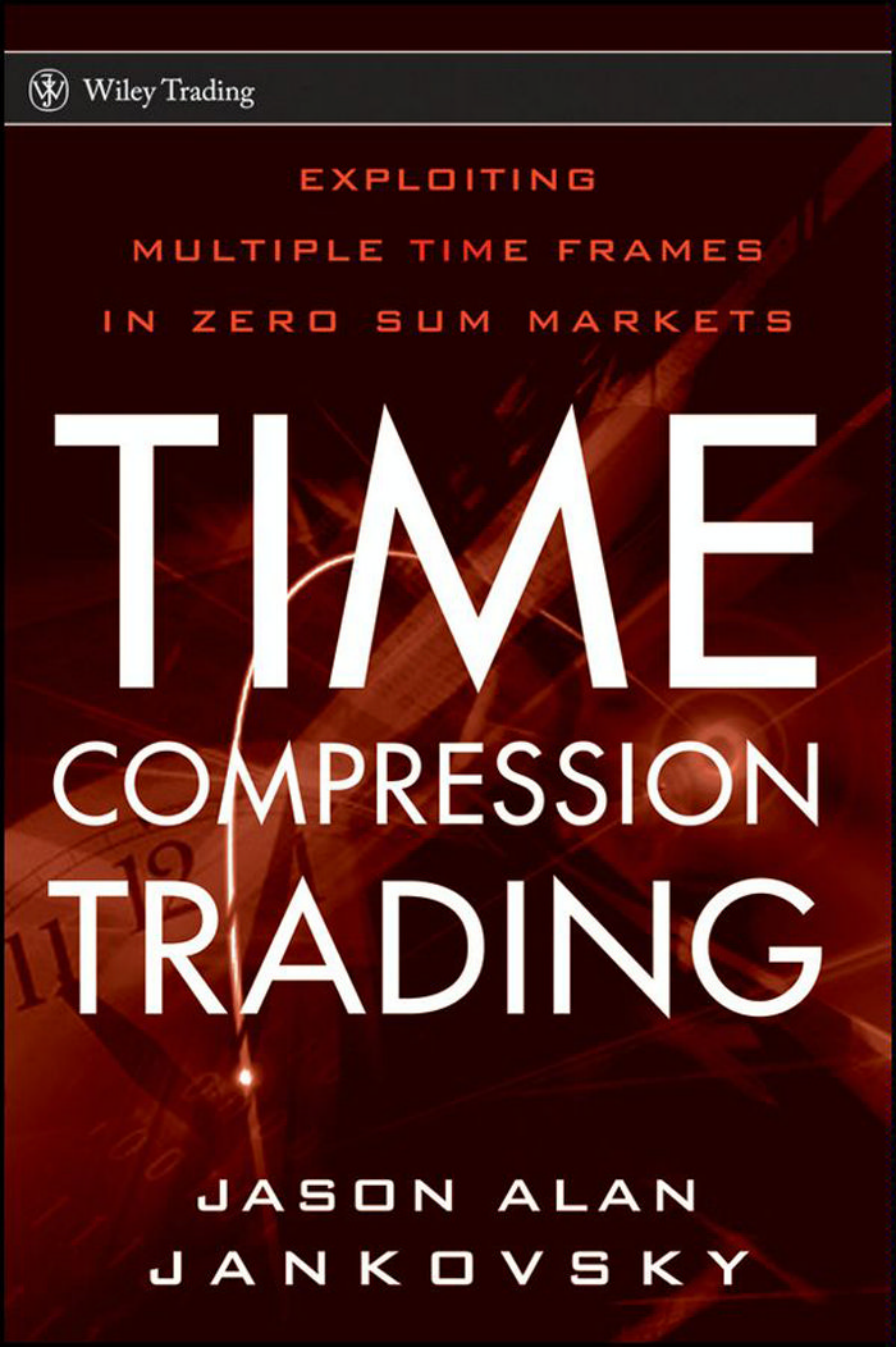
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EXPLOITING
MULTIPLE TIME FRAMES
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TIME
COMPRESSION
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JASON ALAN
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Time Compression Trading

Exploiting Multiple Time Frames in Zero-Sum Markets

JASON ALAN JANKOVSKY

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Preface

In my second book, *The Art of the Trade* (John Wiley & Sons, 2008), I tell the story of my experience trading crude oil during the first Persian Gulf War. Because the book was a narrative of my trader development, it wasn't necessary to go into the unique details that led me to vastly rethink my understanding of the markets except to discuss the end result. The end result was that I finally got the picture of what trading is really all about. The moment-to-moment experience and what went through my mind as this awakening transpired would be a bit lengthy to include here, but I want you to see the crux of the process. That process developed into the theory of time compression.

Time compression is all around us and is a direct result of how we see the world and how we see our place inside of it. It is the inevitable development of our method of making actions. In the coming chapters, I break what I feel are the most basic parts of the theory into pieces so that you can begin to understand something that is not normally part of your regular stream of trading thought.

Part of what you have to do is refocus your mind *away* from seeing the markets as a *place* where something happens into a *process* that is happening. The markets are not a place in the regular sense that they are "in" Chicago, for example, but a process *that is happening* in Chicago. If we pick just one market to explain, most traders don't really understand that when the price of corn changes *here* (in Chicago), it changes the entire world's view of what grain might cost moving forward, which affects the entire worldview of the price of food moving forward, which changes the entire worldview on something else moving forward until all our heads are spinning trying to answer the questions *What does this mean, and what do I do to profit?* The market is alive and functioning

as a *process* that involves a very complex set of group dynamics. What happens *here* in Chicago is not the market "in Chicago"; it is the process of thought/actions playing out in the mind of everyone participating everywhere in the world. What creates time compression is the process itself playing out while all the participants *watch* Chicago.

When the answer to the questions *What does this mean, and what do I do to profit?* becomes an urge to take action from *anywhere*, you get a new traded price. When traders answer that question for themselves, the answer becomes an order to buy or sell—which becomes the *process* of the market, which makes prices move. How does that urge to take action play out as prices are moving? Where does that urge to action come from?

In my crude oil experience, I was not in control of my place in this process any more than most traders are in control of *their* place in the process. Most traders urge to action is *reactionary* based mostly on trying to answer the questions *What does this mean, and what do I do to profit?* In the case of time compression, the "taking action" part is one step further removed into a place where traders have *no choice in the matter.* For most traders, their urge to action is tied to how prices move. Because they can't control price action either for themselves or against themselves, it follows that they usually decide to do something based largely on what they think prices mean to them personally, not what the *process* is showing. That means they feel a sense of powerlessness or that trading is a form of gambling (which is patently untrue). In effect, most traders preordain how they will move forward due to how they see the markets and their own place within them, not because they understand the underlying process of the market. When they have no choice in the matter, the process is acute and the end result is chaos to the equity. But when this chaos happens, *somebody was on the right side.* How did that particular trader get there? Was it just "luck"?

Once I understood that things were not what I thought they were and neither was I, I could form a better way of looking at price action and what it most likely meant moving forward. I could better control my actions to participate because I better understood how the game is actually played and how best to play it. I compare traditional technical analysis (TA) to the theory of time compression in a way where traders can see that TA is *trying* to provide the same benefit that a complete understanding of time compression can give you. You can

think of TA as looking at a picture while time compression as being *in* the picture. Imagine looking at a picture of a famous model and then comparing that to actually being on a date with him or her. I think you would see a vast difference in the two experiences. In other words, understanding how time becomes compressed will *complete* the understanding that TA *begins* to give you. Time compression gives you a sharper edge to begin with, thereby helping you use your tools better, which gives the benefit we are all looking for: a reasonable answer to the question *How do you know when a market price is too high or too low?*

To outline and define the material for you, I make an assumption. I assume most traders have absolutely no idea what a *zero-sum market* is really all about or how it functions. When I do speaking engagements or teach my psychology of trading course, I always ask if anyone participating has *never* heard the term "zero-sum market." There are always a few hands raised from traders who have never heard the term. Some of these traders have been trading for several years yet have no idea that they are trading in a zero-sum market. From my point of view, that is like trying to build a house without knowing how to read a blueprint or swing a hammer.

In Part I: The Uniqueness of Zero-Sum Markets, I go into some detail about what a zero-sum market really is and why those rules of engagement differ from other kinds of activity. The traders themselves are part of creating the environment of a zero-sum market, and their choices create the price action everyone is watching. Other people's choices create the price action *you* are trying to exploit. I look at how the market is created by the actions of the participants and how the participants are making their choices. I want to show you how this process plays out in most traders and how that creates the *real* structure of the market, not the intended or expected structure. Traders function as individuals first, but the *exact* same process is going on *inside* every individual market participant; therefore, the appearance of the market is identical to any one person. This is why crowds behave in the same predictable way. This is why all losers behave in the same way and express similar responses to how their equity changes. Once we know this to be the case, it is vastly easier to see where a change in underlying market structure is likely to happen, providing a place to buy low or sell high.

In Part II: The Theory of Time Compression, I begin breaking down the big picture into smaller pieces that might be deduced from

traded prices and price action in the markets. It is important to note that a solid grasp of zero-sum markets is essential in order for you to understand the crowd thinking that is the process of the markets and the creator of time compression. The theory itself is not complex and is more of a social engineering idea, but because we are discussing the markets as the place where this process *happens*, you need a firm grasp on what makes the zero-sum marketplace unique and different from other things that create time compression. Time compression in the markets creates a flow of money *to* someone and a flow of money *away* from someone. This changes the dynamic of the markets moving forward because the market losers are *different* from the winners after the event unfolds.

In Part III: Exploiting Multiple Time Frames, we begin seeing how time compression is disclosed in the market by using multiple time frames. Most traders are unaware that competing time frames are why the markets suffer big moves unexpectedly or why trends develop the way they do. After you can see how larger numbers of people all coming to the same conclusion will tip the balance of the order flow through the markets, you can begin to try to exploit time compression to answer that big question: *Is the market price too high or too low?*

Part IV: The Five Basic Market Structures includes a few examples of studies I personally have made using the theory and how you can better understand what to look for. The idea with the illustrations is to get a real-time feel for what is happening and how that likely will create a tipping point. The important thing is to see the theory in context so that you can try to develop a better edge than just chance. It is my view that when you can get an edge that is better than chance, you can exploit the market participant with absolute certainty because no one individual you are trading against has an edge better than you. Your trade results can approach 100 percent winners under certain conditions.

Each chapter ends with a brief note called "The Trader's Life." In these sections, I include a few thoughts from my personal trading that I think will help you better understand how the various parts of this book interrelate with each other and how to see the whole concept in the context of your daily trading. I believe that trading is really an art form that requires a deeper focus than just getting information and applying it. Traders need to see that successful speculation involves

a lot more than simply analyzing markets or applying a trading system. Successful speculation involves an understanding of how people behave under certain conditions. Sometimes, we can see that in the price movement; sometimes, we have to discern that from other sources. Regardless, successful trading is more than just charts and statistics.

So let's get started on the theory of time compression.

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I want to say thank you to all those friends and family members who supported me after I missed all those pool parties, barbecues, and get-togethers when my weekends filled up with writing this book. Special thanks to my editor, Kevin Commins, for keeping me on track with the manuscript, thanks to the staff at Wiley for providing the technical help to complete a working manuscript on time, and thank you to all my subscribers who encouraged me to keep at it when it seemed like a big bite to chew.

Introduction

This is my third publication for John Wiley & Sons, and I thought it might be important for the reader to know that this has been by far the most challenging for me to write. The content is more advanced, and it will likely take more than one read to really grasp the material. Sometimes, writing about something you know is harder because it is personal enough that you can't quite say it as you feel it. In my view, traders who have a bit more experience with the markets might intuitively sense what I am getting at with the concept of time compression, but that term has never been used by authors working in the field of trading education or analysis. In my personal trading, I have faced every single situation ever faced by any reader, and I can say with complete confidence that I understand this idea completely and know how to use it. The issue was how to communicate it to *any reader*. I intentionally tried to keep things simple, and I hope that the reader doesn't feel like I have left anything out.

My goal was to shed new perspective on what we are all trying to do every day. Every trader is attempting to find a way to buy low and sell high often enough to make a net gain on his or her equity regularly; this goes without saying. In this material, I purposely avoided discussing things that every trader uses every day, such as money management, technical analysis, pyramiding, or cutting losses, for example. My goal was to narrow my focus into a reasonable answer to the problem we as traders face every day.

I see our problem as very basic: *How do we know when a market price is too high or too low?*

Because there are so many incredibly varied methods of trying to answer that question, it should be obvious that it is not an easy question to answer. Almost all methods of analysis are trying to pinpoint someplace very close to the actual turn in the market to create the best place for *you* to put yourself at risk. This is common

for all models, systems, or technical analyses, no matter what kind of traders people are or what time frame they operate under. All traders out there are trying to find the best place where the market will move higher—and therefore they want to be long—or move lower—thereby placing a short. Our goal is to use *something* to help us answer the question so that the time we invest in the market ends with a profit in our accounts. This is true no matter what you trade or your time horizon. What is that something we are looking for?

We as traders tend to invest a lot of time and money trying to find this unique *something* that we have enough confidence in to place ourselves at risk. We all know that almost all of these approaches rarely have better than about a 52 percent cumulative winning success as a percentage of total trades attempted. Many approaches have *less* than a 45 percent winning trade ratio but in fact are winning systems because of better money and trade management—which is a separate issue. In reality (and serious mathematicians can verify this), these ratios are mathematically *no better than chance.* In most cases, they are *less* than chance. In other words, flipping a coin will give you as good or better odds at a winning trade in most cases. In fact, if you flipped a coin every day at the same time and went long the market when the flip was heads or short when the flip was tails, most likely you could get a lead on the market around 52 percent of the time. What you do with that lead is another matter, but that approach to trading could be considered a viable system, even if people thought you insane for using it.

That is a frightening proposition given the huge amount of money invested year after year in system development, new technical analysis concepts, education, training, and computer-assisted trading (robots or "black boxes"). If the money spent in this area was somehow used just for improving the roads in this country, we probably would have a domestic autobahn eight lanes wide across the entire United States.

Even the most rudimentary or outdated approaches will have a certain percentage of winning trades during a reasonable sample set—say, 100 trades. But if you decided just to throw your arms up into the air, wash your hands of the whole silly "analysis" argument, and flip a coin every day, you probably could outperform most systems to begin with if your money management was sound. In fact, many professional managers do something very close to that by using a very simple system in the first place. They focus their approach

on holding winners and cutting losers according to a very strict set of money management rules. They win not because they have identified the best place to buy/sell but because they hold winners and bail on the losers. In effect, the systemized approach is immaterial and likely not even needed. These traders just hope the market goes a long way when they are on the right side, and they are willing to wait for that.

Why doesn't every trader just go with chance and focus on money management?

I think the answer to that question opens the door to the entire issue of trader psychology. Analysis holds an appeal for most people because we all like the challenge of "figuring this out." Some believe that everything can be analyzed, so naturally that includes the markets. I'm sure a few just don't want to accept that they have no idea how trading works so they need a crutch of some kind. We as humans can instinctively know when an opportunity is right in front of us and it happens enough that we believe we can quantify that into a systemized method. A few assumptions made during the process of reaching a conclusion work against this hypothesis, some of which I go into later, but for the most part, people can learn to recognize when something is "on sale" and when it is "overpriced." Therefore, we try to make a reasonable approach out of that kind of thinking. Often our gut will tell us it is time to do something, and the forward price action plays out that hunch. Is intuition a legitimate form of analysis? How do you know the difference between a gut intuition and a gambler's ambition? Suppose we could quantify that mathematically? At this point, in an attempt to answer these questions, the computers are fired up and the quants go wild with calculus and strange theories that only they understand in an attempt to quantify that difficult premise; that's called quantum financial theory and behavioral finance. If you can't sleep at night, I recommend reading up on those theories.

When I talk to system developers, analysts, or other proponents of technical analysis, I always ask: "How could Jesse Livermore make $100 million in one day back when $100 million was a *lot* of money and he didn't even own a telephone?" Stop and think about this: Most of the great trading fortunes were made *without* any of today's commonly used methods of forecasting and *before* computers were ever invented. What were those traders thinking? Better yet, what were those traders doing?

In my opinion, this problem of market analysis isn't bad, just confused. I think the reason why most systems/analysis is just a rehash

of what has been developed before and doesn't work any better this time around is because we are not seeing the markets for what they really are. We do not really understand what the markets are made out of or how they actually function. We choose to look at the "numbers" for the most part, and when we focus on only one part of a multipart structure, our view of the whole structure is lopsided. That is why time compression is so important. It provides a clearer view of the multipart structure.

The fact is, the markets are made up of *people*, *not prices*. *The people create the prices*. If we study only the prices, and not the people who made them, we likely won't understand what the prices really represent moving forward. Unless we know who made that price and why, how can we then find a low price to buy or a high price to sell with any certainty?

I call my attempt to answer that question in this book the theory of time compression. I thought a fresh look at understanding market structure was what the question needed. I'm going to stay away from all the analysis arguments and ask you to focus on other things.

The best way to understand my argument is to set aside your current understanding of how to analyze a market and think along a new set of guidelines. As we get deeper into the material, I challenge some of the more conventional wisdom about finding winning trades. As your new understanding opens a different perspective for you, I hope that you continue to view the market as *people doing things*, not as *prices moving*. In the end, that is what the market really is.

PART I

The Uniqueness of Zero-Sum Markets

C. S. Lewis is one of my favorite authors. In his book *Out of the Silent Planet* (the first part of his science fiction trilogy), Lewis tells the story of Dr. Ransom. Ransom studies languages and, through a series of events, is kidnapped by two unscrupulous former colleagues and taken in a spaceship to the planet Malacandra, which is in fact Mars. The story is told as a narrative by Dr. Ransom. One intriguing literary license taken by Lewis is how Ransom sets the stage for the narrative. Ransom says that it is impossible to communicate to the reader or even hope that the reader will remember the pervading sense of danger he felt on Malacandra. Part of what makes the story so interesting for me is putting myself in Ransom's place, knowing that he was scared out of his wits most of the time, even though he learned that inhabitants of the red planet were not only benevolent but wanted to see him return to his own world. He was literally in a whole other world, and he found that frightening. Ransom learns the language of this alien world and, in the process, finds that the universe is full of unexpected things that

make his own life much more complicated. I assume that was frightening for him too.

In my view, the issue of trading well is a study in self-awareness. Trading can be done only in the context of understanding how different zero-sum markets are and how we must change to exploit them. In this book, the reader will gain a more complete understanding of time compression and how it is disclosed using multiple time frames if he or she can remember that the concept is based on knowing what a zero-sum market is and how we must adapt to it.

Part I provides a complete look at what a zero-sum market is and the parts that make up the market. This part also looks into how we as human beings process information and take action. How we process information and take action is the cornerstone of what creates time compression. This is crucial to creating a winning trade approach. You need to focus on the bedrock issue that zero-sum markets are not what you think they are. Much like Ransom's experience on a strange new world, learning what "zero sum" really means and what we need to do to exploit zero-sum markets may be frightening. But in the end, that is the knowledge we need to succeed.

CHAPTER 1

Basics of Zero-Sum Markets

If you want to buy a stock, ask who is selling it.
—Old trading adage

In the book *Slaughterhouse-Five*, the author, Kurt Vonnegut, tells the story of a man who (among other things) is kidnapped by aliens and put on display in a zoolike setting. At first, the man is lethargic and not much fun to watch; evidently he is unhappy with captivity. The aliens decide that something needs to be done to make the man more viable and active. They install a stock ticker in his habitat and make him a proposal. They say that they have opened a stock trading account back on Earth and that the stock ticker is for him to keep track of what is happening in the stock market. He is free to buy or sell anything he wants, and those trades will be placed in his real account back on Earth. If he begins trading, they promise, once his account balance reaches a certain amount, they will let him go. He will be free and rich once he returns to Earth. Of course, the man does not know that the prices on the stock ticker are false and that there is no real account. The aliens watch with fascination as the man makes and loses vast sums of money; the random prices that appear on the ticker drive him through every human emotion possible. At this point, they have a very interesting zoo specimen.

I think Vonnegut's use of the stock ticker, money, and the promise of freedom is one of the funniest things an alien race could

use to stimulate human behavior and emotions. Aren't money and freedom what we all want from our personal trading? The book also shows a nontrader's point of view on the markets quite clearly. Trading stimulates the best and worst of our emotions, but it does so because we really don't know the game very well or how to play it. Once we do, we have more control over our emotions, but that is a matter I'll go into later.

In Part I, we are going to discuss the trader issues we face from the perspective of how they create both the market and our urge to action. We need to know some important ground rules about the zero-sum environment because zero-sum becomes the playing field for us and how we play the game determines the price action we are trying to exploit. We—every one of us—create the market we trade. *How* we do that determines price action.

As we get started understanding time compression, I want to set the stage well for the process of drawing all this together at the end of the book. We want to start and finish with the issue of what motivates the trader's urge to action. In this chapter, we will see what makes zero-sum markets different from other kinds of markets. It is this difference that brings the issue of urge to action to the forefront of time compression. Nothing happens in a zero-sum market unless a trade is executed. The issue of *who placed that trade and what he or she was thinking* is the bedrock to understanding a time-compressed market. Let's start with the basics.

WHAT IS A ZERO-SUM MARKET?

As I said in the preface, very few traders really understand the full implications of trading in a zero-sum market. A zero-sum market is one where no transaction results in an exchange of money between the buyer and seller. Transactions are done by either buying or selling the current price in the market. Both the buyer and the seller must be present at a traded price, and both assume the risk of price action for or against the current price in the market. Money actually changes hands when the buyer/seller liquidates the open long/short position by doing an opposite transaction at some later time. No money is ever made or lost in the market; it changes hands based on the difference between the traded prices to the individual's personal account. In other words, say 100 accounts have a total of $100,000 at

the start of trading. After trading is over and the market has changed in price, the total amount of money those 100 accounts have is *still* $100,000. A certain number of the accounts will have more than they started with; that amount will be *exactly* the amount that the losing accounts will show as a loss. For illustration purposes, I am assuming no fees/commissions in this case.

Futures, options on futures, options on stocks, global cash foreign exchange (FOREX), and options on global cash FOREX are all zero-sum markets. (Equities are not considered zero-sum markets.) When a transaction happens in any of these markets, the buyer and the seller agree to obligate themselves for a specified amount of a particular something at the last traded price. For most zero-sum markets (except global cash FOREX; you can hold those positions forever), there exists a "day of reckoning" when the transaction must be settled (although you can liquidate any time prior to that day). If the price has changed from the initial executed price, the difference in price is calculated as a cash profit due or a cash loss due based on the size of the transaction. Both sides are obligated to this cash settlement, win or lose.

Most zero-sum transactions are done under the authority of an exchange that guarantees performance for the obligation from both sides. This ensures that those traders with a loss will pay it and those traders with a gain will receive it. Global cash FOREX is done in the same manner but between competing banks without a central clearing relationship.

The important and most vital part of this environment is that in order to buy something, there *must* be a willing seller at that price. In order to sell something, there *must* be a willing buyer at that price. No matter who you are and how much money you have, you cannot participate in this environment *unless* there is an equal yet opposite position on the other side of the market. You cannot buy unless another trader sells to you. You cannot sell unless another trader buys from you. This is always the case regardless of whether you are trying to get into or out of the market.

WINNERS AND LOSERS

For the sake of illustration, suppose you believe that the price of corn will rise over some period of time. At this point, we aren't concerned

with why or how you think that will happen; only that you decide to buy corn. If you are trading corn futures on the Chicago Board of Trade, you are trading in a zero-sum market for corn. At the exact moment when you place your order into the market, the only way you can buy corn is if another trader somewhere is willing to sell corn at the same price and enters an exact order to sell. If your order to buy is matched with an order to sell, a trade is transacted. At this point, the exchange authority steps in and confirms that one of you bought the market at the last price and one of you sold the market at the same price. For illustration, I am assuming one contract was bought and sold.

So you now own some corn at the price you requested. Someone else sold it to you.

Once you own some corn, the issue of zero-sum markets takes on a completely different character. One hundred percent of all the analysis, study, education, and research attempts to address the issue of what happens next and how to benefit from it or how to prevent the worst from happening. At this point, though, we are concerned only with the function of the market, not how to exploit this process.

So now you own some corn, which somebody sold to you. What happens next?

After those two orders are transacted as a trade at a particular price, one of you will win and one of you will lose. If the price rises, the buyer (you) will make the money and the seller (the other trader) will pay you. You need to really get this point: If the price rises, the buyer will make the money, and it is the seller who will pay the buyer—not the "market," the exchange, or anyone else. The trader on the other side of the market, who holds the losing transaction, pays the money to the winner.

This is the critical thing about zero-sum markets that makes them different from any other markets and what makes the issue of finding the "right price" when you decide to participate so important. If you are wrong, your money belongs to someone else right now; the trader on the other side of your order (whoever that is) has your money. *The winners get paid by the losers.* No money is ever made or lost through the transaction itself; it is made or lost when the price moves for or against your particular trade entry price. You cannot make money unless someone else loses theirs. That is the bottom line.

A MARKET OF PEOPLE, NOT PRICES

That, in essence, is what zero-sum markets are about. But that is really not the issue when we trade. When we trade, the issue is: Why are you doing this trade and what if you are wrong? Most traders don't understand that in a zero-sum market, other dynamics in play create the traded prices and make those prices move. The market itself is only a machine. All the market itself will ever do is provide a place for people to come together and choose to enter an order from one side or the other. It is the *nature* of those orders that we have to be concerned with. We need to know their nature because once we have entered a trade, the only way we can get paid is if someone else loses; and the only way someone else can lose is if the orders *after* us are larger from the same side we are on; that is what creates the price change we are attempting to exploit. Orders *after* us create our profit or our loss. This means that *other* traders decide if you win or lose, not you.

Let me give you an example of how the prices move. Let's say that there are 100 orders to buy the market at a certain price—say $3.00 per bushel for corn. At the *exact* moment those 100 orders to buy enter the market, there will be some number of orders to sell at that price. Let's suppose orders from the sell side total only 80. Therefore, 80 orders to buy are filled; there are now 20 orders that haven't been filled to buy corn. So the market goes looking for sellers to match with those buy orders. Now what does a seller want? He wants a high price. And what does a buyer want? She wants a low price. Therefore, the $3.00/bu price was seen as "low" by a certain group of buyers and "high" by a certain group of sellers. In other words, one group of traders came to the exact equal yet opposite conclusion about the $3.00/bu price: "It is time to do something, and the price is too low/high right now." However, none of the buyers or sellers likely knows each other or whether their combined orders are evenly matched. Nobody knows what the next group of orders will be or how large those orders will be. But the fact is that some group of traders working in the markets concluded that $3.00/bu for corn was "too high" and some concluded it was "too low." Each group chose to act on that conclusion.

But there were 20 more orders to buy left over from that conclusion at that particular moment in time. That is a fact. If the sellers

knew that, they would have waited to sell, and here's why: The market is going to go looking for sellers to meet those remaining buy orders. That means the market will look for sellers *above* $3.00/bu. Suppose the market doesn't find any sellers until the price rises to $3.10/bu, and there it finds 20 sellers? The remaining buyers who wanted to buy at $3.00/bu have to pay $3.10/bu. The buyers from $3.00/bu have a gain, the sellers from that price have a loss (except the new ones @ $3.10/bu). As time goes on, some sell orders come in at $3.10/bu; but there are no buy orders yet. So the market goes looking for buyers and finds 10 new orders at $3.05/bu as it drops back in price. As the orders keep coming in all day and all night, a handful are always left over at each price as the machine keeps processing the new orders that show up at the last price. The bottom line is that as the price changes, it affects all traders' equity, no matter which side they started on or from which price they started. The order flow is never balanced, and there are always some orders left over at each traded price, which is why the market fluctuates in price all the time.

Just keep playing that scenario over and over in your mind and you will understand how price moves in a zero-sum market happen. The only thing the market is doing is processing those orders as they come in over time and matching them with orders from the other side over time. The market doesn't rise or fall in price for any other reason; it is just processing the orders as they come in over time. The market matches buy and sell orders. If there are any left over from one side or the other once orders at the current price are filled, the market goes looking for more orders, creating a price change. That is all there is to the *deus ex machina* (Latin for "God from the machine").

All the other things that go on all day long in a zero-sum market are a reflection of this order flow. In the case of the buyers/sellers at $3.00/bu, as the order flow was larger on the buy side at that $3.00/bu price, the market went higher. Once the order flow changed to be larger on the sell side, the price dropped to fill those orders. That's it. The winning buyers on the price rise from $3.00/bu to $3.10/bu had a profit *because the order flow was larger from that side*, not from any analysis about what will make corn more expensive, what prices traded last week, what increase in consumption is likely, or who said what on television. The price rose higher because the orders were larger on the buy side for that particular period of time. Now, if the order flow were to change suddenly and become quite large on the sell side, the market would drop, looking for more buyers to fill

the unmet sell orders. If those buy orders never got placed, which direction do you think the market go, and for how long? That is the issue of time compression, but I'm getting a little ahead of myself.

Here is the part of zero-sum markets that must be very clear to you: The order flow was created by individuals trying to answer the question *Is the market too high or too low?* The order flow came from individual account holders doing whatever it is they do to answer that question. They believed they had found an answer, so they placed themselves at risk by placing an order. *That* is the market, nothing else. In order to profit, after your particular order is placed and filled, there *must* be more orders from the *same* side coming into the market after you. If you are a buyer, you can profit only if there are more buy orders entered into the market *after you* are holding your filled order in your hand. That means someone else must come to the conclusion that it is time to buy, and he has to find a seller to disagree with him too. If the sell orders are smaller as the buy orders come in, it is other people who make your trade work, not you. Therefore, you must be concerned with what other people are likely to do and when they will do it; otherwise, you have no hope for a profit. If you don't know what the probability is, trading becomes a game of chance for you.

Time compression attempts to answer this question *What will cause a significant change in the order flow?* Because the market doesn't move for any other reason no matter what we choose to think about the markets, all we need to do is find the change in the order flow to win. The price can't rise unless buy orders are larger than sell orders. The price can't fall unless sell orders are larger than buy orders. One hundred percent of all analysis, no matter what it is or how it is done, is attempting to find prices where the order flow will change, causing a change in the price direction. Except for one thing: All commonly used analysis tools use price and calculate signals without considering the person on both sides of the market who has to place those orders. *What is causing those traders to act and place orders right there, at that particular time? Price analysis cannot predict human behavior, and human behavior is what creates the order flow.*

Earlier, I hinted that the real issue is coming to a conclusion so you can place yourself in a trade. Now is the time to define the real issues in trading, but we need to keep the issue of order flow very fresh in our mind. A zero-sum market exists and moves in price as an

imbalance in the orders causes the market to fluctuate as the market seeks to balance the order flow. As the price changes, half the positions active have a gain and the other half have a loss. That is all there is to the actual market itself. But real people are placing those orders. And the fact is, no trades would be done at all if nobody thought they could profit. This leaves us to determine how those people who placed their orders concluded that it was time to do something. How could half of them think a price rise is coming and the other half think a price decline is coming? This is where the issue of analysis gets so convoluted; all the analysis in the world can't explain how two groups of people can come to *equal yet opposite conclusions*; one group expects a price rise and the other a price decline. The groups square off at the exact same starting point, but the winning half won't be known until more orders are processed. And it is this incoming order flow that creates the price action that will benefit one group and hurt the other, not some form of analysis.

Now that we understand that zero-sum markets present some challenging issues, we can begin discussing how the trader is involved. How prices change and how traders earn a gain or suffer a loss comes from their conclusion-making process. The conclusion-making process becomes the order that creates the price change. Since the market is only a machine that does nothing but process those orders, we need to know how the order got into the machine. It is time to start looking at the critical question that creates the market:

What is the urge to action that creates the order?

How this urge to action plays out in creating the order flow is where the potential for a market to become time-compressed actually comes from. The critical thing to remember is that the market is made of *people*, not *prices*.

THE TRADER'S LIFE

I believe that trading is a *lifestyle* more than an activity you do. It is learning to think and behave a certain way rather than simply buying or selling because you are bullish or bearish. When developing a different kind of thinking regarding zero-sum markets, some critical observations helped me understand what I was involved in when I trade. For people who are just learning what zero sum really means, one of my observations might be helpful.

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Think of zero-sum markets as a tug-of-war while equities and other markets are a game of musical chairs. In a zero-sum market, whoever has the force in the market will ultimately determine where prices will go. In equities, whoever is holding the shares (or product) when the music stops is left holding the bag. You can own a share of stock until it reaches zero no matter how many people owned it before you or how much they made as the price changed. In a zero-sum market, you eventually have to let go of the rope or you might be liable for a huge amount of money as your positions change in value. Later, when we discuss leverage and forced liquidation, how the difference between a tug-of-war and musical chairs plays out in price action will become clearer. In musical chairs, there is one eventual loser: the last buyer. In a tug-of-war, everybody on the wrong side of the market force loses.

Part of what helped me develop a better understanding of how this market force plays out was a thought experiment I did trying to answer the question *Who is the force in the market? This dramatically changed how I saw prices and what those price changes mean.*

Suppose there are two groups of people in the market, the professional traders who can do size (meaning a lot of contracts at one time) and everybody else. Let's say there is one trader who can do a 100-lot position. At the same time this trader decides to buy the market, there are 99 one-lot traders who wish to sell. It is unlikely that all 99 one-lot traders will wish to enter the market at the same time, so the large trader has to be content with putting the position on one contract at a time. In order to draw in all 99 one-lot traders, the price will need to decline so that the one-lot traders believe they are seeing a trend develop lower. So the 100-lot trader keeps buying a little at a time as the market falls in price until all the little traders are committed to the short side.

At this point, the large trader likely has an open trade loss as the average position has been bought in a declining market. However, a few of the early small traders will have an open trade gain. At this point, the large trader (who is the dominant force in the market) has the advantage. The reason is simple: The large trader is not going to sell the position; the large trader intends to wait out the smaller trader.

As the first group of smaller traders decide to buy back their shorts, their buy orders are not met with a sell order from the larger trader. Hence, the market goes looking for more sell orders above the market—but there are none. So the market rallies higher, erasing the open trade gains of the small traders. The late small sellers are holding losses. Because the one individual holding all the size in the market has decided not to sell,

the 99 small traders are not in control as they all seek to liquidate. Once the price reaches a level where the large trader has an open trade gain and all the small traders wish to buy back their losing shorts, the large trader sells the 100 contracts one at a time to all the losing traders. In the end, the large trader who controlled the size determined where the market would go in price. It was when the small traders all decided it was time to take their losses that the market had buy orders for the large trader to sell against. Obviously, in an active and liquid market, there are always buy and sell orders coming into the machine, but the basic premise is the same.

If you think this through, you will begin to see that trading a zero-sum market is not about the price but about the people who control the size. When we get to market structure, in Chapter 3, we will discuss the difference in the people who control size and everybody else.

After I learned to see a zero-sum market as a tug-of-war, it became very clear that I needed to understand volume and professional activity. Learning to see the market differently led me down a different path to analysis.

CHAPTER 2

Who Is the Market?

We don't see things as they are; we see things as we are.

—Anaïs Nin

You are the market. You, me, and everybody else out there with an open account who intends to participate. We are the market. After we do whatever it is we do to convince ourselves that a profit opportunity is available to us, we enter an order, creating a price change in the market. As the price moves for or against us, we process that information and then reach another conclusion. When the conclusion-making process for each of us individually brings us to a point where we choose to liquidate, we enter another order. That is what creates the market at its most basic level. You choose to participate and you choose to leave. All of the myriad ways of participating, including trading styles, complex or simple trading systems, day trading, position trading, use of contingent orders, spreading, hedging, or whatever else is available to use when you trade: It all boils down to *you* getting in the market and then *you* getting out. "The market" is not a place—it is a *process* that includes everyone willing to participate. Those choices to participate come from inside you when you make choices.

Stop to consider that every other trader out there is doing something similar and making choices to participate. All the other participants are attempting to analyze price action to find a better entry

point for a trade. Then they go through the *exact* same process you do attempting to find the best place to liquidate for a gain or for a small risk. Every trader is using all available tools exactly the way you do, trying to answer the question *Is the market price too high or too low?* Every single participant is thinking along the same lines and using similar tools. You are no different from anyone else who is participating. You have some capital you are willing to risk, you believe that you can find a way to buy low and sell high, you know you need to limit your risk, and you are expecting a large rate of return on your equity for your trouble. You and everyone else participating are thinking the same thoughts at this level. When we get to a deeper discussion about technical analysis, we will see how everyone participating is also using the same tools the same way, just like every carpenter is using a hammer the same way as every other carpenter is using a hammer.

But we are playing in a zero-sum market. That means out of the thousands and thousands of individual traders participating, no matter who they are, how smart they are, how sophisticated they are, how much research they have done, what their style of trading is, who they trade through, how much money they have, or any number of other variables that may exist, you and everybody else cannot win unless some number of traders lose.

THE CONCLUSION-MAKING PROCESS

In order for you to see how time compression develops and how it provides you with opportunity, you must understand this conclusion-making process. You must see the process in the context of how a zero-sum market is constructed because if you don't, you can't reasonably get positioned ahead of the change in order flow except by accident.

In order to find a change in the order flow, you must understand how people come to conclusions and how they act on them. Why? Because *they—the people*—are the market. *You* are the market. How do *you* come to a conclusion?

