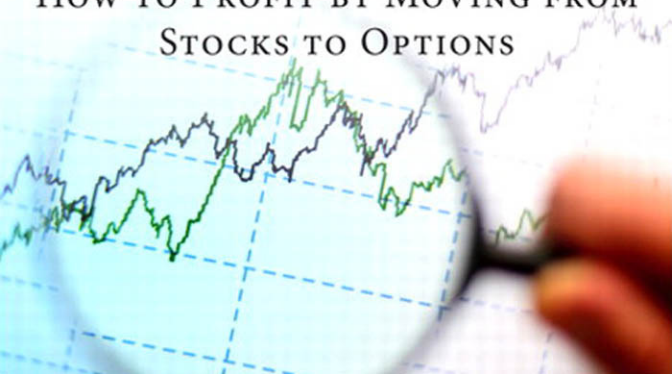


MICHAEL BENKLIFA

THINK LIKE AN OPTION TRADER

HOW TO PROFIT BY MOVING FROM
STOCKS TO OPTIONS



Think Like an Option Trader

This page intentionally left blank

Think Like an Option Trader

How to Profit by Moving from
Stocks to Options

Michael Benklifa

Vice President, Publisher: Tim Moore
Associate Publisher and Director of Marketing: Amy Neidlinger
Executive Editor: Jim Boyd
Editorial Assistant: Pamela Boland
Operations Specialist: Jodi Kemper
Marketing Manager: Lisa Loftus
Cover Designer: Chuti Prasertsith
Managing Editor: Kristy Hart
Project Editor: Elaine Wiley
Copy Editor: Kitty Wilson
Proofreader: Jess DeGabriele
Indexer: Tim Wright
Senior Compositor: Gloria Schurick
Manufacturing Buyer: Dan Uhrig

© 2013 by Pearson Education, Inc.
Publishing as FT Press
Upper Saddle River, New Jersey 07458

This book is sold with the understanding that neither the author nor the publisher is engaged in rendering legal, accounting, or other professional services or advice by publishing this book. Each individual situation is unique. Thus, if legal or financial advice or other expert assistance is required in a specific situation, the services of a competent professional should be sought to ensure that the situation has been evaluated carefully and appropriately. The author and the publisher disclaim any liability, loss, or risk resulting directly or indirectly, from the use or application of any of the contents of this book.

FT Press offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact U.S. Corporate and Government Sales, 1-800-382-3419, corpsales@pearsontechgroup.com. For sales outside the U.S., please contact International Sales at international@pearsoned.com.

Company and product names mentioned herein are the trademarks or registered trademarks of their respective owners.

All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher.

Printed in the United States of America

First Printing May 2013

ISBN-10: 0-13-306530-8

ISBN-13: 978-0-13-306530-5

Pearson Education LTD.
Pearson Education Australia PTY, Limited.
Pearson Education Singapore, Pte. Ltd.
Pearson Education Asia, Ltd.
Pearson Education Canada, Ltd.
Pearson Educación de México, S.A. de C.V.
Pearson Education—Japan
Pearson Education Malaysia, Pte. Ltd.

Library of Congress Cataloging-in-Publication Data is on file.

*For the memory of my father,
Leon Benklifa Z"l,
Who greeted every man with a smile.*

This page intentionally left blank

Contents

	Preface	xi
	Introduction: Why Traders Fail	1
	Is Failure a Flaw?.....	2
	Blaming Emotions	2
	Blaming Systems	3
	Successful Traders Versus Successful Trading.....	5
	Trading for a Living.....	6
	Trade for the Right Reasons.....	6
	The Ability to Duplicate a Strategy.....	7
	Correlation Versus Causation.....	7
	Don't Trade to Make Money.....	9
	Leverage.....	10
	What Kind of Trader Are You?	10
	A Single Difference Goes a Long Way	11
	A Limited Worldview	13
Chapter 1	Understanding Options	15
	What Is a Stock?.....	15
	What Is an Option?.....	18
	The Bet You Wouldn't Make.....	18
	The Options Trader's Toolbox	22
Chapter 2	What Is Price?	33
	How a Stock Trader Looks at Stock Price	33
	How Options Traders Look at Stock Price	37
	How an Options Trader Looks at an Option's Price.....	48
Chapter 3	Pure Options Trading: Building Your Own Trade	67
	Basic Greek Concepts.....	69
	Build 1: Making a Directionless Trade	74
	Build 2: Reducing Your Risk	78
	Build 3: Augmented Returns.....	88

	Bending the Curve.....	95
	The Options Trader's Toolbox:	
	Synthetic Straddles	96
	Evolving a Trade	98
	In-, At-, and Out-of-the-Money Trades	98
Chapter 4	Situational Trading	99
	Known Knowns	100
	Analyzing Situations.....	105
	Building a Directional Trade.....	106
	Known Unknowns.....	126
	Unknown Unknowns	137
Chapter 5	Risk Management	157
	Responsibility in Trading.....	157
	Strategy Is Risk Management.....	159
	How a Stock Trader Measures Risk.....	160
	Defined Risk for Options Traders.....	163
	Layering and Unlayering Trades	164
	Trades Cannot Be Fixed, Just Replaced.....	165
	Portfolio Risk.....	166
	Concluding Remarks	168
	Appendix: Quantum Physics	
	and Trading—The Price Uncertainty Principle	171
	Index.....	175

Acknowledgments

I want thank my Creator, who makes all things possible. I never forget (Devarim 8:11-18, Kohelet 12:14, Tehillim 107:1).

Good people and good conversations helped me write and get through this book. Fortunately, I seem to surround myself with really smart and wonderful people. I want to thank R. Eli Hirsch, who gets “it,” gets “me,” and helps me keep perspective, and Frank Fahey for teaching me the three most important words in options trading, “volatility, volatility, volatility,” and for continuing to be a mentor and a friend. I’d also like to thank R. Yirachmiel Fried and R. Yaacov Rich for being invaluable support and friends in good times and bad. Thanks to Seth Parkoff for the perspective of a real “rocket scientist.” Thanks to Shelly Rosenberg for giving me my first complex option trade, which I puzzled over for days. Thanks to Oscar Rosenberg for pushing me into this. Thanks to Joseph Benporat for all your patient advice. Thanks to Dr. Susan Diamond as always for everything you do, which really is a lot! Thanks to Dr. Bonnie Floyd for your support. You are a smart cardiologist with a great big heart and an even greater soul. **Спасибо** to Alex and Gene Lushtak for believing in me all this time.

Thanks again to Jeff Augen for opening my eyes.

A special thanks to David Lehrfield who listens to me blah blah all the time about all my ideas. You gave me a lot of good ideas. Tell the “Bear” thanks for his great indirect help.

My family gets an extra special thank you. There are probably only a few things more mind numbingly boring than listening to me drone on about options, but I don’t know what they are, and I hope I never find out. There is nothing I enjoy more than spending time with my children, Yehudah the Wise, Shimon the Brave, Chana the Kind, and Chaim the Bold, so I’m glad that the book is done, and I can get back to what is important. Thanks to my wonderful wife, Adira, because you take care of all those things I don’t do, which allows me to accomplish the things I do. I couldn’t do it without you. Thanks p’tite mère for all your support and patience and my terrific in-laws Steve and Carolyn for all your good cheer.

Thanks one and all!

About the Author

Michael Benklifa is a professional options trader and President of Othello Consulting, where he manages millions of dollars in option trades for private investors every month. He formerly served as a Financial Advisor for UBS and as a Mergers & Acquisitions analyst for several large pharmaceutical companies. Benklifa holds an MBA from Texas A&M, as well as a Diplôme (Masters in Management) from Ecole Supérieure de Commerce in France and a BA in Philosophy from the University of Texas. He is the author of *Profiting with Iron Condor Options: Strategies from the Frontline for Trading in Up or Down Markets*.

Preface

“Being ignorant is not so much a shame, as being unwilling to learn.”

—*Benjamin Franklin*

“The greater danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it.”

—*Michelangelo*

The Myth of Sisyphus

A legend in Greek mythology tells of King Sisyphus, who thought he was smarter than Zeus. To punish Sisyphus, Zeus assigned him an eternity of useless tasks. Zeus forced Sisyphus to push a huge boulder up a steep hill, and just before he made it to the top, the boulder rolled back down, leaving Sisyphus to start over.

The education of an options trader usually starts from the stock trader’s frame of reference. Once you have the stock trader’s perspective, you’ll have something to contrast it with when looking at the option trader’s perspective. The myth of Sisyphus is a metaphor for gaining understanding about stock trading.

What isn’t very well known about the legend of Sisyphus is that the people would watch this ordeal and make sport of it. They placed wagers on how high the king could push the boulder without slipping. The higher Sisyphus pushed, the higher the value of the bets. What started out in jest became ever more serious, and great care was taken to analyze the situation before placing wagers. Some obtained detailed reports on the king’s health, measuring the strength in his arms and

legs. They proclaimed, “Look how strong he is! He can easily keep pushing this rock up the hill!” With their in-depth analyses of the king’s health, these people felt confident about their ability to decide the king’s future success. Others studied the king’s movements and looked for patterns in his stumbling. Some said, “Two steps forward, one step back”; others said, “Three steps forward, two steps back.” Somebody was always right.

Knowing what the king would do next was not simple. Poor King Sisyphus could not see past the boulder he was pushing. He never knew what the next step would bring. The hill could be steeper going forward, or it could dip. There could be potholes or rocks along the way. Worse yet, enemies at the top of the hill hindered the king’s progress. They rolled things such as branches, small pebbles, and even large rocks down the hill. They poured water down the hill to slow him down. Sometimes Zeus would make it rain or cause earthquakes. Eventually Zeus also blinded the eyes of the people so that they could see only what Sisyphus saw. To overcome this limitation, the people got reports from enemy camps about their strategies, hoping the reports were accurate. Some studied the weather and the topography of mountain ranges around the world. The people had the same hubris as Sisyphus, thinking they could outwit Zeus.

