
BUY THE FEAR, SELL THE GREED:

7 Behavioral Quant Strategies for Traders

.....

Special Chapter One Preview

Larry Connors
Connors Research, LLC

TRADINGMARKETS
Publishing

Copyright © 2018, Laurence A. Connors and Connors Research, LLC.

ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher and the author.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the author and the publisher are not engaged in rendering legal, accounting, or other professional service.

Authorization to photocopy items for internal or personal use, or in the internal or personal use of specific clients, is granted by The Connors Group, Inc., provided that the U.S. \$7.00 per page fee is paid directly to The Connors Group, Inc., 1-973-494-7311.

Publisher's Notice

The publisher has provided this eBook to you without Digital Rights Management (DRM) software applied so that you can enjoy reading it on your personal devices. This eBook is for your personal use only. You may not print or post this eBook, or make this eBook publicly available in any way. You may not copy, reproduce, or upload this eBook except to read it on your personal devices.

Copyright infringement is against the law. If you believe the copy of this eBook you are reading infringes on the author's copyright, please notify the publisher at info@cg3.com.

ISBN 978-0-578-20650-9

EBook ISBN 978-0-578-20651-6

Printed in the United States of America.

Disclaimer

The Connors Group, Inc., Connors Research and Laurence A. Connors (collectively referred to as “Company”) are not investment advisory services, nor registered investment advisors or broker-dealers and do not purport to tell or suggest which securities or currencies customers should buy or sell for themselves. The analysts and employees or affiliates of Company may hold positions in the stocks, currencies or industries discussed here. You understand and acknowledge that there is a very high degree of risk involved in trading securities and/or currencies. The Company, the authors, the publisher, and all affiliates of Company assume no responsibility or liability for your trading and investment results. Factual statements on the Company’s website, or in its publications, are made as of the date stated and are subject to change without notice.

It should not be assumed that the methods, techniques, or indicators presented in these products will be profitable or that they will not result in losses. Past results of any individual trader or trading system published by Company are not indicative of future returns by that trader or system, and are not indicative of future returns which be realized by you. In addition, the indicators, strategies, columns, articles and all other features of Company’s products (collectively, the “Information”) are provided for informational and educational purposes only and should not be construed as investment advice. Examples presented on Company’s website are for educational purposes only. Such set-ups are not solicitations of any order to buy or sell. Accordingly, you should not rely solely on the Information in making any investment. Rather, you should use the Information only as a starting point for doing additional independent research in order to allow you to form your own opinion regarding investments. You should always check with your licensed financial advisor and tax advisor to determine the suitability of any investment.

HYPOTHETICAL OR SIMULATED PERFORMANCE RESULTS HAVE CERTAIN INHERENT LIMITATIONS. UNLIKE AN ACTUAL PERFORMANCE RECORD, SIMULATED RESULTS DO NOT REPRESENT ACTUAL TRADING AND MAY NOT BE IMPACTED BY BROKERAGE AND OTHER SLIPPAGE FEES. ALSO, SINCE THE TRADES HAVE NOT ACTUALLY BEEN EXECUTED, THE RESULTS MAY HAVE UNDER- OR OVER-COMPENSATED FOR THE IMPACT, IF ANY, OF CERTAIN MARKET FACTORS, SUCH AS LACK OF LIQUIDITY. SIMULATED TRADING PROGRAMS IN GENERAL ARE ALSO SUBJECT TO THE FACT THAT THEY ARE DESIGNED WITH THE BENEFIT OF HINDSIGHT. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN.