When I ask *How do you come to a conclusion?* I am asking you to consider that you are the market and everyone else is the market; how does the market come to a conclusion? The market itself doesn't

"come to a conclusion"; as I've mentioned, it is just a machine. But if *you* come to a conclusion and decide to act on it by placing an order, you have created the machine along with everyone else who has reached a conclusion and acted on it. The group is made of individual parts and is evenly divided between the buyers (bulls) and the sellers (bears). But only one side can win from a net perspective, and it is the order flow from everyone that will make that a reality. How do the orders get into the machine, and how do the individual traders first enter and then leave the market?

At the most basic level, you and everybody else is using the same function to make conclusions. We all have a set of programming we use to reach our conclusions. We all function the same way, but what we allow into the software in our head is why some of us reach a bullish conclusion and others reach a bearish conclusion. I am not talking about "being right" at this point; I am defining who the market is and how an order gets into the machine.

Your conclusion-making software looks something like Figure 2.1.

In most people, this conclusion process runs largely unnoticed. That is why so many people have an emotional response to their trading. For the most part, they are not in control of their own process, and they don't know they can change the critical parts of the process if they need to. In other words, most traders don't know the software they use. This is why you always can find someone you know who will conclude "That's just the way things are" without ever seeing their role in how their circumstances developed as they did. Let's look at these components individually as we see how this conclusion making process becomes order flow.

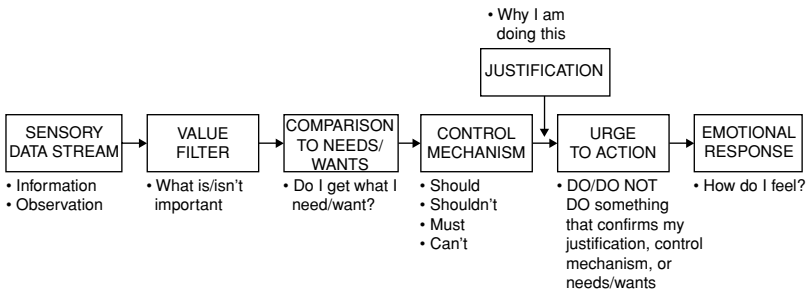


FIGURE 2.1 Why Am I Doing This?

Sensory Data Stream

The sensory data stream is the raw data that is coming into your awareness. It is what you see, hear, taste, touch, and feel. Because humans are thinking animals, this data goes into our sense of ourselves and what we perceive the world around us to be. The raw data has meaning for us only when it moves to the next step.

Value Filter

The value filter is where we choose to allow certain information from the data stream to become apparent to us and where we place that data into context about who we are and where we are in the world around us. This value filter is composed of what we think is/is not important, why it is/is not important, rules, beliefs, opinions, and intents. In other words, we do not perceive everything we receive from the data stream. We ignore most of it unless it fits neatly into what we value. Most of us have a value filter that is imposed on us from birth (our education, training, discipline, etc., from our parents and teachers), but many of us have developed our own from experience. The value filter tells us what matters because we choose to tell the filter what matters to us. The important thing is that we can control the value filter if we choose to.

Comparison to Needs or Wants

Once we have interpreted the data stream, we compare what we perceive to our personal needs or wants. We now are evaluating the potential either to get or not get what we need or want. In the case of trading, this need or want is usually an expected profit opportunity.

Control Mechanism

The control mechanism is where we run the comparison for potential to get/not get what we need or want through our software from something we did not choose to have installed. Some people call this our conscience, but it is composed of four congruencies: should, should not, must, and cannot. They function as a means of preventing us from making conclusions that would not be in our best interests or the best interests of others, but they do not function as behavior

control; they function as a *conclusion* control. The behavior is the last step, which I call urge to action. The control mechanism is what prevents or allows certain people to do certain behaviors.

Justification

Somewhere between urge to action and emotional response is justification. There really is no other place to put this step, but justification always occurs after an urge to action is taken. No matter who the people are or what they were trying to do for themselves in the process of making a conclusion and then acting on it, they will almost always justify what they have done. In my opinion, the justification step is less important for traders because once the order is in the machine, it's over. The force has been applied on the market, and the only response is an exit order later. Justification is there for the most part, but it has nothing to do with price action, as price action only happens when orders are placed and filled. Who cares why the order is there? You can justify your action all you want, but once you are at risk, it is the other traders' order flow that determines if your trade wins or not.

Urge to Action

Once we have taken the data stream and run it through our value filter, comparison of needs/wants, and control mechanism, we now have an urge to action, which also can be an urge to inaction (do nothing). Once we have made our conclusion and then acted on it, we get an emotional response.

Emotional Response

If we have a negative emotional response, we often feel we have made a poor choice; if we have a positive emotional response, we feel we have made a good choice. The emotional response often is created by conflict somewhere in the process, such as feeling guilty if you know you shouldn't do/or should do something.

By the way, for all the professionally trained people who are familiar with human psychology, developmental or abnormal psychology, behavioral science, or self-development: I am not a psychologist. My goal is to share what I have discovered about how people

make conclusions, not to argue about the very complex nature of human thought. I am using my own observations about myself and others, which have helped me see how orders get placed in the market. I've watched winning traders and losing traders execute, and they all seem to be functioning along the lines just described.

A GLOBAL CONSTRUCT

Let's take an example of how this conclusion-making process works and break it into its component processes. Let's suppose you walk into your living room and you see your couch on fire (sensory data stream). Now you have to make a choice as to whether that is important or not (value filter). After you decide if that is/is not important, you most likely will decide how you fit into the picture of your couch on fire (comparison to needs/wants). If you have chosen that a couch burning in the living room is important, and it is best not to go up in flames with it, you now will decide you should/should not, must, cannot do something (control mechanism); if you have decided that a couch on fire in the living room is important, it is best not to go up in flames with it, and you should/should not do something about it, you now will likely reach a conclusion (urge to action) and do one of a few predictable things: call the fire department, attempt to put the fire out yourself, or run out of the house. Once that is done, you will experience an emotional response. In most cases, this process happens so fast it is almost not observable. Most people would see the couch on fire and immediately feel fear. Some would freeze and be unable to do anything, some would grab the phone and dial 911, some would run to the home fire extinguisher, and others might just bolt out the door; whatever action they take, they would all be feeling strong emotions of some sort at that moment. No matter the results, they likely would justify their actions as the "right" thing to do.

If you think ahead a bit, you can see how the exact same thing would happen if a trader was away from the trading screen for a short time and then came back to see either a large gain or a large loss. Some would freeze and be unable to take the gain or take the loss, some would immediately call for help (such as call the broker or review some analysis), some would execute right there to take the gain or loss, and some might add to the open position. In any case, the market movement data went into the trader's conclusion-making

process, and the trader did something, resulting in an order being placed or not being placed. The traders involved will feel emotions at that point: Losers will feel pain and winners will feel satisfaction. It doesn't matter to the market itself how many orders got placed or not placed. The market will process those orders. How the resulting price movement affects any one trader doesn't concern the market. All the traders who are participating are in various forms and levels of conclusion making. Once they have an urge to action, those orders *become* the market. You can't win unless you are on the right side of those orders when the imbalance was created.

The important thing to remember about this process, even if you don't see it for yourself, is that all other traders out there are using a process very similar when they conclude it is time to do or not do something. You yourself are using a similar process. The interesting thing about this process that I discovered for myself is how much control we really have over changing it and accepting data. As long as we hold to the point of view that the market is made of people who all are making conclusions, then acting on them, and they are all basically doing it all in the same way, we have a point of reference to understand how the market reaches a place where the order flow must change.

Your conclusion-making software has some things about it that must be addressed if you wish to gain a better understanding of time compression. By that I mean you need to see the market not as a *place* but as a *process*. I don't think you can do that easily without recognizing that your conclusion-making software is programmed in essentially the same way as everybody else's. When you consider that everyone participating is thinking along the same lines for the most part, and you are not thinking any differently, wouldn't you all come to the same conclusion at about the same time? In effect, that is exactly what time compression is, but in order to observe time compression happening, you must see the market differently from the other participants as they execute their orders. You can't see the market as simply a price change; you need to see it as people participating together.

In order to see time compression happening, you must start from the premise that your usual method of thinking is *exactly* how everyone else is processing their data stream. In order to exploit a potential change in the order flow, you must see how it develops to begin with. The order-flow development *comes* from this conclusion-making

process so you must know how participants are reaching their conclusions. In Chapter 3, I want to discuss how this conclusion-making process, done by everyone all the time, creates the underlying structure of the zero-sum market. Once you understand how the structure is created, you will have a good foundation for anticipating when a change in the order flow could develop.

THE TRADER'S LIFE

I studied my own conclusion-making process for years because I found myself on the wrong side of the order flow so often it was uncanny. I would put on sometimes 30 trades in a row that were all losers. If I had said "buy" instead of "sell" (or vice versa) when I got into the market, I would have had a huge gain after that many winners in a row. Why was I coming to the "wrong" conclusion so often and so consistently? I figured if I was that consistent on the losing side, there must be a way to become that consistent on the winning side; the choice simply needed to reverse in the conclusion-making process somehow.

What I discovered about my personal conclusion-making process is that there was a component that needed "confirmation" before I could take a position. In other words, there was something in my thinking that wanted to reduce the risk on a trade before I could put myself at risk. Obviously, we all want to reduce our risk when we trade, but it is what we choose to focus on as a "risk reducer" that usually leads us to a conclusion at the wrong place in the order flow. In my case, it was the need for confirmation that a trade had potential before I would execute.

As I studied this need for confirmation, I concluded that my real motivator was fear of loss. The need for confirmation was an attempt to reduce the fear of loss. As I became more self-aware of my own conclusion-making process and as my understanding of how zero-sum markets actually worked became clear, I came to understand that it was the fear of loss that was creating my urge to action. The desire to reduce risk is not the problem; the need to reduce the fear was the problem. Because a zero-sum market moves in price based solely on changes in order flow, the only way to reduce the risk to a tolerable level is to fully understand when a market has potential to create an order-flow imbalance. My personal fear of loss or my need for confirmation has nothing to do with a potential order-flow change when it happens; all of that is inside my head.

In fact, once the order flow had begun to change and I would wait for confirmation, I was actually *increasing* my risk, not reducing it. Once the market order flow shifts from "sell" to "buy," the only thing the market will do is rise in price. The longer it rises in price without me being long reduces the potential profit in the trade and increases the potential that the order flow will again go from "buy" to "sell." The reason I was experiencing losses was because I was waiting for confirmation that the price change was in one direction; but the longer I waited, the more the potential for a reversal was developing.

By seeing that my fear was active in my conclusion-making process, I learned that my need for confirmation was leading me to wait until the potential was dropping, thereby increasing my risk. Once I understood that my fear was inside my conclusion-making process, I knew what needed to change: I needed to confront my fear of loss and learn not to wait for confirmation. The best confirmation that you are on the right side of the order-flow imbalance is an open trade gain, nothing else. I stopped waiting for confirmation before executing; I started taking trades immediately.

CHAPTER 3

The Four Components of Market Structure

If you can't buy weakness and sell strength, you can't trade.

—Trader proverb

So far, we have learned that a zero-sum market functions differently because buyers and sellers actually create the market itself and individual traders win or lose based on the actions taken by other traders. We have also briefly looked at the conclusion-making process used by everyone participating and how that leads to an order being placed. Before we get deeper into how the urge to action is stimulated, I want to outline how a continuing market is structured—in other words, how it is built and continues to function due to the constant imbalance in participants' order flow. When we get to Part II, The Theory of Time Compression, you will see why an understanding of the underlying market structure is so important to creating an edge that is better than chance. The simplest way to define market structure is to discuss its component parts.

There are four components to the structure of a zero-sum market. In order of importance, they are:

1. Time
2. Volume
3. Open interest
4. Price

The structure of the market is changing constantly as these components change in relationship to each other. All of them affect the other, and each of them must be seen in context with the others. The market structure is a dynamic process that is slightly different all the time, but when it is working as a whole, it basically functions as an ebb and flow. I don't mean prices—I'm referring to how the rhythm of change happens. You can think of waves on an ocean, for example, or wind blowing through the trees. There is measurable ebb and flow to the market just as there is to any other natural process.

This ebb and flow is a measurable process of all four individual components working together. One gains dominance and then drops back as another gains dominance; but they are symbiotic with each other, much like a growing plant needs water, soil, and air to produce fruit; but the fruit is neither soil, water, or air but a result of the process that happens from all those elements working together through the plant. The market is a process that is combining these four elements all the time in various relationships. In the case of the markets, the fruit is a change in price. The change in price, of course, is what most traders allow into their conclusion-making process and it is usually the most important piece of data they allow past their filters.

Let's look at the four components individually, seeing each one for itself before understanding how they relate together to create the whole market.

TIME

Time is the most critical and most important part of market structure. Why is time so important? Without time, you don't have a market to begin with and you will never have a trader create an urge to action. Nothing happens in any market without a time element being the prerequisite for people making decisions. You can't answer the questions *What does this mean, and what do I do to profit?* without time passing. It is so necessary that it is almost unnoticed by most traders except as an assumed fact. Market participants directly measure time against their own conclusion-making process every moment they trade.

Stop and think about this question: When is it time to liquidate a trade?

If you ask 100 traders, you will get 100 different answers, but *all* traders agree that it takes time to liquidate a trade. It takes time to make a choice to participate, and it takes time to decide when to leave. It doesn't matter what the time amount is; it just matters that a certain group of traders will make their choice to either enter or leave the market only after some amount of time has passed. This is the key element to trading and why an understanding of how time becomes compressed can create a winning approach.

Let's start with an easy example to understand why time is the critical part of the underlying market. If we go back to our previous example using the corn market, there are a number of things all based on time that create the potential for a market to exist. First, consider the beginning of the year when it is time to plant the crop. We don't know how many acres will be planted until the results of the planting intentions survey are in; it takes time to compile that data. Once the crop is in the ground, it will take time to grow it to maturity. As time passes, the expected yield will be calculated, but we can't know that until we get an idea of how much rain has fallen and how hot the growing season is. After enough time goes by, we can get a good idea of how big this year's harvest will be, but we won't know the exact size until the harvest is actually in. It will take time to see if the yield is above or below forecasts. As the crop is growing, we need to compare current consumption to the potential yield to see if there will be a shortfall once the new crop is in the bins; if the weather is bad at harvest, the yield might be down enough for a shortfall. Once the crop is in and the yield is known, we need to prepare for next year's crop. That may mean there will be too much corn or too little relative to demand once the new intentions are known.

It takes time for all the variables that affect the corn crop to become known. As these variables are known, each trader must decide what each one means and how it might affect the price of corn. Some traders ignore these variables and trade only off the technical picture they believe they are seeing from the charts. In either case, it takes time for any trader to conclude that a trend is developing, a retracement is due, or the market is bullish or bearish for the most part.

Additionally, all traders are dealing with their own conclusion-making process that tells them they are in a trade for a long enough time. Some traders are day traders looking to make money right now, which for them means by the end of the day. Other traders are

looking weeks or months out and intend to hold a trade for the entire year. For them, making money right now might mean before the end of the summer.

Time is the most important component to market structure for the simple reason that time must pass for traders to get the data from whatever they value and then run it through their personal conclusion-making process. Once they reach a conclusion, they act on it in hopes of a profit. That action becomes part of the order flow. Since we know that the order flow is always in an imbalanced state, time *must* pass for the price to move as competing orders are entered into the market.

How much time do *you* require?

Time pays out in the mind of traders' conclusion-making processes something like this: "At first I thought [XXX] but now I see [YYY]. Therefore, I must do/not do [such and such] by [time]."

How many times have you heard something like: "Well, the report came out and it was bullish. I'm going to hold my longs until the close unless it drops off. I'm moving my stop up to lock in a small gain. If we are still higher into tomorrow I will stay long." Here the trader is in effect saying: "I need *time* to reach my conclusion."

Time is the key element to the trader, not price, because *the price could still move more in the trader's favor over time.* The trader needs time to see if that will happen. As far as the market itself (the machine) is concerned, it only knows that once time passes, orders will come in. And you won't get any orders without time. It doesn't matter to the machine what the orders are or how the order flow is imbalanced or from which side; it only matters that time passes in order for those orders to be created.

VOLUME

Once enough time has passed for traders, they do something, and that results in an order being placed. An order that is filled means a trade was done. That is volume. Volume is a measure of how much activity a particular market is seeing at a given point in *time.* Every order placed and filled means someone somewhere decided to participate. Now that traders have participated, we know how much activity the market has. If there is little or no volume, that means few traders

are doing anything for some reason. That point too is important to know.

No activity = no volume.

A lot of activity = high volume.

Volume is a measure of how much of *something* actually is happening. You need volume to tell you if traders want to execute into the market. When traders are participating, that can only mean one of two things: Either they are entering the market or they are leaving the market. They can't do anything else. Orders can only be traders making a conclusion that it is time to get in or it is time to get out. Volume or no volume means someone decided it was *time* to do or not do something.

OPEN INTEREST

Open interest is the answer to this question: *Who is getting in or who is getting out?* Open interest is a measure of how many contracts are still active in the market. If open interest is rising, that means a group of traders have gotten into the market and they intend to stay in the market for a period of time. If open interest is falling, that means traders aren't willing to stay in the market. In other words, open interest is a measure of *confidence* that a particular trade will work or not work. It will take time to see that happen.

There are a few things about open interest that are very important. Currently, open interest is calculated at the close of the day's business in most markets. So if open interest is rising, this must represent traders who intend to hold their trades at least overnight. That means they are at risk for something to change that might hurt their trades, and they are willing to let more than one day's worth of *time* go by in order to find out. They feel confident enough to accept this risk; otherwise they wouldn't hold overnight. These traders are not day traders; they are thinking something else that requires more time. This must mean they are experienced traders who know it takes time for a trade to develop.

Open interest is usually a reflection of the more educated, better capitalized, more experienced traders. Most of the time, they are professional traders. Therefore, a rise in open interest suggests that professionals see opportunity and are willing to stay at risk to

get it. A drop in open interest likely means that professionals feel whatever the opportunity was, the potential is likely dropping at the current *time*.

PRICE

Price is the last component of market structure and the least important. Of course, we as traders are trying to exploit a price change in order to profit, but the price itself is not as important as *how the market got to that price*. Price is a reflection of where the market went to as the orders were processed. It is infinitely more important to know how it got there, who is behind the price change, how busy the market was to get to that price, and whether professionals are involved to a large degree in the price change.

To illustrate why price itself is not critical for the winner, consider this question: If you knew the order flow was about to change, and it was about to go heavy on the buy side, and that would likely be in the next 10 minutes, would you buy the current price no matter what it was? Absolutely you would. It doesn't matter what the price is when the order flow changes; it only matters that you are on the right side and slightly ahead of that change. Who cares at what price that order flow change happens? I just want to be slightly ahead of it.

Think of price as being a *reflection* of the net order flow, not an important thing in itself. You want to know the structure of the market *behind* the price in order to answer the question: *Is the market price too high or too low?*

SYMBIOTIC MARKET STRUCTURE

Once you see all four of these components in market structure in proper relationship to each other, you can begin to see when a market is about to experience a change in the order flow. The change in the order flow is inevitable because of liquidation pressure, which we cover in Part III. But before we move on, I would like to give you one example of how to see a change in the order flow develop by understanding the big picture of market structure.

Going back to the corn market for a moment, we know that there are things that take time to discover that might affect the size of the

crop. No matter how you slice it, there will be bulls and bears in the market who will conclude that the market is overpriced relative to the final information due later and those who conclude it will be underpriced. They both need time to see that information and make conclusions as they answer the questions *What does this mean, and what do I do to profit?*

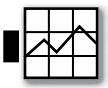
So we watch the corn market in the spring as the issue of the crop size and other fundamentals develop. We notice that the price is steadily rising. That can only mean that buy orders are larger than sell orders. We notice that during this price rise, the open interest is also rising, which likely means that professionals are involved and they are likely on the buy side. We also notice that volumes are increasing each day as the price rises. We now know that more and more traders want to participate. We also know that the sellers are losing money and that part of the buy orders in the order flow are shorts buying back their losing positions, adding pressure to the dominant force in the market.

At some critical price/time relationship (whenever that is), the bulls will decide that the opportunity for the price to rise farther is dropping and they will likely want to take their profit; that means sell orders will start coming in. We notice that as the price reaches the previous yearly high (for example), the volume rises again, but this time the open interest drops significantly. This can only mean that the winning bulls are leaving the market *and* the shorts don't want to play anymore either; therefore, the traders who put the market into a high price are no longer there. Their previous order flow isn't there anymore. Over the next few days, the market stays around the high price, but the volume is very low and open interest drops again. Whoever was the last group of buyers to finally lift the market into the actual highest high prices now have no more buy orders behind *them* to lift the market to an additional high; those previous winning traders are on the sidelines for the most part. Therefore, the market is running out of buy orders.

At this point, the market is vulnerable to a price decline. If the bears conclude that the price is too high, they will try to sell, but there will be very few buy orders to fill those new sell orders. At this point, the order flow has changed from net bid to net offer. The market declines in price until it finds willing buyers. End result: The last group of buyers has a loss, the early buyers from under the market have a profit, the early shorts paid the early winners, and the late buyers

owe the new shorts a profit. The market price action was driven by the net group of traders making conclusions and placing orders (for better or worse to their accounts). This happens as traders process the information they find valuable and act on it—not because the fundamentals were bullish then turned bearish or because the technical picture was bullish then turned bearish. It happened only because people used all of that information in a way that completed their urge to action and then they placed themselves at risk, then they liquidated when they felt the opportunity was over or to take a loss.

This whole scenario plays out as traders reach conclusions about what they individually think they need to do. The underlying market structure discloses that *someone* made money and *someone* lost money not because of what might determine the final price of corn; they made or lost money because enough *time* went by to show that the order flow was buyers for a period of time. Enough buyers were willing to stay in the market as time went on, and more activity was there to increase the order flow from that side. When the buyers changed their minds and decided to leave the market—which was because they (as a group) concluded at about the same time that the market wouldn't rise any farther—the end result of their taking action was to remove order flow from the market. This left the market at a high price, but the underlying structure had changed. The structure as it changes is made by people who participate. How they participate is measured by volume and open interest. Time determines when they participate. Price change is what happens due to their participation.



THE TRADER'S LIFE

I came to the conclusion that time is the most critical component of market structure because I was amazed at the amount of money the larger, more experienced traders around me made simply by holding their positions longer than other people, including me, would.

When I was a young trader, I thought it was very important to reduce my risk by being flat at the end of the day. More experienced traders told me that anything can happen when the market is closed, so it is best not to be at risk with an open position. Oddly, these were the same traders who would hold their positions for weeks. Later, I found out that most of those more experienced traders were telling me things that appealed to my inexperience in order to reinforce losing perceptions of the markets.

I discovered that more experienced traders see younger ones as "free money" as long as the younger traders continue to believe conventional wisdom. The older traders are exploiting the younger ones and take great delight in draining their accounts by being on the other side of their orders and/or waiting them out.

Once I saw that the wealthy traders were holding positions for a much longer time, I starting asking, *Why? Isn't that risky if the market can do anything overnight?* Most of the answers were along the same lines, with the general theme being that the market doesn't move in one day.

So why do younger, less experienced traders liquidate at the end of every day?

I believe they do so because they define "making money right now" different than the wealthy traders. I used to define "making money right now" as the end of the day. Finally, I realized that all I was really doing was providing liquidity to the larger professionals on the other side and my liquidation orders (to get flat every day) were a large reason why the market continued to advance in trend for the professionals day after day. When I say "my liquidation orders," I don't mean just me personally; I mean every other trader out there who operated under the assumption that being flat every day was an advantage. It's an advantage, all right, just not for the trader getting flat every day.

Time is the critical element for the market structure to develop because all participants are defining their "making money right now" psychology based on their perception of how much time "right now" is for them. If the amount of time is too short, that particular trader is likely only the fuel for larger traders to reach their objectives. I learned to think on a longer time frame as part of what I needed to do to profit more often. I learned to wait out the other traders.

CHAPTER 4

The Illusion of Technical Analysis

Technical analysis is the study of market action, primarily through the use of charts, for the purpose of forecasting future price trends.

—John Murphy, *Technical Analysis of the Financial Markets*

Part of what makes zero-sum markets unique is the issue of market analysis. In my second book, *The Art of the Trade*, I devote a chapter to a discussion of technical analysis (TA) that I called "Clairvoyance for Profit." In my opinion, I do not believe that a trader can use TA with any degree of consistency in order to profit. I feel that part of the mystique of TA is the promise that it can help traders win *if they learn it well enough*. I have spent hours in conversation with net-losing traders and, in general, they believe they just don't understand how to use TA the right way. They are committed to getting this understanding so completely that they will spend thousands of dollars on seminars, courses, books, and audio-video series. They really believe that all this mumbo-jumbo will reveal to them some "secret" to the markets. I will tell you, as I have told them, that there is no secret to the markets. You cannot use TA to find winning trades. You need something different, and that brings us to how TA affects the order flow.

Before we begin, I want to remind you that not everyone in the business of trading shares my point of view. The last thing I want is to open Pandora's box and have a heated discussion about the value

of TA. If you are a firm believer in the use of TA, that's fine. For the most part, I don't think it is being used properly in light of how the markets are structured. That is what I want to discuss here, not slam anyone who uses TA. I did that in my last book.

As I mentioned in the preface, TA offers some things that can be applied to the understanding of time compression, but TA itself is missing the big picture. TA is *completed* when combined with market structure and time compression. TA will not help you find winning trades; when used with a better understanding of market structure and time compression, however, it will help you *confirm* that an opportunity is there. Only a few parts of TA are really helpful anyway and we will discuss those later.

What I want to focus on in this chapter is how the relationship of *trust* in TA becomes an order into the machine. As I discussed in Chapter 3, all traders are using some form of analysis before they place a trade. The issue of trust is so important in TA because it is the largest form of analysis used by most traders; therefore, it has an impact on when orders are placed into the market. In other words, a significant number of traders are using TA, and they trust it enough to put themselves at risk. TA becomes a motivation to create the order flow. In order to see this relationship, I would like to make an observation for you to *really* think through.

A PROBLEM OF SHARED DATA

Anyone using TA is seeing the same thing that everyone else in that market is seeing. For example, if we are discussing the corn market in Chicago, everybody trading that market has access to the same information regarding price data. The exchange compiles all of the trading day's activity and publishes it to anyone who wants to see it. Every form of market data provider receives the same information every day from the exchange. My price chart on my desk of the corn market is identical to every other chart of the corn market on any other desk anywhere in the world. Anyone trading corn can get access to any part of the fundamental picture in the same way from the U.S. Department of Agriculture or other data creators. No person anywhere in the world has access to any piece of information about prices, price action, or fundamentals that is different from what anybody else can receive. Everybody has the same data. So why do some

come to the conclusion that it is time to buy when others come to the conclusion that it is time to sell? Remember, they have access to the exact same information in all cases.

Here is where the issue of TA comes into play and why it is impossible for TA to help you analyze the market well enough to win consistently by using it.

Almost without exception, the people who are proponents of TA take the price data (meaning things like the daily open, high, low, and closing prices) and *apply* some hypothetical or mathematical relationship to those prices in order to get a study of the market. For example, people who use an analysis called pivot points will take the closing price range of the market and apply a series of ratios to get projections of buy/sell points for the next open in that market. The idea here is that by applying that particular ratio to that particular group of prices for some reason, pivot points will provide you a winning series of trades moving forward. To apply some hypothetical or mathematical formula to pricing, the only thing you need is a calculator or computer and knowledge of how to use it. In the case of other forms of analysis, which can get quite complicated and sophisticated, the exact same thing is being done but with a greater number of variables or algorithms. But in all the TA done for whatever reason people are willing to accept as viable, *in all cases it is up to the individual trader to interpret the data that is created by the TA.*

Basically, all creators of any kind of TA studies are taking the same data that everybody gets and massaging it according to a specific set of guidelines or rules. The end result is an assumption of where the market is likely to go next. None of these studies, indicators, models, or systems ever has a real-time success ratio above 52 percent when compared to the real issue of analysis, which is: Find me a winning trade. Most of these TA-based analysis concepts or systems are really no better than chance. In all cases, none of these approaches takes into account the fact that the markets don't print a price unless there are two equal yet opposite orders (meaning points of view on the current price) or the fact that people have to make a choice to enter the order in the first place. No matter how certain someone is of a particular method of TA, there always will be traders participating who are seeing the exact opposite in that particular TA or are using something else completely that comes to an opposite conclusion. As an example, for every overbought indicator that is used at a particular time, there will be a TA method that says

"The market is still trending" while others will say "It is time to buy now"; *and all of those indicators are using the same information that everyone else has at that particular time: the price provided by the exchange.*

Here is the part that makes the whole analysis concept absurd to begin with. The idea that TA can predict price means that whatever is being used to calculate the next price is using the same beginning variable: the price. Any serious engineer, mathematician, or statistician will tell you it is against the laws of mathematics, calculus, or logic to use variable *A* to predict variable *A*. The whole point of prediction in any mathematical formula is to take a set of known constants to predict an unknown variable; and you can't predict a variable using the same starting variable no matter what you do with the intervening formulas. In effect, the logic behind TA goes something like this: There is a rock in my room, and there are no tigers in my room; therefore, this rock keeps away tigers. In my opinion, TA is nothing more than wishful thinking.

One of the greatest traders who ever lived, a man who made more money without using technical analysis than any individual ever will by using it, discussed this very same fascination in his book *Reminiscences of a Stock Operator*. Back before World War I, Jesse Livermore describes the "pet monkey" his broker kept in the office to assist customers. The guy was a mathematician and had piles of charts he would show everybody who asked. He could tell you with great certainty where a particular stock or commodity was headed in price. All you needed to do to get this valuable information was to subscribe to his analysis. Livermore describes how customers and professional traders alike would try the analysis and then eventually quit to go back to their "unscientific" method of making money. TA is no more effective to predict price potential now than it was then.

The point I'm trying to make is that technical analysis is simply a belief structure that is not based in factual reality. People *believe* it will work, and that is why they use it. If it doesn't work, people seem to think that they didn't do the analysis correctly and keep on using it anyway. They feel that the problem is with *them*, not with the science of analysis itself. If they lose money for a long enough period of time, they will conclude that the approach is not for them and will move on to another form of the same kind of analysis. For example, if pivot points don't work, they then try Bollinger bands until that method doesn't work for them, either. Until they run out of money. Then they conclude that trading is difficult or not for them. Most traders never

entertain the possibility that TA is not a viable way to get an edge for trading. Someone I worked with once told me, "Every trading system will make money—if you can sell enough copies."

REMEMBER THE PROCESS

When it comes to understanding where the order flow is in the market, it is helpful to remember the process of how traders come to conclusions. Everybody gets the same information, and everybody is massaging that data in some form or another until they think they have an opportunity. Then they place an order. If enough of the TA all says the same thing, then you can know that a large portion of traders will be executing in the market around the price that the analysis says is the right price. Because the market is a zero-sum environment, it is not physically possible for both executed trades to work. Remember, if the TA says to go long, there must have been a seller willing to play also. Who is on the other side of that sell order? That can only mean, since most traders are losing anyway, that must be the spot where the loser in the market is choosing to place him- or herself at risk. The issue of using TA is to see it from the loser's point of view and use that to find a place where the order flow is likely to turn. Think of it this way: If 100 percent of the losing traders are trusting some form of TA, where does that TA say to be a buyer or seller? Most likely that will be a turning point in the order flow against that analysis, because the market will move on the order flow and not on the analysis, no matter what the analysis might say.

As a side note, I use this next concept with a very high success rate to pick turning points in the market. There are people in the TA communities who produce what are known as black boxes, highly sophisticated and complex methods of analysis using advanced mathematical algorithms, artificial intelligence, and even something called quantum financial theory (whatever that is). I have discovered that when these black boxes come to a conclusion and execute a trade automatically or signal a trader to take a trade, they will call the turn in the market about 65 percent of the time. I personally watch the market commentaries and listen to traders who own a black box. When they execute, I take the opposite position in the market usually within 12 hours. For the most part, the black boxes call a turn more often than not, and usually there is a big enough move to get a sizable lead on the price action. I'm not saying black boxes are bad or useless;

I'm saying that they are more reliable at calling turns in the market than they are at calling a winner for their owners. In fact, when I do personal appearances, I ask traders, "Would you use a system with a 55 percent win ratio or one with a 35 percent win ratio?" Most people say, "I would use the 55 percent winner." I then ask, "Why not use the 35 percent system and when it says buy or sell, execute the opposite trade instead? You would then have 65 percent winners by fading the system." The light starts to go on for most people right about then.

My point is simply to help you understand that there are a huge number of market participants who come to conclusions based on things that can't possibly be accurate. There are traders out there who use astronomical data, such as phases of the moon or something; they contribute to the order flow, and in most cases they are a verifiable signal that the order flow is about to change. The change is usually in the opposite direction from what their particular analysis is saying traders should be doing. This is part of understanding market structure and a large part of understanding time compression. In order for you to profit, you must be on the right side of the order flow. If analysis can't help you find that change in the order flow, then it is best used to find the person who *thinks it will.* Order flow from that trader contributes to the structure of the market and helps to create time compression.

Part of learning how to understand time compression includes recognizing that no matter how useless TA actually might be, a large portion of traders do trust it, and they contribute to the order flow. If TA itself can't help us find an edge—but enough people do believe that it will help them *individually*—then TA can help you to analyze the market but *not to find a winning trade.* It helps you find the losers in the market. Those losers must exit the market after they are in the market, and that is the central part of understanding time compression.

THE TRADER'S LIFE

I think it is beneficial for readers to know that I didn't come to the point of view just discussed easily. I am more gifted in intellect and with a capacity for logical thought than many people. I'm not saying that to brag; I'm saying that to impress upon you that I didn't want to believe that the

markets can't be analyzed in the manner that technical analysis would lead you to believe.

I used to be the trader who had piles of charts and all sorts of analysis on my desk. I would read every book I could find about the complexities and nuances of sophisticated analysis because I was under the mistaken assumption that I could use my higher IQ and reasoning skills to find winning trades. In fact, the more I learned about analysis, the more excited I was about it. The whole analysis thing is very seductive and intoxicating because it promises unlimited wealth when you finally figure it out. In fact, countless books have been written by technicians who "discovered" a method of analysis that produced huge rewards for them or their investors. Somehow the profits earned validate the method when, on deeper examination, the only thing these traders really did was get on the right side of a very large trend and stay there. I could name names, but I bet you already know who some of those traders are.

I don't want to discredit those traders or discredit technical analysis completely because there is some value in using TA. But I want to make clear the difference between trusting analysis to find winning trades and using analysis to find the loser. When I was a younger trader, I believed that TA was the secret that I could learn. I attended seminars where hundreds of people were taught the same thing in the same way. The fact that I was losing money consistently enough called into question what exactly I was doing, and why was I trusting this education that so many others were trusting?

When I came to understand that the vast majority of traders who trusted TA were losing, and I was losing, and I trusted TA, I had to conclude that either TA was not a viable method to find winning trades or the rest of the losers and I just didn't understand how to use it successfully. Knowing that I could learn anything when I put my mind to it, I concluded that there must be something about TA that wasn't exactly clear. So I doubled my efforts to learn.

After a few more years of losses, I started to understand what was really happening. I learned the nature of zero-sum markets. I came to see that the winner was doing something different from the loser. During this whole process, I was reading biographies of winning traders and discovered that most of them have a very simple method of market analysis. Often it was something so simple that it was not of interest to someone like me. (Back then I held an inflated opinion of my giftedness.)

When I reasoned this out for myself, I became really angry. I was incensed that I had spent all this time and money pursuing something that

would never really give me any edge better than chance. It was difficult for me to let go of the need for analysis because I had so much emotional and personal energy invested in it.

Think of it this way: If you had spent your whole life learning and even teaching something that later you found out to be a lie, wouldn't you be faced with an existential crisis? Your identity may be gone. You life's work was worthless. You have misled others, and in the end you are faced with the fact that you have wasted an otherwise perfect opportunity. I had some of that kind of experience when I decided that analysis, however appealing, was simply not going to give me an edge.

I'm not saying that TA is a lie or useless; I'm saying that many traders (myself included) assume more about TA than it can really give you. The more you have invested in learning TA, the harder it will be to let go of it, should you discover that it can't really give you the edge you hope for. TA has its uses, but it is not going to make you rich. In my opinion, it is best used from the perspective that it will tell you what a losing trader is likely thinking.

CHAPTER 5

The Psychology of Initiating and Liquidating a Position

Nothing hurts more than being on the right side . . .
—Bobby C., retired Chicago pit trader

Before we begin discussing time compression directly, it is important to take a moment and discuss how the conclusion-making process is influenced by the unique environment of the zero-sum market. All conclusions any trader comes to for any reason are related to how the individual trader sees a potential profit opportunity and what happens to that trader when he or she must exit the market. In order for a trader to realize either a cash gain or a cash loss, he or she must enter and then leave the market. During the time a trader has an active position in the market, he or she is at risk for either a gain or a loss to happen, but the trader does not really know which will result until he or she actually has completed the trade. During the time when a trader has an active position, he or she is using a slightly different method of reaching conclusions due to the underlying nature of how humans think. Your psychology of when and how you get into and then out of the market is where the final result of time compression is seen.

There are two slightly different psychologies at work for the trader and they are two halves of the same whole. Getting into and then out of the market requires a flow of information to the trader; then the trader performs processing for those orders to enter the market: the get-me-in order and the get-me-out order. As both of these

orders need time to pass before they can be placed, time compression results from the "how and when" those orders are placed.