As each day progressed, Sisyphus pushed the boulder higher. The people who thought he would climb higher gloated freely. The question, however, was not whether the people were successful in their wagers on the king’s movements but why they were successful. Did Sisyphus ascend because of his strength or because of favorable conditions? Did it matter? Of course it mattered, but many chose to ignore it. Zeus laughed and laughed because he knew that being right for the wrong reasons is no skill at all. Zeus knew all the people were destined to lose.

This story is a myth, but your money is real.

The success of my first book, *Trading Iron Condor Options*, caught me by surprise. Options are mysterious for most people, and writing a book about a specific strategy within that world seemed pretty obscure. I had read a lot of books about options, and I wanted to write something that wasn't simply an advertisement. I wasn't trying to sell my investment services. Sure, I wanted to establish myself, but I didn't want to write a book that left something out. I don't mind sharing a good idea because, as a man of faith, I believe there is enough to go around.

Since the publication of that book, I've had conversations with many people, and what strikes me the most is how many people who trade options act as though they are still trading stocks. This is a recipe for disaster. Gaining a proper understanding of option trading should feel like a paradigm shift. Once the paradigm shift is complete, you may never want to trade stocks again.

A friend was going to an options seminar and wanted me to come with him to help him evaluate the quality of the seminar. He knew that I'm an options trader. I figured, Why not? I was in the process of writing my first book on options, and I thought I would learn an approach or two for the book. I sat through the seminar, which lasted a few hours, although it felt like it lasted for days. I was horrified at how dangerous these people were for uninitiated options traders. They made options trading sounds so easy. They basically said that all you have to do is look at some charts and put on some basic trades.

For instance, the seminar speakers renamed the option strategy called a *straddle* a "chicken trade." One type of straddle they talked about is to buy an at-the-money call, which makes money when the stock goes up, and to buy an at-the-money put, which makes money when the stock goes down. It seems like you can't lose with this strategy because you make money in either direction. Their reasoning was to buy a straddle right before earnings since there should be a big move after earnings, and you will be able to make a lot of easy money. They called this strategy "chicken trade" since you don't have

to have the courage associated with being directional. You can buy both directions at the same time—be “chicken” and be smart. The logic would be sound except for the fact that options prices tend to go up enormously right before earnings, and it becomes very difficult to make money from an earnings announcement unless it turns out to be a complete surprise and an enormous unexpected move ensues. Of course, the seminar speakers did not mention that small detail.

They also looked at charts and said all you have to do is look for previous highs or previous lows and then just buy calls or puts based on whether the reversal of these supports the resistance lines on the stock charts and you’re good to go. Then they proceeded to tell everybody that they have a several-thousand-dollar mentoring program as well as CDs and books in the back of the room for a mere few hundred dollars. They could sell you everything you need to be a successful trader. I turned to my friend and said that he should buy the material right away. He asked me if I thought these were good ideas. I said, “No way. You should buy the materials, read everything, and then do exactly the opposite of whatever they say.” By the way, they sold a ton of their questionable materials. What I really wanted to do was stand on a chair and yell to everybody there to get out as fast as they could. Alas, although it was the right thing to do, I was too chicken.

You see, I am the real “chicken trader.” I avoid risk as much as possible. I spurn confrontation. I don’t have the courage to claim that I am more right than the market. Before I trade, I want to understand exactly what I am getting into and have as many probabilities on my side as possible. Then I say a prayer and place the trade.

The seminars out there cost a lot of money—hundreds to thousands of dollars. I have a theory that the reason people are willing to spend so much money on these classes and seminars is that they’ve lost a lot of money trading on their own. One bad trade can easily lose more than the price of a seminar. If people can find a way to make money and not lose so much, then the seminar pays for itself. That’s not an unreasonable path to take. Education is worth its weight in

gold—as long as you get a good education. That being said, the price of this book is paltry if you get just one good idea or useful perspective from it.

It doesn't matter if you're stock trading or options trading or horse trading; you have to know what you're doing and why you're doing it. For the average investor, trading is simply buying low and selling high. But not all trades are created equally. A horse trader and a stock trader are both trying to do the same thing, but nobody would say that being a good horse trader prepares you for being a good stock trader. Unfortunately, many stock traders think they are prepared to enter the options trading world because they believe that stock trading prepares them for that kind of trade.

This book is written for two people. First, there is me. I've enjoyed the professional success of my first book, *Trading Iron Condor Options*, so I don't really need to write another book. However, I really enjoy teaching, and writing helps me think more clearly, which makes me a better trader. My first love in university was philosophy, which I majored in and did a little graduate work in. Philosophy is about trying to think correctly, if not differently. I do a lot of thinking about trading since that is what I now do professionally. What am I trading? Why am I trading? What do I understand? Am I fooling myself? Thinking for this book has helped me get closer to these answers.

The other person this book is written for is the nascent or frustrated trader who wants a different perspective on trading options. Successfully trading anything is very difficult, and options are particularly challenging. The learning curve is steep, and options trading is frequently counterintuitive.

If you are a stock trader, this book will probably offend you on some level. Several of the claims here say that what you have been doing is just wrong-headed. You will resist the interpretations and disparage the intelligence of the presumptuous author. But any book that presumes to make you “think” needs to challenge the status quo.

From an options trader perspective, stock trading is like flipping a coin, whereas options trading is playing chess. Just as there are many books on playing chess, there are a lot of books about trading options, each with a different goal. A more accurate but mundane title reflecting the goal for this book would be *One Way to Think About Options Trading*.

There are obstacles to options trading. One of them is social. The average investor is very comfortable with all kinds of industry-specific terminology. Enter a conversation and start dropping terms like *earnings per share*, *cash flow*, and other boring accounting terms, and others will nod in approval that you at least have a basis on which to form an opinion. Then you might add to the discussion *moving averages*, *crossovers*, *golden cross*, *RSI*, *MACD*, or *stochastics*, regardless of whether you understand the math, and the group starts to hang on your every word. However, if you start talking about *implied volatility*, *shorting gamma*, *adding delta to a position*, or *putting on a few butterflies*, you have effectively ruined the conversation because no one can actually converse with you. To save the day, an advisor (that is, a salesperson) steps in front of you and says this is a great time to buy, but it's important to have a diversified portfolio. The group takes a few steps away from you to continue the conversation without you. Options trading is a lonely business.

Another obstacle is that the stories of options losses are numerous and varied. Of course, anybody can lose when trading stocks, but options have a multiplier effect: When you win, you win big, but you can also lose big. Still, there are brave individuals who dip their toe in the cold water and decide to buy options. One trader might think that XYZ stock is going to go up, so he buys a call, betting it will go up. The stock goes up, and the trader still loses money. What gives? Then he thinks buying options is for the birds, so he'll sell options instead. He remembers that his friend Bob sold something called *naked options* and ended up going to some nameless country to sell an organ or two to pay it off. So instead he decides to sell covered calls on the

Coca-Cola stock his family has owned since 1910. He makes a couple dollars from the sale and feels great about the easy money; then he loses the stock when its price jumps 10% on good earnings news. These are not inspiring stories for a nascent options trader.

Stock traders who enter the options market often fail because they trade options thinking like stock traders, not options traders. This is not to say that options traders don't suffer horrific losses, but at least they know why they lost money. I once asked a friend who owned a car dealership what suggestions he had for getting the best price on a car. He said the most important one was to know what I wanted to buy before I stepped onto the car lot. This suggestion holds well with options trading as well. Before trading options, you need to know exactly what you are trading and why you are trading. Buy low and sell high is a stock trader's mentality. An options trader, depending on the situation, can make money if the market goes up or down, goes up and down, or does not move at all. Stock traders look at options trading from the wrong end of the telescope, having more of a bird's-eye view. Turn the telescope around, and you will see up close how options work.

This book methodically builds on concepts. I define stocks and options both technically and conceptually. Then I explain the nature of price for both stock and options traders. Then I will start with the most basic options trade and layer trades to create more complicated trades. Once you have these tools, you can examine different situations and how to apply trades. Finally I will analyze risk and what it means to apply it to trading.

The aim of this book is not to be all things to all people. I don't visit and graph every possible strategy. There are just too many of them. I also don't provide specific trading suggestions; rather, I give you actionable ideas. Learning how to fish is not simply about copying the fisherman's actions but understanding how the fisherman thinks. Where is the best fishing hole? Why is it the best?

This page intentionally left blank

Introduction: Why Traders Fail

“Insanity is doing the same thing, over and over again, but expecting different results.”

—Albert Einstein

“I have not failed. I’ve just found 10,000 ways that won’t work.”

—Thomas A. Edison

There are plenty of bad trading ideas. Unfortunately, the merit of a particular idea is not whether it has examples of success. A trade based on poor reasoning can still make money. While nobody would say “no” to making money, none of us wants to be that trader who consistently puts his hard-earned money at risk in a way that doesn’t really make sense. We can paraphrase on the inscription at the Temple of Delphi: “Know thy trade.”

Stocks and options are very different vehicles for trading, but they are both trades in a general sense. Before you can master the tools for smarter options trading, you need to “upset the cart.” You need to tear down your misconceptions about trading in general and build a different framework. If you have ever experienced serious losses from trading, this will be painful because you will have to face what you did wrong but, unlike Edison, maybe you won’t have to find 10,000 ways that don’t work.

Is Failure a Flaw?

Traders attribute failure to many different reasons. Some think failure comes from within. They blame weakness in character or not being bold enough. There is something mythical about the brave trader who got it right when everybody else got it wrong. “If only we could rise to that level of courage and temerity,” opines a misguided trader. Alas, there is always somebody who gets it right when everybody else gets it wrong. But why did he get it right? Did he know something, or was he just lucky? John Paulson made a fortune for his hedge fund when the market crashed in 2008. On the other hand, his fund lost 53% in 2011, even though the market soared. So was he smart or lucky in 2008? Many would rather be lucky than smart, but most of us are not that lucky.