The Connors Group, Inc.
185 Hudson St.
Suite 2500
Jersey City, NJ 07311

Connors Research, LLC
185 Hudson St.
Suite 2500
Jersey City, NJ 07311

CONTENTS

ACKNOWLEDGMENTS		XI
CHAPTER 1	FEAR, GREED, AND MARKETS	1
CHAPTER 2	RSI POWERZONES	19
CHAPTER 3	CRASH	35
CHAPTER 4	VOLATILITY TRADING	55
CHAPTER 5	VOL PANICS	69
CHAPTER 6	VXX TREND STRATEGY	83
CHAPTER 7	TRADING NEW HIGHS	95
CHAPTER 8	TPS; <i>FEAR AND GREED RISING</i>	107
CHAPTER 9	TERROR GAPS	125
CHAPTER 10	BUYING FEAR, SELLING GREED	135

APPENDIX	149
i. Connors Research Traders Journal (Volume 7): Superior Trade Construction for Asymmetrical Gains	149
ii. Connors Research Traders Journal (Volume 3): Stops (Still) Hurt	154
iii. AmiBroker Add-on Code for the Trading Strategies in <i>Buy the Fear, Sell the Greed</i>	157
iv. More Research from Larry Connors	158
v. Private Mentoring	159
vi. Private Consulting for Asset Managers and Family Offices	160
vii. Introduction to AmiBroker Programming	161
viii. Correlation Risk	164
ix. Trading Resources	166
x. Relative Strength Indicator Formula and ConnorsRSI Calculation	173

ACKNOWLEDGMENTS

As with all of the books we have published over the years, this one required a team of dedicated individuals to get it from a raw manuscript to the finished product you now hold in your hands.

A special thank you from me to the following people who assisted in the creation of this book.

Cesar Alvarez, Brittany Connors, Drew Markson, Lani Meyer, Jason Meyer, Matt Radtke, Jose Pepito, Jr., Shuma Malik, and Danilo Torres.

CHAPTER 1

Fear, Greed, and Markets



“In war tomorrow, we shall be dealing with men subject to the same emotions as were the soldiers of Alexander.”

George S. Patton
From George Patton’s Personal Papers
The Secrets to Victory
March 26, 1926

Let’s imagine you’re asking for professional advice on an important financial matter from someone who is experiencing the following symptoms:

- Nausea
- Dizziness
- Chest pain
- Headaches
- Neck aches
- Stomach upset
- Pulsing in the ear
- Burning skin
- Shortness of breath

- Electric shock feeling
- Shooting pains in the face
- Heart palpitations
- Weakness in legs
- Feelings of going crazy
- Fear of impending doom

On a scale of 1-10, how confident are you of this person's judgment?

8-10 - Highly confident. This guy definitely has his act together.

5-7 - Somewhat confident. Maybe the shooting pains in his face and his heart palpitations are a bit bothersome, but you're willing to overlook everything else, including his feelings of burning skin, nausea, dizziness, and the weakness in his legs.

2-4 - Little confidence. Feelings of going crazy and fear of impending doom are not quite the qualities that inspire strength and confidence in someone's judgment in making financial decisions for you.

1 - None. Nada. Nul. Nicht. ZERO! The guy's likely a nut. Who in their right mind would rely on the judgment of a person in this condition???

The Correct Answer

You likely answered either 2-4 or 1 (OK, I know you answered 1).

THE OFFER

Now let's assume I make the following offer to you: I offer you the chance to trade directly against traders and investors who are having the exact symptoms listed above, including the feelings of going crazy and impending doom. And as a bonus...

1. You can trade one-on-one against them;
-

2. You get to determine the times you'll trade against them;
3. You get to construct the trade however you feel is best for you;
4. And you get to do this multiple times every month for the rest of your life. On top of this you know that had you done this over the past quarter century, you would have won anywhere from over 70% of the time to up to 97% of the times you did this.

How does this make you feel? Would you accept this offer?

Most people certainly would and I'm sure you would too. This book is going to show you when, where, and how to do this.

So now I'm sure you're excited. You're also saying to yourself, "What's the catch? This sounds too good to be true."

Well, it's true. You'll see that quantitatively for years and even decades it's been true. The catch is that the times you will be buying and selling these historically large-edge high-probability times are psychologically the hardest times to take these trades. This is why the edges you are about to learn have existed for years and, in many cases, decades.