THE BASIC TRADER CONFLICT

Every trader processes information according to personal preferences. That is why traders can look at the exact same information and reach different conclusions: some conclude the market has potential to rise in price and others conclude there is potential to fall in price. The issue of how and what traders place value on to make this conclusion isn't really that important; only that they conclude "It is time to do something" and place the order. What happens at the moment of trade initiation?

At the moment traders place an entry order, there are things happening in their minds that work against them just then. First, they *must* believe that the time/price relationship is at the perfect moment for a profit—otherwise they wouldn't be in. No one does a trade expecting to lose; therefore, traders are expecting a profit right now. As we have discussed, the individual choice for traders to use whatever they value to come to that conclusion and how they measure "right now" isn't the issue. The central issue is that traders *have made that choice and an order went into the machine.*

Because a choice was made and traders are expecting a profit right now, they will immediately have a conflict no matter what happens next because only one thing can happen: The next price change will be either for the entry price or against it. No matter what the next price change is, traders *must* make a choice at where they intend to exit the market. It is important to note that it doesn't matter if traders already made that choice before they got into the market by placing a stop-loss order or a profit-limit order; the fact is, they have to make another choice. Both choices work together to effect a change in a particular trader's account balance.

The psychology of "It's the perfect time to do something" and "I will make money right now" set traders up for a conflict that must be resolved. That conflict will be resolved after the market moves in price—even if exit orders are working. A price change against the entry price results in a loss, which the traders are not expecting. Therefore, the conflict is *increasing* in intensity. A loss was not expected; therefore, it wasn't the perfect time to make the trade, and traders

won't make money right now. At this point, the urge to exit the market grows in some traders, as does the actual dollar loss. As the loss continues to grow, traders continue to experience more conflict until they decide they have had enough, and they liquidate the trade. It doesn't matter if that means a stop-loss order is executed or if it is a market order to liquidate—*there is a point in all traders' minds where they must exit the market to resolve the conflict.*

In the case of a price move in favor of the entry, the exact same conflict develops. As the price continues to move in favor of the trade, the conflict is *increasing* as the open trade profit grows. As the market price moves to a point where traders *must* resolve the conflict in their minds, they will exit the market with a profit. Again, it doesn't matter if that exit order was a market or a profit limit order—*there is a point in all traders' minds where they must exit the market to resolve the conflict.*

At the moment of entry into the market, regardless of the actual outcome of the trade, traders are beginning a conflict/resolution cycle in their minds that operates completely independently of the underlying structure of the market or the order flow. This conflict/resolution cycle happens only in individual traders' minds, nowhere else. In fact, not only can no one else experience that exact same cycle except an individual trader, the market can't help to resolve the conflict any other way except as the trader *wants* it to be resolved. All the market is going to do is process those two orders when they are placed. Only the trader can tell the market at what two prices those two orders will be and at what *time* they will be placed. Therefore, individual traders control what happens to their account balances, not the market. Most traders operate without understanding this cycle. That is why they often conclude that they are at the mercy of the market price action when in reality they control every point of the cycle.

Once traders enter the market, they create a conflict that only they can resolve. All of the things that happen after the entry are happening only in the mind of the traders until they exit the market. The traders make the decision how much time is needed to resolve the conflict and how much price movement needs to happen to do so, or a combination of both. It is when traders have *no choice* in the resolution of the conflict that we get time compression, and that is where the most significant changes in order flow happen. When I say "no choice," I mean that traders *feel* they have no choice. I go into detail on this in Chapter 8.

The important thing to remember about this conflict/resolution cycle is that it happens only in the mind of traders and nowhere else. The market is completely independent of this cycle. It is each trader's own conclusion-making process that determines what the price change *means* for his or her account value. The market never sees what the price changes do to the particular account that completes the cycle of getting into and then out of the market. Only individual traders see that. Therefore, how traders (as a group) are resolving this self-created conflict cycle becomes the order flow.

Once you recognize that the entire market process—all the orders coming in from either side all the time—is only a conflict/resolution cycle perpetrated in the mind of every individual placing those orders, you now can begin to understand what time compression is and what it means for you. Once traders enter the market, they *must* exit sooner or later. Traders do that once their internal conflict reaches the level that it *needs* to be for each one individually. Should the conflict resolution reach beyond a trader's control, he or she will experience a sense of panic in the case of a loss or euphoria in the case of a windfall gain. Because the conflict began and ends with the trader, any threat to control of this process results in a threat to the conclusion-making process, even if a trader is unconscious of his or her control. Therefore, price action becomes a threat to the *individual trader*, not to the group or the market. The market will be there after a trader resolves his or her conflict and/or eliminates the perceived threat. Other traders will be there too.

But because the entire market is made up of individuals who are all creating and resolving this conflict inside their own minds, *all* price action is a threat to *someone at all points in time*. The underlying psychology of the market structure is conflict resolution. In most cases, the way to resolve this conflict is to avoid pain or eliminate a perceived threat to the individual.

The methods of resolving this individual conflict are varied. We as traders see and hear them every day while we participate. Here is a short list of how some traders manage and resolve this conflict:

"I don't use stops—I have a mental stop."
"Once I'm in, I wait three bars; if I have a profit, I take it."
"Don't let a winner turn into a loser; place a breakeven stop!"
"You don't go broke taking a profit."
"If I have three losers in a row, I quit for the day."

"I look for about $200 a day in profits; I quit for the day after that."
"I got stopped out—the bastards took my money today."
"That jerk [so and so] just said [XX]; I was up before that. That's why I lost today."
"The charts say [XX]. I'm getting in at [YY] price."
"I'll be out by the close."
"WOW! We hit the stops and the market exploded! I don't want to miss it so I'm getting in."
"I can't believe I missed my price by one tic! Oh well, I'll try it again tomorrow."
"Oh no, now I'm really losing. I hope it comes back before a margin call."

This list could go on for pages, but I think you get my point. Regardless of how conscious or unconscious traders are of the role they play in this conflict/resolution cycle, they alone are creating and resolving it. It doesn't matter if traders blame a loss on the charts, the news, or anything else; they are resolving the conflict somehow. It doesn't matter if traders can't explain how a profit or loss happened or what caused the market price to go wherever it went; sooner or later, the profit or loss will get "big enough" for them to resolve the conflict. Traders resolve the conflict however they resolve it, and take their gain or loss. That is the order flow.

The sum total of all this activity in the minds of all participants results in the orders getting placed in the market at the time/price relationship that resolves the conflict and removes the threat to each individual. When orders all pile up at one particular time/price relationship, we have time compression, and a large change to the order flow is inevitable.

SUMMARY OF PART I

As we close Part I, let's sum up our starting point to understanding time compression.

Zero-sum markets function differently from other financial pursuits. The market is an order-processing machine that moves in price based on a never-ending order-flow imbalance. You are the market because you place orders, as does every other participant. Every trader is reaching a conclusion in more or less the same way even if they use

slightly different tools to make their conclusions. Most of the available analysis tools do not provide valuable input to understanding how order flow develops or how the market is actually structured. Once you choose to participate, you are creating an internal conflict that only you can resolve regardless of what the market does to your equity. As you and every other participant create the market, the prices will move based on how everyone resolves the conflict they create inside their own heads. You cannot win unless you are on the right side of the order flow, and the order flow is created by the need to resolve the *perceived conflict* created by prices as they move.

THE TRADER'S LIFE

Part of understanding how the order flow develops through the machine (the market) is understanding how you perceive and resolve conflict. In many cases, being on the right side of the order flow and holding an open trade profit is harder for some traders because they don't really have an exit strategy. Any price can be the perfect price to liquidate, but which one is it?

In my case, I found that the more time I allow for a trade to work, the easier it is to hold the winning position. Often I move my exit orders too quickly, putting me in a position to take a smaller profit too fast, but I'm okay with that as I know I will find another winner. Other traders may feel the conflict more acutely when they hold losing positions too long. For either conflict, the important thing for you to do is have a risk that is always consistent and a plan for exiting a winner.

All traders have this conflict. Part of what creates the order flow and time compression is how they choose to resolve the conflict. It is important to know that most traders put their exit orders inside the range for the time frames they are trading. For the most part, that means most of the exit orders (stop-loss orders) are within the range of the last day or so. I found that when I place my orders to liquidate (resolving the conflict) outside the range of the past day or two, it is a lot less likely that the market will fill those orders. As long as the trade is working, I try to keep my liquidation orders outside that range. Sometimes that means I give back a large portion of the open trade gains; sometimes that means I avoid getting whipsawed. But knowing that most traders can handle only so much conflict before they have to liquidate helps me decide the best place for me to liquidate and, in many cases, the best place to initiate.

Part of developing your own winning approach is thinking about where losing traders will have to liquidate their loss to resolve their conflict. Where is that point for you? Is it inside the range of recent price action? If so, that is a great clue that you need either to reduce your leverage and allow a larger swing in price or to stop waiting for confirmation. We talk about leverage and forced liquidation in Part II, but it is important to note that both issues are involved in the psychology of initiation and liquidation.

PART II

The Theory of Time Compression

Time compression is a factor of how people behave when stimulated a certain way. There is no certain way to know precisely what people are going to do until they do it, but one thing is certain: They will do something. Of course, all of this activity is based on perception, and perception is what makes markets move. When people believe there is an opportunity, they will do something; when they feel they are under threat, they will do something. All the various kinds of reactions people can have to what they feel is an important event for them all boil down to whether they feel under threat or feel there is an opportunity. There is no reason to do anything without one of these two motivating perceptions. Once those perceptions have been processed through our conclusion-making software, it results in an order being placed.

A lot of studies have been done on motivation and perception. Most studies continue to divide actions done by people into either a desire to gain pleasure or a need to avoid pain. No matter how you slice those two basic motivators, everything we as humans do falls into one of those two categories. Either we want to get something we

feel is positive for us or we want to avoid what we feel is negative for us. In the markets, this would naturally be defined as a profit or a loss.

When attempting to define a time-compressed market, it is critical that you always remember that someone somewhere is placing an order into the market with the intention of receiving pleasure (profit) or avoiding pain (loss). There are no other motivators than these two.

In this section, we are going to look at how time compression is created based on the perceptions held by the people participating in that particular market event. It doesn't matter if the event is market related or not; when groups of people are stimulated a certain way by events around them, they will behave in a predictable way: either to gain pleasure or to avoid pain. As this plays out in the markets is what we are interested in although time compression happens around us all the time in various forms.

CHAPTER 6

The Development of the Theory

You're just going to have to wait in line.
—The nice lady at the Department of Motor Vehicles

Time compression is what happens when everyone wants to do the same thing at about the same time for roughly the same reasons. Time compression is around us all the time. In fact, it is a natural process that is caused by the very basic fact that there is more than one person living on the earth today. You cannot get through your day without seeing some sort of time compression at work sooner or later.

For example—the lunch rush at a restaurant. At 11:00 A.M., the number of people trying to buy lunch suddenly jumps from three or four to maybe several hundred if the restaurant is big enough and well-known enough. In this case, the restaurant knows this and plans the day accordingly for this eventual change in the number of patrons. The cooks arrive and start making the salads early, the servers start around 10:00, and the manager makes sure that someone has gotten a starting bankroll for the cash register. None of this is happening at 8:00 in the morning or at midnight the night before. The restaurant knows that it will make most of its money between 11:00 A.M. and 2:00 P.M.; it plans for the staff to start as this need arises, and not before; to control costs, it runs regular specials to move older products to reduce losses, and so on. The restaurant can't make a cost-control

model or a profit model if it takes its daily receipts and divides by the total number of hours it is open; it must plan for time compression in some fashion or risk not having enough staff, food, or change available when the opportunity to make money is there.

The restaurant has found a way to exploit time compression. It works fairly well to keep people employed, customers happy, and the bank account growing. What kind of restaurant owner would ignore this eventuality? Restaurant owners don't—it is the *very nature* of the restaurant business to be available when people want to eat. Sure, you can be available at all times, such as a 24-hour diner, but in that case, there will be *three* cases of time compression at work every day: the breakfast rush, the lunch rush, and the dinner rush. That's when people want to eat. The rest is incidental to running a restaurant.

Time compression takes many forms in all parts of our lives. If you want to be at your desk in the city by 8:30 A.M., just like everybody else, then you will likely get caught in rush-hour traffic if you commute from the suburbs. You could leave a little earlier and miss the traffic jam created by everyone else wanting to be at work by 8:30, but you don't; you know how much time rush-hour traffic takes from your day, and that is how you make it to work each day. So does everybody else.

The form of time compression that always amazes me is what happens on April 15 every year here in the United States. That is when every citizen must have his or her yearly income tax return filed with the Internal Revenue Service. Every year, attendance at sporting events goes down, movie theaters are half full, restaurants are empty, and dogs aren't walked between April 10 and April 15. Almost every single tax-paying citizen is at home trying to finish the tax return before the deadline. The post office is even open until midnight on the fifteenth with people outside taking returns from cars that drive by so that people won't pay a penalty for being late. What amazes me is how many people wait until the end even knowing that they have a refund due. Wouldn't you want that cash now? I have my income tax form filed with the IRS every year before the end of January. If I am getting a refund, I have it in three days instead of three months because no one at the IRS has anything to do but my return; no one else has filed yet.

There are examples of time compression at work all around us every day. The grocery store is packed between 5:00 P.M. and 7:00 P.M. as people on the way home from work stop to get a quart of milk;

there are long lines at the hot night spot around 10:00 P.M. Saturday night; the beach is packed at 2:00 P.M. on a sunny Sunday . . . The list goes on and on.

In fact, in order to keep society functioning and avoid the delays that time compression can impose on us, people go to great lengths to avoid it or profit from the lack of it. There are "early bird" specials at restaurants, midnight bowling leagues, and special markdowns at some department stores if you shop after 8:00 P.M., for example. People can get great deals on airfare or vacations if they are willing to travel Tuesday through Thursday instead of Saturday through Monday. Enterprising people can even get things completely free if they buy certain products at certain times just so vendors have cash coming in when no one else is buying. How many times have you heard someone say they won't do something because they want to avoid the crowds?

Time compression is a fact of life because sometimes things happen in such a way that very many people are motivated in the same direction to the point where there exists a conflict no one in the group wants but must endure, such as waiting in line at the DMV. If we could avoid it we would, but we can't, so we must endure it. Do you know how much money it costs me to get my driver's license renewed? If the DMV would only have a few hours open in the evenings or weekends, I would gladly wait in line, but it doesn't. Its 8:30 to 4:30, Monday through Friday; weekends and holidays excluded. If I want to drive legally, I have to take a workday off and stand in line. No way around it.

The important thing to remember is that time compression is part of our life, and that includes the markets. When time compression develops in the market, the experience is similar to other forms of time compression, except here we can profit from it instead of being annoyed by it. In fact, you can't avoid time compression happening in the markets. It happens all the time and is part of how the markets function. Of course, the key is learning how to see time compression happening and be ready to take advantage of it.

THE COMMON THREAD

Before we start discussing the market-specific form of time compression, I want to provide a few underlying details that seem common

with all forms of time compression. These are important in that they help us recognize ways in which time compression develops, how much time is needed for it to be expressed, and what clues to look for to confirm we are seeing time compression and not something else.

In order for time compression to develop, there needs to be four things:

1. A precipitating event
2. Stimulation of greed, fear, or hope
3. A timeline that requires something be done quickly
4. A sense of certainty by the individual

For example, suppose you open your newspaper and there is an advertisement from your local shoe store. It says that between 9:00 and 11:00 A.M. this Saturday, it is having a 2-for-1 sale that includes everything in the store. This is a classic form of time compression potential. First, there is the greed factor of getting more for your money than usual. Second, you must be there at a certain time to get the benefit; and last, you hope that the shoes you want will be among the store's current inventory. If you get there early, you have a better chance of getting two pairs of shoes you want in your size; if that is the case, you have already decided to buy. Of course, everyone reading that ad is thinking the same thing and reaching the same conclusion. The line at the shoe store starts forming early and is huge at 8:00 A.M. Once the doors are opened, there is a mad rush to find the shoes you want before someone else finds them. You might even tip the salesperson to ensure that your interests are respected first—thereby erasing the benefit a 2-for-1 sale actually provides you—but you get your shoes and saved at least something.

In this case, time compression was set up a few days before 9:00 A.M. on Saturday for all the reasons needed to create it. Time compression began to show up before 8:00 A.M. only because the conditions dictated a 9:00 A.M. start to the sale. By 11:00, it was all over, and the number of patrons at the shoe store was likely no larger than it would have been on any given Saturday. End result: A lot of shoes were sold in a short period of time to people who normally wouldn't have bought them. Or likely wouldn't have bought them on that particular Saturday at that particular time. If we look at parallels between time compression developing outside the shoe store and

inside the markets, we can find a lot of similarities. In the case of the markets, time compression develops much in the same way but with some different variables that make it unique.

First, there needs to be a precipitating event, like the ad in the newspaper for the shoe store. Usually this is an unexpected event. Suppose there is a headline news story that will be very important to a particular market. If we use the corn market again, let's say that the U.S. Congress has passed a bill that allows corn farmers to sell old corn still in the bins as animal feed to Asia. Let's say that China needs about 200 percent more corn in the next four months and will take all the corn we can sell if we can ship it in the next 90 days. The price of corn is $3.00 per bushel when this event passes in front of the corn market. For the most part, this development would be seen as a bullish development because a sharp increase in demand for a short period of time means that a lot of corn will go away quickly; high demand equals rising prices.

In this case, corn traders will have their greed stimulated because it is a good bet the price will rise, the time is short for the opportunity, the individual trader will likely have a sense of certainty about a potential profit but has to act fast. All traders out there are thinking the exact same thing if they have a bullish bias to begin with, and most likely there will be a rush to buy the market. Sellers probably wouldn't want to sell the market because they know that a higher price is coming and they want to sell into that higher price anyway. So now we have an order-flow imbalance heavily favored to the buy side, creating a tremendous surge higher in price. The market trades limit up quickly and stays there for three or four days. That means a lot of buyers are out there, and they all want to buy corn "before it's too late." Again, time is the issue, not price. The perception of potential price is what is motivating the buyers.

This is time compression driving price higher. Now, the interesting thing about this scenario is that it happens all the time in the markets. Only when the event is in the public eye quite dramatically do you get a sharper and more consistent rise—a front-page drought, for example. But in any case, the market is becoming time compressed, as everybody who has an urge to action is on the buy side of the order flow. What happens when all those potential buyers finally have had their order filled and there is no one left to buy corn? Well, that becomes the top in price. Now you get an equal and dramatic move lower, right back to where the market started from. In the final

analysis, the four-month average price for the corn in the bins is about the same before the time-compressed rise resulted in a time-compressed sell opportunity. China doesn't actually pay any significantly higher price for the corn it buys, just as you didn't really get a savings on your shoes.

The perception of the entire event happened inside the mind of the traders. When everyone wanted to buy corn at the same time, no one wanted to sell; the price rallied until it found sellers who, because the market is a zero-sum game, are the late buyers who believed they had a sure thing (sense of certainty). They now must exit the market and can't get out of a buy trade unless they use a sell order. The market then falls back to the non-time-compressed price area (where it started from) as those sell orders can't find buyers. The whole thing is over in a short time, and the net result is a transfer of wealth from the loser to the winner while corn itself remains at a fairly close average in price over time.

In most markets, time compression happens more subtly and usually creates solid highs and lows that can be exploited quite regularly. The purpose of the corn market illustration is to show you the basic concept and what is needed for time compression to develop. Again, those basics started with individuals' underlying belief structure. This belief structure often is based on fear, greed, or hope. There also must be a tangible benefit to an individual that is readily apparent to him or her—in other words, a sense of certainty about something.

IT ALL STARTS WITH THE INDIVIDUAL

As we look deeper into time compression and how it develops in the market, it is important to remember that the individual trader is where all this starts. You get a time-compressed market when the entire group of market traders all comes to a fairly similar conclusion. But there doesn't need to be a big move in price for this to happen. An individual needs a sense of certainty, and that sense of certainty needs to be shared by a large part of the entire group. Remember, because nothing happens until an order is placed, we begin to understand time compression by observing and deducing the order flow.

THE TRADER'S LIFE

Time compression is a natural thing that happens in the markets all the time. As a trader looking to exploit a potential change to the order flow, you want to know what the clues are to look for. As stated, the four basics to market structure are clear, but what do they look like when you actually are attempting to analyze a market?

I've discovered that a few basic things seem to happen all the time when a market is becoming time compressed. We discuss them as we move through the next few chapters, but here I'll mention the sort of time compression that, in my view, is one of the best and easiest to exploit. If the market is rising, the public seems to want to be involved. When there is information or marketing being done in public areas, that usually signals that a bull market is going to find a top soon. For example, when a rising market is near a time-compressed top, you will see a lot of newspaper headlines suggesting a never-ending up market, and you will hear radio/TV advertisements suggesting how simple it is to profit from this rising market and how little actual cash is needed to participate.

J. P. Morgan tells the story of how he would get his shoes shined every Wednesday at the same shop around the corner from his office. One day the shoe shine attendant asked him if he and his friends could buy some stock through Morgan's brokerage. The three friends had about $40—a lot of money in 1929. Morgan politely refused, hurried back to his office, and ordered that his company was not to have a single share of stock on its books by the end of the day. Morgan simply asked, "If the shoe shine boys are buying stocks, who else is left?" Of course, the 1929 stock market crash was only a few days away, and Morgan looked like a genius. He was not a genius; he noted that the order flow was likely running out on the buy side. It wasn't his army of analysts that showed him that. It was a public investor.

Time compression is not a difficult concept to grasp, and it's not a difficult thing to exploit. You merely need to look for the clues. As we get further into this part, we discuss a lot of those clues. Remember, though, that a great clue for a time-compressed market is a public fascination with it, and that fascination is usually from the long side.

CHAPTER 7

Time Compression and Technical Analysis

Time is money.

—Old business adage

All traders attempt to analyze the markets they trade. There are almost an unlimited number of ways to do this. The point of all analysis is somehow to find a price level that is too high or too low relative to some other perceived price that is coming next over a certain period of time. The favored method of finding this price point that is too high or low is the commonly accepted methods of technical analysis.

The problem with technical analysis (TA) is that it attempts to predict price changes based on some hypothesis that combines other previous prices into a formula that gives traders a price to place themselves at risk—but the analysis can't tell you *who put the prices where they are now.* Where prices are *now* (when the analysis says it is time to buy or sell) was determined by what the participants believed enough in the first place to place themselves at risk. In other words, enough "someones" decided to do something, and that created an order-flow imbalance that moved prices to where they are *now.* The particular price that the market is at *now* was determined by the actions of people who did something. TA can't tell you what those participants will do *next.* Because we know that the market can't move in price in either direction unless there is an order-flow imbalance, TA cannot tell us what is likely to happen *next* except

by accident. This is why TA is never more than about 52 percent accurate, no matter how you use it. TA cannot predict the actions of people—and people move the market when they execute (when they make order flow).

As I mentioned in Chapter 4, the best use of TA is not to find a trade for yourself but to use it to uncover how the other participants are thinking. It is this thinking you want to uncover as best you can because when the largest number of participants decides it is time to do something, order flow will change; and that is what creates the price change you are attempting to exploit. If you are on the wrong side of this order-flow change, you lose. Nothing can be done at that point except you must cash out and accept the loss. If you want to be the winner (which someone will become), you must get on the right side of that order-flow change. TA cannot help you do this unless you understand it in context—which is always how the loser is using it.

Let's start with a few basics.

PRICE CHANGES STIMULATE URGE TO ACTION

Traders often want to enter a market (from either side) once the market has made a "significant move." For the sake of illustration, let's assume the market has made a down move in price and has made that move quickly and in a wide range. What I mean by that is the market has dropped a long way in a short amount of time. When we discuss multiple time frames, I will define "a long way" and "short amount of time." For now, I want you to think about how you personally perceive a "long way" and "short amount of time." Your perception of these terms is what stimulates your sense of opportunity. Think about it this way: If something happens that was "unexpected," how do people you are competing with see that from their point of view? How do you see that unexpected event for your trading?

Once the market has made this drop in price, we know that there *must* have been an order-flow imbalance to the sell side; otherwise, the market couldn't have dropped in price. We want to know who the group of traders were that entered those sell orders, and we want to know why the buyers were not there. TA cannot tell us that information. TA can only tell us that the price drop happened and what it means (from that particular TA assumption). As winning traders,

our goal is to uncover who lost money and who made money on that price decline, nothing more.

Once the price decline has happened, there can be only two results:

1. The shorts from somewhere above the market have a gain. The larger this gain becomes, the greater the conflict becomes to find a liquidation point (use a buy order to cash out a profit).
2. The longs from somewhere above the market have a loss. The larger the loss, the greater the conflict becomes to find a liquidation point (use a sell order to cash out the loss).

In both cases, the only thing that is certain is that the shorts are making money and the longs are losing money. When the conflict reaches a climax, someone decides to do something and the order flow changes again.

From a standpoint of underlying market structure, the move has created an urge to action, and at this point people decide to do something. They may not decide to do something immediately, but they have decided to do *something*. This is when the order flow changes. If we stop to consider that a potential buyer now sees an opportunity to "buy low," we have TA and time compression working together. If at this moment, the shorts from above the market decide it is time to press their advantage and add to a winner, the order flow changes. When this happens, the TA cannot predict a bottom nor can it account for the change in the order flow. This is when time compression becomes significant: At this moment, *both sides are squaring off at a new price point.*

Suppose this price point is a place where the market has broken out to the downside, and TA says it is time to sell. But the price doesn't decline. That can mean only that buyers are willing to execute at that low price, and their orders are enough to match the incoming sell orders. Therefore, only one side can win moving forward because at that exact moment, sellers were willing and so were buyers. When the price stops, that means order-flow balances; that means enough orders are present from both sides. But that also means enough of the participants will at some point suffer the growing conflict to liquidate, no matter if they win or lose. If at this moment the market has begun to recover in price, then we know the shorts are losing, which

means the order flow at that low price is attracting more buyers than sellers. It doesn't matter if that is shorts from above the market liquidating, new longs coming in, or old longs adding to a loser—at that moment, the buy orders on that drop in price are overwhelming the sell orders, and the market is rising. Some TA will now say that the market has suffered a false breakout and recommend that those who were short liquidate; those orders now add to the change in the order flow from offer to bid, increasing the price recovery.

What would you have done if you could see this order-flow imbalance developing as I described it on a price drop? Obviously, you would have bought that drop in price. You would be long from a new low price point. Your risk was the lowest it could have been, and your profit potential would have been the highest possible. Every time you see a low price point followed by a higher price point, *someone* bought that low price point. Otherwise the price couldn't have printed there. At that low price point, a buy order and a sell order were executed against each other. It doesn't matter if the buyer was covering a short from above the market or if the order was a brand-new long position—someone was on the right side of the order flow at the absolute best price to buy (relative to where the market went next). Also, someone sold it into the hole (i.e., their sell order was executed at the lowest possible level). It doesn't matter if that was a long from above the market liquidating a loss or a new short coming into the market; that was the absolute worst point for a sell order to be executed (relative to where the market went next).

As this scenario plays out, we have the problem of TA and time compression working together. TA would not have suggested a buy at that point except by accident; time compression, however, would have been screaming, "It is time to buy." Time compression attempts to understand where the order-flow imbalance is developing, whereas TA attempts to analyze price to predict another price. In the long run, TA will not help you find the turns in the market as effectively as an understanding of time compression will. Your goal as a winning trader is not to analyze price in order to predict another price but rather to gain an understanding of what the participants will be willing to do *as price moves*. Every time the price moves to a new significant area (a price level that attracts a lot of activity) it will change the perception of all the participants to some degree. If this change in price is enough to cause an urge to action, sooner or later the participants will enter an order, creating the order-flow imbalance you are

trying to profit from. Analyzing price won't tell you where this eventuality will occur except by accident. Understanding time compression will tell you when it is *likely* to occur—whatever price that it happens from may be. Or about what time it is likely to occur.

URGE TO ACTION CREATES ORDER FLOW

The benefit of using TA as a guide to understanding time compression is because the majority of traders *trust it* and *expect it* to find a price that is too high or too low relative to the next level of prices they *expect* to see. When the *next* level of price is reached, they must resolve the conflict they are experiencing individually. At that moment, however, it happens to be the *same conflict* the majority of traders active in the market are experiencing—an open trade loss. The losers all enter their liquidating orders *together* at roughly the same time, creating an order-flow imbalance in the *opposite direction* to what they perceived from their analysis. This is how an overbought market can continue to climb higher in price until it explodes to the upside, creating an absolute panic from the losing side (the early shorts). Then the market reverses back to a level that would have made winners out of many of those losing shorts. Of course, the longs who "bought the breakout" have the same problem: a losing position. In the end, both the buyers and the sellers have a net loss based on their understanding of what the TA said they should do. For every bullish TA, there will be a bearish one. But the change in price was determined solely by how the orders came into the machine. Because the majority of traders trust TA (whether bullish or bearish), they are all operating and executing in such a way that they create the order flow that works against them.

Most of this problem comes from one basic part of the trader psyche: the need to "find certainty" before making a trade. Most losing traders operate with a high degree of fear that they will lose. Because they won't make a trade unless they feel very secure and confident in their analysis, they often wait for confirmation before doing any trade. If they are bullish, for example, they will be very attracted to a low price level but won't buy at the low price until the market has begun moving higher in price. When the risk is the lowest and the profit potential the greatest, they do nothing.

The losers analyze their charts and debate endlessly about which price level is the low that will confirm the market now has an upside bias. They use all sorts of TA to reach these conclusions, but the fact is, when the order flow changed from offer to bid, they did nothing. As the market climbs in price, they are certain that the analysis is now correct, and they will buy the next pullback. However, they must use the charts to analyze when this pullback will occur; otherwise, they wouldn't have trusted TA in the first place to "confirm" the bottom was in. As the market continues to climb in price with only modest pullbacks, the pullback is never enough to justify buying, so they wait longer. At some point the conflict between "the low is in" and "I don't want to miss it" reaches a climax, and they buy. Usually at this point the market pulls back enough to scare them out, and they liquidate their losing long position. As the market advances again, they are left with the quandary of being right but losing money because of it. If the market reaches a new high after they have liquidated their losing position, they suffer greater anxiety and go back to analyzing the charts to see where the next buy point is. Losing traders repeat this scenario over and over again.

Time compression using multiple time frames will show you directly how this process is playing out day to day in the market and will provide you a place either to sell against that losing long or to join the party once the trader has liquidated the losing position. TA won't show the price at which a change in the order flow is going to occur, but it will show you how to see time compression developing enough to suspect at what *time* it will happen. As we have discussed, it doesn't matter what price the market is at when a change in the order flow develops; it matters only that you are on the right side of it.

To gain a deeper understanding of time compression and how TA helps to disclose it, in the next chapter I discuss the issue of forced liquidation. Before we move on, though, I want you to hold in your mind the idea that TA is used by the majority of losing traders as being very important. *Losing traders want to analyze the market. Winning traders want to exploit the losers.* There is no way to profit in a zero-sum market unless you are on the right side of the order flow. Time compression is how you find the loser, and *knowing how losing traders liquidate their losers* is the central part of understanding time compression.

THE TRADER'S LIFE

When I was a younger trader, I never saw this relationship completely. It was only after I had my massive loss from the 1991 crude oil market that I began to understand what the relationship between winning and losing traders really looked like. If you were to study the crude oil market from the time leading up to and then the start of the first Persian Gulf War, you would discover some intriguing things about that market.

The most intriguing thing for me was the commitments of traders' reports. In that information the Commodity Futures Trading Commission disclosed that the holders of long positions were mostly public traders up until the end of 1990 and just ahead of the January deadline for Saddam Hussein to withdraw from Kuwait. The large traders (the professionals) were liquidating longs and actually holding a modest short position. The market crashed in January of 1991 and took more than a decade to reach those price levels again. In other words, it was a time-compressed topping market.

All the technical studies for that market, all the commentary leading up to the crash, the market news and advertising was all incredibly bullish. Most of the chartists and analysts were expecting that when the bombing of Baghdad started in mid-January 1991, crude oil would advance to maybe $100 per barrel. You could not find a crude oil bear anywhere. The point is only that the losers were the late buyers, most likely public investors. The real professionals in that market were letting them in by selling to them.

After this defeat, I never looked at the markets the same way again. I see the markets as a never-ending conflict between the net winner and the net loser. I know the loser is using some form of analysis to get positioned, and the winner is saying, "That's okay—have all you want."

I think part of understanding time compression is learning to see how the net winner outthinks the net loser. The net winner wants to let the net loser in when the net loser says, "I can't wait any longer—get me in."

CHAPTER 8

Forced Liquidation and Order Flow

The scars of others should teach us caution.
—Saint Jerome

Nobody wants to lose. But you can't profit in a zero-sum market unless someone loses. All the various methods of analysis and the unlimited number of ways you can participate are at the bedrock bottom of this issue. Nobody wants to lose. As traders, we surround ourselves, and make huge financial investments, with people/tools/opinion to reduce this potential for loss. Despite all of this activity, though, somebody somewhere is going to lose, and that will never change. Who is that loser?

If you want to make a million, great—go find the people who are going to have to lose that million for you, and you will do well. If not, someone else will get your money, adding to his or her millions. And that's that. Maybe you can all get on each other's Christmas card list.

I'm not trying to be funny; I'm telling it like it is. If you trade, and you can't do it well, the losses are yours, and you will pay them to the winning trader. If you spend huge amounts of time and money learning how to analyze the markets and you can't do it, you lose. If you hire the best minds to teach you how to trade and you can't do it,

you lose. If you are on the wrong side of the order flow, you lose. The whole point of all this education and study is to understand this and not be the loser.

So why do people take this risk?

THE REASON BEHIND RISK TAKING

People take risks because they think they will win, plain and simple. It doesn't matter *why* they think they will win; it only matters that they *think* they will win. Traders of every degree of sophistication, resources, talent, skills, ability, and inner beauty all place themselves at risk because they really believe they will win. None of the traders I have ever spoken with believes that he or she will lose. They all believe they will win. Every one of us starts every day with the strongest and most secure belief that we will win. By the end of the day, a certain number of us go home with less money in our accounts than when we started. Personally, I don't care who that trader is, only that his or her money is mine and my account balance is higher. I'm sure 100 percent of traders out there feel the same way. They have a problem when they think they will win but don't.

This brings us to understanding forced liquidation. No matter how you want to look at trading or at how the markets function, there will be certain traders on the wrong side of the order flow. These traders will have losses. It is important to understand the nature of these losses. Some traders do not protect themselves. True, for the most part, traders understand the risk they are taking and will do certain things to reduce their risk, but there always will be some traders who don't protect themselves when they need to. Those traders are the ones who make time compression inevitable.

As we have discussed before, any open position in the market must be closed at some point. When a trader decides it is time to take a risk and opens an active trade, that trade eventually must be closed. Learning to see the market as a dance between opening and closing positions is part of understanding time compression, but the most significant part is the issue of forced liquidation to close a position. It is vital to understand that forced liquidation involves only losing positions. Winners have a lead before they have to do anything. This is why the issue of losing traders and how they liquidate when they have *no choice* is so critical to exploiting time compression.

When I use the words "no choice," I mean a trader is thinking: "I have to do something *now*." In the process of placing a new trade, most traders will have a point of conflict where they *must* exit a losing trade. Sometimes this is a stop-loss order; other times it is a place where the loss inside the mind of the trader is at a breaking point; in other words, the trader feels so much pain that he is forced to liquidate in order to reduce the pain he feels. It is also important to understand that a "loss" might mean "less profit" at that point. No matter how it is measured in the trader's mind, it has reached a critical point for that individual. For example, a trade might move immediately against the trader to the point where it is not yet at the stop-loss order but the speed of the move signals to him or her that something is wrong; that trader might liquidate at that moment and call it a day. Other traders might feel a sense of loss after an open trade gain of $2,000 suddenly drops to $1,000, so they enter a liquidation order. The point to remember is that no matter what the price action is in the market, there will be a group of traders who feel they have *no choice* but to liquidate, regardless of the change to their equity. Those traders are forced to liquidate from their personal point of view.

The worst cases of forced liquidation are, of course, when traders enter a position with no stop-loss order or protection of any kind and the market moves against the position consistently enough that the trade goes on margin call or is forced out by the broker/clearing firm. In a case like that, the liquidation is truly a forced liquidation. When you account balance reaches zero, you are forced out completely. Thank you for playing; we have some lovely parting gifts for you.

In either case, whether traders feel a big enough sense of loss to liquidate or if the responsibility to liquidate is given to a third party, the absolute fact of the matter is that a certain group of participants have had *no choice* from their point of view. It is how these losing traders see the concept of having *no choice* that is significant.

Suppose you take your car in for regular service and leave it overnight. The next day you go to pick up your car expecting to pay for an oil change and you are presented with a bill for $400 that includes new brake pads, rotors, and a tune-up. Besides the first shock of the bill, you would naturally want to know why the extra work was done. The mechanic says something to the effect that "regular service" includes the brake job and the tune-up and he was only doing what you asked. When you explain that you only intended to have an oil change, he presents you with a contract that you signed clearly

stating that the 40,000-mile "regular service" will include these other items. No matter how you want to argue it, you are liable for the extra work, and you won't get your car back until you pay the bill. Yes, you can dispute the bill and go to all the hassle, but until the bill is paid, you don't get your car. You can fume all you want, but the fact is you have to pony up the cash right now or you aren't going to work today.