If failure is a stepping stone to success, traders want to pin down the reasons so they do not repeat them. Failure in trading can be both immediate and painful. Trading books either read like self-help books or esoteric pseudo-scientific technical tomes. They blame either a trader’s lack of psychological fortitude or simply running the wrong computer trading program.

Blaming Emotions

Some believe that trading is pretty straightforward, and the blame for failure lies in the deficiencies in the trader. Some books on trading are almost entirely about psychology. In fact, most traders probably consider themselves pretty good amateur psychologists. There is a pretty wide consensus that controlling emotions is the biggest obstacle to successful trading. Trading is easy. *You* are the problem. Fear and greed kill successful trading, and inherent human flaws stemming from emotions like anxiety, disappointments, desperation, and disbelief are to blame.

The presumption in many books is that the technical part of trading is easy, and if you could just take yourself out of the equation, then you would do very well. In fact, every time you lose money, it's apparently not because the method is wrong but because you fell victim to one of these emotional traps. Typical trader expressions are "I should've listened to my charts" and "I should've respected the fundamentals, but I didn't." People don't tend to blame the technique for the problem. The ignoble assumption is that failure is never about faulty reasoning. It is easier to blame a lapse in stoic emotional distance than to admit that a plan was just wrong.

People are too quick to jump to emotional excuses for failure. Traders would do themselves a favor if they just admitted once in a while that they are wrong—and not just emotionally wrong, but that they just got it wrong intellectually. The constant refrain that "I should have followed my system" or "The signal was there, I just read it wrong" is usually disingenuous at best and dangerous at worst. If you can't learn from a genuine error in judgment how will you ever improve? When you try a strategy that consistently loses, don't blame emotional states or lapses in judgment. Just take the other side of the trade and go from being "wrong" to being "right." It's humbling, but sometimes the market is just smarter than you, and no amount of Zen mastery over your emotions will make a bit of difference.

Blaming Systems

According to some "gurus," systems are not the problem but are the solution. The wealth of information to be tapped and exploited only needs the right tools for analysis. Unfortunately, if anything, there is too much information. Computers have just made things worse for the average trader. Most of us have supercomputers on our desktops and in our phones. We can analyze everything simultaneously each nanosecond.

The elusive perfect system seems to be just out of reach. We just need one more screen, a little faster hookup to the Internet, or one more obscure indicator. There must be some system that can peer behind the curtain and figure out what is going to happen next. One thing is for sure, though: You will not find it in a book or anywhere online. Nobody would share the perfect system. Personally, I doubt it exists. But trading is specifically about information—what we know, what we don't know, and how we use it. The exploitation of information or the lack of information are the determining factors in all trading. So analysis and manipulation of information are crucial. However, one of the biggest mistakes traders make is believing they have all the information they need to trade. In reality, stock traders everywhere do *not* have enough information to trade. In order to be a consistently successful stock trader, you need *more* information than everybody else. Most traders think they are trading information, but they are unknowingly trading *misinformation*. The specific nature of that misinformation is that traders think and behave as if they have more information than everybody else. They are misinformed.

A buyer of stock is expressing through his action that he believes unconditionally that the current price is inaccurate and should be higher. Whenever I've proposed this idea to people, I initially get a lot of resistance and awkward shuffling of the feet. The proposition seems sound yet, if true, buying stock would be an irrational endeavor.

Think about it: If a stock is \$100, why are you a buyer? Because you think it will go higher or because you think the current price inaccurately reflects reality and should be higher. Aside from the exceptional circumstance of insider trading, this position is misinformed. Merely "thinking" the price should be higher is not an informed decision. Knowing what everybody else in the world knows is not enough information to decide that the current price is inaccurate.

Consistently successful trading is nothing but the exploitation of inefficiencies in price. Those inefficiencies have to be specifically identified in order to be exploited profitably. It is not enough to know

that the price is wrong; you have to be able to explain why the market has mispriced the stock. Unless you can do that, your purchase of the stock is speculative.

Any traders who think they have a computer system to analyze the same information everybody in the world has—to identify, exploit, and profit from an inefficiency in information—are mistaken and are doomed to failure. No matter how many times you slice a pie, you will not end up with more pie than you started with.

Successful Traders Versus Successful Trading

Successful traders are supposed to know everything. It's not such an outrageous assumption on the face of it. If traders make money trading, they have to be right more than they are wrong, or at least they have to be right when it matters the most. The average person has no idea what is going to happen next with a particular stock or what major world events loom that affect the economy. When people ask me to look inside my crystal ball, my answers tend to create more frustration than what motivated the question. First, I tell people I'm a trader and not an investor, so I have no idea how they should invest. Also, as an options trader, I prefer nondirectional trades and can make money whether prices go up or down. So I don't need to have an opinion about where the economy is going. In fact, I could be completely wrong and still make money. Directional traders need directional opinions. My opinions about the world float unattached to my trading.

Many have the misconception that the more wealthy the trader, the more "right" she must be. When a trader is introduced on television, the assets under management are usually mentioned in the same breath as the person's name. The unspoken assumption is that the bigger the dollars the more accurate the opinion. Many think that a

trader trading \$1 billion must have more knowledge than a \$1 million trader or a \$10,000 trader. The truth is that the difference has less to do with returns on investments and more to do with good marketing and PR.

Trading for a Living

Armies of people try to make a living from trading. Those interested in trading for a living range from students, to retirees, to the recently unemployed. In a powerful bull market that goes on for months or years, lots of people think they can make a living from trading. There is a large chasm between wanting to be a successful trader and achieving that goal.

A fascinating study done by the University of California at Berkeley found that 8 out of 10 high-volume day traders lost money in a six-month period. They also found that “only the 1,000 most profitable day traders (less than 1 percent of the total population of day traders) from the prior year go on to earn reliably positive abnormal returns net of trading costs in the subsequent year.”¹ Few people make a living from trading for long. The majority lose most of their principal before they quit.

Trade for the Right Reasons

So why are some traders successful and some not? To be blunt, most people don't know what they are trading. Many times traders believe they are trading one thing (i.e. stocks) when all the while they are in fact trading something else (i.e. information). If you make

¹ <http://faculty.haas.berkeley.edu/odean/papers/Day%20Traders/Day%20Trading%20Skill%20110523.pdf>

money trading, you want your success to stem from being right for the right reasons. If your underlying reasons were wrong and you still made money, then you were right for the wrong reasons (i.e. you were lucky). Being right for the right reasons is important because if you want to be successful in future trades you have to be able to duplicate your strategy.

The Ability to Duplicate a Strategy

The inability to duplicate a strategy is a path to failure. A hunch is not a strategy. If your reasoning process begins with the words “I feel,” think again. Let’s look at an example with Apple, a currently favored stock. Let’s say Apple is trading at \$450 a share. You buy it because you think Apple is going to come out with a new phone soon, and you think that will make the price go up. The phone comes out, and the price goes up to \$500. But let’s say the reason the price went up is that Apple found a way to cut its manufacturing costs. But you still made money on the trade, right? What does it matter? It matters because you made money, but you made it for the wrong reasons. To make matters worse, the stock could have gone up for 100 different reasons, and you’ll never know which one it was because there is no official daily or hourly announcement that explains why a stock goes up or down. Financial journalists usually attach a reason to explain price moves after the fact, but it’s usually just speculation without any hard data to support it.

Correlation Versus Causation

Most traders assume that their analysis must have identified the correct cause for a rise in price. Not knowing the reason a price moves is problematic for a stock trader as he considers his next trade. Also,

success doesn't necessarily breed success. It doesn't matter how many times in a row you make money trading if you still haven't identified the cause for a price action. Flipping heads five times in a row is rare, but it does happen—though it doesn't mean you figured out how the coin works. Also, being wrong more often does not increase your chances of being right. No matter how many times you flip the coin, the odds of heads on the next turn is always 50%. Similarly, making one “good” trading decision after another does not increase your chances of making another good trading decision. Being lucky is neither a tactic nor a strategy that can be duplicated. Therefore, you need to be aware of the difference between *causation* and *correlation*.

If we both lift a glass of wine, it doesn't mean I caused you to lift your glass of wine. When a stock goes up and you make money, your profit is correlated to the up move in the stock, but that doesn't mean you identified the cause of the price action. One question that will help you steer away from failure is “Can I duplicate the reasoning behind this trade?” Applying this question to Apple, the trader would have to ask whether knowing about an upcoming *widely known* product launch is a strategy that can be duplicated for future purchases of the stock. The question also assumes that previous rises in stock prices were *caused* by the impending product launch. These questions are nearly impossible to answer, but many traders trade on precisely this type of reasoning all the time.

It is possible with options to identify specific reasons an options trader makes or loses money. You know, for instance, the effect of time decay on a trade. You also know the effect of volatility on an options price, and in some instances you can pinpoint when those changes will occur. This kind of precision is key for successful long-term strategic success.

Don't Trade to Make Money

Besides not identifying *what* causes prices to move up or down, traders fail because they do not know the reason *why* they trade. *The worst reason to trade is in order to make money*, and trading to make money usually ends in disaster. This reason for failure seems counterintuitive. Why trade, if not to make money? Money is the great motivator. We work to make money, so shouldn't we trade to make money? There are other perks to trading to make money. If you make a lot, you can work from home and be financially independent. The truth is, everybody wants to trade for a living. You're the envy of your peers. Sounds great, but these motivations are all wrong.

If you buy a house to resell at a higher price, the goal is to make money on the deal. But you wouldn't buy the house unless you had a good reason to think you could resell it at a profit. Maybe you already have a buyer lined up. Maybe you know you are paying below market price. Merely buying any house blindly would be foolish. Ironically, you have to take money out of the equation when trading in order to make money from trading. *Money is the byproduct of a good trade but not the reason for it.* Another example is playing a game of chess. Everybody plays to win, but winning is not a strategy. Winning happens as a result of a properly executed strategy. The objective of trading should always be to exploit an opportunity or inefficiency. When you do that, you make money. The only question you have to ask yourself is "Does it make sense?"

So why are the Wall Street guys making so much money all the time? What's their edge? Mostly, their edge comes from the fact that they don't need to trade to make a lot of money. Most of the mutual funds and hedge funds earn management fees that pay their bills whether they do well or not. You, an individual who wants to trade for a living, do not have that luxury. The other edge is that they don't need to win big. Let's say you have \$100,000 to play with. Can you live trading that amount? What kind of annual returns do you need?

Do you need 20%? 40%? Seriously? To win big means you set yourself up to lose big. What if you had \$1 million? Do you need a 10% return? 20%? Is that also reasonable? If you made that kind of return, you would still be beating the stock market pretty handily, which is unlikely. The best traders suggest the same idea: Trade opportunities but preserve capital. It's called *risk management*.

Leverage

When trading improperly, the ability to leverage makes a bad idea worse. Brokerage houses allow you to leverage your portfolio so you can expose yourself to far more risk than you can afford. Because beating market returns is difficult, the allure of leverage is that you can theoretically have your portfolio outperform the market by doing the same trade you would have done otherwise but just more of it. If you leverage your portfolio two times, a 5% return becomes a 10% return. Sounds easy and straightforward enough, but the problem with leverage is that you are trading for the wrong reasons again—namely, making money. How much you trade is not the issue. The logic of the trade is what is important. If a trade makes sense, it doesn't matter if you are trading \$100 or \$1 million. Leverage can be useful, but trading shouldn't be about increasing your risk exposure in order to make more money.

What Kind of Trader Are You?

One of the most common mistakes stock traders make when trading options is treating options trading as just another form of stock trading. You need to trade options as options and not as stocks. There are three kinds of traders: pure stock traders, pure options traders, and limbo stock traders who inappropriately trade options like stocks.

The goal of this book is to transition a limbo trader into a true options trader.

A horse trader may know horses but it would be a mistake for him to think that means he knows how to trade cars. A stock trader that views options as merely a way to express his opinion on a stock is making the same mistake. Overlooking some of the most basic elements of options could lead to failure.

A Single Difference Goes a Long Way

You can own stocks forever. On the other hand, before knowing anything else about options you need to know only one thing: options expire. Whatever bet you made, up or down, the third Saturday of every month is the declared deadline for equity options. Everything about options prices revolves around the deadline. This makes all the difference in the world.

How significant a repercussion comes from a single change, such as going from trading stocks with no deadline to trading options with a deadline? In my youth, I used to visit my family in Paris in the summers. For some reason, my cousin and I were discussing chess and checkers. He was telling me that there are those who think checkers is harder than chess. I found that claim ludicrous. I love a good game of chess, and checkers always seemed more like a gateway board game to chess. The checkers basics are diagonal moves, diagonal jumps, and you can only move forward (unless you get to the end and make a king); in addition, you are *required* to jump and take the piece in *front* of you when available, and whoever has nothing left loses. I couldn't understand what my cousin was talking about, so I challenged him to a game. We started to play. I moved. He moved. I jumped his piece, and he jumped mine. At one point, he put a piece behind my piece. I proceeded to move another piece forward, and he stopped me. He said I had to jump his piece. But his piece was behind mine, not in

front. You can't move backward in checkers like that. Apparently in French checkers, you can. In fact, you are *required* to jump pieces, regardless of the direction. So I jumped his piece. He then jumped over my entire board. Forward. Forward. Back. Back. Back. Forward. Game over. That was not the checkers I remembered! We played again, and all of a sudden, the game was very hard. That one rule change added a new dimension to the game. It wasn't the same game at all. I suggested that we go back to playing chess. While stock traders understand the concept of a deadline, they don't understand the dynamics of how time works against them or, more importantly, how to use time to their benefit.

Volatility

Regardless of which option you trade, you know a few things: when the option expires, the price level (strike), and the effect of interest rates and dividends on the price. Yet for no apparent reason, the price of an option goes up or down. For instance, XYZ stock is at \$100, and it costs \$100. Easy. Say you wanted to buy an option on XYZ stock at \$100 that expires in a month. The price is \$10. An hour later, it is \$12. You look at the price of the stock, and it's still \$100. What gives? How can the price of the option change, while the stock price stays the same? The culprit is implied volatility. Nobody wants to overpay, but probably the biggest reason that stock traders lose money trading options is that they don't understand how the pricing works (or they choose to ignore it). They lose money even when all their predictions regarding the underlying stock prove correct.

The Impact of Price Movement

The timing, speed, and magnitude of an option's price movements are all important elements in an option's price. Options trading shouldn't be viewed simply as a bet where you wait and see who wins at the end of the race. A trader looks for opportunities throughout the

life of the trade. Therefore, a thinking options trader needs to properly understand and consider all the moving parts.

A Small Toolkit

The average retail trader is a buyer of stocks. The strategy is to buy low and sell high. Hedging comes from buying something else—like treasuries—that goes down when stocks go up. The options world is rich with strategies. Options can be used to hedge an existing strategy, but the hedge may become the strategy for making money. If buying is the only strategy in your portfolio toolkit, you will be pleasantly surprised with options. Buying trades is like a simple knife; buying options is a Swiss army knife.

A Limited Worldview

Misreading information is a stumbling block to successful trading. It is not uncommon for a trader to see a large trade occur in either the stock or options market and jump to judgment about the motivation behind the trade. For instance, somebody just bought a ton of shares of a stock. Is that bullish or bearish? There is an expression that people sell for many reasons but buy for only one: They believe the price will go up. But what if you found out that the stock trade was paired with an options trade? What if that options trade was actually a complex trade that contained many parts, stretching across different prices and months? What if the stock trade was a hedge on an options trade? Looking at the stock trade in isolation is nonsensical. When traders do simple trades, they assume that everyone else is also doing simple trades. When you get accustomed to complex trades, you assume that everyone else is also doing the same, which may or may not be true—but at least you won't be too quick to interpret and act on a single piece of information, which can lead to losses.

Most people come to options trading from the stock world. The goal here has been merely to contradict some assumptions about trading, expose some flaws, and stress the need to reorient your thinking to approach options trading from the proper perspective and attitude. It's all about information and how you can use it to your advantage both in what you know and what you don't know.

1

Understanding Options

He who knows when he can fight and when he cannot, will be victorious

—Sun Tzu

Before trading options, you need to understand the nature of options. Unfortunately, some stock traders are not exactly clear on this—or on the distinctions between trading and investing. Before stock traders can transition to options trading, they first need to know what to expect as a trader.

What Is a Stock?

A *stock* is a fractional ownership in a company. It is an asset, a two-dimensional instrument easily represented by a single line on a chart where value goes up or goes down. Privileges such as voting rights and dividends come with that asset ownership. But is owning an asset the same thing as investment? The average person considers an investment as money handed over to a company to make the company more competitive, which is not what happens when you buy stock. The only real “investors” are those who buy a stock during the IPO. That money goes straight to the company. After that, the stock is bought and sold among traders and not with the company unless the company executes a stock buyback, in which case shares are retired permanently. So “investing” is a misnomer for owning stocks.

The question is whether a person who buys a stock and then sells it at some point in the future is best described as an investor or a trader. The answer is not as obvious as it may seem. Investors are said to be in “for the long term,” and traders want to make a quick buck and don’t care about the company being traded. Most people only care about the company stock price going higher. In this respect, there are no such things as investors, just traders.

In order to make the transition from stock trader to options trader, you need to see both long-term and short-term trades as trades and not see one as an investment and the other as a trade. You need to let go of the aura of respectability that the term *investment* connotes and accept that you are a trader. Regardless of how you came to your conclusions of when and why to buy a stock, your intentions are precisely the same as those of a short-term trader: to buy low and sell high.

So where does this distinction between investors and traders come from? One answer is how the U.S. government taxes capital gains. The government wants you to be an owner of stocks and gives you tax incentives. Stock held for more than one year is considered long-term capital gains, and anything less is considered short-term. The long-term capital gains tax rate is lower than the short-term rate, which is taxed at the same rate as your earned income. The tax differences provide an incentive to hold stocks “for the long term.” Even if the government seeks to incentivize larger time frame behavior through the tax code, it doesn’t change the motivation behind the transaction itself: making money on the trade. Time frames do not matter because everybody is a trader.

I’ve encountered many people who believe that since they own stock to get dividends, which are also taxed at 15%, for now, that they are investors. Dividends are a touchy subject but let’s be clear about one thing, dividends are generally a bribe by the company to get people to buy their stock. That sounds harsh but unless the company is debt free and has more cash than it needs for future investments it probably shouldn’t be giving out a dividend. Some companies will

actually go into more debt and borrow money to pay dividends it can't afford to keep stockholders happy. This sounds like a terrible investment strategy. At best a dividend is a hedge. If a company offers a 5% annual dividend and the stock drops 8% then you have hedged your losses to -3%. We'll look at a number of option strategies that can do much better than this.

Many people consider "investing" in the stock market as a safe bet because over time, the market goes up; so buy-and-hold is a proven long-term strategy, right? There are a number of problems with this reasoning. The first is the selection effect, as pointed out in the book *The Anthropic Bias*: A proper analysis of the market requires continuous records of trading of which we only have about a century's worth from the American and British stock exchanges.

But is it an accident that the best data comes from these exchanges? Both America and Britain have benefited during this period from stable political systems and steady economic growth. Other countries have not been so lucky. Wars, revolutions, and currency collapses have at times obliterated entire stock exchanges, which is precisely why continuous trading records are not available elsewhere. By looking at only the two greatest success stories, one would risk overestimating the historical performance of stocks. A careful investor would be wise to factor in this consideration when designing her portfolio.¹

Very few look at the stock market 100 years in the past. We've had one depression and a few recessions. Statistically, there are too few data points to draw any kind of conclusions going forward. In addition, variables—such as the demographic boom since World War II or the inflationary policies of going off the gold standard—could have more to do with the rise in asset prices than the presumption that markets will go up eventually. This is not to say that buy-and-hold is wrong, but considering yourself an investor and assuming that it is true might be a poor conclusion.