That is forced liquidation. It doesn't matter that you didn't intend to have a big loss; you have it. You can either stop the bleeding or lose it all. In the case of the car, it doesn't matter that you would have had the work done anyway at another time; you owe it now. In the markets, forced liquidation happens when the change in price affects traders to the point where they either really have no choice or they feel they have no choice.

At this point, a turn in the market usually occurs. This is because the issue of forced liquidation usually happens to losing traders when there has been a sharp unexpected move in the market against their position. Because losing traders are all using the same information (technical analysis) in roughly the same way, they all experience the same effect on their equity. In effect, the "unexpected" loss (or reversal against the position) is seen as a real cash debit by enough traders that they have *no choice* but to liquidate, providing a change in the order flow for the other side to exploit. This is where false breakouts, trend violations, and whipsaw come from. These are examples of how some form of no-choice order flow is created. Losing traders liquidate quickly to avoid a bigger pain level from their point of view. Their urge to action is stimulated to a very high conflict level. These traders see only one way out of the conflict: "Get me out!" They execute immediately.

THE BREAKING POINT

I want to start drawing together a few other points to help you gain a better understanding of forced liquidation. If you look closely at the issue, you will see that the precipitating event was really not price; it was *too little time.* The fact that the price move against the open position happened *so fast* changed the traders' perception and conclusion-making process. How many times have you carefully and completely analyzed the market and waited patiently for the price to

reach what you believed was the perfect time/price point to get into the market with a new trade? The instant after you placed the trade, the market reverses and in seconds has reached a level where you are holding a large loss. It happened so fast you barely could draw a breath. That is forced liquidation: something happening so fast you have *no choice*. The conflict reached a high level very quickly, and now you are considering liquidating that loss before it gets to your stop-loss order. The breaking point was stimulated not by price but by *too little time*. When this happens and the trade is a winner, most traders act just as quickly to book the gains; their thinking is something like, "I never expected that—I thought it would take a week to get that far."

All traders have this breaking point inside of them when they trade. What concerns us is how that breaking point becomes part of the order flow. If enough traders participating in a market experience this breaking point, you will see a very large move in one direction very quickly, as the losing traders respond to the conflict they are experiencing. Remember, this conflict is in the minds of the traders, not in the market. The market is just processing a lot of "Get me out!" orders at that moment. Once that moment has passed, the market will attract order flow from other traders, resulting in a price reversal once the order-flow imbalance is corrected. This is why sharp breaks are answered with a sharp rise and often the price returns to a level very close to where the event started from. The forced liquidation was in the minds of the losing traders. They resolved the conflict just as quickly as the price moved, creating a temporary and severe order-flow imbalance. Once those orders were filled, whatever was the result to those accounts, the price is at a point where it will become unbalanced quickly again as new traders decide the price represents a new opportunity.

Forced liquidation is a state of mind that losing traders feel very strongly. When they act on the conclusion that says "Get me out!" they create a large temporary order-flow imbalance. This is often the best place to go long or short; the move that happens *too fast* in the minds of losing traders is based on their *sense of time* and their analysis, which *uses time* to reach a conclusion. Forced liquidation is experienced by traders whose analysis cannot explain a price change and that price change happens "too fast." To resolve the conflict and maintain control, these traders run for the exits all at once. That is the basics of understanding time compression: the need to resolve a

conflict quickly because the market isn't making sense to people on their particular level of observation.

When we discuss multiple time frames, it will become clear how this forced liquidation works through the market price action creating a large order-flow imbalance for a period of time. The important thing to hold in your mind is that forced liquidation is experienced by the losing side, not the winners. Winners in the market have a lead on the market and sense a lot less conflict when there is a sharp move in the opposite direction of their trades. The significant issue is how individual traders perceive the amount of time involved. There is a point in every trader's mind where the perception of time moves from normal to too fast as it relates to price change in the market. A price change that happens too fast is different for traders operating under different time frames. But the overriding principle regarding forced liquidation is that something is happening in the market that the individual trader cannot process quickly enough as it happens. This stimulates the urge to action differently because the change is occurring over a period of *too little time.*

The most common response to a threat is to run. If losing traders perceive that something is happening so fast they cannot understand it, they will liquidate quickly to protect themselves. When this happens to enough losing traders at roughly the same time, their liquidation orders will create a large move in price as they temporarily create a large order-flow imbalance from one side. That price change will mean something to a different group of traders and often will create roughly an equal move in the opposite direction. Forced liquidation by losing traders represents a strong opportunity for winning traders to get positioned. You are using a large temporary order-flow imbalance from one side to push the price to a level that will naturally be seen as opportunity by the dominant order flow in the market.

Forced liquidation happens not because the market moved against the position held by losers but because it happened "too fast" in the minds of the losing traders. When a market is time compressed, it is ready to make a fast move in the direction opposite of the most recent price action. This fast move indicates that a lot of traders are feeling a great sense of pain from their open-trade loss and they are all adding their liquidation orders into the machine at roughly the same time. This process happens fairly regularly in all time frames; when it happens across multiple time frames, the market experiences a severe case of time compression. When that time compression reaches

a critical point and the market reverses, the largest group of losing traders feels the need for a forced liquidation. That becomes the time-compressed order flow.

THE TRADER'S LIFE

One of the things that will help avoid forced liquidation is personal discipline. All traders have to define what they mean by this phrase, but the end result is preservation of capital. Because you can't play without cash, it is imperative to have some method of avoiding a situation where you experience a forced liquidation.

The simplest way is to define your risk on every trade as a percent of your starting capital. I personally use 1.5 percent. When I have decided to take a position, I measure that entry price against the exit area that is most likely out of range for the random nose in the market and multiply that distance in price as a dollar value. For example, if I think my liquidation exit in case of a loss would be a move equal to $250 per contract traded, then I calculate what 1.5 percent of my equity would be when divided by $250 per contract. If the potential loss as a percent of equity would be, say, $1,000 of my account balance, then I would execute my position with up to a maximum of four contracts.

The advantage is that I avoid overleveraging my account, and no matter what happens, I know that my risk of loss is a reasonable number for me. I don't have to panic out of the trade should a move happen quickly against me because I already know in advance what my risk on the trade is. Because I know what I will risk, the risk is reasonable for my account balance, and the stop-loss exit order is out of range. There is nothing to do but let enough time go by for the trade to either work or not. If I get a lead on the trade, I reduce my risk by moving my stop closer to the entry point until I can comfortably hold a break-even risk on the trade.

For most people, this sounds very basic and goes without question. But there are a huge number of traders out there who do not take proactive steps to avoid a forced liquidation. Part of that reality is the big swings in price that eventually return to the starting point; I know those traders are there, and I try to use that volatility to get positioned in the first place. But even so, I always use a proactive method of controlling risk so that I personally won't be one of those panicky traders driving trades.

CHAPTER 9

How Leverage Increases the Potential for Forced Liquidation

Leverage can work for you or against you. In the event of an adverse price move against your position, significant losses can occur quickly. You may become liable for losses beyond your initial investment.

—Typical risk disclosure language on broker account forms

Leverage is the main reason why forced liquidation creates a time-compressed market. When you examine leverage as an investment tool, there are three things that you need to assume:

1. Almost all traders use leverage incorrectly when they trade. They typically use too much leverage and too short a time frame when they use it.
2. Leverage creates large gains or losses relative to the starting balance of the account. Those gains or losses are larger than most traders ever see in other nonleveraged investments in the same period of time, although many times the price distance itself is modest as a percentage measure.
3. In many cases, nonleveraged investments move farther as a percentage than leveraged investments. In other words, most leveraged markets don't really move that far in price, and often nonleveraged investments move more.

Let me illustrate by comparing a few markets together.

If we use our illustration in the corn market again and look over a relatively reasonable period of time, we see that the high and low price for corn during 2009 were $4.61/bu and $3.02/bu. For the same period of 2009, the high and low price for General Electric (GE; a Dow component) was $17.19/share and $5.72/share. The range in corn was $1.59/bu, a range equivalent to roughly 52.6 percent starting from the low price. In GE, the range was far greater: $11.47/share, equivalent to roughly 200 percent starting from the low price. If you bought GE perfectly off the low with $10,000 (without leverage), you would have made roughly 200 percent on your money. If you had used the same $10,000 and bought corn off the lows but leveraged ten 5,000/bu contracts, your gain would have been $79,500 at the highs ($10 \times 5{,}000/\text{bu} = 50{,}000/\text{bu} \times 1.59$). Corn made less of a price move (as measured by percent), but the use of leverage allowed the potential for a much larger gain. Consequently, should the market have gone against you, the leverage would have worked the other way, creating the potential for a huge loss.

In the case of GE, if you bought the stock and it dropped in value, you likely would not have lost all your investment due to the fact that GE would have to go to zero before that happened. In corn, the leverage would have created a larger loss faster; at some point, your loss could have been more than your starting balance, and you would have been liable for the greater amount. The price of corn itself didn't move that much; it was leverage that did the work. It is leverage that adds to the potential for a forced liquidation.

"RIGHT NOW" THINKING

This brings us to the problem of how traders use leverage and what it means to their sense of making money "right now." As we have seen, most traders expect to make money "right now" after they execute and place themselves at risk. They are using a certain amount of leverage to achieve this, and they really don't expect to have a loss. If the market goes against them, usually they are willing to risk a certain amount of money to find out if they have a profit potential. If most traders are trading too large for their account balances, we can begin to see how forced liquidation develops time compression when the losing trade happens "too fast." The losing trade has

an open trade loss that usually is larger than expected, and it appears that the trade is going to reach the stop-loss order very quickly (if there even is a stop-loss order). Should that happen, the loss will be even greater than the traders have now. The only way to prevent that from happening is to enter a liquidation order right when the traders feel that the conflict must be resolved. The leverage accelerated the emotional pressure traders were feeling. If the leverage had been smaller, the conflict would have been smaller as well. As a side note, equities traders often hold a trade against themselves a distance in price that could easily be a 20 percent loss on equity before concluding to liquidate. Often they wait months for that 20 percent loss to happen.

But when leverage is used, a 20 percent loss in equity can happen very quickly, even though the actual price change is quite small. It is this conflict between the leverage affecting equity faster that creates forced liquidation and contributes to time compression. This is also why leveraged investments regularly have price changes that return to their previous levels after running the stops and forcing the losers to the sidelines. The only orders to fill were the "Get me out!" liquidation ones, and those were needed because a large enough group of traders was leveraged too much for their account balances. Remember, you don't *have* to leverage when you trade. Forced liquidation and time compression occur because traders *choose* to leverage, and they regularly use too much leverage, not because of "excessive" price changes—most markets don't move that much in price. It only appears that way to most traders because their leverage is creating huge changes in their account value moment to moment.

When discussing leverage and how it creates the potential for time compression, it is important to remember that for the most part in zero-sum markets, *all contracts are leveraged; every trader is leveraging.* The central issue is *how much leverage relative to the account balance.* It is the amount of leverage relative to the account balance that creates the problem of small price moves resulting in unacceptable losses, triggering the "Get me out!" orders. Once small price moves happen *against* overleveraged accounts, somebody somewhere is forced to liquidate, and that will happen "right now"—in other words, in a short amount of time.

Let me give you an illustration. Let's look at two hypothetical accounts trading in the same market. One account is starting with a $20,000 balance and another is starting with $150,000. Both

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accounts are subject to exchange rules and initial margin requirements. Let's use the corn market again to keep things simple. Corn trades in 5,000/bu contract sizes at the Chicago Board of Trade and today's numbers require about $600 initial margin. The $20,000 account can potentially leverage 33 contracts ($20,000 ÷ $600 = 33). The $150,000 account can leverage 250 contracts ($150,000 ÷ $600 = 250). In the smaller account, leveraging 33 contracts would result in a position size of 165,000/bu. In the larger account, leveraging 250 contracts would result in a position size of 1,250,000/bu. Here's the interesting thing: If both accounts leverage at their respective maximums, both accounts will have a total loss of starting equity from the *same* amount of price action against their respective positions. In other words, a 12-cent move against either account will result in a total loss of roughly $20,000 on a 165,000/bu position and $150,000 on a 1,250,000/BU position. Conversely, a 12-cent move in favor of either account would double the equity on deposit.

Based on the 2009 range of corn, a 12-cent move in price, in either direction, represents about 7.5 percent of the yearly range and roughly 3.9 percent of the price at the low, and only 2.6 percent of the high price. In other words, a change in market value of only about 3 percent is enough to either wipe out either account or double either account balance. Would you expect to double your money on a stock trade if the price moved 3 percent? Would you expect to be wiped out?

Now let's look at a more reasonable approach to leverage, knowing what we know about price moves, percents, and margin.

Let's suppose the $20,000 account decides to risk 10 percent of equity in an attempt to profit. This is $2,000. This account decides to risk a price move of 30 cents to find out if the trade potential is viable. This means the account will risk $1,500 per contract; so the account will trade 1 contract. Suppose the $150,000 account is willing to risk 20 percent of the account equity in an attempt to profit, but this account will risk only 10 cents in price to find out. This means the account will risk $500 per contract; so the account will trade 60 contracts. In this case, the larger account is taking a poor risk as far as leverage is concerned because the price distance the market needs to move to realize a loss on the account is very low compared with the annual percent of range. In other words, the amount of risk per contract is low but the potential for a 10-cent move to happen is higher. The smaller account is suggesting that it will take the market a lot

farther to realize the risk. Therefore, the larger account will have a *faster* "Get me out!" time frame relative to the entire market. The smaller account has a better probability of seeing a gain because it has a *slower* "Get me out!" time frame. In other words, the smaller account can afford to wait; the larger account *must* make money "right now" or risk taking a faster loss, even though the percentage of the entire account at risk in either case is reasonable.

If the larger account were to take the same 30-cents-a-bushel risk, it would be in the same position as the smaller account as far as the amount of time it can afford to wait. But by overleveraging, account holders are in a position that they must be correct "right now," and thus have a higher probability of being incorrect. The size of the account doesn't matter—the size of the leverage matters. By using leverage incorrectly as far as percentage of price distance the market has to move to realize a loss before a gain, the vast majority of traders are taking losses only because the market doesn't have to move very far to begin with. Most traders get to forced liquidation faster only because the move in the market has to be very small to put them there due to the amount of leverage they are using. Too much leverage leads to faster forced liquidation.

And, of course, a small move only takes a small amount of time. This is how using multiple time frames can disclose time compression. The typical leverage used by losing traders combined with the price move forces those traders to the sidelines *faster*, creating an order-flow imbalance to the liquidation side, which is usually against the direction the market has been moving up to that point.

Before we move on to the general market-specific theory of time compression, I think it is important to review how the theory and the pieces are coming together. The markets are made of people making choices that they genuinely believe will benefit them (make money). These traders are relying on information and study that really isn't based on how the market is truly constructed (entry and exit orders as they are processed). Most traders are expecting to make money "right now." If they don't, they have a conflict level that they must resolve very quickly (forced liquidation). Because most traders are leveraging more than is reasonable for typical price action, they are likely to suffer forced liquidation very quickly (low time frames). Time compression is the result of a high number of traders all needing to liquidate sooner rather than later, creating a temporary order-flow imbalance.

THE TRADER'S LIFE

I think that leverage is probably the hardest thing for a trader to decide how to use. Most traders would agree that we need risk control, money management, and some sort of analysis. What we don't agree on is how much leverage to use. Some traders want to leverage up to the largest they possibly can in hopes that a small move their way will return a large gain. Of course, it takes only one swing the wrong way against their position to wipe them out.

I have found that leverage is best based on the amount of risk you want to take. In other words, err on the side of caution and trade smaller while running a wider stop. Take a $500 per contract risk instead of a $200 per contract risk and trade two-thirds less. When you do something along these lines, you most likely will need a lot more time for the market to move a distance that would show a healthy profit. You are putting the forced liquidation issue to the sidelines early in your trade, and likely you are trading with the force in the market rather than with the random noise.

Besides, overleveraging is what leads to forced liquidation anyway—why put yourself there? Just reduce your size and manage your greed a little better.

CHAPTER 10

How Traders Lose Perspective

I'm crazy, you're crazy; we're all crazy.
—The Cheshire Cat in *Alice's Adventures in Wonderland*

In the book *Alice's Adventures in Wonderland*, Lewis Carroll makes an interesting point on the question of perspective. In fact, the whole story is about having your point of view challenged. Poor Alice finds herself locked in a room with the only way out being a small door she can't fit through. She finds the key but is too big to get through. By eating a cookie she finds in the room, she suddenly increases in size and is terrified. Then she discovers a potion, drinks it, and the process is reversed; she shrinks to a size that will fit through the door—but she has left the key on the table and is now too small to reach it. Eventually the problem is resolved and we go on with the story, but the point is made. There are consequences no matter what you wish for or how you see things. Often your perspective and place in the equation are in conflict with what you want or need to accomplish; it may cause you to take actions that work against you.

The whole industry of professional illusionists exploits how we see things to create what appears to be magic by using the phenomenon of *misdirection*. The audience is carefully watching the illusionist perform a magic trick—and everyone is trying to figure out how it is done. The illusionist knows this and uses props or effects to draw the audience into watching one part of the trick while

performing something else the audience will not see to complete the illusion. The end result is that the audience experiences something from its point of view that appears to be magic but is easily explained if you know the "secret" to the trick. When you see how the illusionist *misdirected* your attention, you see how simple the illusion was. That is why it is called an illusion.

WHEN PERSPECTIVE MEETS MISDIRECTION

In the trading arena, a similar process is at work that often leads to consistent losses. It is a combination of your perspective and misdirection. In the case of trading, the effects are self-created and always self-defeating. How we choose to look at things and what we choose to focus on contribute to creating our losses. By failing to understand exactly how the game is played and by allowing ourselves to participate while under a self-created illusion, we place ourselves at risk with little chance for success.

A combination of several things causes traders to lose perspective on their trades. As a group, we want to make money "right now." How do we define "right now"? If you are thinking on a time horizon that is too small for the order flow to develop in a particular direction, you will start to experience something that will increase your urge to act. Perhaps you will liquidate the trade in frustration that it is taking "too long" for the trade to work only a few moments before the trade went your way in a big way. You were right about price direction but have no position on. In this case, it wasn't the market structure that denied you a profit; it was your perspective on how much time was needed for the trade to work.

Some traders will have a string of losses that bring them to a point of despair that they will never have a winner again. They will take a few days off only to return to the market and see a huge move in the direction that would have recovered their initial losses and given them a profit. In this case, they quit on their hypothesis not because the potential wasn't there but because they had losses that were unbearable for them; they had to remove themselves from the environment to get their heads straight. These traders have lost their perspective.

There are countless numbers of errors traders can make along similar lines. In all these cases, it is *not the market* that is preventing the traders from prospering but *how they choose to participate.* Often it is how traders define their time horizon for making money right now that prevents them from winning. Besides the point of view that something is taking too long, there is the compounding effect of not understanding exactly how the market is structured. Add to this poor choices made when experiencing losses, and you have a recipe for continued losses. Until traders choose to look at things in a different manner and choose to participate better, they have only a small chance of ever gaining wealth. Drive the final nail in the coffin by operating under the illusion that study and analysis is where the problem is and you have someone ready to blow up completely.

Traders lose perspective on their trades because they do not understand that the market is not prices moving but people behaving a certain way. They lose perspective because they choose to think in a narrow range that doesn't include a viewpoint other than their own. They lose perspective because they trust something other than themselves to find the trades for them.

To help put this in a frame of reference that is specific rather than conceptual, let me describe typical losing traders' world and performance. Then we will look at how winning traders see things and how they perform.

THE LOSING TRADERS' WORLD

To losing traders, each day starts with a review of the previous day's price action. They calculate and refine numbers according to a specific set of rules. Those numbers now become the entry or exit prices for the day's trading. When the market opens, the traders compare those numbers with previous numbers to either increase or decrease the credibility of today's numbers. The traders take some time to review "the news," which is considered either bullish or bearish for the day's numbers. Then they spend some time reviewing other price calculations to find a potential "overbought" or "oversold" area of price. Once the market reaches those prices, the traders allow some time to *confirm* that the high or low is in place, and then they do a trade. Once in the market, the traders spend a lot of time reviewing each

and every price change and calculating to determine if the market is projected to reach either a profit or a loss before a certain amount of time has passed. They closely monitor the news for additional clues that the trade will work or not work in the allotted time. During this process, the traders watch other markets for confirmation that the particular trade is "correlated." They liquidate the trade before the end of the day to reduce risk exposure regardless of gain or loss.

The traders now compare the end results to what they had expected and find there is a difference between what was made or lost and what *should* have been made. They decide to work harder the next day at refining the calculations used and producing a better result. They spend time reviewing what could have happened in hindsight and notice where it was all so obvious if only they had seen it earlier. The traders resolve to look for those clues again tomorrow.

HOW WINNERS DIFFER

Winning traders start their day by reviewing open positions and adjusting open trade stops. Once they make those choices, they place the orders immediately. The traders now review open interest and volume in their selected markets and compare that to previous action at current prices. If volume is higher or lower, or open interest is higher or lower, the traders have two points of reference. They consider a short position if the market reaches a certain price level and consider a long position the other way. The traders attempt to discern where the stops would be on either side of the market and compare those price areas with previous support or resistance that has already traded—not projected. They collect and review the news for clues to what will help both the bulls and the bears. Then the traders place their entry orders and stops for new positions.

At the end of the day, the traders review which trades are working and which have losses. They liquidate the losers and keep the winners overnight. They calculate new stops for open trades before waiting to see overnight action. Now the traders calculate their open trade winnings and closed losses and add that to their running total for the month and year. They decide to add to open trade winners if certain moves against their positions lack conviction, and they are not stopped out with a smaller profit.

PREDICTION VERSUS OBSERVATION

The difference is perspective and illusion. Let me illustrate.

The losing traders are attempting to predict *where the market will go*. They trust the concept of analysis completely and do not consider what they personally need to do in order to participate. They are comparing actual results to what they personally think *should* have been earned. They think that if their actual results were not what they believed they might have been, the fault is in how the analysis was done; they believe they missed something. They are getting out of every trade by the end of the day in the false assumption that this reduces risk.

The winning traders are attempting to participate *with what is happening*. They want to understand where the liquidation orders are because they know that a liquidation order is often the best place to enter the market. They are looking at how important certain prices are to participants rather than trying to predict what price will trade. They don't care what direction the market may go, and they are ready on either side. When they have a winner, they intend to hold it for as long as it takes to work. They liquidate losers quickly and hold winners. They are trying to keep as much out of a winner as they can. If they are not stopped out, they are trying to maximize the winner by putting more on as long as the trade is working. They keep records of what they personally do to participate rather than investing time in trying to figure out how they could have made more. They know the news will have information for both sides, and they are asking which is more likely to win. They are not relying on other markets for clues to what is happening in the market they are trading.

The losing traders have lost perspective on the market and are operating out of an illusion about what creates price action. They also are focused on results rather than on what they do to participate. They are looking for a sense of certainty. The winning traders are maintaining a sense of probabilities rather than certainties. They know exactly what creates price action and are watching for clues that the pricing will draw orders from actual people. They are focusing on what they do every day to maximize gains and minimize losses rather than trying to project winnings.

In short, the winners are operating *proactively* and the losers are operating *reactively*. The winners have a different perspective

of what the market is and how to profit. The losers are trying to make sense of it all. The winners don't care what will happen; the losers have to know what will happen. The winners' baseline for participation is *observation*; the losers' baseline for participation is *evaluation.*

Traders lose perspective on their trades when they operate from an evaluation point of view. When traders spend time attempting to predict where prices will go with a sense of certainty, they lose the opportunity to go the other way with confidence. They need to evaluate that direction, too. Half the opportunity each day is closed to them until they evaluate it. When traders focus on what is happening to the market rather than what is happening to them *in the market*, they lose the potential to profit by their actions because *the market and what it does* is their main priority. When traders' actions are dictated by what the market does before they can profit, they lose the ability to participate with full control. They have to react to what the market does, and they have to evaluate what it means. They cannot buy or sell at the best places to do that because they are relying on something other than themselves to make that choice. They are following rather than leading their account balances.

The whole point of understanding time compression and using multiple time frames is to move out of evaluation thinking into observational thinking; to open your perspective and reduce your illusion about how to win more often. In order to do that, you need to turn your focus away from *What does this mean?* to *What is happening?* In the final analysis, you can win only when you are on the right side of the order flow. Understanding how the order flow develops and when it is ready to change is a different process from predicting prices. It involves an understanding of what motivates people to do certain things, how they behave when under perceived threat, what they value when placing themselves at risk, and what will change their minds and force them to liquidate. It involves using leverage in a way that won't work against you and exploiting the largest group of participants: the losers.

SUMMARY OF PART II

Before we move into using multiple time frames, I would like to offer a summary of what we have learned so far. Trading zero-sum

markets is completely different from other financial pursuits. The game is played in such a way that consistent profit is impossible without getting positioned against another group of participants who are preparing to lose. Because the markets cannot move in price without orders being placed (and filled), we need to concern ourselves with where those orders are coming from and who is placing them. If profit must come from a loss incurred somewhere else, we need to know with as much clarity as we can where our opponents are most likely to take those losses. We cannot have confidence to participate if we ignore the underlying structure of the market. We need to know who is playing and what they value. We cannot expect mathematical models to help us if they also ignore the underlying structure of the market. By understanding that most of our losses come from evaluating rather than observing, we can take a quantum leap forward in our placement of trades. We can begin to see that the market is not *a place* but *a process*. By understanding that an order-flow imbalance will always exist, we know that there must be clues that such an imbalance is developing. We look for those clues not by studying price but by discerning what people will do *with* the price.

This brings us to exploiting multiple time frames and the inevitable results of time compression.

THE TRADER'S LIFE

Every trader has the problem of losing perspective on his or her trades. I think the best way to avoid this problem is to always take time every day to review something about the market you personally haven't used or seen before. That might be a different time frame, a different type of analysis—it could be anything. You want to get in the habit of looking at the market from as many angles as you can to avoid being one-sided or myopic in your view.

The reason traders lose perspective is because they are so focused on their inner need for a cash gain that they soon forget that trading is much more than price action. They need to take a step back and look at things from a different perspective. For example, I routinely listen to what some analysts say about a particular market and ask myself, *How did they come to that conclusion?* I look at the data they are using and the argument they are making, and I don't pass judgment on it—I simply

observe it. I ask if it has merit from an unbiased point of view. I'm not looking for these analysts to tell me what side of the market to be on; I'm asking myself if I understand what these analysts are saying and whether there is something there I haven't seen before.

My goal with this exercise is not to figure out where prices will go but rather to discern if I can leverage the thinking process others use into my own in some fashion. There are unlimited ways of looking at the markets. The typical losing traders have narrowed their perspective on price potential to what fits neatly and securely into their existing paradigm, and most likely that is based on trying to answer the question *What does this mean and how do I profit?* Because losing traders are trying to evaluate the market rather than observe the market, most of the potential in the order flow is never going to be apparent to them.

My grandfather was an amazing man, and I wish I could have gotten to know him better. He passed away before I learned these lessons about myself and the markets so he never got to see that I became a better person as I learned how to profit from the markets. He used to say something that made no sense at all to me then but makes perfect sense to me now: "You won't find diamonds on the henhouse floor."

PART III

Exploiting Multiple Time Frames

Multiple time frames are really a study in how people see the world around them. Every person has had the experience of dealing with someone he or she thought was shortsighted. Every one of us knows someone who can't see past the nose on their face. The more a particular person grows in his understanding of the world around him, the more that person will see things differently from people who have not taken that journey with him. This is why conflict from two opposing points of view is inevitable. The more you learn about how things really are, the more you find yourself in conflict with people who don't see things that way. Some truly unenlightened people view this conflict as only two opinions, both of which are viable; therefore, each person can hold his opinion indefinitely. If that were true, there would be no wars—but that is a subject for another time.

The "longest" point of view is usually the one that will benefit the most people involved in a particular conflict. For example, in government, there are people who want to help the "disadvantaged." They work to get laws passed and get taxpayer-funded programs in place

to ease the suffering for these individuals. But people who have spent their entire lives dealing with the "disadvantaged" will tell you that a large portion of those people have bigger problems, such as mental illness or just plain laziness. The more informed people with greater experience will work to have potential new laws or programs reflect the deeper reality that they see. For the greater good of society, these more informed people see a better way to get the result that everyone is seeking. When these people make that effort, they find themselves in conflict with those who don't see the deeper reality.

In the markets, this exact dynamic is in play. The entire point of multiple time frames is that some people are acting without seeing or knowing the whole picture. Of course, because the markets are a zero-sum game, it doesn't really matter which participants are seeing the whole picture. The people who don't see the whole picture are at risk that what they don't see will be the reason that they incur a loss. The people who see the whole picture likely will be the ones who take the other traders' money.

Think of it this way: When you are listening to a piece of classical music, what are you hearing? You are hearing the entire sound of the musicians and what the composer wants you to hear. But suppose someone removed the bass line and the horns and only let you hear the strings. You would likely hear something completely different from what the composer wanted you to hear. In fact, without hearing all the instruments in harmony with what the composer wanted you to hear, you likely wouldn't recognize what you were hearing as music at all; you would hear noise.

That is the issue of multiple time frames. Each time frame is a part of the entire market; some time frames tell you more about the whole unfolding event and some tell you less. But you can't hear the entire sound of the market without considering that all time frames are important to the complete picture. Think of each time frame as part of the whole. Look for the time frames that are in control of the market and those who are involved in the random noise.

CHAPTER 11

Basics of Multiple Time Frames

There are only two kinds of people in the world. Those who divide people into two groups, and those who don't.

—Anonymous

How's that for a pithy statement? On the surface, it has a bit of humor to it, but when you look at it logically, it is absolutely accurate. There are only two groups of people: those who divide people into two groups and those who don't. It doesn't matter who the people are who hear that statement or what the general feeling might be for anyone reading that statement; people will either agree with the statement or not, and that effectively divides them into two groups. That makes the statement true from a logical and deductive point of view. There are only two groups, regardless of what people use to make their argument that defends their point of view. In the final analysis, there are only two groups: those who divide people into two groups and those who don't. Think it through and you will agree that the statement is true from any angle. This is the essence of logical thinking and why there are so many conflicts from opposing points of view. For all parties involved in a conflict, there is *always* a bedrock final reasoning process underneath the conflict. That will be true regardless of how any one person in the conflict chooses to look at it.

In the markets, this is an absolute: There are only two groups of people, winners and losers. It does not matter who those people are, what the size of their equity or trades might be, or their level of knowledge or study. At the end of the day, no matter who you are or where you choose to participate, you are in one group or the other. Period. End of story. No matter who you are or who the other market participants might be, at the end of your participation (and theirs), only one of you will be the winner and the other will be the loser. There is no way around that immutable fact.

In Chapter 10 we discussed how traders lose perspective on their trades. This is due almost exclusively to the point of view that revolves around *evaluation* versus *observation.* We know that in order to profit, we have to be on the right side of the order flow for the period of time we choose to be in the markets. If we are on the wrong side of the order flow, we lose. By focusing on anything other than where the order flow might be changing, we are less likely to be in the winning group. Therefore, our analysis needs to center on understanding the order flow and where it might change. As we have seen already, that is much more than analyzing prices or predicting where prices will go next. It is a factor of understanding who is creating the prices and what those prices mean to the other market participants. And, of course, it's knowing that sooner or later, both sides (the winners and the losers) must liquidate their positions to turn an open trade credit/debit into a cash credit/debit.

Now that we are going to start putting the pieces together using multiple time frames, we need to understand three components:

1. How market participants view prices
2. The time horizon of traders (in other words, how traders define the term "right now" for themselves)
3. The evolving conflict as it is due to be resolved

Always remember that no matter what happens in the market as far as prices are concerned, there is a particular time frame for results that every participant is choosing to focus on. That time frame becomes the underlying structure of the market, and this structure is what you must focus on in order to put yourself on the right side of the order flow more often.

INWARD OR OUTWARD BIAS

Before we get to the meat and potatoes of this point of view, I want to spend a minute on the issue of your personal point of view. Part of what I hope to communicate in this book is that your personal point of view is where your losses or your gains come from. The way you choose to see things is how your urge to action is stimulated. You need to know what that is for you *personally*. That means what you see for yourself will likely be different from what someone else sees for herself. This is how the same factual information (fundamentals, technicals, news, the current pricing in the markets, etc.) can be seen from a bullish or bearish point of view. The two opposing points of view will *always* be there in any market at any time. When we are discussing multiple time frames, we will see that the bullish and bearish points of view are constantly playing out every day across all parts of the market. It is imperative that you learn to think *outside* of your own point of view and learn to think from the market's point of view, regardless of whether you agree with it or not. Think of it this way: This is what the market says; this is what I do. What you personally think really doesn't mean anything.

Let's start with the premise that all traders come to the market looking for an opportunity. It doesn't matter if their bias is bullish or bearish—they are looking for a place to *buy low* and *sell high*. Would you agree? Now we have the issue of what stimulates the urge to action. Sooner or later, no matter who the traders are or how they come to the conclusion, an order will be placed. Now someone is at risk. For buyers, this price area is "too low"; for sellers, it is "too high." The rest of the trader community in that market comes to the table, and the price is going to go wherever it is going to go, creating an open trade gain for one side and an open trade loss for the other.

The issue of where those winners and losers are *in the market* is the issue of understanding multiple time frames. Time compression is when the vast majority of traders available for that market all want to get in or get out at roughly the same time, forcing the market to process all those orders *one at a time* (in real time), as the market participant enters the orders. Naturally, we want to position ourselves ahead of that eventuality on the side that will drive prices in one direction or the other. We cannot do that with a high degree of probability if we focus on *price* as opposed to *time*.

TIME WORKS AGAINST LEVERAGE AND URGE TO ACTION

Time is the key element here because it takes time for traders to answer all those questions they have rolling around in their heads:

- Is the price too high/low?
- How long should I wait for prices to move?
- What if such-and-such happens?
- What if the price moves against me?

Traders have to answer these questions in real time as the market is moving and they have to hold to their underlying time frame of reference. That time frame of reference is how traders define the term "right now."

If you add the issue of leverage to the equation, there is a greater conflict developing. A relatively small move in price can result is a larger percentage gain or loss against equity. The market doesn't have to do very much at all in order for most traders to have a serious amount of pressure on their accounts and on their thinking one way or the other. This pressure will increase the conflict created by participating in the market in the first place. If traders are still trapped inside the evaluation mind-set, they now must answer the question *What does this mean?* thereby driving their urge to act even faster.

This is why most traders who have a lead on the market always take profits too soon and those with a loss always wait to the bitter end to take it. It has nothing to do with the market/machine processing those orders. It has to do with the way traders have to answer all the questions in their heads while the market is moving; and that is in conflict with two things: their definition of the term "right now" and the urge to action to protect themselves. All of this is happening completely independently of the underlying fundamentals or the technical picture most traders draw for themselves. It is happening because the *time* involved is in conflict with traders' basic goal of making money right now. Losers are answering the questions *What does this mean and how do I profit?* by evaluating their account balances as they change. For losers, account balances always are dropping in value; therefore, the urge to action is more acute to liquidate a losing trade or take small gains because that is better than nothing.

Getting back to the issue that there are only two groups of traders in the market, we must make an observation that cannot be ignored. In order to win consistently, you must be focused on something that the losers are not seeing. Winners are looking at something losers are not seeing; it is for this reason that winners are on the right side of the order flow. What are winners looking at? In my view, winners are *watching* the losers. When losers make their move, winners are taking the other side of losers' trades as best they can. The important issue to have in mind is that this is not any one particular trader. It is the *net* effect of the order flow from every trader participating. The *net* winners are getting positioned *against* the net losers, and the winners are *watching* when the net losers are interested in participating. Think of it this way: The winners are attempting to exploit *when* the losers execute, no matter which side that is from.

For example, if the market is in a steady rise, it is certain that the longs are winning. The shorts are losing as the market rises in price. It doesn't matter if the longs in this case are one trader who controls 80 percent of the open interest from that side or thousands of little traders who all hold one-lot positions. As long as the buyers keep coming to the table, the shorts will continue to lose. Part of understanding order flow and market structure is understanding the *net* position that is working the order flow. You need to remember that it does not matter who the names are on the accounts that are winning or losing, only that the order flow is from one side or the other for that period of time. In this case, the winners are looking to buy dips and the losers are selling the breaks. When the market dips in price, the winners are buying with size that is larger than what the losers are selling, resulting is a new rise in price.

So why are the sellers making their moves? What are they looking at?

They are looking at something that is not an accurate accounting of the market structure. That fact brings us to the difference between what winners watch and what losers watch: Winners are watching the losers, not the price the losers make their moves at.

RANDOM NOISE AND ORDER FLOW

Let's look at the differences between net winners and net losers. Remember that the winners and the losers are not any one individual

account but rather a bias to see things a certain way. Because these two groups of traders see things differently, we need to know where the differences fall and what is most likely to be revealed about those differences when we study multiple time frames.

First let's start with the losers. In the chapter on technical analysis, I observed that all analysis is taught the same way to everybody. Because traders are under the assumption that analysis will lead to positive results, and they are being taught the same analysis the same way as every other trader who uses it, it is reasonable to assume that all traders using a certain form of analysis will do the same thing at the same area because they all believe they will profit. A very large group of traders will interpret certain things that happen in the market in the same way. Please refer to the example shown in Figure 11.1.

This is a typical loser analysis chart. Notice the time frame is a five-minute O-H-L-C candlestick chart. On top of the price chart there are two moving averages: the 7-bar and the 21-bar average. Underneath the chart are two "overbought/oversold" oscillators: the Relative Strength Indicator (RSI) and the MACD (moving average convergence/divergence). The theory behind this analysis is that the price will extend to some price area that is "oversold" or "overbought" (in other words, too high or too low). Additionally, the theory also includes the concept that the slow-moving average (7 bar) represents acceleration off the too high/too low area while the longer-moving average (21 bar) represents the developing trend. As long as the 7-bar MA remains above/below the 21-bar MA, the market is under trend, either higher or lower. The oscillators attempt to show where the market is turning in price or where the price has moved against trend for a possible entry. It is important to note that the 7-bar MA on a five-minute price chart represents 35 minutes of clock time; that is almost no time at all for the overall order flow to develop.

So far so good.

Except this is what all traders are taught from the moment they buy their first book on the markets or attend their first seminar. That means this basic moving-average-crossover-with-confirmation system is used by virtually all traders at some point in time. These traders are all losing, as any one of them can tell you. Therefore, the winners *must* be thinking something different; otherwise, the losers would not lose with such regularity. Please remember I'm not suggesting that every net losing trader is using a moving-average-crossover-with-confirmation system. I'm saying this is a typical net loser chart

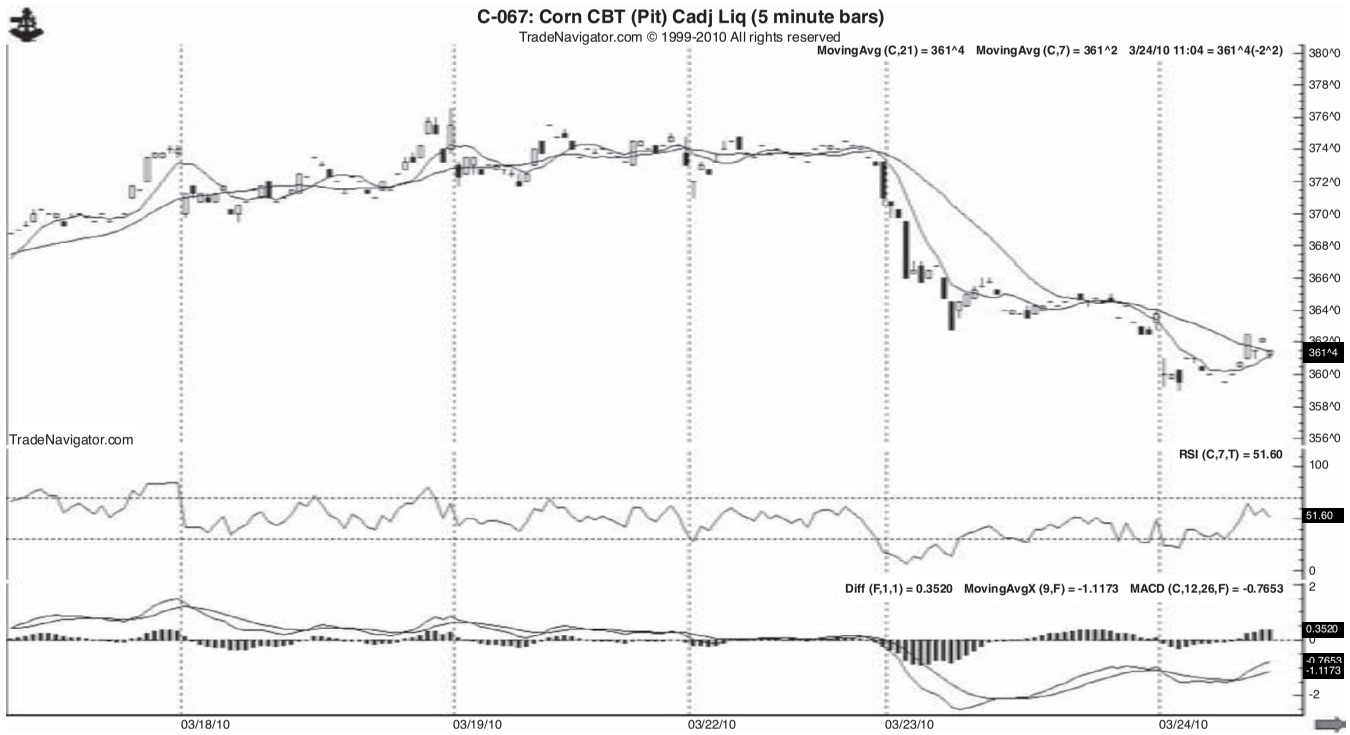


FIGURE 11.1 Typical Net-Losing Trader Chart Analysis

because it is using what the "experts" teach the net losers. The more seminars you attend or books/systems you buy based on technical analysis in some fashion, the more you will see some similarities. They are *all* on a lower time frame; they *all* have some form of "overbought" or "oversold" analysis. In this illustration, I am simply using one of the more common ones that most readers might recognize.

What are the winners thinking?

Please refer to the example shown in Figure 11.2. This is a typical winners' chart. Notice that the time frame is 60 minutes, not 5. The winners are using a 50-bar and a 100-bar moving average, not 7-bar or 21-bar MA. There are no "overbought" or "oversold" oscillators; volume is used. Also, note that there is a retracement study that has weekly reference points; the retracement studies used are much larger than the day in question. Additionally, the 50-bar MA represents over two days of price action; the 100-bar MA represents even more time. In other words, this chart doesn't reflect *random price action.* It reflects the probable order flow in a particular direction, and that takes *time* to develop.

What is the difference between these two opposing points of view?

The first answer is to define what "right now" means to the traders. In the case of losers using a 5-minute time frame, the time horizon is very short: perhaps 20 to 30 minutes (5 or 6 bars on the chart). In the case of winners, the time frame is at least 5 to 6 hours. Additionally, the winners are looking for clues that define *who* is trading (volume, not what the price is).

If we stop there, we have the basics to understanding multiple time frames and the issue of time compression. Here is what you need to know: Winners are working on a longer time frame than their opponents. Winners are willing to wait longer for a trade to work. Winners are looking to see how important a particular price area is to the market (volume); they are not looking to see if a price change will happen "right now" in the same way that losing traders define "right now." Winners know the price will move eventually. They know that if a price area of the market is not important, it represents an opportunity *because* it is important to some other group of traders who are not thinking past the next 30 minutes. Losers are on a shorter time frame than winners. Winners know this and attempt to buy/sell the market when losers are seeing an opposite position from their points of view.

Let me show you a clear example in Figure 11.3. Here is a market that has made a big move on the hourly time frame. Notice

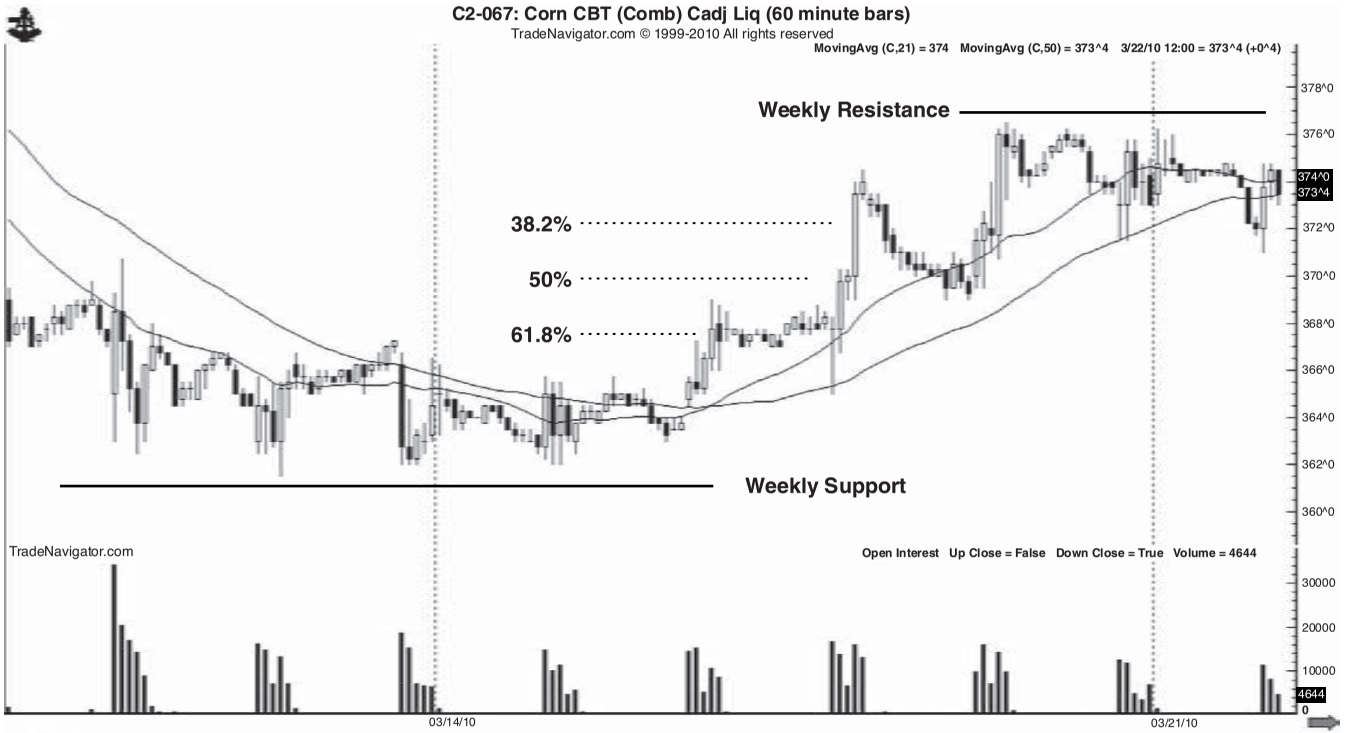


FIGURE 11.2 Typical Net-Winning Trader Chart Analysis

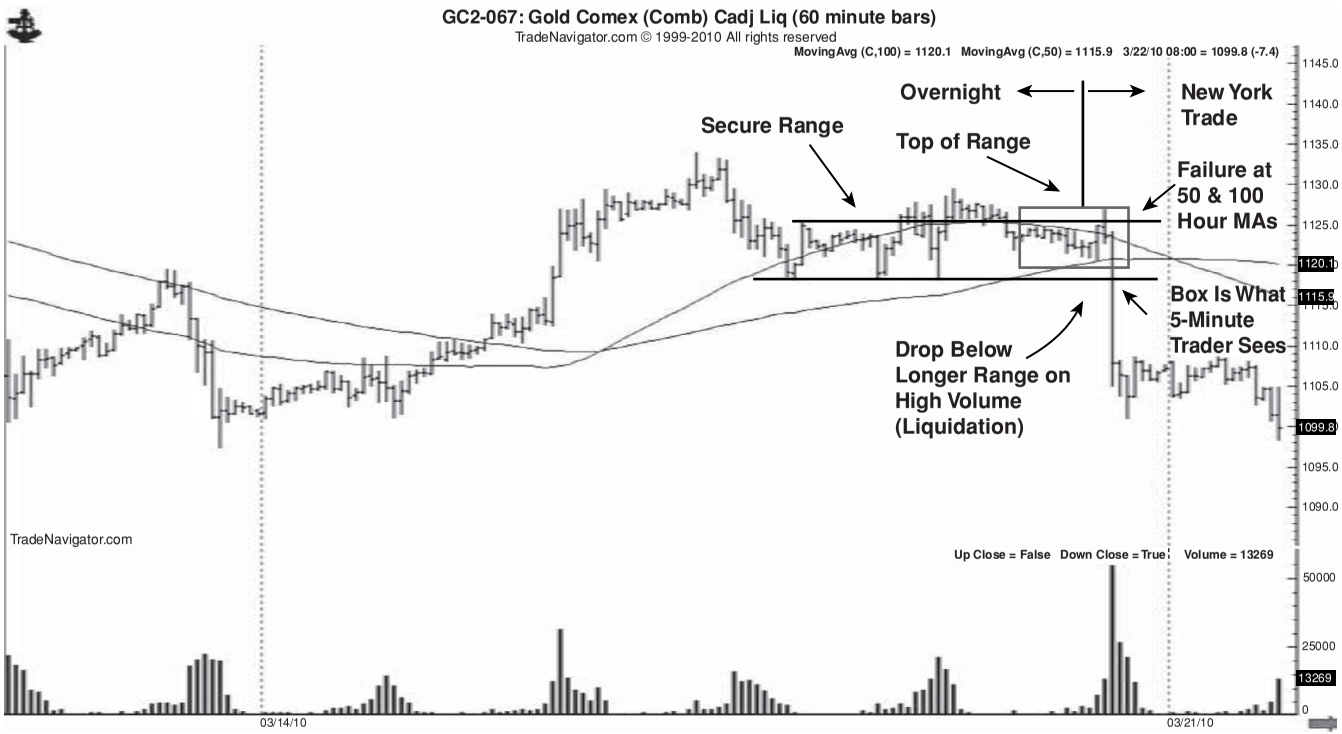


FIGURE 11.3 Short-Time-Frame Trader Not Seeing the Whole Picture (Random Noise)

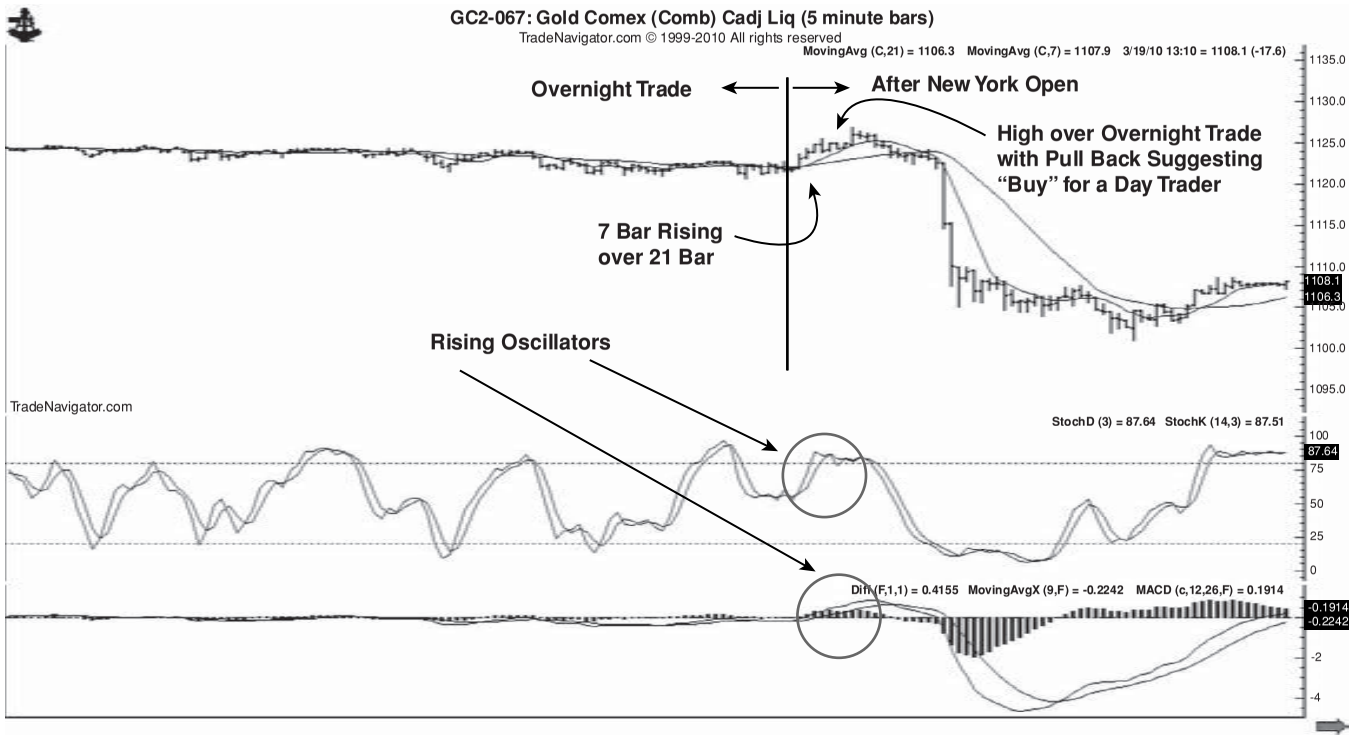
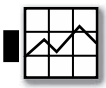


FIGURE 11.4 Longer-Time-Frame Trader Seeing More Structure in the Same Market (Potential Order Flow)

the square box ahead of the big move. That square box represents what a 5-minute chart would show for the same market. Please refer to Figure 11.4; this is the price chart for the exact same market for the exact same time period just prior to the big move seen on the larger time frame. Notice that the 5-minute chart showed a very clear uptrend potential that would have signaled "get in" for short-time-frame traders *just before* a major move the other way. In other words, the losers were watching something different from what the winners were watching. The winners were seeing a possible range top with potential for a downside breakout. They were getting positioned for the bigger move while the losers were focusing on making money "right now."

These are the basics for using multiple time frames: Net winners are using a longer time frame than net losers. Net winners are watching something different from net losers. Net winners want to know where the other participants are taking a position. Net losers are focusing on a potential price change and using a very short time frame horizon to determine that. Losers are trading *random noise.* Winners are trading *order flow.*



THE TRADER'S LIFE

The key takeaway from our starting point on using multiple time frames is to understand how traders using larger time frames are seeing more of the potential in the market because they are willing to wait for the order flow to develop against losing traders. This takes time. For the most part, losing traders are using too little of the market information they compile while also using analysis from a losing point of view when they compile it. It is important to note that if losing traders are operating on a higher time frame, that is primarily due to their use of the same frame of reference that shorter-time-frame traders are using. By that I mean it is of no value to operate on a longer time frame if your point of view is identical to that of the typical losing trader. It just means that your loss will take more time to play out.

Here's what I mean: If losing traders are using something like an overbought or oversold indicator while waiting for confirmation before executing—and they are on a longer time frame, such as the 2-hour or even daily time frame—they *still* will wait several bars of time before

executing because that is what the charts tell them to do. Although traders are operating on a longer time frame, they *still* are viewing the price action from the losing traders' point of view, which is *evaluation* and trying to answer the questions *What does this mean, and how do I profit?* Losers' thinking is still losers' thinking, no matter what time frame net losers are using when they trade. For the most part, net losers in the market are operating on a shorter time frame, and net winners are on a longer time frame. However, loser thinking can show up anywhere.

The important point is that when traders stop thinking like net losers, their time frame will naturally expand to be longer because they can no longer *evaluate* the market. Winning traders must do something different from losing traders in order to profit consistently. That means winning traders have come to understand that the longer the time frame they operate under, the better potential to uncover losing traders' liquidation orders. Winning traders naturally are going to operate on a longer time frame.

The difference is what winning traders bring to the table. They are now trading on observational information against traders who are still evaluating. We can assume that evaluation traders are on the shorter time frames for reasons we have discussed throughout this book.

CHAPTER 12

Three Market Potentials: Uptrend, Downtrend, and Range

The trend is your friend.

—Old trading adage

The market can be biased in only one of three ways; uptrend, downtrend, or range. In any time frame, one of these structures will be present. If you are looking at a long enough time frame, the bias usually is very obvious. When you begin using multiple time frames, the issue seems a bit cloudier at first. Let's start with some basics for each potential and view them in context. For the sake of illustration, I am not going to discuss any particular time frame right now—just the basic structure of what is happening within these three potentials.

ORDER-FLOW POTENTIAL IN EACH MARKET STRUCTURE

Uptrend is where the market is mostly rising in price. The highs are getting a bit higher and the lows are also a bit higher. There is the usual give-and-take between price areas, but for the most part the market is rising. This means that buyers have dominance and the order flow is mostly from the buy side, including the weak shorts who have to liquidate at a loss by using a buy order. This relationship in the market will continue until the buyers (as a group) decide

that there is no more potential for the trend to continue, and they liquidate. Usually this happens at a previously significant high price that the market has been at before. Often the volume and open interest picture become extreme as both sides have a high interest in either protecting what they have or exploiting highs that will not be seen for a long time.

Downtrend is where the market is falling in price over time and represents an opposite relationship to what was discussed in uptrend. One important consideration for downtrend is that when a downtrend ends at a significant low price, it often stays at that price for a longer period of time, as the market is not attracting any interest from either side. The bears are done and believe the market has bottomed; the potential bulls need a lot of information (fundamentals) before they feel confident that the market has serious upside potential. Additionally, when a downtrend has ended, there is a significant drop in both volume and open interest as both the bulls and the bears have little desire to participate.

Range is where the market stays between a set of prices and drifts back and forth between those prices regularly. Range is very easy to define and for the most part signals that something is changing to the overall status of the market.

Both uptrend and downtrend have a certain bias that makes them unique. The psychology is slightly different in each case, and you need to know a bit about the difference to get the clues right. In uptrend and downtrend, the important thing to remember is that the trend will end at some point, and those clues are very clear. Most uptrends and downtrends end in range for a period of time. When looking for clues to time compression, it is important to look for range on a lower time frame as that usually signals a change in the underlying psychology. When a trend ends and becomes range, the order flow is beginning to change. This change is a prelude to time compression. It is vital to look for the clues that range is established. Once range has been established at the end of either uptrend or downtrend, the potential for a reversal is high. These price points can become big trades in the other direction.

If we were to look at a market trending into a top or bottom, we would see that there are important clues to consider. Most important, the volume will show a significant change, and the open interest will almost always drop into the extreme end of the trend. In the case of uptrend, this represents a large group of traders who would not ordinarily participate but want to get in on a "sure thing." One of

the most memorable markets in uptrend was the 1988 soybean market during that year's drought. Volume went higher than ever before as traders from all over the globe tried to cash in on the potential for a failed soybean crop. Open interest declined sharply after the high was in, as those late longs bailed on their positions. This structure is unique to uptrend, as there is a prevailing sentiment in most traders' thinking that rising markets are the best ones to trade. In fact, downtrends are more likely to be profitable trades. Most professional traders are looking to sell into strength from a market in uptrend. Uptrends are almost always exploited by professional sellers or hedgers.

Downtrend is often called a liquidating market as the bulls (who wanted higher prices) are disappointed. The bears are usually professional traders who know it takes time for a market to reach the end of the trend and are willing to sit with positions for a long time. This is why you have heard the old trader maxim "A bull has to eat every day while a bear only needs to eat once in a while." The point is that a bull market (uptrend) needs regular reinforcement and new blood all the time for prices to continue in uptrend. A bear market usually is exploited by professionals (and often is preferred by them). Since they are the largest, most well-capitalized traders working on longer time frames anyway, it is natural for a downtrend to have less liquidation pressure from shorts covering; hence, there are fewer buy orders no matter what. Downtrend is often more secure and less subject to volatile swings in price because the overall psychology is less aggressive. Downtrend generates less fear that the losing traders will miss something.

Range is where the fun begins. Range is what makes the whole issue of multiple time frames and time compression so important to getting positioned against a sizable change in the order flow. Let's take a few minutes to look at the nature of market structure for range versus uptrend or downtrend.

TWO PREVAILING REALITIES OF THE ORDER FLOW

Despite the three potentials that the market has at any given point, the underlying issue is really a factor of two prevailing realities. Those realities are:

1. Uptrend or downtrend is an order-flow *imbalance*. This is the natural state of the market.

2. Range is an order-flow *balance*. This is a temporary state and is physically impossible to continue.

What makes range so important to traders is the fact that *all order flow cannot remain balanced*. Range is a temporary state that will *always* give way to either uptrend or downtrend at some point. This is why using multiple time frames can be so beneficial for traders. No matter what the prevailing trend is in the market, up to a certain price/time relationship, there will be a temporary place where the order flow balances for a period of time before resuming or changing trend. When this range is established, it signals that a change in the order flow is apparent, and it is only a matter of time before that change happens.

Range is a temporary state, because once the market reaches a significant price area, both bulls and bears have to make a choice. In the case of uptrend reaching a high point, bulls have to decide if the move in their favor is exhausted and thus they should liquidate by using a sell order. Bears will be attracted to a high point as a selling opportunity. If they decide it is time to get positioned, they will enter a sell order. If both those sell orders are entered at roughly the same time, it would naturally represent a large amount of orders on the sell side. The market would have an order-flow imbalance to the sell side, creating a price decline. But if the price did not decline, that can only mean that additional buyers were willing to enter the market at that price level.

If the market now goes into range at that significant high, that can only mean that more buyers were willing to get positioned as their bids absorb the selling from both the old longs and the new shorts. If you think through this scenario carefully, you will see exactly how the market is setting up for a price decline. The more time the market spends in range at the high price level, the more committed the additional buyers must be. As the new shorts are not at risk yet because the market has not advanced against their position, they likely will feel no pressure to liquidate, no urge to action. As the new longs see no advance for their position, they also will feel no threat, no urge to action. Both sides continue to wait until the market makes a move for or against them. But the market is composed of new longs and new shorts. Old longs are out. A price decline is a threat to only one side: the late long expecting higher prices. How did the late long come to the conclusion that new highs were coming? Most likely through

analysis of some kind on a shorter time frame. Why? Because the old long was on a longer time frame and therefore more likely to know when the trend was over. When old longs decide it is over, they are not adding to the bid order flow anymore. Someone must have absorbed their offers. And that someone must have absorbed the offers from the new shorts—*otherwise the market would not have an order-flow balance.*

This is why when a range is established, there is often a very sharp move out of range in one direction or the other when the order flow goes from balance to imbalance. Both sides are in agreement at that point. In the case of an uptrend ending in range, the shorts have the advantage when the bulls bail on their positions. Additionally, the pullback in price represents a deeper threat to the bulls as no new high is coming at that point. More bulls quit. Hence, a top is in place. In the case of a downtrend ending in range, more time is needed before the bulls take a stand. Range is usually longer after downtrend is over.

Range is the critical point before time compression is released. Range represents a point where both sides agree that the price is significant enough to do something. Orders from each side are being offset by the other side for a temporary period of time. The order flow is balanced temporarily. Once all market participants have done what they needed to do from their point of view, the market is vulnerable. Volumes should drop dramatically as both sides sit and wait for the other side to do something. In the case of uptrend ending in range, unless a completely new group of buyers comes to the table, a reversal is going to happen. The late buyers are at risk. Why? They want to make money *right now.* Their analysis suggested more highs were coming *right now*. They won't wait very long for it to happen. The late longs liquidate, and the market crashes. The new shorts are happy with the lead; they do nothing. Range gave way to a reversal as the psychology of late buyers was in conflict with that of long-term sellers.

Before we move on to the 12 choices present in execution, I want to wrap up this chapter with an observation. Learning to see time compression is about knowing who late buyers or late sellers are in the market you are trading. There will *always* be late buyers or sellers. Multiple time frames can tell you when they are most likely to put themselves at risk. The important thing to remember when looking for late buyers or sellers is when the market has moved from

order-flow imbalance to order-flow balance. In other words, the market has paused in the trend. You want to watch for range as your first clue. Once range is securely established, time compression is inevitable.

THE TRADER'S LIFE

In my view, the only important variable to time compression is watching for range to form. It is only a matter of time before range gives way to a sharp move in one direction or the other. The natural state of the market is to liquidate losing positions. That means price action in one direction as the market seeks to balance the inequality in the order flow. But this imbalance will be exhausted at some point because the universe of potential participants is a finite number of actual people; sooner or later the market will find a place where the imbalance is temporarily balanced. That place becomes range.

Range will provide the best clues that time compression is developing because the market cannot physically stay at one price level for very long. The losers on both sides eventually must close their positions.

The really interesting thing about understanding this psychology is what happens to most traders when the market is in a range. Losing traders continue to evaluate the market as they always do and continue to rely on technical indicators for the buy/sell points. However, overbought and oversold indicators are less reliable in a range. The fact is, there is nothing you need indicators for in a range. The bottom prices and the top prices are already plain to see.

Knowing that the market will break out of a range is also a common understanding. Most losing traders continue to attempt to predict when that will occur and on which side. They want to get positioned for the breakout because, from their point of view, a breakout is a high probability offering them a sense of certainty. However, they won't buy the bottom of the range if they are expecting an upside breakout; they wait for confirmation to buy, and that means the market has to break out first before they buy. In such cases, they do something called a straddle: They place a buy stop order to enter a long above the range and a sell stop order to enter a short below the market. In other words, they are short from the bottom of the range expecting a downside break or long from the top of the range expecting an upside break. If their entry stop is executed, they

place their liquidation order inside the range. This is why range has false breakouts and remains secure; net losers attempting to predict a breakout are usually the fuel to push the market back into the range, clearing out the losers' liquidation orders.

Once this scenario is exhausted, you get the actual breakout from range, but that occurs after net losers have been cleared out and are no longer participating. That means a drop in volume and open interest. Once volume rises sharply into a price area considered outside the range, you are seeing a time-compressed market.

CHAPTER 13

The 12 Choices in Executing Trades

If you don't know where you are going, any road will get you there.

—Unknown

As we begin understanding how multiple time frames are used to uncover potential changes in order flow, it is important for traders to define the personal choices they make to participate. Equity in our trading accounts changes only when we personally choose to participate, so it is important to know what choices will likely improve our account balance. We need to know what the total number of choices is so we can see the best choice in the context of the other choices and of the underlying market structure. These choices will be present in all potential time frames you might be attempting to exploit. When seen against uptrend, downtrend, or range, these choices will provide a higher probability for a better trade selection.

Up until now we have been discussing how zero-sum markets are constructed and how participants create order flow. In this chapter, we are going to discuss what exactly you have to do to make more winning trades when you participate. In my opinion, you need to narrow your focus down to the most likely one or two scenarios available once you have used multiple time frames to find a trade. You need to start with solid knowledge of what the choices represent from the point of view of the time frames in question. Then you must

understand you narrow the choices down to the most likely ones by making deductions along the way.

BEYOND LONG AND SHORT

Most people feel that there are two or perhaps three choices when trading: They can either go long or short (two choices). Some traders feel there is a third choice: Stay out of the market completely. Although on the surface this would seem to be fairly accurate, there are in fact a total of 12 choices you can make as a trader that will affect your equity one way or the other. Since we cannot profit unless we are in the market, we need to have these 12 choices in front of us all the time and understand their context with the order flow and with multiple time frames within the market. Our goal with understanding time compression and using multiple time frames is to uncover where losing traders are within the market. We do this in order to be better positioned for the eventual change in the order flow. These 12 choices help traders narrow their focus and keep them on track with finding those better spots.

If we want to get positioned in a market, we need to know which way we are going to go. By that I don't mean going long or short; I mean which way we are going to go with the order flow. In a downtrending market, for instance, the prevailing order flow is *offer*. Therefore, we would need to decide if we have the clues that show us the trend will continue and therefore find a point to sell the market thereby joining the existing order flow as it continues to remain offer.

We also could decide that clues suggest the market is about to bottom and that a change in the order flow is coming, and it will be from net offer back to net bid. We therefore would be looking for a place to buy the market, attempting to get in ahead of when the order flow switches from offer to *bid*. So in a downtrending market, we have at first two choices: go with the prevailing trend by joining the current active order flow on the sell side by selling the market *or* find the place where the order flow is likely to change from offer to bid, thereby looking for a potential bottom to buy the market. We then have to choose to get into the market after we have decided which side we are going to pursue. We then have to choose to liquidate at some point. So, in effect, we have two choices to make regarding the potential in the market as we see it and two choices to make

with whatever we decide to do with the potential we feel we have uncovered. We can either go with the trend or fade the trend; and we have to choose when to get in and when to get out; this becomes a total of four choices we are presented with when looking at a market in downtrend.

When we are discussing uptrend, we have the same four choices, but the initial question of going with or going against the trend means starting with a buy order. The same four choices are still there.

Range presents us with four choices as well, but it is slightly different from the basic going with or against the trend because range is not just a trend in and of itself but a deeper signal that the market's larger overall up- or downtrend is possibly set to change. In other words, if you go *with* the range, you would look to be a seller at the top 5 percent to 10 percent of the established price range and be a buyer at the bottom 5 percent to 10 percent of the price range. When a range is secure, you can be long for the rise to the top of the range, then close and reverse your position and be short from the top back to the bottom of the range.

Going *against* the range would be looking for the price to break out of the established range, thereby creating a reversal in most cases or a resumption of the broader trend already in place. If you were looking to fade the range expecting a breakout one way or the other, you would be buying for an upside breakout and selling for a downside breakout. Regardless of whether you go with the range or for a breakout, you still need to decide where to enter the market and where to exit, thereby creating four total choices as well.

If we now total up the choices and view them in context, we have 12 choices:

Go with or against uptrend:	2
Go with or against downtrend:	2
Go with or against range:	2
Total:	**6**

Additionally, we have the choice to get in or out when using any trend: $2 \times 6 = 12$ choices present at anytime. We narrow those choices to the best one or two by using multiple time frames.

Once we start looking at some examples of markets that are becoming time compressed, narrowing the choices will become clearer.

For now, we need to understand how these choices increase or decrease probabilities.

THE BENEFIT OF MORE CHOICES

To start with, every time frame will have an apparent relationship to one of these three states of market price action. The lower time frames are contained in the larger time frames, and the larger time frames also will have an apparent trend. As you move between time frames, you will see clearly that some time frames are in an apparent conflicting relationship with the others. Understanding this conflict is where time compression may be developing and on which time frame it is likely to create a change in the order flow. In other words, time compression may occur for a longer or shorter period of time and be disclosed on smaller or larger time frames as they are in conflict with each other from conflicting states of trend potential. Also, time compression may be apparent only within certain time frames, such as range on an hourly chart for a period of four to five days as the market prepares to continue a broader trend in place on a daily or weekly time frame.

For example, a lower time frame might clearly show uptrend in place, but when compared to a larger time frame, you see clearly that the market is in range. The apparent uptrend on the small time frame is in reality the move to the top of the range on the larger time frame. As the market price reaches the top of the range for the larger time frame, the smaller one will look to be in a very secure uptrend. The pullback from the high prices on the smaller time frame is not a correction from the highs but most likely the resumption of the range top on the larger time frame. A trader watching *only* the smaller time frame would see the drop in price as a buying opportunity to go with the uptrend that on the lower time frame appears to be secure. In reality, the larger time frame is in control of the market at that price level, and it is from the sell side. Most likely buyers on the small time frame are working against sellers on the larger time frame.

Now, this doesn't mean that the market can't rally through the top of the range, creating an upside breakout on the larger time frame, but if all things are equal and the structure of the market is roughly the same as it was when the larger time frame established range, it is more likely the market will pull back deeper than maintaining

uptrend would show on the lower time frame. At this point, losers in the market are the lower time frame traders looking to buy what they think is a dip in a secure uptrend. When they buy what appears to be a pullback for a better long entry, they are setting up for a loss. You would then want to have an idea where the losers' stops might be because that is the price level where the market is going to go soon. After that, if that is the bottom price range of the larger time frame, the short from above the market will cover and the range bottom remains secure. The uptrend on the lower time frame will appear to have ended and been replaced with a new secure downtrend. Losers on the smaller time frame will sell into a lift in price as they now see that as a selling point in a secure downtrend. Of course, the market is remaining under the control of the larger time frame, which is now on the buy side of the range. So, in effect, losers on the smaller time frame used their analysis to get long near the highs and short near the lows. Their loss is being paid to the larger time frame as they are whipsawed.

My point is that by understanding that each of the 12 choices is present to every trader on every time frame, your goal with using multiple time frames is to see clearly which time frame is in control of the market. You do that knowing that losing traders will be watching only one time frame, and they will always be using some form of analysis on that one time frame. Because losers will be executing on the wrong side of the order flow, you are looking for reasons to find where the other side of the order flow will develop, thereby killing your opponent. When multiple time frames reach critical mass from one side of the market or the other, you now are building into a time-compressed market; a large shift in the order flow in the other direction is inevitable. The market can go one way for only so long. Often using multiple time frames will help you find where that last group of eventual losing traders is going to be the last few orders from that side.

THE TRADER'S LIFE

In my experience, the 12 choices present in every execution remain a guideline to help me narrow my focus. For instance, if a market is in a secure uptrend on a larger time frame (such as the daily time frame), it is more likely that a drop in price would be an opportunity to buy. However,

on a smaller time frame, there might be a clear indication that the market is reaching a price level that would likely show a pullback. This potential short opportunity is on a lower time frame and would likely be a temporary situation only. I then can make a choice either to sell what I hope will be the top of the recent leg higher for the larger time frame or wait out a drop in price until the drop in price reaches a price point that makes a buy against the larger trend more likely. Either choice has a probability to it, and either choice will provide a change to my equity.

In either case, the opportunity has a time limit to it and a degree of probability. By thinking in probabilities and in potentials—rather than trying to predict to which price the market will go—I can narrow my focus to a set of conditions that might be more likely. I can then choose to execute or not based on a set of probabilities, not on price analysis or prediction.

The issue of the 12 choices is not to find a winning trade. The issue is to open your mind to the whole of market potential all the time. Your goal is to choose to narrow your focus when you see the market in context. I found that by seeing more than two or three choices (based on where the price is now and what I predict it will be), I was able to see the rhythm between competing time frames as a natural structure of the market. That rhythm results in opportunities that come and go, but the larger time frames appear to hold dominance most of the time. Consequently, I use lower time frames to anticipate where the loser would feel a sense of confirmation before entering the market; if that price area is close to the prevailing trend on a higher time frame, that is usually a higher probability trade. In other words, if the lower time frames show a down trend, and are also signaling a "confirmation" point, if that point is also close to where the larger time frames show a range bottom or a low price area in prevailing up trend I know the loser is likely to be shorting the market. That would be a high probability buy in my view.