¹ Nick Bostrom, *Anthropic Bias*, p. 2 Routledge, 2002

What Is an Option?

An *option* is a contract in which one party sells risk for a price. Gambling is the same thing. You go to the tracks and place a bet on a horse. The track takes the risk and sells you the bet and promises to pay if you win. If you take and sell that bet to someone else, you are selling that promise. An option is a legally binding promise that can be bought and sold. The person selling the risk writes the promise, which is why selling an options contract is frequently called “writing.” An options contract allows the buyer to exercise the terms of the promise at any time before the option expires.

Contract law is defined by three elements: offer, agreement, and consideration. An option is a contract between two parties. Exchanging money for the risk implied in the promise is the consideration. All contractual agreements are about promises.

Explaining options is notoriously difficult. Expressed basically, you buy calls when you expect the price of the underlying security to go up, and you buy puts when you expect the price to go down. But options are more complicated than this. You also have to consider what happens before, during, and at the end of a trade.

To flesh out and get a better understanding of options, it might actually be better to think of options as a bet. I personally shiver at the idea of what I do as gambling but, upon reflection, it shares more with gambling than stocks do, but in a good way.

The Bet You Wouldn't Make

Consider the kind of trade you would not make. Think about the following scenario: Two gamblers are arguing about whether stock XYZ, which is currently priced at \$100, is going to go up or down. Gambler A says he thinks it will go up, and Gambler B says he's crazy. Gambler A bets Gambler B that the stock will go up, and if he is right,

Gambler B will have to pay him \$1 for every dollar the stock goes over \$100. Would you take that bet? Not if you are sane.

There are two problems with this wager. The first problem is that the bet is open-ended. There is no time limit to the wager. Gambler A could come back to Gambler B after a day, week, year, or decade. He only has to wait for the stock to go up and pick the price that most suits him. The other problem is that Gambler B is not getting compensated for putting himself at risk. What does he get if Gambler A is wrong and the price goes down? Merely the satisfaction of being right? He is taking a huge unlimited risk to the upside without getting paid for it and with no cutoff point in time.

If you were Gambler B, what kind of conditions would you put on the bet? First, you'd want a time limit. The open-ended duration exposes you to unlimited risk and an undefined time frame. So you could be right in the short term but wrong over the long term. The other problem is that you are taking on enormous risk without compensation. So how would you define the right compensation for the risk you are taking? You'd use time as your guide. You'd try to figure out how much the stock could possibly move over a given time frame. How much could a stock move in a week? A month? A year? The more time you commit yourself to, the more risk you take of being wrong. The more time, the more risk, the more money you would charge for that risk.

Here is the rub: You want to charge as much as possible, but not so much that Gambler A says the trade is too rich for his blood. Gambler A offers you \$2 over the next month to take the bet that he is wrong that the stock will go up. You think to yourself, \$2 isn't enough because the stock regularly moves up and down \$5 every month and yet always seems to end up in the same place, which is why you are taking the bet. Even though you think you are right, you realize your timing could be wrong, and you could still lose. So you say you'll take the bet for \$5. This way, even if the price goes all the way to \$105, you still don't lose anything. Gambler A takes the bet because he thinks

the price will move at least \$6, and he'll come out ahead. All this is the standard back and forth that goes into any bet, whether on a horse race, a football game, or a prize fight.

In options trading, there is one other piece that also confuses people: the payment method. With just a few exceptions, a seller of an option is paid for giving up some right, but if he loses, he pays in stock and not in dollars. You are not obligated to pay \$1 for every dollar the price moves. You as the seller of the bet promise to sell the stock at \$100 at any time in the next month, whenever the buyer calls the bet. If the stock is at \$110, you have to go out and buy it for \$110 and sell it to him for \$100 and lose \$10 on the trade. However, you still get to keep the \$5 you got for taking the bet.

Most people get confused by a put option, which is a bet that a stock will go down. Gambler A bets you \$5 that the stock will go down, and you sell him that bet. If the stock goes down to \$90, you, as the seller of that bet, have to buy the stock at \$100. He gets to buy the stock on the open market for \$90 and resell it to you for \$100, pocketing the difference.

The seller of the bet always takes on the obligation. If you sell a call, you must *sell* the stock at the agreed-upon price any time the stock is higher. If you sell a put, you must *buy* the stock at the agreed-upon price if the market price has moved lower. The risk for the buyer is always limited to the price paid. However, the seller's risk can be unlimited, such as when the stock price rises substantially.

It is a cliché to say that the stock market is like a casino. But there's some truth in this statement. Which is more like gambling: stocks or options? Stocks are not a bet because you would never take that bet. When you buy a stock, there is no time limit that determines when you have to sell. Stock traders trade the price of the stock. The trade is about the stock price. Stock trading is not gambling—it is speculating.

Options are not about the stock price by itself, but are about the stock price plus time. What happens within a given time frame gives the trade meaning, structure, and value. Options trading is always

about how *fast* the price will change, how *far* it will move, or *when* it will move within a period of time. Options trading is *derived* from the price action—hence the term *derivatives*.

“You can’t beat the stock market” is true about stocks, but the options market is not the same. Since options trading is about the stock market, your trading market is less clear. For example, you can trade the *aggressivity* of a price move. Perhaps you will trade the *timing* of a price move. Maybe you will trade the actual *distance* of the price move. Or maybe you will do the opposite and trade the lack of aggressivity, the lack of movement over a given time frame, or the small range of the price movement. In all these cases, you are not trading the market but, rather, trading something about the market. So is it possible to beat the market? It depends on which market.

So if options are closer to gambling than are stocks, does that make options trading worse or better than stock trading? Better. One thing that dominates the world of gambling is the odds. Gamblers are great statisticians. The best gamblers want the odds in their favor when they place a bet. Options trading is also all about the odds. You have to constantly ask yourself when to bet with the house or against it. In both higher and lower prices in the stock, each option will have its own probability. Probabilities are also calculated across different time frames. The pricing in options reveals a plethora of information. Options traders look at pricing models and volatility to determine odds for trading that, when used properly, add a significantly higher level of sophistication than stock trades. Ironically, many options traders feel less like gamblers than do stock traders. A stock trade always has a 50% chance of going up or down. Does a stock trader know what the odds are of going up or down 10% over the next year? An options trader has an idea. The access to greater information is a source of comfort to options traders that stock traders don’t have. Stock trading is more speculation than gambling. If trading stocks were gambling, there would be more sophisticated information about the odds of different price levels over different time frames.

The Options Trader's Toolbox

Every trader has two goals: make money and manage risk (which might be the same thing). The tools each trader has to achieve these goals guide strategy. The stock trader's tool is buying assets. Through the purchase of assets, traders seek to make money. Through diversification of assets, traders seek to diminish volatility in their portfolios. A portfolio of uncorrelated assets takes the sting out of a big downward move in any one asset. Correlations between asset classes can wax and wane pretty quickly. Still, keep in mind that the tool available to a stock trader is buying. If buying is the hammer in the toolbox, assets are the nails. Portfolio theory is all about the nails. It's all about what kind of nails you deal with and how hard and how deep to hammer them. To extend the analogy a bit further, alluding to the cash available, you get to hammer only a certain number of times.

My father was a mechanic all his life, and it was always a wonder to me to watch him work. I was never my father's son when it came to being handy. Tools are anathema to me. Growing up in Dallas, I watched my father work on cars in 100-degree summers, trying to loosen bolts that wouldn't budge or were stripped. If a bolt was stripped, Dad didn't just keep using the same wrench the same way. He would hammer a smaller wrench over the bolt to give it shape again and then hammer the wrench to loosen it. A wrench alone would not have gotten the job done. I learned many things from him. Know your tools. Don't blame your tools.

Options are just more tools for the toolbox. Calls do one thing, and puts do another. When you have a set of tools working together, you can accomplish qualitatively different tasks than you can accomplish with individual tools. A piece of wood can only accomplish so much. Find a fulcrum, which also can only do so much, and together you have a lever, which is something completely new and different.

Tools work and interrelate. The relationship might be presented graphically. Most relate to stocks in terms of their price chart, which

is fine since charts illustrate risk and reward clearly and succinctly. In addition, computers can graph the math behind complex options trades instantaneously and have transformed the playing field for the average trader who wants to get into options. Imagining how a single option is graphed is pretty easy, but trying to picture a strategy that has four or five moving parts can tax even the most creative mind, especially since volatility can warp the effects of that graph. Figure 1.1 shows an example of a simple chart.

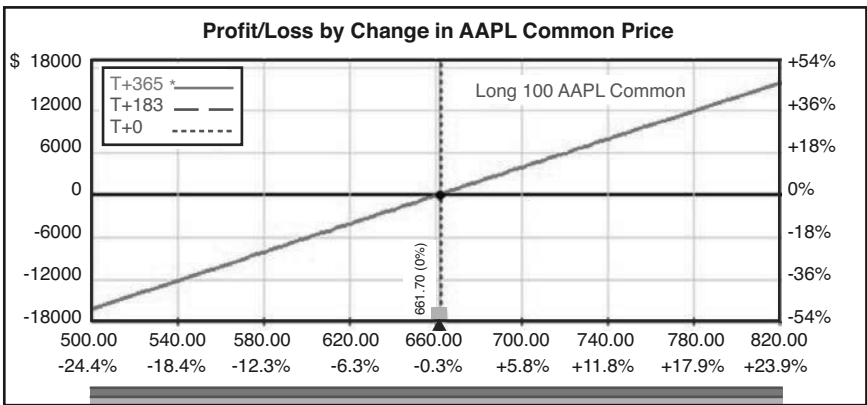


Figure 1.1 Apple P&L graph for stock ownership

Source: OptionVue 7

Does this represent *only* a stock chart? Most people are surprised to learn that you can re-create almost exactly the same chart using options. When you combine *buying* an at-the-money call option and *selling* an at-the-money put option, the resulting graph looks just like a stock graph. This is called a synthetic long stock position. Using options, you can create a P&L that mimics the behavior of owning 100 shares of stock without actually owning the stock. Although it mimics the returns and losses of a stock, though, it is still not a stock. There are no dividends. There is a time limit. Why would somebody want to create a synthetic stock position? One reason might be the cost of the trade. The cost of buying the at-the-money call can be almost completely offset by the sale of the at-the-money put. Under the right conditions, you can get paid for that trade if the cost of the put is

higher than the cost of the call. Imagine getting into an expensive stock for no cash outlay. But keep in mind that brokerages will require you to have margin collateral to cover the risk behind the naked sale of the at-the-money put. That margin requirement is usually only a fraction of the cost of buying the stock outright.