CHAPTER 14

Thinking in Probabilities

God does not play dice with the universe.
—Albert Einstein

Or does he? So far we have been discussing things related to the market itself, such as how the market is structured, how the order flow moves from imbalance to balance and back to imbalance, and the fact that there will always be net winners and net losers inside the market. We have touched on how the group dynamics of thought and action play out within specific time frames, and we are about to draw all this together into a deeper understanding of how to get better positioned for a change in price. In other words, we are about to learn how to make sense of what is happening outside of you, the individual participant.

This chapter is devoted entirely to you, the individual trader, because without understanding how you come to conclusions, you won't see things differently than losers do when they participate. A large part of understanding how you think before placing yourself at risk concerns thinking in probabilities. This is a lot deeper than the surface agreement that says: Yes, I know nothing is for certain in the markets. This chapter is about learning to view what is happening in the market from a completely different viewpoint than typical market participants. You will need to dig deeper into your thinking as time goes on because whether you can see it now or not, you likely have a lot of conflict in your thinking that prevents you from gaining

the best insights from your analysis. This is true even if you are learning to use multiple time frames well to uncover where time compression is creating a change in the order flow. This chapter is about what is happening *inside* of you, the individual participant. Inside you, you can deal in probabilities within the eventual certainty of the order flow. Order comes from chaos, according to my friends in the business of particle physics.

Earlier, we discussed the relationship between *observation* and *evaluation.* Losing traders are always trying to answer the questions *What does this mean, and what do I do to profit?* when doing their analysis. In other words, they're making an evaluation. Winning traders are more concerned with fully understanding *what is happening* rather than trying to answer the questions *What does this mean, and what do I do to profit?* Winning traders already know with complete certainty that a change in price one way or the other way is coming. They are trying to find the best time/price relationship they can to go against what is most likely the last group of potential losers entering the market. In this process, it is critical to understand that winners are not *evaluating* things in the same way as losers are. Winners are using their understanding of the market structure, the fact that losers are in there somewhere, prices can't go one way forever, their understanding of human nature as it is disclosed when speculating, and how they see things personally to come to a deductive place in their reasoning that answers a different question: *What is more likely moving forward?*

Winning traders don't need to answer *What does this mean, and what do I do to profit?* because they understand and accept that speculation is a game of unknowns until prices actually move. In fact, the more winners understand the concept of order-flow change, the less analysis they need to do. If the market runs out of buyers, then a reversal lower is certain. What analysis needs to be done? You make money in a declining market by being short.

Once prices start moving, winners are interested in asking different questions either to maintain a winning position or find one. They are not trying to figure out where prices will go next because they know that once prices are moving—no matter where they go—they will draw in other traders who will eventually be on the wrong side. If prices reach a significant level quickly, that only means there was a deeper urge to action to get positioned quickly—an urge that is likely fear, greed, or hope. Winners want to answer the question *Will*

that continue or will that change? thereby creating an opportunity that includes one of the 12 choices to participate. The questions winners ask are different from the questions losers ask; therefore, they create opportunity differently.

ASKING BETTER QUESTIONS

The basis of developing a thinking method grounded in probabilities rather than certainties is the art of asking the right questions when developing your trading presence. By asking open-ended questions that help you discern things like market structure, order flow, and where the losers will be forced to liquidate, you place yourself in a position to see and observe what is happening rather than trying to answer the question *Where will prices go?*

Let's look again at how losers are attempting to participate. For the most part, losers are focusing on things *outside* themselves to answer the various questions that are grounded in evaluation. Here are some typical loser questions that I have discovered:

"What does this price change mean?"
"Which way will the market go?"
"Where should I take profits?"
"What is the news?"
"When will the price rise/fall?"
"How do I do better analysis?"
"Am I missing anything?"
"Who can I trust to get me better data?"

If you think through the psychology of these questions, you will see that they center on things that are perceived to be outside the control of traders. They are very much centered on underlying thoughts that focus on gaining a sense of certainty about how to participate. Those sorts of questions show that traders are more concerned with finding a winning trade than understanding what created the market in the first place. If you add on top of this sort of thinking the additional illusion that technical analysis will answer the question *Which way will the market go?* you can begin to see why trading is so difficult for most people.

Most traders want to find a higher degree of certainty about what they are doing, and they believe that higher degree of certainty will come from outside of themselves. They believe they need to learn more or do more to improve their results. They often are focused more on how their equity changes from day to day than on what is creating the price change they are attempting to profit from. This is one reason why they will always wait for "confirmation" before placing a trade. They must be *certain* that a trade potential exists.

Typical winning traders are more concerned with how they see things personally form the information they choose to let into their thinking. They know that bullish and bearish information/opinion is never ending, and they don't care which the "right" opinion is. Winners know that they can win more often if they make their goal finding the losers rather than trying to predict where the price will go. Winners watch price and what it means to other participants; they don't care what the price is or where it goes—only that they are on the right side of the price change when it happens. Winners often have two or three scenarios of what might happen in the market and are prepared to act on any number of plans based on what is most likely. Often this involves using multiple time frames to discern the underlying market structure, and each scenario will have a probability.

Winners' psychology is different from that of losers. The actions taken by winners are different from those taken by losers. Winners are doing their best to think in probabilities, and they come to their conclusions from a different stream of thought than do losers. Winners are watching what is happening in an attempt to discern what is most likely to come next, based on how well they can tell what is happening now. Winners don't want to predict prices; they want to know with as much clarity as possible what has *already happened.* Only then can they make a reasonable guess as to what will happen next.

In short, winners are outthinking losers. Trading is a thinking man's game, not a mathematician's game.

DEVELOPING A PROBABILITY MIND-SET

To help you get the most from your understanding of time compression and the use of multiple time frames, here is a short list of

questions that will start you down the road to thinking in probabilities better. Once you have tried some of the ideas listed here, you will want to come up with a few of your own as your knowledge about the markets and yourself as a participant grows.

I have found myself asking questions I never would have thought of just a few years ago. They always help me with the complex task of reasoning out where and if a market is about to turn. Because we can never know with certainty what someone will do until they do it, these sorts of questions help with maintaining a probability-based thinking process rather than an evaluation-based one.

- Who is winning, who is losing?
- Where might the stops be?
- Where will the loser decide to quit?
- Which time frame is in control of the market now?
- If I was bullish, where would I buy?
- If the market fails at the monthly opening range, are the shorts more confident?
- Where would I take gains if I was long from the weekly lows?
- What surprise will turn the order flow? Could that be today's news?
- What would high volume at the midrange tell me about the health of the long side or the short side?
- What is the downside price risk if a new low trades? What if the stops are not there?
- Is anything changing?

Questions of this sort will start bringing more probability thinking to the table for you. Most of the questions I ask myself are related specifically to what I think I am seeing and what I will do if I am wrong. In other words, I accept that I won't be right all the time, and I am more concerned with making sure I am not at risk when I am. I already know that I will have a certain percentage of winning trades. My goal in using multiple time frames is to maximize that potential by finding out which of the highest time frames are controlling the market. I am looking for clues that will show me it is okay to hold the trade as long as possible until the losers have quit as the biggest group. What if that takes months?

In the final analysis, thinking in probabilities will help you avoid falling into the trap of evaluating and predicting prices. This will help

keep you focused on understanding who the losers are. That needs to be the focus of your study because you can't win at this game unless someone else is losing. Thinking in probabilities will help you uncover what losers are thinking and how they are behaving more often. Of course, using time compression and multiple time frames will go a long way to doing just that, but it is still critical to approach them with the right mind-set. Otherwise, time compression and multiple time frames will become just another form of analysis rather than the potential key to understanding the complete picture of the market structure. The market structure is composed of *people who are doing things*; the price is only a reflection of that. By shifting your thinking into the *probabilities of people doing things*, you will understand how to better find the changes in the order flow. Time compression and multiple time frames are clues to uncovering the stronger probabilities so you have to have that thinking in mind when you start.

THE TRADER'S LIFE

One of the best books I have read is *How to Think like Leonardo da Vinci.* What struck me about the process Leonardo used to achieve what many call genius is that most of what he did was based on observation and asking questions. Some people would disagree with me when I say that Leonardo wasn't all that special; what he did was *actualize his potential.*

His notebooks are full of observation more than anything else. Whatever his gift was, I believe it would have been useless if he hadn't asked the questions he did. Of course, he lived at a time where pressures on daily life probably impeded his full ability from being known, such as disease, political unrest, and lack of communication technologies, but one thing is certain: Without the advantages we have today, he accomplished more than many people will ever accomplish. Most likely it was because he knew the questions to ask.

In my trading, things really started to improve when I learned to move beyond asking such questions as: *Should I go long or short?* Asking the right questions opened a new way of seeing things. When the markets were no longer prices moving higher or lower but became an issue of *What are people doing?* I discovered that there were a lot more opportunities available. There were short-time-frame trades and longer-time-frame

trades; there were reasons to stay out that were not there before and a host of other potentials.

By learning to ask better questions, I learned to think in probabilities. By applying my understanding of what motivates people to take certain actions to my understanding of how zero-sum markets are structured, I was able to see probabilities differently and take the better ones more often.

The ability to ask better questions will open doors to your trader development that nothing else will.

CHAPTER 15

Using Multiple Time Frames

Common sense is not common.

—Voltaire

Here are certain things about winners and losers in the market that will help you better use multiple time frames to uncover potential changes to the order flow. These observations are based on my personal experience in the markets and represent conclusions that I have come to based on a lot of personal study and research. Once I began to ask better questions and see things differently, there were some inescapable things that I deduced, and those things are important enough to make clear to you as well. If you don't immediately see the connection between what is discussed here and the rest of the book's content, try to see it all in context of what happens in zero-sum markets. For the most part, it is the psychology of the participant that creates and changes prices. How winning participants and losing participants approach the market and how they place their orders is based largely on whether they are evaluating price action or observing how the market is structured.

Between these two conflicting points of view on what the market actually is there is another area of conflict: within the traders themselves. The observations I make in this chapter are coming from my assessment of this conflict and what it likely means to how the market is structured every day. I assume certain things that some readers might not agree with. Others may find that although they agree with

what they read here, they don't see how it is material to finding winning trades. I would like you to accept what we discuss in this chapter as part of what makes using multiple time frames important because it helps you understand how each time frame might be structured differently within the overall market. Differences in structure between competing time frames make the overall structure of the market easier to understand.

MARKET QUALITY AND POTENTIAL ORDER FLOW

Bull markets are different in quality than bear markets. Bull markets tend to attract a lot of participants who ordinarily wouldn't be trading (in other words, the public). Because the public is always the least informed and least knowledgeable about the market, they tend to make trades more often and for faster gains or losses; that means the volatility will be higher and order flow often will be patchy. For these reasons, there might be a lot of action on the open in the market, then nothing all day, and then a lot on the close. Prices might fluctuate a lot in larger ranges before settling down to roughly unchanged for the day. When a market is a raging bull, you will see higher prices day after day, sometimes limit moves, and always a lot of volume. But the fact is that the market will top at some point, and when it does, it won't come back. Public traders often have blown out their accounts in the process, and the participants who lifted the market to the highest highs are not playing the game anymore. That means the bull market dies from overweight. If you are long a bull market, you need to be especially careful to protect your open trade gains and spend most of your time looking for clues that a top is coming. Of course, when that is as clear as it can be, you need to consider trading a larger position from the short side, as there is a strong potential that the market won't see those high prints for a very long time.

The average market participant is operating on a time frame of 72 hours or less. This is because typical traders leverage too large and expect to make money "right now." Every 72 hours there is enough movement in the market to attract almost everybody at least once for either a long or a short and for them to have taken at least one loss. Watch price action and you will see this regular rhythm of ebb and flow. These traders see the price moves on a daily basis as places to

be long or short for some reasonable amount of regular gains that they have as a trading goal, say $100 a day. These traders often will be long for a day or two, then short (or sometimes execute both a long and a short each day), and will do a lot of trades over a two- to three-week period.

For the most part, these are people who have spent a lot of time and money on computers, trading systems, education, and research all with the hope of making some amount of regular daily income. They are taking regular losses and are active on the shorter time frames. Stop and think about this: If someone is a day trader, what does that mean? It means the trader is expecting to make money *today* and *every day* and expects to be flat at the end of the day, every day. When using lower time frames, day traders are content with smaller moves in the market, and they never hold overnight. That means if the market has given a buy signal for this group of traders, you already know that their sell orders will be processed before the close. This is why the market can make a move higher: It reaches some important price that shows a "breakout" on a small time frame and then stalls right there. The longs are the day traders who must use a sell order before the close. If the market doesn't advance, they will be out by the end of day; this is how the market will break out, then stall, and about a half hour before the close drop sharply off the high. The day traders are taking their losses before the close. They didn't buy underneath the market, they bought the breakout, and when the market fails at the close, they see it as a false breakout. They likely will come to the market on the sell side the next day, because that is what the charts will tell them to do.

Size in the market is controlled by the smallest group of people: professional traders who operate on longer time frames and are willing to hold positions overnight. How do traders get to be 100-lot traders? It usually isn't from losses. Therefore, when a market has size on one side or the other, you have to assume the larger time frames are trying to take control of the market and that they are willing to wait more than 72 hours for that to happen. These participants are usually professional traders. That means the market is likely to reverse or at least consolidate in range for a few days. Professionals often take the other side of day traders' orders. Because the long-time-frame traders are not usually going to liquidate the same day, the resulting opposite liquidation order will never be placed. That is why day traders move the market against themselves by the close.

The markets have an interesting ratio between winners and losers as far as accounts are concerned. This is not just my opinion; this is data compiled by regulators and market data services. The average retail trading account is closed in less than six months, and 90 percent close at a net loss of some amount. Ninety percent of people are taking losses. Eighty percent of these accounts are less than $100,000 starting balances. When you are winning, all the money comes from the small traders. You need to really focus on learning what small traders tend to focus on, what they value, and what they trust to make their trading choices. I can tell you that most are heavily biased to using some form of technical analysis, and they are mostly operating on the lower time frames to find their trades.

Eighty percent of traders operate on a time frame of one hour or less. That means they are watching the 1-, 2-, 3-, 5-, and 10-minute price charts and are not watching the higher time frames at all except to "confirm" that a trade has potential. It is this need for confirmation that drives them to buy after the market has already rallied or sell after a break lower. In their minds, they see that as a big move, which naturally must mean more is coming. To get a feel for what this means, find a market that has had a daily reversal in it and compare the price action to a 2-minute chart. On the 2-minute chart, it looks like a massive reversal that is "confirmed" on the 5-, 10-, 15-, and 30-minute charts. They (the losing traders) now will work the market from the sell side the next day.

Most losing traders do not put enough data on their screens. They also tend to go with the default settings for technical indicators rather than customize them. When I say "enough data," I mean the number of price bars for the time frame they are trading. I have found that for a time frame to give good data for potential changes in order flow, you need to have over 100 bars of data for that time frame. Most trading platforms or screen settings have a default setting that usually shows less than 72 bars. Think of it this way: Would you go to an art museum and put your nose right on a painting and view only what is right in front of your eyes on that corner of the canvas? Probably not. You have to stand back a reasonable distance to get a good idea of what the artist was trying to say. It is the same with the markets; you need to have enough data on the screen to get a better view of what that time frame is trying to say.

As far as technical indicators are concerned, most people use only a handful of what is available from their service provider. They tend to use what they have been told to use by their broker or analysis

software provider, or from courses they have taken or books they have read. Why is this important? Because when you look at lower time frames, you can assume you are looking at what the net losers are doing. They will not be looking at how competing time frames are trading. They will have too narrow a focus and will be trading from too small a perspective. They will all be using roughly the same technical indicators and they will be using them roughly the same way.

"Wicks" or "tails" on price bars are important pieces of data. They tell you that a potential change in the order flow is happening on a higher time frame. Please see Figure 15.1. When a price bar has a wick, it means that the highs or lows were important to enough people on a higher time frame that they chose to do something. Likely this price action shows up on a smaller time frame as the order-flow imbalance is created by the higher-time-frame trader. That often means that the order flow is changing in the direction of the wick. On the example, you can see a bid wick circled with the next few bars higher in price. The same is true for sell wicks. When wicks are on higher time frames, it means losers were taken out and a reversal is in the works. The presence of wicks on daily or weekly charts is a huge clue that professionals are active and will continue to execute on that side aggressively. A wick is defined as more than 35 percent of the bar's range. A close in the direction of the bar is a good signal that the wick is more valid. In other words, a bid wick with a bar closing higher is a possible reversal to the upside. It's the opposite for a sell wick, of course.

FUNDAMENTALS AND THE URGE TO ACTION

Due to the Internet and the huge development of online trading services, finding losers is easier than ever in my opinion. Simply take some time and review the best-selling products out there. You will see clearly that losers are being groomed for their losses from the start by the heavy focus on systems and analysis. Additionally, the educational forums for the most part focus on day trading and using shorter time frames. But the best way to find losers using the technology is to join a trading chat room. Simply find one that focuses on the market you want to trade and sign up. Within a few days you will see the same group of people constantly discussing their trades and why they are long or short. You also will find that they are often on both

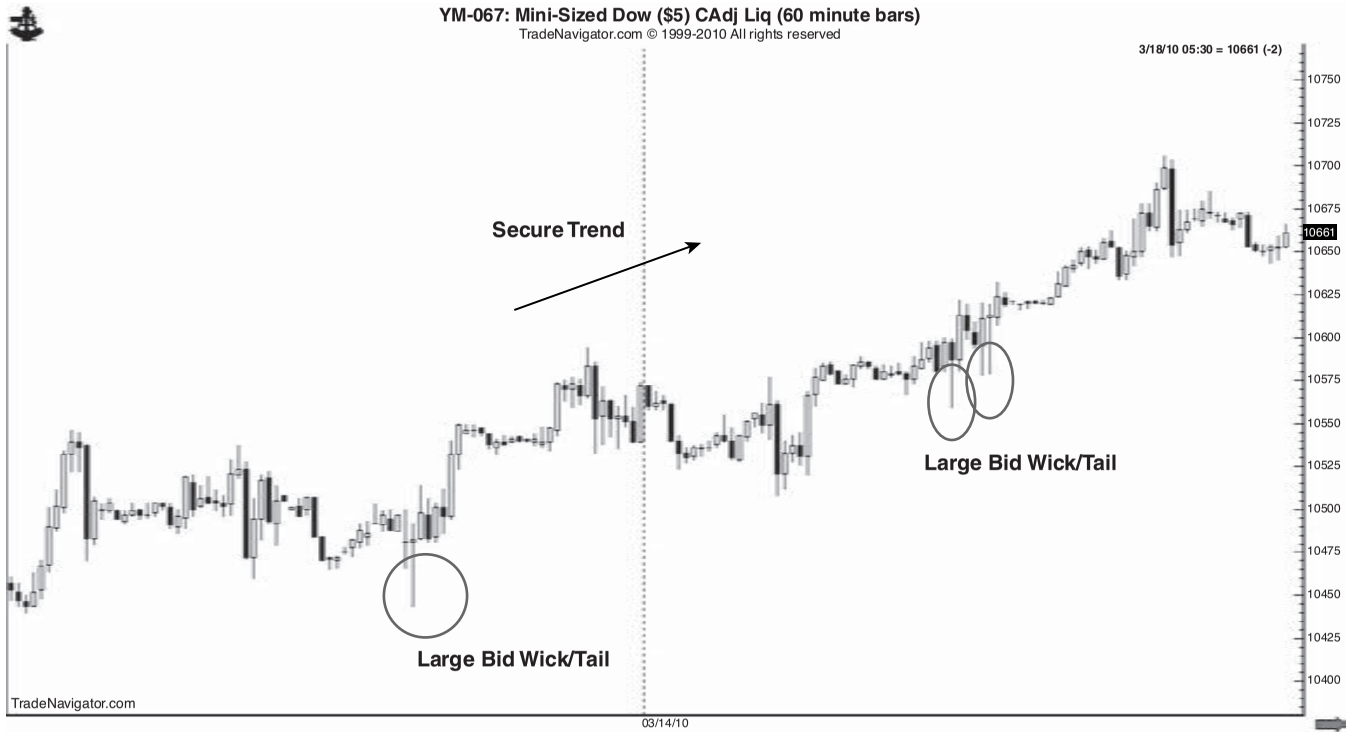


FIGURE 15.1 Prominent Wicks or Tails Suggesting Changing Order Flow

sides of the market from day to day, and they are almost always flat at the end of the day.

Write down what they propose to do and why for a few days, and you will see that they are on the losing side frequently. In fact, if you can find a particularly vocal member of that chat room who absolutely swears by his system, try to form a relationship with that person. Find a way for that person to take you into his confidence and give him all the time he needs to convince you he is on to something. He will call the tops and bottoms for you with uncanny accuracy as his system puts him long at tops and short at bottoms. Compare that data with your growing knowledge of using multiple time frames, and you will see how the larger time frame is eating those small-time-frame traders for lunch. By the way, if you intend to exploit this idea as a regular trading tool, you need to stay focused on always finding new people to talk to in those trading chat rooms. The losers blow themselves out regularly and they are usually gone within 60 days.

Fundamentals (or news) can be an especially enlightening way of understanding where losers in the market are getting positioned. The news is the same for everyone. Everyone knows when the news will be released, and everyone has either a bullish or bearish bias about the news before it is released. No one trading has access to fundamentals in a different way from anyone else. The only differences are in how traders perceive the news for themselves. When it is all said and done, the news can only be one of three things. The news can be:

- Better than expected.
- Worse than expected.
- About as expected.

How the market responds to the news is a great clue to what losers in the market are thinking. If the news is better than expected for the bulls but the market doesn't respond with higher pricing, what does that tell you? Likely the buyers have already made their move; hence a sell-off is coming. If the news was bearish and the market does nothing, what does that tell you? Likely the bulls are still committed to their position. The news won't make any difference to the structure of the market unless the traders most likely to be hurt by the news are already holding open positions. Traders most likely to get hurt by "unexpected" news are traders who will run for the exit. So if that doesn't happen, what does that tell you?

SUMMARY OF PART III

Before we get to some specific illustrations for time compression and using multiple time frames, I want to wrap up this section with a few closing thoughts. My hope with this chapter is to open your thinking to seeing the lower time frames as the losing traders and the higher time frames as the winning traders. Those who want to develop their trading approach more consistently often fail to appreciate that there are real people doing real and definable things when they are participating in the market. Some of those definable things are not readily apparent and would be seen only when traders took a step back and asked a few commonsense questions.

Remember that thinking in probabilities opens the door to a deeper understanding of how the order flow will change. Remember that losing traders are looking at things and *evaluating price* while winners are *watching what happens and trying to observe the losers.* All of these things will come together as you practice asking the right questions and accepting that the market is made of people doing some very definable things when they place themselves at risk. Thinking in probabilities will help you see the structure of the market differently from how losers evaluate pricing. By using some common sense, you will avoid placing yourself at risk without a better understanding of where the potential change in the order flow might develop. In other words, you will be attempting to trade only from the perspective of where the order flow might change; not from anything else.

Last, it is my view that you cannot use the concept of time compression and multiple time frames without changing your underlying concept of what the market is and how it moves. You must use some common sense.

THE TRADER'S LIFE

One of the problems when suggesting to people that they use some common sense when developing their trading approach is that Voltaire was absolutely correct: People are not operating in reality for the most part. During my developmental years and my subsequent epiphany in understanding, I came to see reality around me in a completely different way. I

learned that most people operate under a cloud of illusion, assumption, misinformation, and unenlightened thought. It would only be natural for those people to see things in a distorted way, and that includes those people trading in the markets.

When I resolved to never be the kind of person who sees things through a distorted point of view, I found myself at odds with almost everyone. By that I mean that most people are not interested in developing their thinking past a certain point, and they often view anyone who is trying to evolve past a certain kind of thinking as a threat of some sort. I caused myself a lot of pain and suffered a lot of career reversals because I remained very vocal about the change I had come to understand. I threatened people in some way, completely unintentionally. Obviously, if most people are threatened by something, they want to get rid of it. In the market environment, that means you lose your job or your business relationships.

I'm saying this to you because if you follow what I am proposing in this book and personally evolve as a trader, you will likely face a similar conflict. You can avoid the inevitable results of that conflict by doing a few minor things. First, never discuss your trading with anyone. People will constantly argue your point of view, and if you make money more often than they do traders will hate you for it. You are a threat to their comfortable world. Second, keep relationships with losing traders. They will "talk" their positions constantly. They will provide you a lot of information about what losers in the markets tend to focus on and how they behave. Think of them as a laboratory experiment.

Last, share your success only with people you know and trust. Some sort of relationship within the community of winners and their trusted others fuels the ability of the winners. Maybe it is affirmation or possibly congratulations. But in any case, the pearls don't go to the swine, if you understand my meaning.

If you are going to take the quantum leap from *evaluation* to *observation* in your understanding of markets and how to profit, you are going to move into a place that will create conflict with others. Be wise about this conflict and find a way to make it a source of regular positive growth. You will be amazed at the difference.

PART IV

The Five Basic Market Structures

In Part IV we are going to look at some examples of time-compressed markets. We are going to look at the five basic market structures and use multiple time frames to understand how the participants are viewing price action. When doing a study of any market, it is important always to remember that price action discloses only a handful of options in context of the larger time frames. The larger time frames always control the market; therefore, the lower time frames must disclose the losing traders at some point. When viewing these examples, you need to recognize that *sooner or later* losing traders (whoever they are) are going to liquidate at a loss. The purpose of losers is to pay winners; nothing else. Your study of the market must be designed to answer the question *Who is going to lose?*

As I mentioned before, the purpose of study of the market is not to find yourself a trade; it is for you to find the loser and take your position against him or her. That means you must recognize that no matter what appears at first glance to be happening, there actually is something else going on behind the scenes that you are looking

for. That something else (whatever it is) is the true structure of the market, and therefore it is the only thing you really need to focus on.

Because zero-sum markets are constructed the way they are, it is only a matter of time before something changes and prices do something different from what they had been doing up to that point. That is the whole point of understanding time compression and why multiple time frames can show you underlying structure and the most likely time/price relationship where the change will occur. You must always remember that market losers constantly are analyzing price in order to answer the questions *What does this mean, and what do I do to profit?* Because they are trying to answer these questions, their analysis always will put them in the market slightly ahead of when the market will do something different. This is an issue of *time*, not price. Losers want to know what price is coming next, and they think that will be "right now." When the market does something "right now" that was different from what the losers expected, they always will take a loss as prices move against them. Your goal with understanding time compression and your use of multiple time frames is to find the *time* when this is most likely to occur; the price at that point doesn't matter. You must think of price as a reflection of the underlying structure. When the *time* is right for a structural change in the market, any price to get positioned will do.

The five basic market structures are:

1. Topping market
2. Bottoming market
3. Secure uptrend
4. Secure downtrend
5. Secure range

The 12 choices present in execution represent the complete picture of the actual ways to get positioned, stay positioned, or liquidate. When using the theory of time compression and using multiple time frames to discern the market structure, you need to determine if the structure has reasons to continue or not. For example, you are looking for clues that an uptrend has the potential to continue or that the market is topping. In other words, the uptrend is secure or it is under threat for a reversal. Therefore, that particular market *must* be in one or the other of the five categories of market structure. In the

case of a downtrend, you are looking for clues that it is secure or bottoming; in the case of range, you are looking for clues that the range will hold or the market is about to break out in one direction or the other. So in effect, there can only be five essential kinds of market structure. You as a trader need only determine if the structure is secure or not, thereby reducing your 12 choices to 1 or 2 with a higher probability. Obviously, you would buy a secure uptrend and liquidate when the market is topping. Once topping is secured, you would be a seller. Once downtrend is secure, you would hold a short position and likely add to the position. You would liquidate when bottoming is secure. Basically, by fully understanding the underlying structure, your choices are self-evident, and no discussion of execution is really needed.

Remember, the five states of market structure are created primarily by time. You always must consider the amount of time that is passing in order to conclude the market is becoming time compressed. The more time it takes for something to happen, the more likely the market is time compressed. In all cases, losers are late to the party and fuel the move in favor of the time-compressed market to return to the non–time-compressed price level. That is almost always a reversal in price from a critical time/price relationship.

When a market has a secure trend or range, the conditions are slightly different but secure trend will usually end in range and that eventually will lead to time compression and a reversal. When identifying a secure trend or range, you need always to look for clues that this secure trend or range will end. That usually means a reversal in price as well; but for a period of time, the price will continue to move in the previous fashion.

Let's have a look at the five market structures in detail.

CHAPTER 16

Topping Market

The graveyards of Wall Street and LaSalle Street are full of traders who were right too soon.

—Anonymous

The ability to see that a market is ripe for a reversal from uptrend is not that hard to have. The problem is that most traders are looking at the price rather than the time element. That is why early shorts are the blood to bring the market to the actual high prints. Those traders fuel the move to the actual high by their need to cut their losses quickly. That means the market is continuing to have an abundance of buy orders and the actual eventual winning shorts are less likely to execute, but you *know* they are there waiting. The time that passes between their entry and the buyers' exit is when a bull market has secure uptrend, which we discuss later.

WHEN IS A MARKET PRICE "TOO HIGH"?

The important part of finding a time-compressed topping market is not *price* but the *perception of price.* All bull markets end at some point. A zero-sum game is played the way it is because every buyer must meet a seller, and if a market is rising, there will be a point where the price becomes "too high" for every participant, whether

bulls or bears. In the case of the bulls, it is time (as a group) to liquidate and take their winnings. In the case of the bears, it is time (as a group) to enter a short. A topping market happens when bulls and bears both agree that *now* (whenever that is) the market has run out of potential in the uptrend. In other words, both sides decide it is *time* to sell, and they do that fairly close to the same moment. The price could be anything.

Therefore, a topping market happens when *the activity* changes significantly, at whatever the price in the market happens to be. That means your baseline of determining a time-compressed topping market is volume and how it is changing. You need to watch for a change in volume from the baseline norm. When this change from the baseline is happening, you also need to monitor open interest. A significant change in open interest signals that something is changing from the point of view of the longer-time-frame trader. The open interest represents professional and more experienced traders; it is a measure of their confidence. So if professional traders are *less* confident, they will liquidate some or all of their position to reduce their risk. Therefore, since a rising market can only mean that the bulls are making money, a drop in open interest must mean the bulls are getting out; and those are likely professional traders who were long from under the market and likely long for a longer period of time. So when you see a change in *activity* and clues that the professionals are liquidating, you are near a top in price, whatever that price is.

THE *PERCEPTION* OF PRICE

There are two kinds of highs in my view. One is the "consolidation high," where prices reach some high level and stay there. In reality, the price has risen to a high print and gone into range; this is not necessarily topping. The market could continue higher, and the clues you would be looking for are discussed in secure range. Consolidation highs usually happen at price levels that are not multiyear or all-time highs.

The second high is the exhaustion high, and this represents the best disclosure of time compression. Exhaustion high happens at the actual printed high in the market. That becomes clear later, once the market drops in price and never comes back. Leading up to that point are things relating to activity that show that time

compression is happening. Exhaustion highs are usually at all-time or near all-time highs, such as a 15-year high.

For this illustration I have chosen the COMEX gold market through the end of 2009. Please refer to Figure 16.1 for the start of the study. This is a daily O-H-L-C chart for the nearest futures contract. I have included two moving averages, the 50 bar and the 100 bar, and the volume and open interest. I will discuss the lower time frames in a moment.

As you can see, the market was in a steady climb from about the $925 per ounce level starting in August of 2009 through the high prints in early December. As you likely know, the $925/oz level was a recent record high price, and the gold market had been rising in price for years up to that point. The previous record high for gold was roughly $880/oz all the way back in the early 1980s, so the price rising beyond that level attracted a lot of attention. Again, the *perception of price was that something significant was happening and it attracted a lot of public attention.*

In August, the open interest remained steady throughout the month as volume remained at a consistent level. But in September there was a large jump in open interest, and the volume was rising too. That can only mean that professionals were interested in the market as a rising price with rising open interest must mean that buyers are happy. The market began to rise faster than the 50-bar and 100-bar moving average (MA) could keep up with it, and both open interest and volume continued to rise until the end of November 2009.

At the end of November, the daily volumes and open interest were holding at or beyond record levels as the price advanced to the $1,200/oz level. Then the market suffered its first real sell-off, and that just happened to be the highest volume day all year. Open interest declined from a record high as well. That means some traders decided that the $1,200/oz price was where they would liquidate, and those traders likely were professionals.

Notice that the market rallied off the lows of that bar to close in the upper half of the range. The market continued higher for another four days and reached the actual traded high around $1,225/oz. *But look at the volume.* It was half of what it was at $1,200/oz *and* no more than it usually was after September anyway. The next day the market dropped on the highest volume ever and closed *below* the closing price after the professionals likely got out. By the end of December, the market was back under the 50-bar MA *and* open

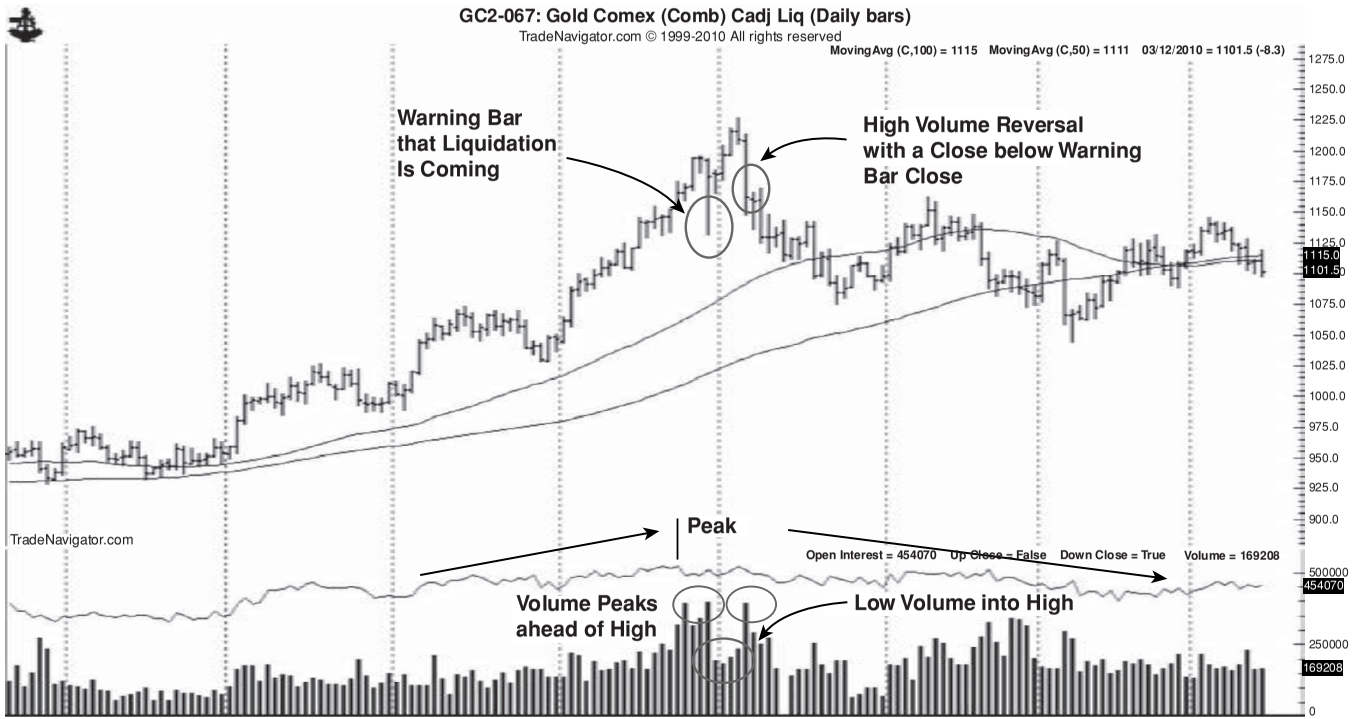


FIGURE 16.1 Longer Time Frame of a Topping Market

interest was dropping. No one wanted to play. In fact, the volume (although lower than earlier) kept rising as open interest dropped, suggesting more liquidation. The market suffered an exhaustion top and likely will not see the $1,200/oz level again without something changing the *perception of price.*

If you think this through, you will see what happened and how time compression was released at the end of November.

Prior to the actual printed highs, the market was seeing higher volumes on up days for the most part. Every day was a new record high. Every newspaper, every financial television show, every financial analyst you could find was discussing the bull market in gold. Every hour during prime-time television there was some sort of a cash-for-gold advertisement. In other words, the public was aware that there was an opportunity in gold that seemed never ending. These are people who ordinarily wouldn't be in the gold market. Brokers were on the phones 24 hours a day soliciting customers to trade gold, and it was *all* from the long side. The public loves a bull market.

At some point a bull market ends. There are only so many people who can enter a buy order. Professionals use that volume to liquidate their longs by being the sell order on the other side of that volume. That was disclosed by the high volume into the first high in the third week of November. The last gasp of less-informed traders on the buy side was disclosed by the rise in price to a fresh record high on *half* the previous volume (small orders). Part of the lift was professional sellers executing too soon, but they were thinking in the right direction anyway.

WHAT SMALLER TRADERS SEE IN A TOPPING MARKET

Now let's look at how using multiple time frames would have given you an opportunity to sell gold somewhere around $1,200/oz.

Figures 16.2 and 16.3 show what losers in the market were thinking ahead of the actual traded high. It is important to remember that what losers are watching and how they are evaluating the market is based solely on price, nothing else.

First, look at Figure 16.2. This is a 30-minute chart leading up to the actual high prints. Remember that this action was happening with *half* the previous volume. The low print on the left of the chart

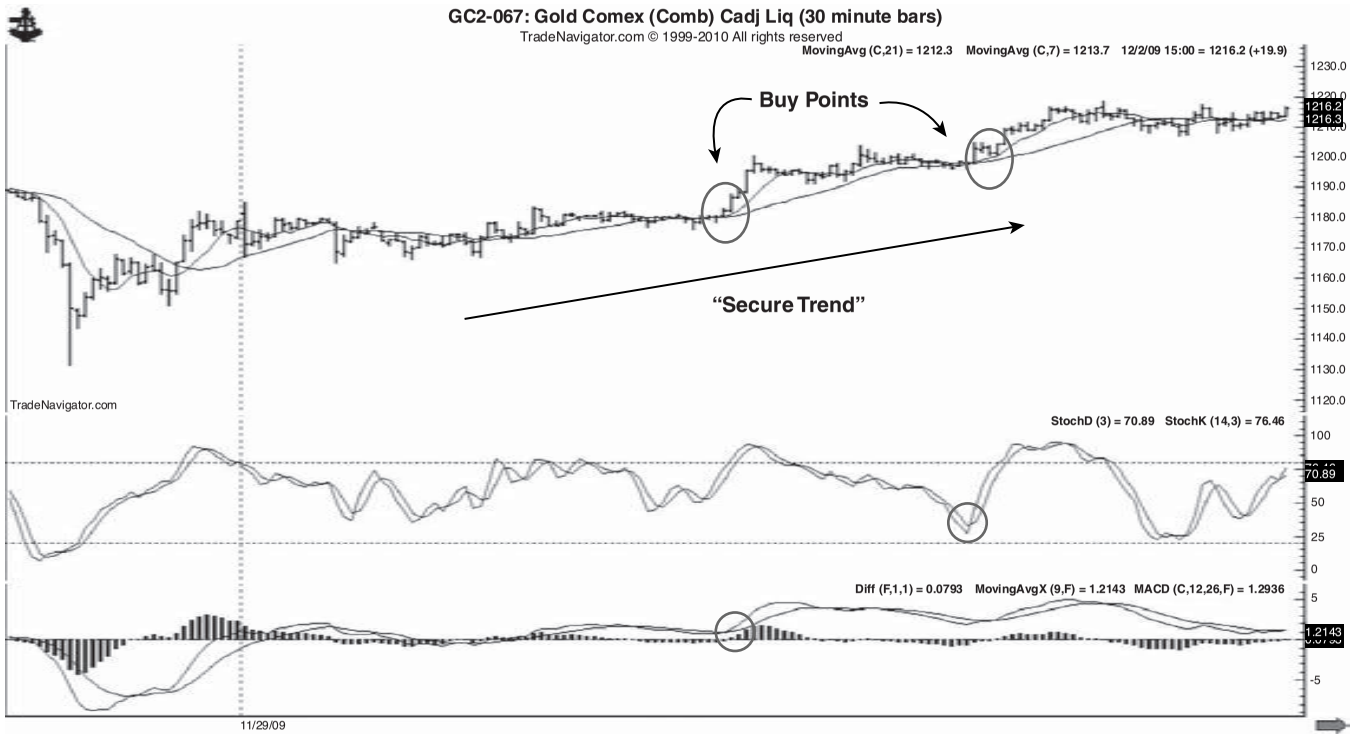


FIGURE 16.2 Market Action after the Spike in Volume and the Loss of Professional Interest

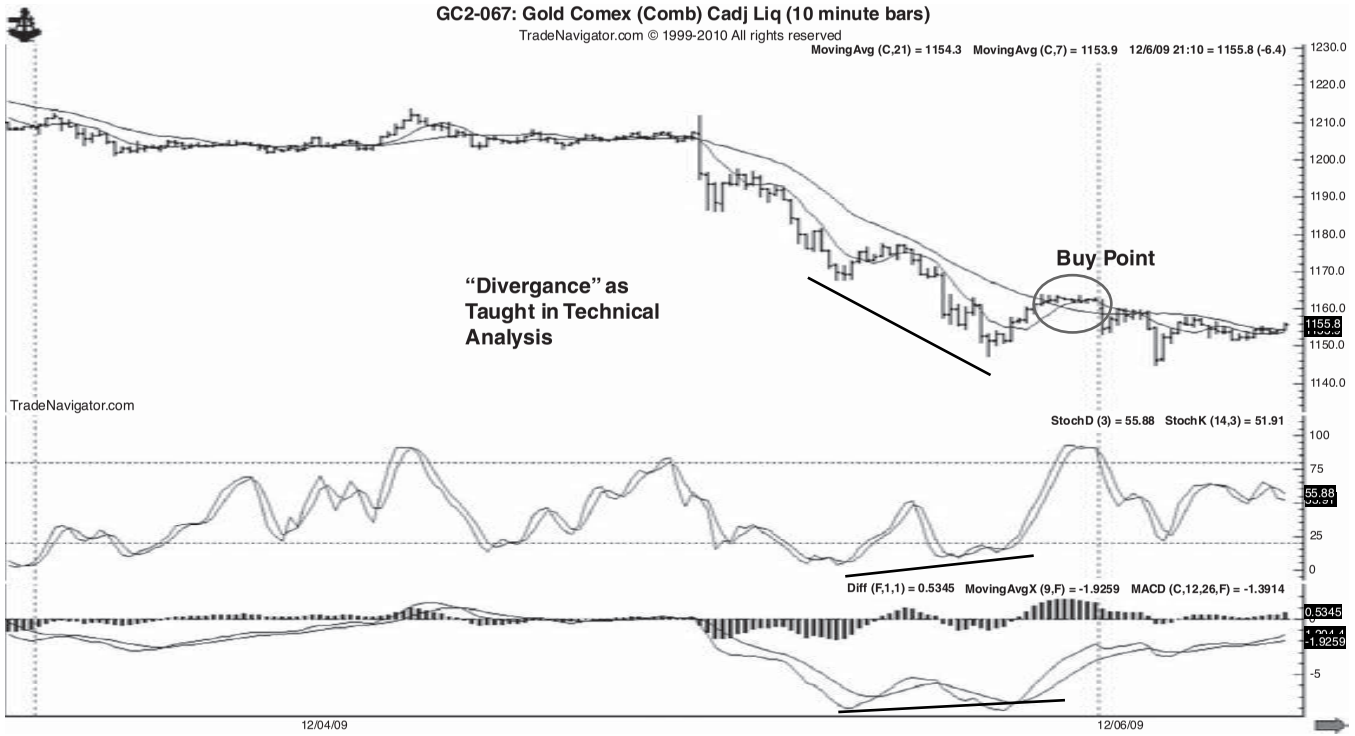


FIGURE 16.3 What the Very Top Looked Like to the Late Buyer

is the high-volume down day that was likely where the professionals liquidated their longs: November 27. Notice that the oscillators were "oversold" and that the 7-bar MA crossed the 21-bar MA as the oscillators moved into neutral and overbought territory. The price continued to hold above the averages, and every time the oscillators went "oversold," the price was at a higher level and the averages were in the "buy" mode. This is a classic loser chart at a market top. Losers are taught that this is an uptrend and you need to be buying the dips.

Now see Figure 16.3, the 10-minute chart for the actual high. This chart is for the day of December 4. Notice that the oscillators are showing "oversold" at several price levels that provide a small lead, but the averages are dropping. Notice the down bar in the middle of the chart—that is the New York open. Where would most Americans be trading? Most likely they would be trading the New York action. That bar was the *biggest* down bar in that market for a 10-minute chart since the high prints overnight. Notice that every time the oscillators went "oversold." there was a slight lift but the market didn't rise above the averages. That is late buyers trying to make money "right now"; it's a bull market—and you always buy corrections in a bull market, right? By the end of the day, all those small traders threw the towel in. By the way, that was a Friday. Everybody had all weekend to steam over why the market wasn't higher that week.

Do you see what happened there? The longer-time-frame traders, who were long from earlier in the year, decided it was time to liquidate. When the volume was there, they were the sellers against the late buyers who were active into the end of November. The warning shot was the high-volume down day that covered a large distance but left a big tail (the late buyers). The final rally to the actual high was on low volume, and low-time-frame traders likely were evaluating price from an uptrend perspective. The sharp break from the actual high on high volume was the late long getting slapped and the fresh professional sellers. The non–time-compressed price in the market is likely closer to $925/oz, which is where I suspect the market will be before the end of 2010.

By observing the record high price, the drop in volume, and open interest into the record high, you had a clue that the market might be time compressed. By dropping down to the lower time frames and seeing that the charts were all on the buy side from how losers would be looking at things, you had a good clue that the market was ready to top. By observing the huge down bar on the open (on a Friday) after

the market had printed a record price the day before, you knew that likely the market had a lot of get-me-out orders waiting. There were no buyers left, hence a time-compressed top. Now everybody wanted out, and the market had nowhere to go but lower as it processed that order-flow imbalance from the sell side.

THE TRADER'S LIFE

In my opinion, a topping market is your best opportunity to get rich no matter how you define rich. The best topping markets are those that are at an all-time high price level or near one. The reason is because sooner or later, *every market must top*. It cannot continue higher forever; there are only so many people who can play.

Always make part of your daily analysis a study of markets that are near or at all-time highs. There are usually two or three markets a year that have had a big move higher and offer you this opportunity. The best way to trade them in my view is to take a small position the day or two after the big volume drop from the highs (the liquidating test).

Once the market makes that move, it might make a low-volume test for a new high; that is the place to possibly add to the short. If you suffer a loss and you are stopped out, continue watching the clues and be ready to move again because the market is going to top sooner or later. You need to be ready for it when it does happen.

If you can get positioned reasonably well, look for a price drop that has a close under the previous upside volume and add to the position. At this point you might want to buy short-dated option calls against your short leveraged position; it's cheap insurance against upside volatility. If you time it fairly close and you are in position, expect your calls to expire worthless as the market continues lower. Find a way to continue adding to your open short; I like lower weekly closes.

You need only one or two of these markets to cooperate every other year or so to make your unfair share. Keep looking for them.

CHAPTER 17

Bottoming Market

Buy when there is blood in the streets.
—J. P. Morgan, financier and great trader

J. P. Morgan was an excellent trader. Besides liquidating at the highs three days before the 1929 stock market crash, he was known for buying when nobody wanted to buy. There is a very sound reason for this, and, in fact, it is one of the keys to successful speculation. Bear markets end in a rush of frustration and disappointment. There are two kinds of bottoms: range and reversal.

When a market is in downtrend and is ready to end in range or reversal, a prevailing sentiment creates the bottom. That sentiment is disinterest and refusal. By that I mean the bulls have grown so frustrated trying to pick a bottom that they have given up on a rally or change in trend. There is a large group of traders in that market that have decided just to quit entirely and go somewhere else to look for a profit. The bears with open trade gains are holding very little in terms of size (they were liquidating on the way down), and they finally quit altogether too. At this point, most participants are looking elsewhere, and the market has very little to offer anyone. It is off the radar, so to speak.

Part of this is because the public has no interest in a down market. They want the excitement of a bull market. This is in itself a

great advantage because the traders who will make a secure uptrend have to see a price rise before they are willing to commit; and those people usually are sellers wishing to see a return to lower prices. In other words, a bottoming market is one that attracts late professional selling. Often these traders already have made money on the short side and are looking for a continuing downtrend, but something has changed. That something is the professional buyer. A bottoming market is different from a topping market in that usually it is created by professional activity. A topping market usually is created by public activity.

Think this through. If a market has been in a secure downtrend for a longer period of time and reaches an important low price, who benefits? No one. Producers of consumables are frustrated because the product is priced at a level where it is very hard to make a profit. Often the producers cut back on production of the product in question. Take a market like corn, for example. If the price is so low that farmers can't make a profit when they sell the crop, why would they incur the expense to grow one? Speculators interested in a price change see no opportunity unless something changes in the supply/demand relationship. No one is going to commit capital unless there is a potential for a price change. Why would you sit on a position that had no potential for change when you could commit your capital somewhere else to attempt a profit?

When every market participant throws their hands in the air and says, "I quit—I'm going someplace else," you have a market bottom. It is only professional buyers who have any interest at this point because sellers are not going to deploy their capital without some potential. In their minds, the market is "dead." The move has already happened. Hence, no sellers. Often this point in price is an all-time low or a multiyear low that hasn't been seen since before most of the participants have been trading. In other words, it is new territory for most, and that means risk. But to professional buyers, this means opportunity.

Most bottoming markets attract professional buyers; they don't usually attract the public. Professional sellers are likely out of the market or willing to sell into a small rally for an attempt at further gains. However, there is an important distinction that makes the market a bottom. That is the time frame of the professional buyers. These traders are willing to take small position and wait. Professionals don't

have the pressure to make money "right now" in the same way that less informed or newer traders do. Professionals also know that there will be no volume at the lows because no one is interested in the market. That means professionals can't do size. That is okay. If they are long a rising market, there will be interested participants *later*, and they will use that volume to increase their size or liquidate into (creating a top).

The major difference between a topping market and a bottoming market is that when a market is at a low price and creating bottom, professional buyers are the only interested participants from that side. Because they buy in small size (absorbing the small size from professional sellers who are not willing to commit more capital), the order flow is mostly balanced, until the price moves to a level that threatens the sellers. Professional buyers know that it will take time to put in the bottom. Because they are on a longer time frame anyway, they won't liquidate unless they see volume on the sell side. As long as that doesn't happen, they will stand pat—that is why they are professionals. The only at-risk party is the professional seller, who is also trading small to avoid selling into the hole. Therefore, volumes are low and open interest is small.

CHARACTERISTICS OF A BOTTOMING MARKET

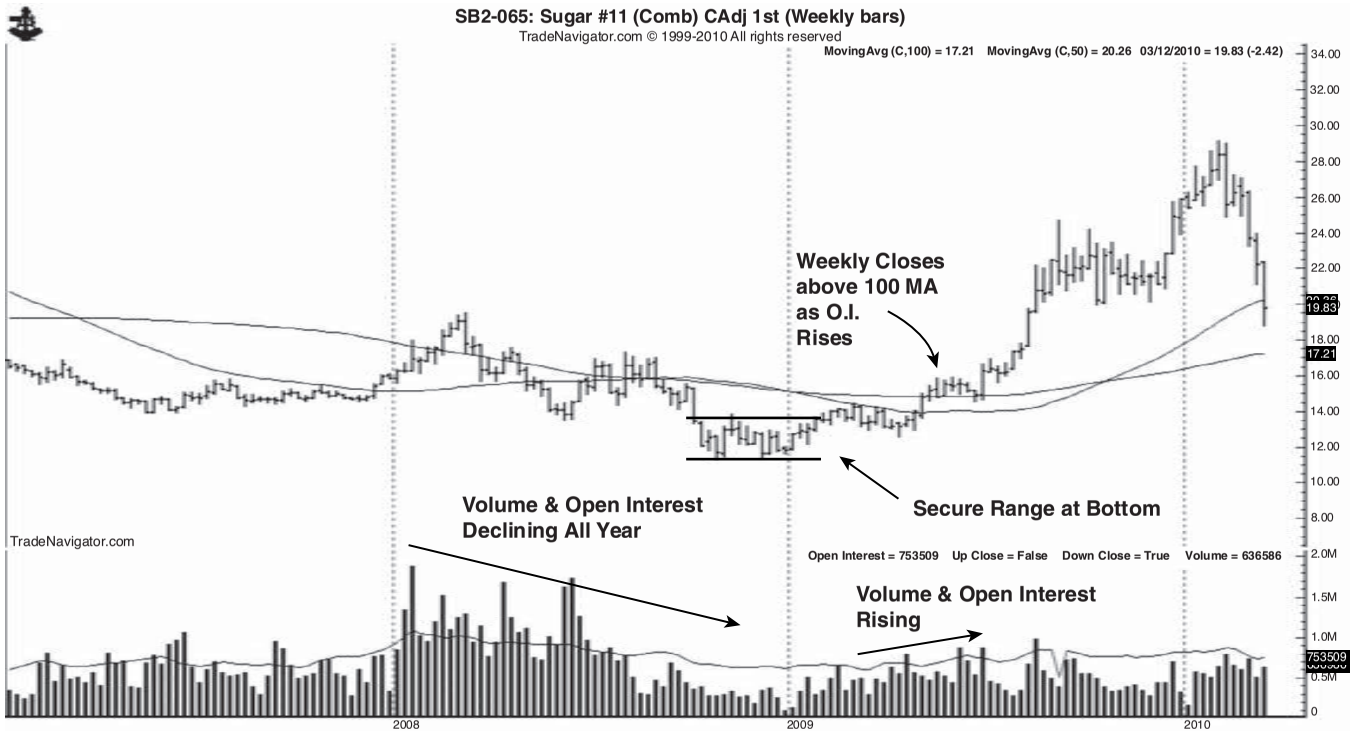
A bottoming market typically has very small price ranges into the bottom as there is light activity. No orders, no market. Professional buyers know that if their orders are too large, that will move the market. A bottom takes time to form because there are low volumes, low open interest (at first), and both professional buyers and sellers know what they are doing. A bottom represents a huge opportunity simply because the market is being accumulated by people who are not going to put liquidating orders out there possibly for months. The driver to higher prices is professional sellers covering small shorts quickly because that is what professionals will do when losing: They cut their losses quickly. Professional buyers are sitting on their hands and won't sell; hence, the market is accumulating bid pressure as the professional shorts cover back when professional buyers accumulate more of the market and don't sell.

Let's look at a bottoming market ending in range. I want you to pay special attention to how much time it takes for a market actually to put in a bottom. Again, this is not *price* but the *perception of price* and what it means for professional traders. Please refer to Figure 17.1, a weekly chart of the sugar #11 market.

Notice that the volume at the beginning of 2008 was very high, and the open interest was also high. As the year progressed, the volume dropped off noticeably after August, and the open interest was declining noticeably as well. At the end of the year, the price had reached around 12.00 cents per pound, and open interest was at the lowest all year. Additionally, volume was about 10 percent of what it was earlier, and the price was the lowest it had been since 1999. This was a market no one had any interest in. The actual traded low was the week of October 24, and the market stayed close to that price through the end of 2008. In January 2009, the market started to climb and finally crossed the 50-week moving average (MA) in May 2009. From October 2008 until May 2009, the market was bottoming. Notice the gentle rise in open interest and volume through the year until the market topped in January 2010. It is interesting that the open interest and volume at 28.00¢/lb in 2010 was actually less than it was in January 2008 at 18.00¢/lb. This fact suggests that perhaps the public was not interested in sugar during this time, but the truth is that the market bottomed at 12.00¢/lb in 2008, matching the low a decade earlier, before attracting any volume or open interest until the price lifted above 18.00¢/lb. In other words, no one really wanted to trade that market until it had already bottomed. On the way down it was a liquidating market as the longs quit.

If we look at smaller or shorter time frames into the lows, what do we see?

Please refer to Figure 17.2, the 30-minute chart for the week the market printed the yearly and decade low. Notice that the 7-bar and 21-bar MAs are suggesting a short and that the oscillators would have gotten you short fairly close to the downtrend in this time frame. However, this was the market bottom for the decade. Who would be selling a market trending into the bottom of the decade price range? It wouldn't be professional sellers—they would wait for a rally first. Additionally, the volumes were at the lowest level for the year; that can only mean small traders. Open interest was dropping to the lowest level in years as well; so who were the sellers? They were either



O.I. = open interest

FIGURE 17.1 Market Moving from Downtrend to Bottom

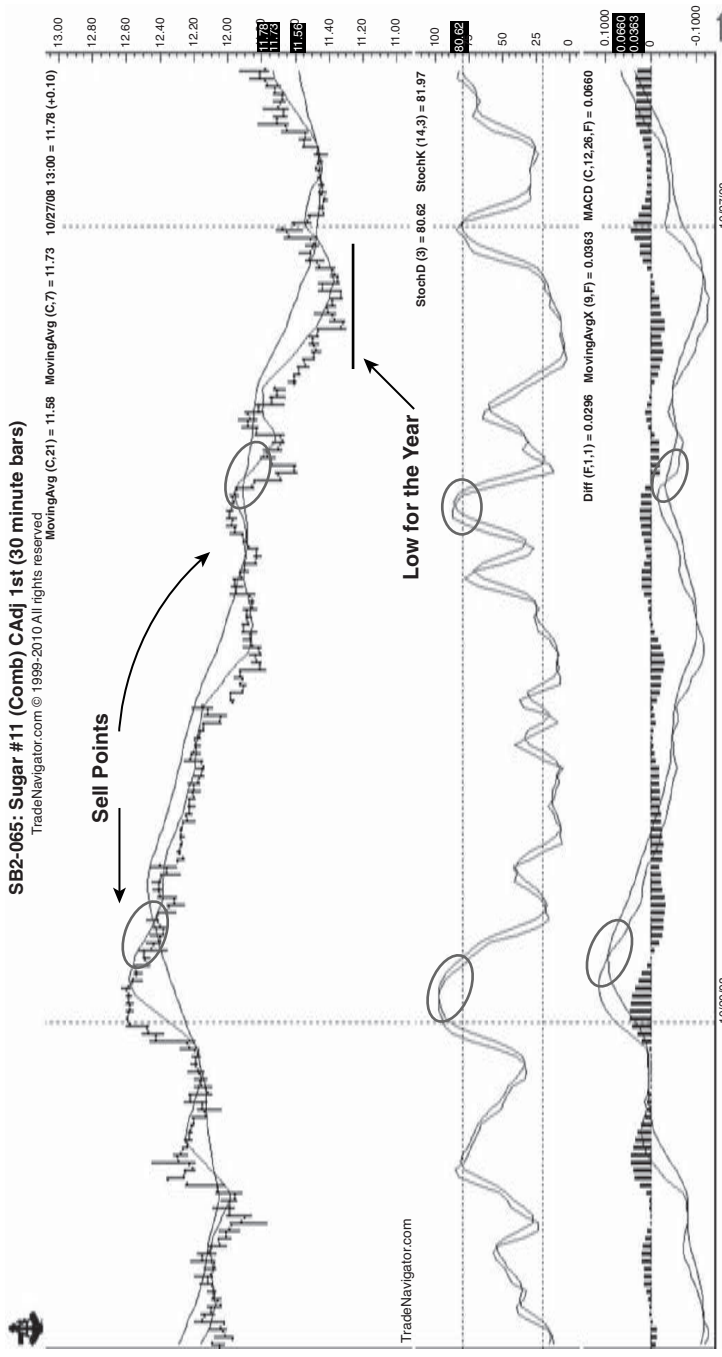


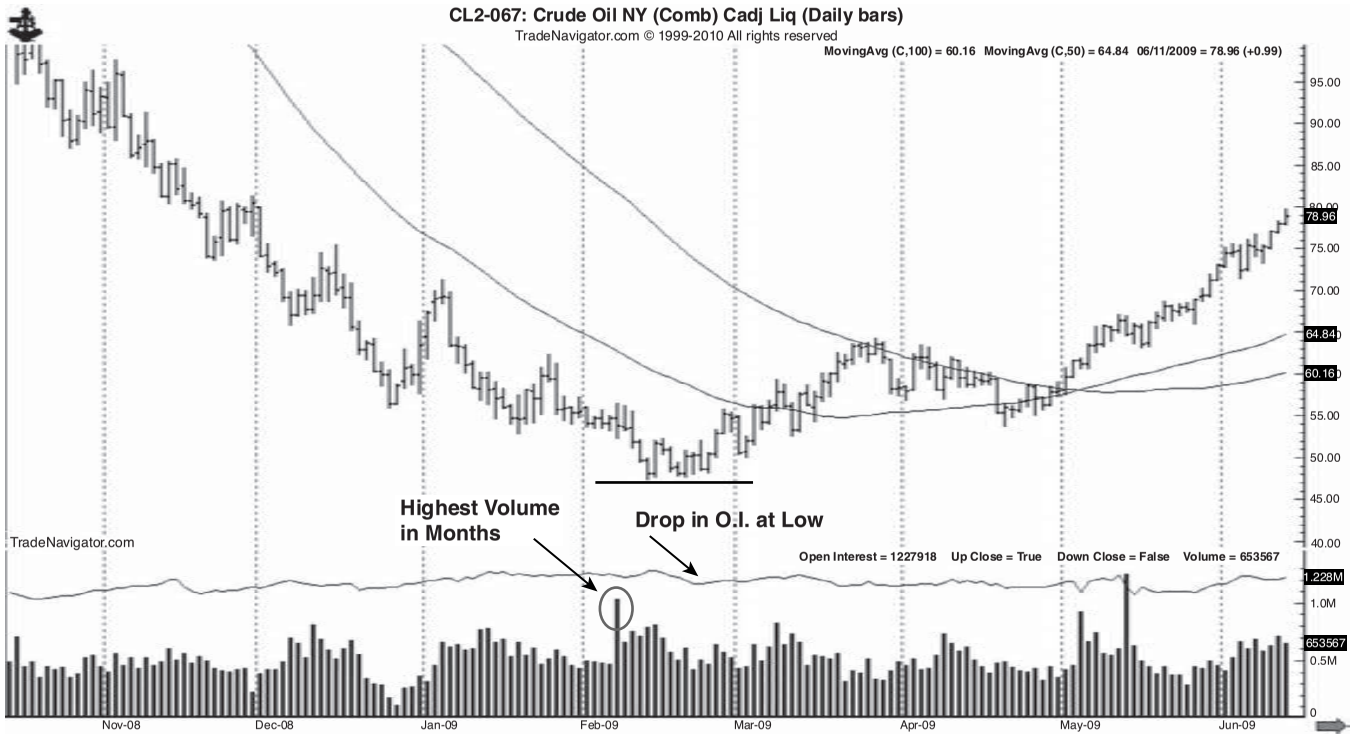
FIGURE 17.2 Actual Bottom from Lower-Time-Frame Perspective

small traders or professionals doing small size. Both would have had to cover back at a loss only a week later, and likely they would have been whipsawed attempting a short at anytime through the end of the year.

This market was not attracting size or committed players. But the price was at the best place to buy in almost 10 years. Who were the buyers who started the rally that took another year to double in price? They were the professional buyers using late sellers to execute against. If those late sellers were also professionals, that explains the low volume. We know it wasn't the public on the buy side because usually the public is not interested in markets that are at bottoms until the move higher has already begun; that's why the public always is long at tops. This market took from October 2008 through January 2009 to bottom because professional buyers were likely thinking on a time frame that was months to begin with and they wouldn't sell once they were positioned; plus the market was made up of professional buyers against late professional sellers with no volume anyway. The volume started to pick up once the market crossed the 50-week MA, suggesting that technical buyers were interested. In either case, professional buyers were long with a nice lead and therefore not at risk once the market started attracting other money. They had a market they could sell into at any time they wished because the volumes had picked up after the low was in. They created the bottom that attracted the other participants later.

The second kind of bottom is a reversal bottom, also called an exhaustion bottom. This is slightly different from a range bottom and spends a lot less time at the bottom price. Additionally, the volumes are much higher, and the market is usually not at a significant low price but at a midrange price. Often this kind of bottom becomes a yearly or quarterly bottom, but the actual bottom prices are within a larger-time-frame range, as happened with the crude oil market of 2009. Please refer to Figure 17.3, the daily chart showing the crude oil bottom in February 2009.

The spike in volume on February 6 was the highest volume in months for a down day. The market had fallen off the record highs seen a few months before and had reached a price level close to the previous highs from years earlier. The market had not traded to a new low for its history, but this was a 12-month low and fairly close to the upside breakout area seen the year before. In other words, it



O.I. = open interest

FIGURE 17.3 Exhaustion Bottom

marks a retracement of some sort. After the high-volume day, the market continued slightly lower, but volumes were light and open interest was dropping but still remained high. That means that a liquidation move occurred against the broader uptrend despite the larger ranges. Someone was willing to hold position through the break in price, and that is why the market didn't continue lower after that point.

Within a few days the market had recovered in price, and the volumes were beginning to uptick a bit; the clue here is that the volumes were not larger than before the spike in volume. That means the spike in volume was significant and represented someone interested in the market at that price. A large-volume day a few months later on an up day well above the previous month's highs indicates that buyers took control of the market at that low. The low prices after the large-volume down day into the $45 per barrel area indicates a potential exhaustion low. The fast recovery in price indicates that both sellers and buyers felt that the $45/bbl level was too low.

If we look at a smaller time frame for those few days, what do we see? Please refer to Figure 17.4, the 30-minute chart for February 12, 2009. Notice that the MAs and the oscillators would be getting you short into the lows with some success until the end of the day. Because small-time-frame traders had been short selling with success for some amount of time up to the bottom, they likely would be doing the same again the next few days as the market rallied and never looked back off the exhaustion low. They see that as the continuation of a downtrend and the rally as a sell opportunity. They think that the trend is secure and will sell rallies after the bottom is in. When they finally quit selling rallies, you get a spike in volume to the buy side, as we see in May 2009.

The important thing to remember about bottoming markets is that professionals usually are the active participants creating the bottom. In the case of a range bottom, most likely they are against professional sellers. In the case of an exhaustion bottom, they usually are working against late sellers (often public traders). In the case of the exhaustion bottom, public traders are more active because the market is not at a price level where no one is interested. This particular bottom is inside established previous price action, making it within a potential trend from the point of view of the smaller-time-frame trader.

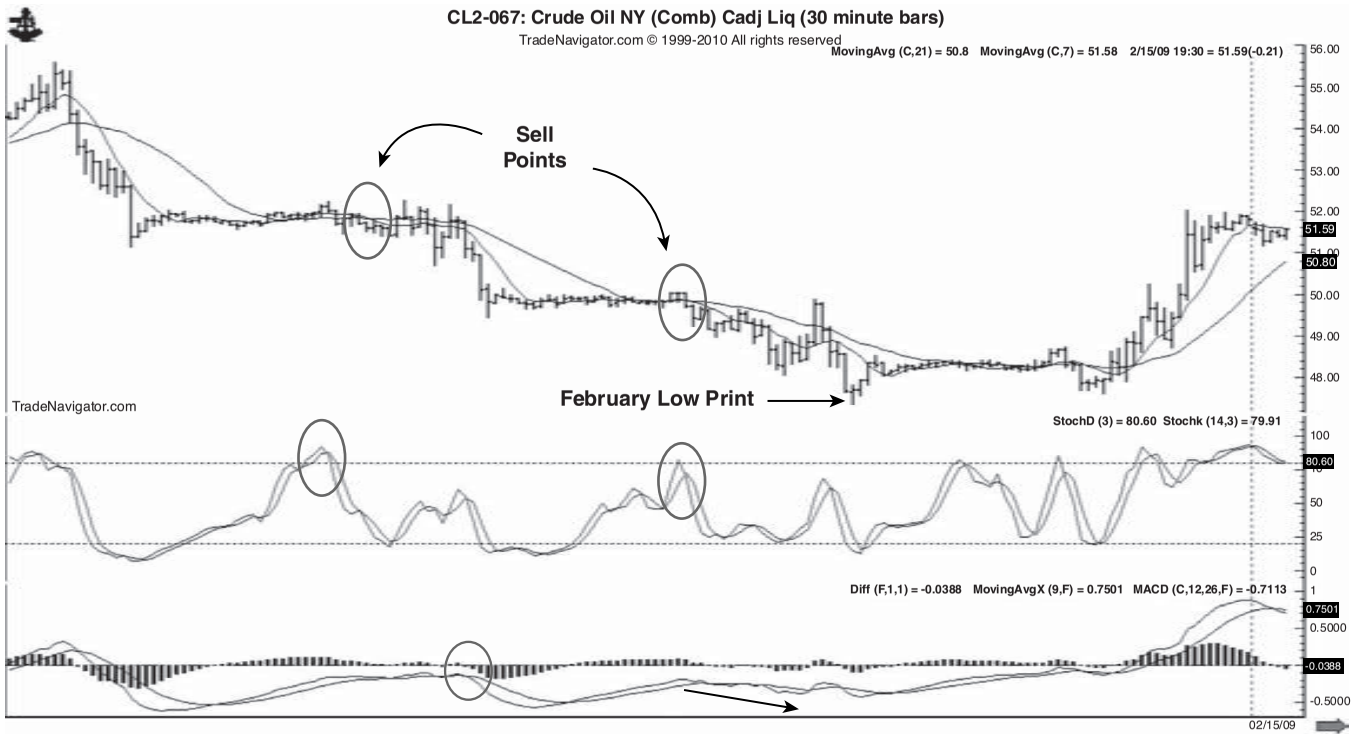


FIGURE 17.4 Exhaustion Bottom from the Point of View of the Smaller Time Frame

THE TRADER'S LIFE

In my view, bottoming markets are more difficult to find and trade because they usually take so much time to bottom that the price moves remain small and they cover that price range frequently, except in exhaustion bottoms. Therefore, you might have to invest a lot of time if you take a position too soon, or you might have to be willing for the market to back and fill in price all the time making your position profitable for a time and then unprofitable for a time. In other words, you might have picked the price/time relationship fairly well but if you stay with the position for several weeks, the price might be orbiting around the traded lows for quite some time making your position in or out of the money often.

The best way to trade bottoming markets successfully is to select a time frame you know likely will control the market (such as the weekly) and buy on tests of the weekly lows. If the market is truly attempting a bottom, the weekly lows will trade often and usually around the same levels with only a few minor price moves beyond the worst weekly bottom. In effect, you are buying the bottom of the range before the eventual reversal, but you might have to wait a long time for that trade to work.

The exhaustion bottom is harder to trade because the volatility is usually higher and when the market makes the exhaustion bottom, it won't stay there very long. In my view, exhaustion bottoms are best traded using options as part of your strategy. If a market has an exhaustion bottom, it will likely rally quickly, allowing option premiums to widen out quickly as well. The advantage is that option premiums have known risks whereas a futures position might move against you significantly, even if only temporarily. Options buy you time at the possible exhaustion bottom. If the trade is no good, you have a reasonable risk for your attempt. If it is a solid bottom, you can always accumulate more leveraged longs as the bottom continues to form.

In any case of a bottom, you need to remain especially vigilant as the market climbs in price. Rising markets are always more risky than declining markets. Be sure to use all the tools at your disposal to protect your open trade longs after a bottom is in.

CHAPTER 18

Secure Uptrend and Downtrend

Buy high, sell higher.

—Old trading adage

Participating in a secure trend in price is the surest way to gain regular profits. Part of understanding what makes a trend secure is understanding the issue of who controls the market and on what time frame. A trend in price is created when market participants are equally divided along multiple time frames and for the most part they are all likely seeing the same things. The reason the market is trending in price is because all the participants are roughly in agreement that a trend exists and they want to join the trend at some point from the time frame under which they personally are operating. The smaller or shorter-time-frame trader and the larger-time-frame trader are both going to execute on the same side, but they won't necessarily do it at the same time. Their combined order flow is net to one side, but it might take significant time for that order flow to come into the machine.

Secure uptrend and downtrend are basically the same market structure. In the case of uptrend, the bids are overwhelming the offers; in the case of downtrend, the offers are overwhelming the bids. This structure will not change unless the traders on the time frame controlling the market decide it is time to liquidate. For example, if the daily time frame is controlling the market, the trend is secure unless daily/weekly traders decide it is time to liquidate. Then the

trend will stop in the secure direction. When the trend is ending, you get range or reversal, but until the controlling time frame makes the choice to liquidate, that won't happen. The reason is very simple: The winners are not taking gains yet. Therefore, there is a certain amount of opposite execution orders that are simply being held and are not going into the machine.

Those opposite execution orders can become quite large, but until they actually are used, the market is under prevailing trend in one direction. What produces the give-and-take of price action and the moment-to-moment price fluctuations is the smaller-time-frame traders who are seeing the market trend from a different point of view. Those traders are executing on both sides because they see corrections against trend as an opportunity for a short period of time, and there always will be traders executing who don't think the trend is secure. But these traders are always small size, producing a smaller net number for volumes. They are always out of the market by the end of the day so they don't affect the open interest. Their function in a secure trend is to provide liquidity for professional traders to get positioned against.

A secure trend is likely to end once the market reaches an important price level that winners think is where the market has run out of potential in that direction. Because these traders often are professional participants, and often are correct at the market turns previously before the existing secure trend is active, these participants will have enough order flow to stop the trend when, as a group, they think it is time. Until that point, the trend is secure.

HOW SECURE IS THE TREND?

All secure trends, whether uptrend or downtrend, will end. The question you are trying to answer with your study is *How secure is this trend?* The answer to that question is based on observing a few things working together, and they need to be congruent in their expression. Three parts of market structure provide a reasonable agreement that a trend is secure: time, volume, and price. Open interest in a secure uptrend is always rising until the end of trend. Open interest in a secure downtrend is usually falling so if it is rising that adds credibility to the downtrend. For now, we are going to set that component aside and focus on the other three components of structure. A secure

uptrend is slightly different from a secure downtrend with these three components, but for the most part, the overriding issue is the time element.

A secure trend needs a lot of time. By that I mean calendar time. A secure trend cannot develop without first making a top or bottom, as described previously. In the case of a secure uptrend, a bottom needs to be in place, and the structure must have been as described in bottoming markets. In other words, a secure uptrend cannot form *unless* there has been a bottom, and the structure of the bottom was professional against professional with little interest from smaller traders (the public). Otherwise, the market doesn't have the potential to form a secure uptrend yet and is likely just pausing in price before moving lower. Once a bottom is in and professional buyers have started a new potential uptrend, what creates and maintains the new secure uptrend is the attention the market receives from other traders who haven't participated yet. It takes time for the market to begin moving higher, and smaller traders need a lot of time to "confirm" that the bottom is in. They are watching the market and trying to decide if there is an uptrend in place. In the case of a secure downtrend, a top must be in place, and the market must have washed out the remaining longs with enough conviction that they won't be back. A downtrend becomes secure after the market has topped and the move lower has attracted professional sellers. The move lower over time is created by the diehard bulls who keep buying dips, thinking that the move lower was a correction against the previously rising market. Prices continue moving lower as they are forced to liquidate.