Figure 1.2 shows an example based on Apple (AAPL). It was selling for \$661 a share when this chart was prepared. Therefore, purchasing 100 shares of Apple would cost \$66,100. A chart using LEAPS, which are long-dated options, allows you to buy an October 2014 660 call and sell a 660 put with 494 days until expiration.²

Actuals	AAPL Common		Legend			
	661.70	-1.00	Last	Chg	Trade	
	670.10	660.40	High	Low	Ex.Pos	
Options	JAN14 L <494>					
	MktPr	MIV	Trade	Ex.Pos	Delta	OrigPr
675 C					63.8	.....
670 C	94.80	31.8%			64.6	.....
665 C	97.15	31.8%			65.4	.....
660 C >	99.25	31.8%	+1		66.1	.....
655 C	101.15	31.8%			66.9	.....
650 C	103.95	31.9%				
670 P	109.80	35.0%			-36.2	.....
665 P	107.15	35.1%			-35.4	.....
660 P >	104.35	35.1%	-1		-34.7	.....
655 P	101.50	35.1%			-33.9	.....
650 P	98.85	35.2%			-33.1	.....
Summary						
	Net Reqmts		Gross Reqmts		Cash Flow	\$+510
Init	\$20,508		\$21,018		Cur. Value	\$0
Maint	\$20,508		\$21,018		Gain/Loss	\$0

Figure 1.2 Apple synthetic stock position

Source: OptionVue 7

² These prices are the midpoint between the bid and the ask for illustrative purposes.

As you can see in Figure 1.3, the calls cost \$99.25, and the puts pay you \$104.35. The trade nets a credit of \$5.10 before trading costs. However, the margin requirement for placing the trade to cover the naked put is, as per the CBOE, “100% of the option market value plus 20% of the underlying security” which is, in this case, around \$22,000.³ Obviously the market value of the option can and will fluctuate and the underlying margin will also move but, in most cases, it will still be cheaper than buying the stock outright.

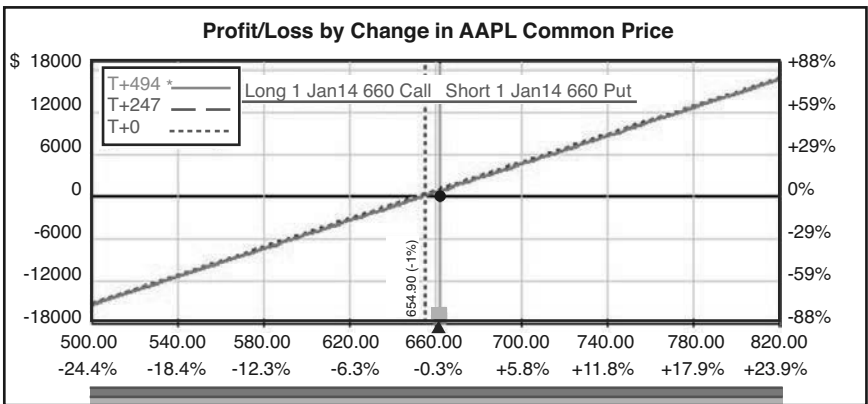


Figure 1.3 AAPL synthetic stock chart

Source: OptionVue 7

The chart of this trade looks familiar (see Figure 1.4).

³ <http://cboe.com/LearnCenter/workbench/pdfs/MarginManual2000.pdf>

Actuals	AAPL Common			Legend		
	661.50	-1.10	+100	Last	Chg	Trade
	670.10	660.40		High	Low	Ex.Pos
Options	OCT <39>					
	MktPr	MIV	Trade	Ex.Pos	Delta	OrigPr
675 C						
670 C	21.05	28.8%			46.8	.....
665 C	23.35	29.0%			50.3	.....
660 C >	25.85	29.1%	-1		53.7	.....
670 P	28.80	28.1%			-53.2	.....
665 P	26.10	28.2%			-49.7	.....
660 P >	23.60	28.3%			-46.3	.....
655 P	21.25	28.4%			-42.9	.....
Summary	Net Reqmts		Gross Reqmts	Cash Flow	-\$63,587	
	Init	\$30,577	-\$33,010	Cur. Value	\$0	G

Figure 1.4 AAPL At-the-money covered call position

Source: OptionVue 7

On the surface, the chart in Figure 1.4 looks great, but don't forget that this trade has the same slope as owning 100 shares of Apple. So the losses in absolute dollar terms will be just as sharp as the gains. Why would anybody do this trade? If, for example, you had a bond portfolio, you could leverage that portfolio to trade the options rather than the stock without exposing yourself to any further risk than just owning the stock. Even though you don't get dividends through synthetic positions, you have to ask yourself if dividends are worth it. Maybe you'd rather keep more money sitting in a bond portfolio earning interest and use options to create a synthetic portfolio of stocks at a fraction of the cost. You can create an entire stock portfolio using synthetic stock positions, as long as you maintain collateral in your margin account. Just something to think about.

Options Trader's Toolbox

Stock and its synthetic equivalent can be expressed using a basic formula.⁴ Owning stock (S^+) = buying a call (C^+) + selling a put (P^-), or

$$S^+ = C^+ + P^-$$

Using algebra, you can rearrange this formula to get interesting results. For instance, the most advantageous options trade is the covered call. You own the stock, and you sell one call for every 100 shares you hold. The reasoning is that if you lose the bet and the stock price goes up, all you need to do is provide the stock you have to cover the loss. Expressed in notation form, a covered call = $S^+ + C^-$.

You can convert this formula to $P^- = S^+ + C^-$. In other words, selling a put is equal to owning the stock and selling a call. Both have the same profile, as shown in Figure 1.5.

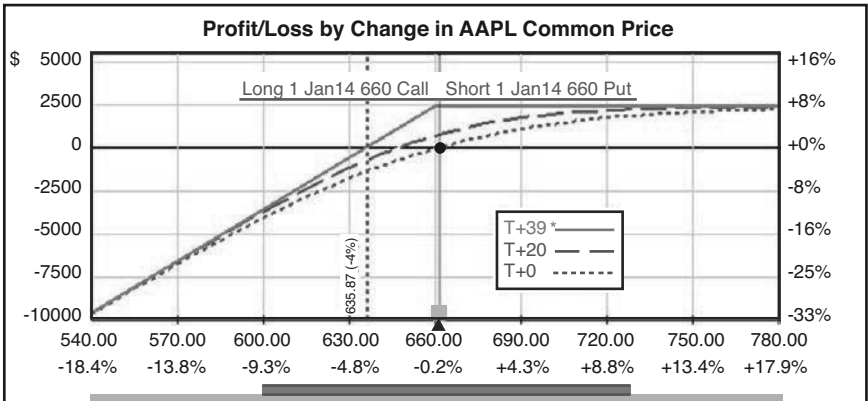


Figure 1.5 AAPL covered call P&L graph

Source: OptionVue 7

⁴ A truly balanced equation would include the risk free rate of return but for our purposes is not necessary for understanding the strategic relationships.

Figure 1.5 shows the trade and a summary of a covered call. The table represents AAPL again, selling one at-the-money call option with 39 days until expiration in tandem with owning 100 shares. You would sell the call for 25.85 a share or a total credit of \$2,585. The net cash outflow would be -\$63,587.

In Figure 1.6 we examine the case of a naked put strategy. In this example, it sells for a little less than the call. Why? Apple was bullish at this point, and the calls were bidding up. The trade brings in a credit, but the margin requirements are far less than the case required to do the covered call.

Actuals	AAPL Common		Legend			
	Last	Chg	Trade	High	Low	Ex.Pos
	661.50	-1.10				
	670.10	660.40				
Options	OCT <39>					
	MktPr	MIV	Trade	Ex.Pos	Delta	OrigPr
675 C						
670 C	21.05	28.8%			46.8	.....
665 C	23.35	29.0%			50.3	.....
660 C >	25.85	29.1%			53.7	.....
655 C	28.50	29.2%			57.1	.....
665 P	26.10	28.2%			-49.7	.....
660 P >	23.60	28.3%	-1		-46.3	.....
655 P	21.25	28.4%			-42.9	.....
650 P	19.10	28.6%			-39.6	.....
Summary						
	Net Reqmts	Gross Reqmts	Cash Flow			
Init	\$13,080	\$15,441	Cur. Value		\$0	
					+ \$2,361	

Figure 1.6 AAPL naked put strategy

Source: OptionVue 7

Figure 1.7 shows what a naked put strategy looks like.