In a secure uptrend, you need to see professional buyers and a lot of time to draw in a larger group of participants. In a secure downtrend, you need to see professional sellers and a lot of stops being triggered regularly as the old longs and diehard bulls continue taking losses. This is why a secure downtrend is often called a liquidating market and open interest continues to drop. In either case, once the top or bottom is in and the market is either attracting more players (secure uptrend) or forcing players out (secure downtrend), you now can go with the trend with a high degree of confidence.

In a secure trend, volume and price become more closely related. Volume should be increasing above the average for that market when the market makes a new price level in the direction of trend. That means the volume should spike when the uptrend reaches a new monthly high price, for example, or the volume should spike when the

downtrend drops to a new significant low price not seen since before the top. This spike in volume is caused by late traders in either market. In the case of the uptrend, this is early sellers taking their losses. In the case of the downtrend, it represents more buyers taking losses. Increasing uptrend volume means there are new players coming to the table competing for the lower number of sell orders and lifting the market faster. A secure uptrend should be seeing sharp rises in price relative to previous price action, volume should be increasing on the price rise, and the open interest should be rising. Pullbacks in price should be on lower volume, and the low prices should not extend beneath previous lows. A secure downtrend should see volumes rising on price declines, sharp rallies on low volume that never trade above previous highs, and dropping open interest. Additionally, a secure downtrend will see net volumes dropping as the price continues lower as traders lose interest in the market; if the market has potential to make a significant low price, the open interest will stop declining at some point and level off or begin rising. That is professional sellers taking a stand on the way down as they expect sharply lower prices and are willing to invest a lot of time for the market to get there.

SECURE TRENDS ARE NOT TIME COMPRESSED

In both secure uptrends and secure downtrends, the market is not time compressed. Time compression results from a change to the market participants' belief structure. As I mentioned before, a market tops or bottoms when the sell/buy orders represent both winners and losers deciding it is time to liquidate at about the same time. The sharp reversal is a result of a change in the participants' belief structure that the market cannot continue in the same direction. But in a secure uptrend or downtrend, this belief has not changed. The market is moving in one direction as the winners hold or increase positions and the losers, who are trying to pick a top or bottom, can't find it yet. The underlying structure is confidence, not panic. Secure uptrends and downtrends are orderly markets; they move more slowly with less volatility in the price action. Topping or bottoming markets can get violent; secure trends tend to be quieter and regular. Secure trends are secure because the winners feel no need to do anything;

therefore, the losers are driving pricing in the direction of trend as they liquidate. In the case of uptrend, the market is attracting new blood regularly. In the case of downtrend, the sellers see that the buyers don't have what it takes and stand pat. The trend is secure because confidence in the trend remains high enough that the winners hold their liquidation orders and sit tight. The market is not time compressed until that belief structure changes.

Let's look at a market that shows secure trends. Please refer to Figure 18.1, the weekly COMEX silver market. This market is interesting because it shows both kinds of secure trends after topping or bottoming

The market was clearly in a liquidating downtrend from early 2008 until the bottom in the fall of 2008. Prices were dropping every week for the most part, and new weekly lows often were accompanied by spikes in volume. Overall net volume was dropping, as was open interest, as the market forced out players and as traders lost interest on the way down. The market went into range at the bottom briefly before beginning a new uptrend. The market had increasing up volume on up weeks and decreasing volume on down weeks all through 2009. Open interest was rising as the price climbed until the 2009 high was made at almost the same price level seen in mid-2008 on the way down. The trend was secure on the way up and on the way down. Silver was a secure downtrend liquidating market until the end of 2008 and became a secure uptrend in 2009 until a previous price level was used by professionals to end the trend. In this particular market, both kinds of secure trends were created in a two-year period. Notice also that both the downtrend liquidation and the uptrend accumulation required about a year to form and be expressed. But during that time, almost any seller in the downtrend could have found a place to profit and any buyer in the uptrend could have found a place to profit—except late buyers or sellers, of course.

In my view, a trending market is setting up for a reversal at some point. Until you see the clues that topping or bottoming is possibly occurring, there is nothing to do but sell rallies in a downtrend and buy dips in an uptrend. You can see in Figure 18.1 that there were times when the market corrected against prevailing trend, but if you were patient and took small losses until you could get positioned, you could ride that trend until it ended in either direction. The key here is that daily/weekly traders (meaning professionals) were in control

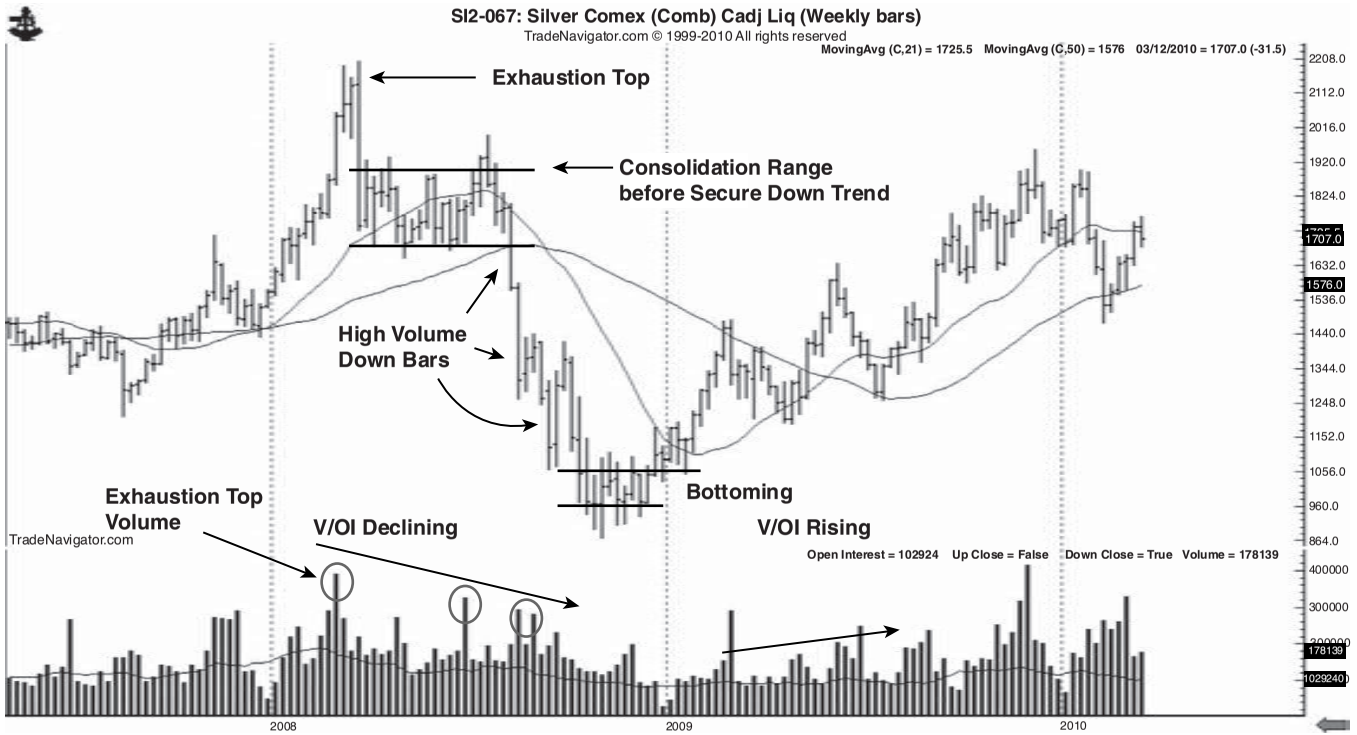


FIGURE 18.1 Secure Trend

of the market, and until those traders decided it was over, the trend was secure. There's nothing to do but go with the trend. In a situation like this, you need to pay special attention to the clues early in the potential developing trend, *knowing* that the top or bottom *will* form at some point. Once a bottom is in, you need to assume a potential uptrend is developing and look for the clues that say the uptrend is secure. The opposite is the case for a downtrend. To make the most from a developing downtrend, you need to be ready to execute a short position as soon as you comfortably can as a liquidating market will not give you a lot of time at the best prices. A liquidating market tops and goes into downtrend a bit more quickly and with more violence than a bottoming market goes into range or uptrend. Once the clues are there that the trend is down, the price will have already made a significant change.

In either case, the clues are there that a trend is secure, and you can go with it for a long period of time. The market is not time compressed; it has the *potential* to become time compressed, but that won't happen until professionals on the right side of either trend decide it is time. Most likely that will be a drop in open interest as the professionals take their gains and leave the market. At that point the market will likely top or bottom, and the game is on the other way.

THE TRADER'S LIFE

Secure trends are wonderful, but your real goal with trading a secure trend is to sit tight until you see topping or bottoming. If the trend is secure, it will go until the top or bottom forms; why liquidate?

Because secure trends are not time compressed, there is little potential for any serious reversal to negate the trend. Yes, you will get corrections against the trend, but those usually are of a significantly lower quality and often represent places to add to open trade winners with the secure trend, not a change in the trend itself.

Downtrends will suffer hard and fast rallies that usually never retrace more than about 38.2 percent from the actual top to the most recent low. If it is a low-volume move compared to the down volume before the retracement, you have a solid opportunity to add to your shorts. Uptrends usually have more frequent retracements, and they often are closer to 50 percent retracements between bottom lows and the most recent highs.

Think of it this way: Downtrends grind lower all the time with occasional rallies that fail; uptrends are more violent and have larger up action usually off large moves.

In either case, there is nothing to do but wait once you are with the trend. You want to assume the trend is secure until you see the clues discussed in topping or bottoming markets. Trends can go for months and months—stay with them.

CHAPTER 19

Secure Range

Buy bottoms and sell tops.

—Old trading adage

How simple is that old adage? Of course we want to buy bottoms and sell tops. That goes without saying. As we have discussed throughout this book, we are attempting to study the market from the point of view that order flow in one direction eventually will change to order flow in the other direction, and we want to get positioned as near the turn as possible. We know that the loser in the market is the fuel that will make the order flow change. We know that the perception of price is what creates the change in order flow for most traders, and we want to understand what that perception is to the point of eventual change. So what happens when the order flow balances? When the order flow balances, you get range. When a range is secure, you get very easy money in my opinion. Range trades are absolutely the easiest money to make, but they are never the largest.

When a market is in a secure range, there are very obvious price levels that the market retreats from. In fact, those price points are so obvious that no other study of the market is really needed. The price will rise to the top of the range and then retreat to the bottom of the range with almost clocklike rhythm. You don't need to use an indicators or oscillators, and you don't need any fundamentals; all you need is the price range, and that is very clear.

However, a secure range is a secure range only as long as market participants continue to choose sides. If the range is at or near a market top, reflected by a significant high price, the range represents a potential reversal from a high. You need to look for clues that will help you discern that the range is a pause before a new high is attempted. If those clues are there, you will likely see a breakout from the range to a new high, making the uptrend a continuing event. Otherwise, a top is likely in play. But if other clues are there, the range is secure for a period of time. Regardless of what you personally may feel the potential in the market may be, that range will trade, providing an opportunity for consistent gains over a period of time. The key to understanding the difference is disclosed by volumes at the extreme ends of the range.

PSYCHOLOGY OF RANGE

The psychology of range is really a very simple thing. If the range is occurring at an important high price, the bulls are continuing to buy the dips, establishing the bottom of the range. The sellers are shorting the top of the range, expecting a reversal. As long as both groups believe that their point of view is the correct one, you won't get a reversal or a trend continuation. What happens is a period of time where more and more open positions from both sides are executed and the population of eventual liquidation orders builds as time compresses. Sooner or later one side or the other will gain dominance, but for the present the order flow is balancing.

A range is a balanced market, and that event is *always* temporary. When one side or the other decides it must exit, the order flow will go into the regular imbalanced state and you will get either a breakout to a new price level or a retracement to a previous price level. Reading the clues correctly will tell you if the range is a pause on the way to a new price level or a setup for a reversal. There are a few things about range that you must understand and be ready to exploit.

It is important to note that range is usually established on a lower time frame. This is the case because professional traders need the order flow from small-time-frame traders to either liquidate or initiate a position. Small-time-frame traders are interested in trading for money they expect to make "right now." That means their initiation orders and liquidation orders will both be executed in a short time frame.

Either order represents an opportunity for professionals to initiate or liquidate a position. Because short-time-frame traders often place both orders during the same trading day, professional buyers or sellers know they will have at least one of those orders available during the day as an opportunity for their position. In other words, if a market is ranging, small-time-frame traders will be participating on both sides but seeing the market as trending or breaking out in one direction or the other (for their time frame). Professionals are on the other side of those trades.

Suppose the market is rising and small-time-frame traders are convinced of an uptrend in place. Professional sellers might be the ones on the other side of that order. The market will decline to a point where small-time-frame traders see an opportunity for a short as the "momentum" of the market accelerates; so they sell near the bottom of what becomes the range. Professional buyers are on the other side. In effect, small-time-frame traders and their points of view on the market create the range as professionals take the other side of the trades. This is why you see so many small-time-frame traders get whipsawed in the market each day as the market is establishing range. They are long in the morning as the market declines and short from the lows as the market rises into the end of the day. They have very solid signals from their analysis but they don't know that large-time-frame traders are seeing something else and working against the order flow.

As a range becomes established and secure, this process continues for a period of time. Small traders continue to get whipsawed; professional bulls are accumulating the market from the lower prices; and professional bears are accumulating the market from the higher prices. As this process continues and the range becomes more secure, smaller-time-frame traders finally get the message and begin buying the dips and selling the rallies. Eventually the entire participant community is working the market from both sides, and the range is secure. What makes the range secure after it is established is the liquidation of small traders taking short-term gains.

Small traders buying the bottom of the range will liquidate at the top of the range, adding to the pool of sell orders that include professional sellers trying to use that price area to establish shorts. The same thing happens at the bottom of the range, as small-time-frame traders liquidate shorts, adding to the pool of buy orders near the bottom. As long as professional sellers are trying to sell into the top of the

price area (along with small-time-frame traders), the market cannot break out to the upside to a new price level. There are too many sell orders at the top of the range. As long as small-time-frame traders liquidate shorts from the top of the range by entering a liquidation buy order at the bottom of the range (competing with professional buyers), the market has too many buy orders at the bottom of the range. The market can't decline in price.

This is a secure range. This process can continue, sometimes for weeks, as longer-time-frame professionals continue to use the range to position for what they expect next and as small-time-frame traders "scalp the range" for small gains on a regular basis. Until buyers or sellers decide their position isn't going to work and liquidate, the market doesn't have an order-flow imbalance yet. It doesn't matter at what price level this process of order flow balance happens. Once it happens, the market is trapped between two price levels and will stay that way until one side or the other (as a group) throws in the towel and calls it quits. Sometimes this can be an all-time high, a midrange price level, or an all-time low. Once the market has participants on both sides who for reasons of their own effectively take each other's orders, the range is established and secure.

During this process, there are orders building on both sides of the market, representing a group liquidation that will fuel the break in one direction or the other. Sometimes these are resting stop-loss orders. Once you see range established and secure, you need to assume the stops are building on both sides. One group of those stops will be triggered. When those stops are triggered, the price action will change the perception of range and trend. If an uptrend has ended in range, and the range is secure, most likely the break will be lower. If a downtrend has ended in range, and the range is secure, most likely the break will be higher. It is important to remember that once range is established and secure, it is only a matter of time before the break in one direction or the other will occur. When the break finally happens, you need to consider volume as the key to whether a new trend is developing or if the previous trend is continuing. In other words, a top is in place when uptrend ends in range followed by a sharp break in price with very high volume. The uptrend is still secure if the top ending in range has an upside breakout on very high volume. Of course, the opposite is the case with a downtrend.

Because ranges often happen on lower time frames, they usually last only a few days before a break in one direction occurs. This

happens because small-time-frame traders cannot handle trading without price action in their favor. The market has to go somewhere, and they won't wait very long for that to happen. Therefore, range usually is a short market structure and results in breakouts within a week or less. A range that is established for more than two weeks or so usually signals that the previous trend eventually will reverse. Again, range is a temporary thing at best, but it is sure money while it lasts and big money when it breaks out of the range price area.

To look at a typical range market, please see Figure 19.1, the 120-minute British pound futures.

Prior to the sharp drop into the low prices seen on February 28, 2010, the market had been in a steady decline as downtrend was secure. The market reached an exhaustion bottom on that day and has never traded at the actual low prints since then. The total time shown on the chart is about two weeks, which is long for a range and usually indicates a potential for reversal; for now, however, we are concerned with secure range. Notice that the volumes were larger in both directions but often from the middle of the range. This means that volume is typically lighter at the extreme end of the range as it is secure. This is because shorter-time-frame traders are more comfortable going with the range somewhere in the middle because they see downtrend or uptrend as "confirmed" once the top or bottom of the range has traded. Therefore, the larger volume is often midrange as those traders attempt a position. Also, notice that the longer-time-frame moving averages tend to stay down the middle of the range and rotate around each other, giving false signals for trend in one direction or the other. This is important because lower-time-frame traders are looking for *trend*, not *range*.

Now let's look at a portion of this range from the perspective of smaller-time-frame traders. Figure 19.2 is a 10-minute chart showing what happens at the extreme end of the range.

Notice as the market reaches the top of the range, shown by the solid line around the 1.5200 area, that the oscillators and moving averages are all suggesting buying dips. In fact, at the extreme end of the range, seen on the far right of the chart, the indicators are in "oversold" territory as the market holds near the top of the range. Additionally, if you notice, the market had minor ranges at lower prices on this time frame, followed by sharp rallies until the top of the range was reached. If you do your own volume study for this market, you will notice that volumes were mostly average at either end of the range

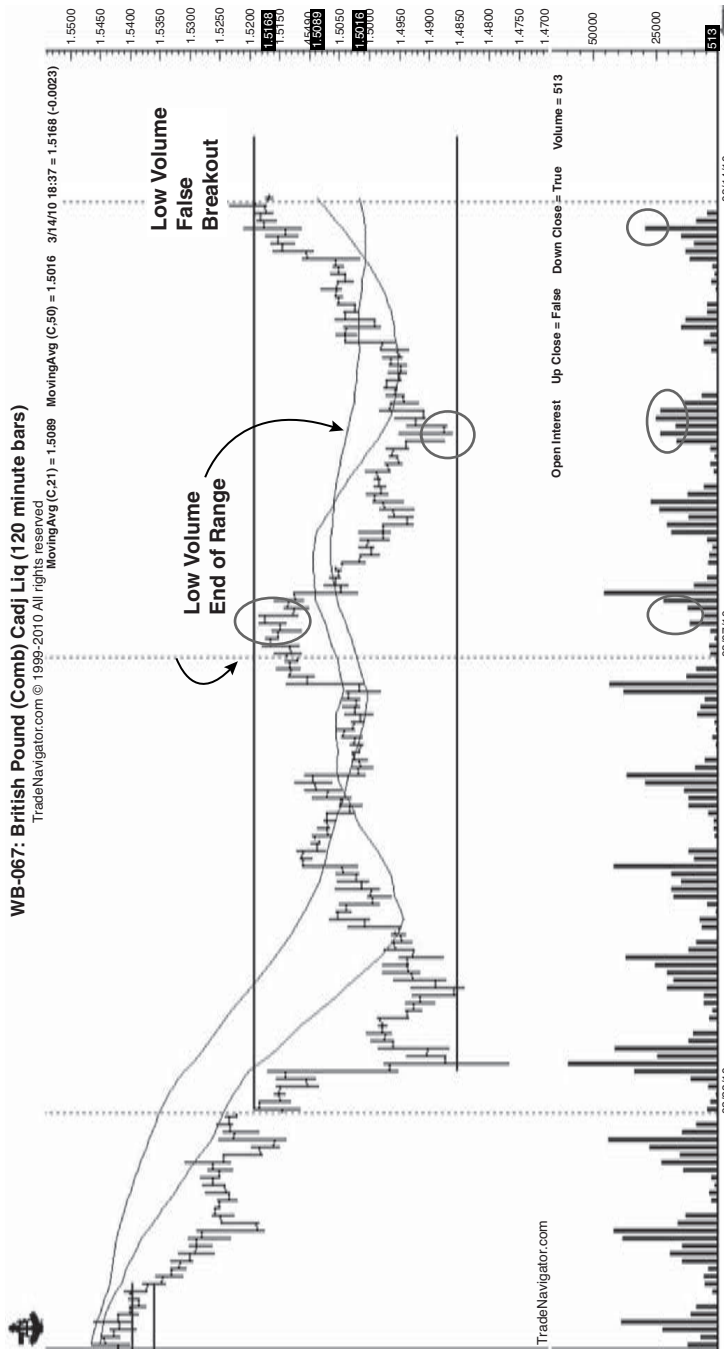


FIGURE 19.1 Secure Range

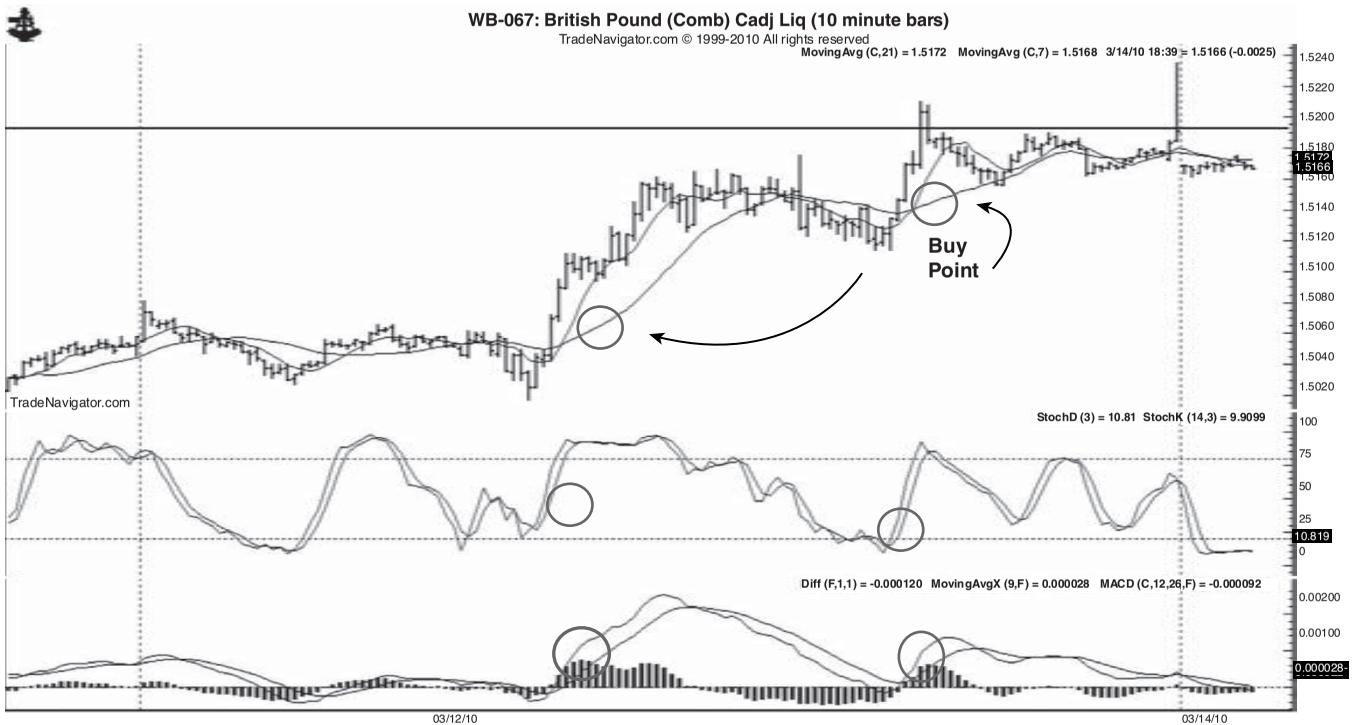


FIGURE 19.2 Smaller-Time-Frame Trader and Incorrect Perception of Trend

on the larger time frames, including daily. This is a secure range that is not attracting buyers or sellers past a certain point. Most of the interest in the market is near the middle part of the range as that represents smaller-time-frame traders seeing "trend" from their point of view. This market will not rally or make new lows until either the longs or shorts quit in enough size to create break out in one direction or the other. As a trader attempting to understand time compression in a range, your main concern is volume at the extreme ends of the range. Once that volume becomes larger than the midrange volumes, you are likely near a breakout; the range is now top or bottom, creating a new trend. This is true unless the range is somewhere in the middle of a larger price picture and the breakout is with the underlying trend. Please see Figure 19.3, the daily EURO futures chart.

The range in the middle of the secure downtrend had very high volumes as the market broke out to the downside. In this case, the range was a pause before resuming downtrend. The clue in this case was the exceptionally higher volume on the breakout of the range as compared with the volumes within the range. There were a few high-volume days within the range, but the market remained trapped. This price action lower was the late longs buying the "correction," as they saw it. The sellers were likely professionals working the top of the range. When the market broke to the downside, the higher volume indicates that the stop-loss orders were from bulls building long positions that were liquidated quickly (meaning all their orders at once) as the market traded under the previous range bottom. The market continued lower after the consolidation range midway between the traded highs in late 2009 and the traded lows in March 2010. In this case, range was secure only for a few days before breaking to the downside.

Secure range is a temporary thing. As a serious trader, you need to assume that it usually indicates a reversal is building. For the times that it is a continuation pause before more action with the existing trend, your clue is that the range usually forms at a reasonable correction from the start of the existing trend. In the case of the EURO, the range around the 1.4500 and 1.4300 price area was roughly the 38.2 percent retracement from the high prints and the previous 2008 lows. We do not discuss retracements in this book at all but I think they are something you eventually will need to add to your arsenal of study. Here we are looking for clues that the range is secure and clues that the breakout indicates either a reversal or resumption of trend.

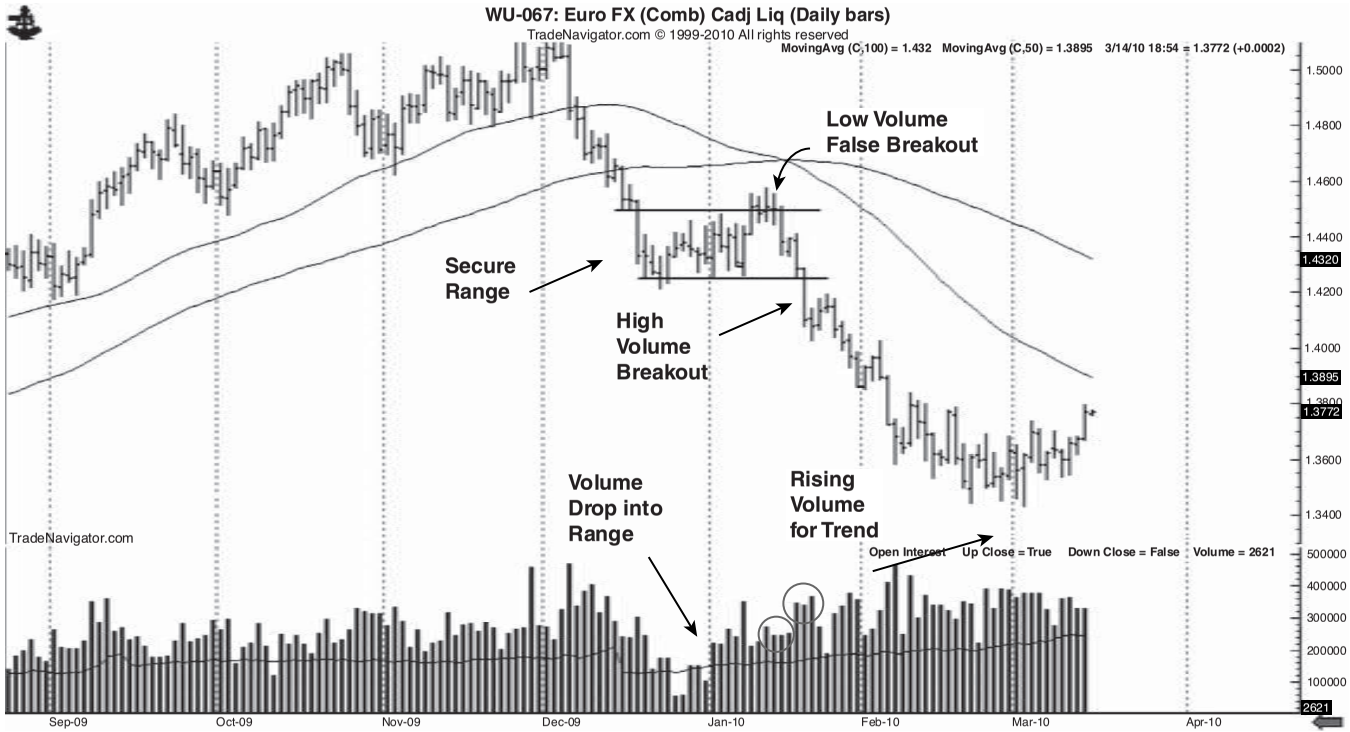


FIGURE 19.3 Range Ending in Continuation of Trend

SUMMARY OF PART IV

The five basic market structures all reflect the potential for the market to eventually reach a time-compressed state. This is most apparent at the top or bottom when the competing order flow has the greatest potential to reverse. During secure trend, the imbalance is continuing until the belief structure of the market changes. You can discern that change by asking, *Who still wants to play?* Your clues are volume and open interest.

When secure range is present, it is critical always to focus on the fact that it is a temporary state and will always lead to an order-flow imbalance. Range can happen at any time and is usually more apparent on a slightly higher time frame but within that higher time frame the lower time frames will all see up or down trend from their point of view. As the market continues to process the balanced order flow, liquidation orders are building on both sides of the range, making a breakout inevitable.

Regardless of which state the market is in at any point in time, smaller-time-frame traders are not seeing the whole structure of the market and are unaware that larger-time-frame traders have control of what happens next. Because lower-time-frame traders do not see that a large order-flow imbalance against their position is building, they become the release of time compression when they liquidate. Liquidation is what makes markets move in price. Time compression reflects the highest number of orders that still need to be liquidated when there are no orders on the other side for them to be filled against.

That forced liquidation pressure is enhanced by small-time-frame traders using too much leverage for their account size when their trades did not make money "right now." Part of what makes forced liquidation happen is the evaluation focus by losing traders trusting and using their analysis in exactly the way every other losing trader is trusting and using analysis.

There are only two states for order flow: balance and imbalance. The five basic market structures *must* reflect one of these two states. It is only a matter of time before one state gives way to the other. Most likely losing traders on the smaller time frame provide the best clues that a change in order flow is imminent.

As a winning trader, you are looking for clues that small-time-frame traders are convinced that a trend is secure (and thereby the

market is set to reverse), a top or bottom is happening (and thereby the market trend will continue), or that a range is secure (and thus the market is set for a big move one way or the other).

In all cases, small-time-frame traders never are seeing the whole picture, and they never are seeing what long-time-frame traders are seeing.

THE TRADER'S LIFE

In my view, the most important takeaway you could have about the five basic market structures is the underlying issue of order-flow balance or imbalance. All the competing time frames will show one of these two states all the time. The critical thing is to assume that the larger time frames are the dominant order flow.

Because range can form at any time and usually is first apparent on shorter time frames, you want to watch for potential range formation on the lower time frames as a clue that the order-flow balance will resume in an unbalanced state on the higher time frames. For example, when a downtrending market reaches a weekly low, you will likely see range form on the 1-hour time frame or less when the low is reached. That range needs to be studied for clues that the dominant order flow is continuing to sell highs, making the short-time-frame range a pause before a deeper move lower. If the weekly low happens to be a multiyear or an all-time low, that range may be the beginning of bottoming. Obviously, in an uptrend, your clues are for higher prices or top.

If the market has already put in a top or a bottom, then the range on the smaller time frames is usually a pause before more price action in the direction of the developing trend is seen. In other words, when secure range is below a top in price or above a bottom in price, it usually is a pause before more in the direction of the developing secure trend. I call that the "pause that refreshes." In other words, once a market has topped or bottomed, and the new trend the other way is developing, there will be range trade on lower time frames regularly that you can use to add to open trade winners in the direction of the new developing trend.

If you want to make the most from your understanding of order-flow balance and imbalance, you need to study range more than anything else. That's because range *always* will end in order-flow imbalance, creating a change in price.

CHAPTER 20

Conclusion

Everybody's buying? Then sell, sell!! What? Everybody's selling? Then buy, buy!!

—Al Czervik in *Caddyshack*

When I first saw *Caddyshack* as a young man, I thought Rodney Dangerfield's character was the best in the whole movie. Al Czervik was the kind of businessman I thought most really wealthy people would be like. I had no idea how true his words would be as I got older. Al was absolutely right, even if he couldn't golf to save his life.

In the final analysis, when trading in a zero-sum market, in order to be the winner you have to do something different from the loser. If you choose to execute for an entry hoping to profit, you must do that at or near the price/time relationship that will draw other traders into the game on that side. It really doesn't matter if those orders are other traders hoping to profit or those traders taking a loss; you must be fairly close to the point where the order flow will go into an imbalance on your chosen side. Otherwise you will be the loser.

We have discussed a lot of interesting variables that all contribute to that process. I personally think that the overriding factor is always the loser in the market. The loser in the market is the one who will pay the winner. You really can't expect to be a consistent winner unless you are willing to accept that the loser is your source of profit. Until you will take the step in your thinking that helps you uncover and

trade against the loser in the market, your results will most likely be less than you could have had. That, of course, includes net losses.

Multiple time frames help disclose the relationship between the winning trader and the losing trader at the most basic level because the loser is thinking (and therefore acting) in a way that is not seeing the whole picture. The loser is looking at prices in different ways from the winner. The loser usually is evaluating price rather than observing the underlying market structure. Your goal is to see this relationship from the whole perspective. Accept the fact that the loser is attempting to make money from trading "right now," and he or she defines that differently from the winner. The loser is always using lower time frames. The winner is using higher time frames. How the loser analyzes the lower time frames are your best clue to what they will do next. Remember that the loser is trying to answer the questions *What does this mean, and what do I do to profit?* The winner is trying to answer the question *Where is the loser?*

The market is a crowd. Crowds behave in a predictable fashion. Time compression is the inevitable result of the crowd all doing the same thing, the same way, at the same time. When the crowd makes its move, it usually does so in order to avoid pain and a deeper loss from the point of view of the individual participants. Can you see that eventual inequality happening? It is always there, just waiting. As you begin to understand crowd behavior better and see how time compression is disclosed using multiple time frames, ultimately you will have the advantage of exploiting the change in the order flow. That change in the order flow is all you need to profit consistently.

Thanks for reading.

About the Author

Jason Alan Jankovsky is a 20-plus-year veteran of leveraged transaction trading. Trading extensively in futures, options, and FOREX since 1986, first as a customer and then as a registered broker, he is self-taught and self-educated. Working in almost all facets of the business, he has authored several trading systems, trained other successful traders, and been published in many industry periodicals. His numerous articles on global cash FOREX have appeared in *Traders Savvy*, *The Perspective*, *SFO Magazine*, *Futures Magazine*, *FX Magazine*, and many other industry publications. He is a regular guest on FOREX TV.com and the *Jack Bouroudjian Show* as well as other business radio and television shows. He is the author of *Trading Rules That Work: The 28 Essential Lessons Every Trader Must Master* (John Wiley & Sons, 2006), a regular Amazon top-100 best seller in the category of "futures." His second book, *The Art of the Trade: What I Learned (and Lost) Trading the Chicago Futures Markets* (John Wiley & Sons, 2008), is an autobiography of his education as a trader and is also a regular Amazon top-100 best-seller in the category of "biography/business." He has focused on the psychology of trading as the key component to a successful trading methodology and teaches a six-week course on trading psychology every quarter to traders around the world. He appears regularly as a guest speaker at many public and private trading forums and has been invited to speak at round-table discussions offered by events such as the Orlando Money Show and the New York Traders' Expo. He provides daily trade coaching and analysis for subscribers to his educational Web site, working directly with traders of all skill levels. Born and raised in Chicago, Mr. Jankovsky is an avid sailor and private pilot.

Mr. Jankovsky can be reached through his Web site, www.theliononline.com, or by e-mail at jaj@theliononline.com. He publishes his personal trading results weekly. Interested readers may attend his Internet webinars by requesting a free link through his Web site or by e-mail.

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TIME COMPRESSION TRADING

"In the final analysis, when trading in a zero sum market, in order to be the winner you have to do something different than the loser. If you choose to execute an entry hoping to profit, you must do that at or near the price/time relationship that draws other traders into the game on that side. It really doesn't matter if those orders are made by other traders hoping to profit or by those traders taking a loss; you must be fairly close to the point where the order flow will go into an imbalance on your chosen side. Otherwise, you will be the loser."
—**Jason Alan Jankovsky**

In this landmark book, expert trader and market analyst Jason Alan Jankovsky shows what it takes to be a winner in the zero sum marketplace. He offers the tools needed to develop a better understanding of crowd behavior and shows how to implement the time compression method. Jankovsky's insights and practical ideas give any trader the advantage to exploit the change in order flow and profit from it time and again.

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