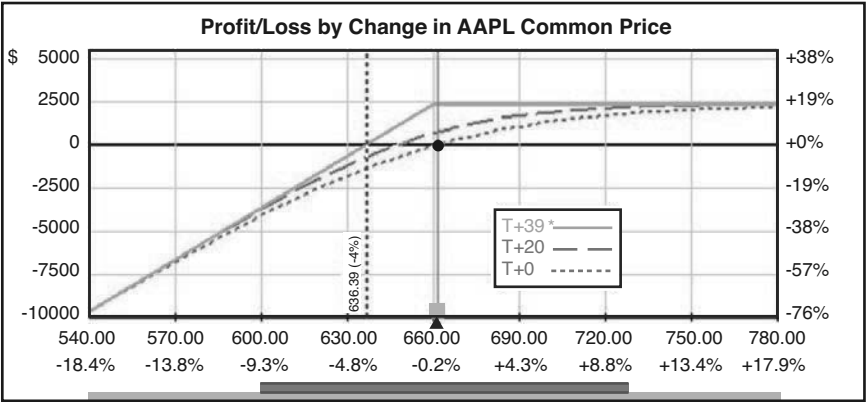


Figure 1.7 AAPL naked put P&L graph

Source: OptionVue 7

Figure 1.7 is nearly identical to the covered call graph shown in Figure 1.5. In fact, if you superimposed one of the graphs on the other, you would get the result shown in Figure 1.8.

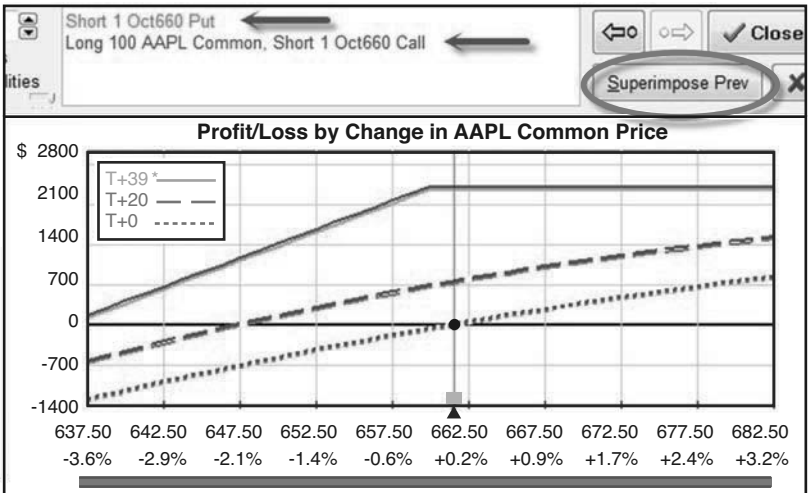


Figure 1.8 AAPL covered call P&L graph combined with naked put P&L graph

Source: OptionVue 7

Gains, losses, and breakevens are almost the same. Most people trade covered calls because they want to leverage their existing stock position to make more money without regard to whether their stocks are good candidates for selling calls based on the prices of the options. What if you didn't own a stock? Is it better to buy the stock and sell the calls, or is it better to sell naked puts? Many people will tell you that selling naked puts is very dangerous and should be avoided in favor of the safer covered call strategy. This comparison should give you pause before you run to that conclusion.

So which is better: a covered call or selling a naked put? Mostly it depends on the prices for the puts and the calls. You don't want to undersell in either case. Another consideration, besides taxes, is cash or margin necessary for entering the trade. Owning a stock and selling calls will cost you more than just selling puts. We will revisit the different types of considerations for choosing strategies including covered calls later. Here we just want to introduce you to the terrain.

Synthetic stock positions, covered calls, and naked puts are just some of the combinations that use this formula. Table 1.1 shows the different equivalencies using stocks, calls, and puts.

Table 1.1 Options Trader's Toolbox

Strategies	Notation
Synthetic stock (at-the-money)	$S^+ = C^+ + P^-$
Short synthetic stock (at-the-money)	$S^- = C^- + P^+$
Short put	$P^- = S^+ + C^-$
Long put	$P^+ = S^- + C^+$
Long call	$C^+ = S^+ + P^+$
Short call	$C^- = S^- + P^-$

Knowing these relationships gives you flexibility in trading. When you own stock, you can create the equivalent of a naked short put position simply by buying a call. If you own stock and buy a put, you have

also created the equivalent of owning a call. So you can own stock and leg into different call or put strategies using these equivalences.

You can also layer strategies. If you already own stock and you open a synthetic short stock position, you negate any movement up or down in the stock. However, if you separate the distance between the put you buy and the call you sell, the result is a collar, which is a popular hedging strategy. We will go more into the detail of the mechanics and strategies but it is good to mention that you are already on your way to sophisticated options trades just through the understanding of this Option Traders' toolbox.

Smart traders want to take steps to limit their risk to the market. Stock traders limit their risks through buying or placing stops. A diversified portfolio is about buying uncorrelated assets so that one moves up when another moves down in order to diminish risk. A stock trader's toolbox is limited to buying and paying full price each time. By including options in your toolbox, you gain nuanced hedging strategies that were previously unavailable.

An options trader's toolbox holds more than the tools listed in Table 1.1. A pure options trader might not use stocks at all. They can use combinations of calls and puts. The combinations and strategies are seemingly endless. From an options trader's perspective, a stock trader's only tool is a hammer. The stock trader is either hammering a nail in or taking it out. He studies the nail and tries to determine how hard he should hit it. With the plethora of strategies at your disposal, as an options trader, you have a multi-piece toolbox.

The objective of this book is not to create another encyclopedia of options strategies. There are other books for that. The more you understand options and how traders think about them in different situations, the better you'll be able to understand new strategies and develop your own.

This page intentionally left blank

Index

A

- accepting responsibility for your trades, 157-158
- actual price, 49-50
- analyzing situations, 105-106
- The Anthropic Bias, 17
- at-the-money calls, 98
 - implied volatility, 40
- Augen, Jeff, 78
- augmented returns, 88-94
 - butterflies, 90-94
 - ratio trades, 88-90

B

- behavioral norms of expiration day, 119-123
 - collapsing time decay, 122-123
 - intraday moves, 120-121
- belief as strategy, 35
- bell curve, calculating one-standard deviation moves, 40
- bending the P&L curve, 95
- beta, measuring risk, 161-163
- betting
 - Martingale betting system, 165
 - odds, 21
 - as options analogy, 18-21
 - risks, compensation for, 19
- bias in direction, overcoming, 71

- Bollinger Bands, measuring volatility, 59-61
- broken wing butterflies, 92
- bucket analogy, effects of volatility, 55-59
- Buffet, Warren, 160
- Bush, President George W., 160
- butterflies, 90-94
 - broken wing butterflies, 92
- buying
 - deep-in-the-money option calls, 46-47
 - as part of trade, 67
 - spreads, 79-81
 - zone of agreement*, 80-81

C

- calculating one-standard deviation moves, 40
- calendar spread, 83-85
- calls
 - buying, 70-73
 - covered calls, 65
 - deep-in-the-money option calls, 111-112
 - buying*, 46-47
- casinos, comparing to stock market, 20
- Celsion, 153

certainties of trading, 100-104
 directional trading, 102-103
 liquidity, 103-104
 size of the trade, 104
 charting
 expressing information through,
 35-37
 option, 23-26
 skews, 51-54
 VIX, 60
 cheap versus low-priced options,
 104
 collapsing time decay, 122-123
 collar trading, 110
 comparing
 correlation versus causation, 7-8
 mathematical probabilities and
 traders' probabilities, 41-43
 successful traders and successful
 trading, 5-6
 traders and investors, 16-17
 compensation for risk, 19
 computer systems, as excuse for
 failure, 3-5
 condors, turning into earnings,
 130-134
 contract law, 18
 contrarian traders, 59
 correlation versus causation, 7-8
 covered calls, 65
 deep-in-the-money option calls,
 46-47
 equation for, 27
 versus naked put strategy, 30

D

Day Trading Options (Augen), 78
 deadlines
 equity options, 11
 harnessing time as benefit, 12
 implied volatility, 12
 decision making, failure as aid to,
 158
 deep-in-the-money option calls,
 111-112
 buying, 46-47
 defined risks, 163
 defining
 options, 18
 price, 33
 types of traders, 11
 delta, 41, 49
 as obstacle to directional trading,
 107-108
 relationship to gamma, 49
 stock prices, determining, 45-47
 delta-neutral position, maintaining,
 137-141
 derivatives, 21
 diagonal spread, reducing risk,
 81-83
 directional bias
 as known known, 102-103
 overcoming, 71
 directional trading
 calendar trades, 117-118
 collar trading, 110
 deep-in-the-money option calls,
 111-112
 as known known, 119

obstacles to
call price, 107
delta, 107-108
price of the straddle, 108
statistical probability,
108-109
 ratio trades, 115-116
 selling puts, 112-115
 synthetic stock trades, 109-110
directionless trading
 selling theta versus buying gamma,
 78
 the straddle, 74-76
 the strangle, 77
 dividends, 17
 duplicating strategies, 7

E

earnings
 post-earnings price drift, 142
 turning strangles into, 130-134
 effects of volatility, bucket analogy,
 55-59
 emotions, as excuse for failure, 2-3
 equations
 covered calls, 27
 for strategies, 30
 synthetic stocks, 27
 equivalencies, strategy formulas, 30
 evolving nature of options trades,
 69, 98
 example of scans, 147-155
 excuses for failure
 emotions, 2-3
 systems, 3-5

expiration day
 behavioral norms, 119-123
collapsing time decay,
122-123
intraday moves, 120-121
 as known known, 119
exploiting
 inefficiency in information, 35
 opportunities, 9
expressing information through
charts, 35-37

F

failure
 as decision-making aid, 158
 excuses for
emotions, 2-3
systems, 3-5
 as flaw, 2
 reasons for
impact of price movement,
12-13
limited worldview, 13-14
volatility, 12
 finding situations, 144-155
 scans, 145-146
example of, 147-155
limitations of, 146-147
 flat volatility, 64
 formulas
 covered calls, 27
 for strategies, 30
 future price, 54-55

G**gambling**

casinos, comparing to stock market, 20

odds, 21

delta, 41

options as a bet, 18-21

probabilities, 21

gamma

buying, versus selling theta, 78

relationship to delta, 49

The Geography of Thought

(Nisbett), 36

goals of traders, 22**Google**

implied volatility, 105-106, 124-125

straddle trade, Greeks, 142-143

graphing

skews, 51-54

VIX, 60

Greeks, 49-50

beta, measuring risk, 161-163

gamma, relationship to delta, 49

for Google straddle trade, 142-143

theta, 70

Vega, 69-70

H**harnessing time as benefit, 12****hedging, 13**

portfolios, 166-168

time, 73

HFTs (high-frequency traders), 35**horizontal skew, 50****I****identifying**

inefficiencies in price with charts, 35-37

reasons for failure, 7-8

types of traders, 11

implied volatility, 12, 39

at-the-money calls, 40

Google, 124-125

incentives for holding stocks, 16**inefficiency in information,**

exploiting, 35

information, expressing through

charts, 35-37

in-the-money trades, 98**intraday moves, 120-121****investments, stocks, 15****investors versus traders, 16-17****iron condors, 86-87****J-K****known knowns, 100-104**

directional trading, 119

expiration day, 119

intraday moves, 120-121

liquidity, 103-104

size of the trade, 104

known unknowns, 126-136

long straddles, 127-128

short straddles, 128-130

L**layering**

option calls, butterfly spreads, 90-94

strategies, 31

trades, 164-165

LEAPS, 24

leverage as reason for failure, 10

limbo traders, 11

limitations of scans, 146-147

limited worldview as reason for failure, 13-14

liquidity as known known, 103-104

long straddles, 127-128

low-priced options, versus cheap options, 104

luck, correlation versus causation, 7-8

M

maintaining delta-neutral position, 137-141

Martingale betting system, 165

mathematical probabilities, 38-40
one-standard deviation moves, 43

measuring

risk, 160-163

beta, 161-163

R2, 163

volatility with Bollinger Bands, 59-61

momentum traders, 59

Monte Carlo simulations, 43

multiple trades, executing at once, 61-62

N

naked call strategy, strangles, 86

naked puts

selling, 30

strangles, 86

strategy for, 28

Nisbett, Richard, 36

O

obstacles to directional trading

call price, 107

delta, 107-108

price of the straddle, 108

statistical probability, 108-109

odds, delta, 41

one-standard deviation moves, calculating, 40

opportunities, exploiting, 9

option calls, deep-in-the-money
option calls, 111-112

options

as a bet, 18-21

risk, compensation for, 19

buying a call, 70-73

cheap versus low-priced, 104

defining, 18

graphing, 23-26

Greeks, 49-50

layering, 164-165

overpaying, 62-64

put options, 20

trading

defined risks, 163

payment method, 20

underselling, 62-64

“writing,” 18

out-of-the-money trades, 98

overcoming bias in direction, 71

overpaying options, 62-64

P

P&L curve, bending, 95
 Paulson, John, 2
 payment method for options trading, 20
 portfolio theory, 22
 portfolios, hedging, 166-168
 post-earnings price drift, 142
 price
 actual price, 49-50
 call price as obstacle to directional trading, 107
 cheap versus low-priced options, 104
 defining, 33
 determining by expiration
 delta, 41-43
 price of option, 44-45
 future price, 54-55
 implied volatility, 39
 inefficiencies in, identifying with charts, 35-37
 options prices, options traders' view of, 48-65
 overpaying options, 62-64
 relative price, 50-54
 stock prices
 delta, 45-47
 options traders' view of, 37-47
 stock traders' view of, 33-37
 underselling options, 62-64
 volatility, bucket analogy, 55-59
 probabilities, 21, 37-38
 delta, 41
 mathematical probabilities, 38-40
 statistical probability as obstacle to directional trading, 108-109

traders' probabilities, 41-45
 purchasing deep-in-the-money option calls, 46-47
 put options, 20
 delta, 43
 naked put strategy, 28

Q-R

R2, measuring risk, 163
 ratio spreads
 butterflies, 90-94
 ratio trades, 88-90
 ratio trades, 115-116
 reasons for failure, 1
 correlation versus causation, 7-8
 impact of price movement, 12-13
 inability to duplicate strategies, 7
 leverage, 10
 limited worldview, 13-14
 volatility, 12
 reducing risk, 78-87
 buying a spread, 79-81
 zone of agreement, 80-81
 calendar spread, 83-85
 diagonal spread, 81-83
 relative implied volatility
 actual price, 49-50
 future price, 54-55
 multiple trades, executing at once, 61-62
 relative price, 50-54
 relative price, 50-54
 replacing trades, 165
 responsibility in trading, 157-158
 RFA (radio frequency ablation), 152
 risk management, 10, 154
 defined risks, 163
 portfolios, hedging, 166-168

reducing risk, 78-87
calendar spread, 83-85
diagonal spread, 81-83

situational risks, 100

strategy as, 159-160

Rumsfeld, Donald, 100

S

scans

example of, 147-155
 limitations of, 146-147
 situational analysis, 145-146

selling

as part of trade, 67
 put options, 112-115
 theta, versus buying gamma, 78
 time, 73

“selling the slope,” 78

Shon, John, 128

short straddles, 128-130

situational analysis, 105-106

finding situations, 144-155
scans, 145-146

situational risks, 100

size of the trade, as known

known, 104

skews, 51-54

The Sleuth Investor (Mandelman),
 35

spread trading

butterfly spreads, 90-94
broken wing butterflies, 92

buying, 79-81

zone of agreement, 80-81

calendar spread, 83-85

diagonal spread, 81-83

iron condors, 86-87

ratio spreads, 88-90

statistical probability, as obstacle to
 directional trading, 108-109

stocks, 15-17

dividends, 17

incentives for holding, 16

as investment, 15

prices, stock traders' view of,
 33-37

straddling

directionless trading, 74-76

Google straddle trade, Greeks,
 142-143

long straddles, 127-128

price of the straddle as obstacle to
 directional trading, 108

short straddles, 128-130

synthetic straddles, 96-97

strangles, 86

directionless trading, 77

turning into earnings, 130-134

strategies

acting on belief, 35

buying a call, 70-73

covered calls, 65

duplicating, 7

equations for, 30

failure as decision-making aid, 158

layering, 31

naked put strategy, 28

risk management, 159-160

selling theta versus buying
 gamma, 78

spread trading

butterflies, 90-94

buying a spread, 80-81

calendar spread, 83-85

diagonal spread, 81-83

Iron Condor, 86-87

ratio spreads, 88-90

strikes

- deltas, 41
- spread trading
 - buying a spread*, 80-81
 - calendar spread*, 83-85
 - diagonal spread*, 81-83
 - iron condors*, 86-87

successful traders

- ability to duplicate strategies, 7
- versus successful trading, 5-6

synthetic stocks, 109-110

- equation for, 27

synthetic straddles, 96-97**systems, as excuse for failure, 3-5****T****taking responsibility for your trades, 157-158****theta, 70**

- selling, versus buying gamma, 78

time

- effect on options pricing, bucket analogy, 55-59
- harnessing as benefit, 12
- hedging, 73
- selling, 73
- and volatility, 64

time decay strategies, iron condors, 86-87**traders**

- contrarian traders, 59
- goals of, 22
- versus investors, 16-17
- momentum traders, 59
- options traders, 37-47
 - view of option price*, 48-65
 - view of stock price*, 37-47

probabilities, 41-45

- stock traders, measuring risk, 160-163

traders' probabilities, delta as obstacle to directional trading, 107-108**trading**

- buying, 67
- buying a call, 70-73
- directional trading
 - calendar trades*, 117-118
 - collar trading*, 110
 - ratio trades*, 115-116
 - selling puts*, 112-115
 - synthetic stock trades*, 109-110

evolving nature of trades, 98

graphing, 23-26

known knowns, 100-104

expiration day, 119*liquidity*, 103-104*size of the trade*, 104

as occupation, 6

options

defined risks, 163*evolving nature of trades*, 69*multiple trades, executing at once*, 61-62*payment method*, 20*probabilities*, 37-38

replacing trades, 165

responsibility in, 157-158

right reasons for, 6-7

risk management, 10

situational analysis, finding situations, 144-155

- stocks, 15-17
 - as investment, 15*
 - price, stock traders view of, 33-37*
- unknown unknowns, 137-155
 - maintaining delta-neutral position, 137-141*
 - post-earnings price drift, 142*

Trading Corporate Earnings

News, 128

Trading Iron Condor Options, 78

traits of successful traders, 5-6

- ability to duplicate strategies, 7

transitioning from stock trader to

- options trader, 18

types of traders, defining, 11

U

underselling options, 62-64

unknown unknowns, 137-155

- delta-neutral position,

- maintaining, 137-141*

- post-earnings price drift, 142*

- treating with caution, 154*

unlayering trades, 164-165

unsuccessful trades, 134-136

V

Vega, 69-70

velocity, 103

vertical skew, 50

VIX (Volatility Index), 60

volatility, 12

- bucket analogy, 55-59

- implied volatility, 39

- at-the-money calls, 40*

- Google, 124-125*

- mathematical probabilities, 38-40

- measuring with Bollinger Bands, 59-61

- overpaying options, 62-64

- relative implied volatility

- actual price, 49-50*

- future price, 54-55*

- multiple trades, executing at*

- once, 61-62*

- relative price, 50-54*

- and time, 64

- traders' probabilities, 41-45

- underselling options, 62-64

- Vega, 69-70

W-X-Y-Z

“writing,” 18

Zhou, Ping, 128

zone of agreement, buying a spread, 80-81

This page intentionally left blank



In an increasingly competitive world, it is quality of thinking that gives an edge—an idea that opens new doors, a technique that solves a problem, or an insight that simply helps make sense of it all.

We work with leading authors in the various arenas of business and finance to bring cutting-edge thinking and best-learning practices to a global market.

It is our goal to create world-class print publications and electronic products that give readers knowledge and understanding that can then be applied, whether studying or at work.

To find out more about our business products, you can visit us at www.ftpress.com.