Unfortunately, many traders and investors are psychologically unable to fully take advantage of these types of opportunities. (Warren Buffett can and does on the investment side, but this is a big part of why Buffett is Buffett.)

The outside fear when these trading opportunities occur is often too extreme and when fear is too extreme, the crippling symptoms mentioned earlier kick in and one normally goes into protection mode. Traders and investors are usually not willing or able to shut off the noise to go into offensive mode. You'll see this throughout this book — there are many behavioral components going on at the same time and none add up to one rationally saying to themselves, "It's time to buy." In fact, the majority of rational people are in panic mode pushing prices even lower and making edges even greater for those who step in at the right time.

[Click here to order your copy of Buy The Fear; Sell The Greed - 7 Behavioral Quant Strategies For Traders](#)

The goal of this book is to make you aware of when and why short-term market edges exist in stocks and in ETFs, and then give you the quantified strategies to trade them.

I wrote my first book on trading more than two decades ago and have since authored a half dozen more books. Each book contained either strategies and/or years of price data that showed where trading edges exist.

Over the past five years, it has become more and more apparent to me that the edges I saw were not being driven by technical analysis, nor fundamental analysis. The majority of the time they were being driven by behavioral factors of which fear and to a lesser extent greed were the catalysts. In a few cases, for example the RSI PowerZones Strategy in Chapter Two, we've seen these edges as measured by the times the signals were correct actually increase over recent years. Part of this is due to the 2009-2017 bull market. Another part of it is behavioral.

Thirty years ago, when a news event would occur, it could take days to assimilate it. The majority of the assimilation was done by professionals, not individual traders, who over time moved prices to where they should be. Fear and greed were certainly always prevalent, but outside of large events (for example, 1987), the response was smoothed by time and contained within a small universe, mostly made up of investment professionals.

Today it's far different. News now drives prices every day, and at times every minute. The number of news sources today is vastly larger compared to 30 years ago. Thirty years ago, there was Dow Jones Newswires and maybe a few other financial news outlets. Bloomberg had only begun gaining some traction (I believe Michael Bloomberg had just made the decision to go into the news business) and CNBC didn't exist, nor did the internet.

Today there are literally dozens of potential news and information sources for traders and investors to get their information from, ranging from Bloomberg, which is primarily for professional traders and investors, to many sites I won't mention because there are so many, which get millions of pageviews a month because they put their own editorial spin to things. Add in CNBC, which runs before and during market hours and is followed

by (as of May 2018) *Fast Money*, which moves stocks after hours, along with the ubiquitous Jim Cramer coming on the air right after with his hour-long show, plus dozens of message boards including the large user-generated content site StockTwits, and the news and chatter never shut off.

If fear is a contagion, then when fear hits, it quickly goes viral. Nearly two decades before D-Day, then-Major George Patton so astutely pointed out that human nature in soldiers (and I believe he likely meant all humans) never changes. The same can be said for traders and investors. The only thing that's changed is the timing of their emotion; today it occurs faster and at times is more extreme primarily due to the role the media (and especially social media) plays in disseminating the news that triggers this behavior. We'll see this played out and quantified in each of the strategies in the book.

We'll start the book off with two chapters, with one that shows when fear is at its greatest and has correctly predicted the short-term direction of liquid ETFs over 80% of the time since 2006. For the S&P 500 ETF (SPY), the strategy has correctly predicted its direction over 91% of the time since 1993.

We'll then look at a strategy that takes advantage of greed; in this case it's extreme greed in stocks where the stocks reach parabolic levels, often because of news and crazy rumors, and then they reverse (they CRASH) the majority of the time.

From there we'll go to my favorite topic: trading volatility via VXX. No market gets inside fear better than the volatility market, and we'll walk through the history and, more importantly, the structure of VXX, where we'll see why and how this product was built to go to zero.

We'll also look at the five types of buyers in VXX, a group that has historically lost substantial money year after year since 2009. They range from well-meaning but uninformed investment advisors all the way to outright gamblers. With this knowledge, we will then learn two strategies to trade this structurally inefficient product, one that applies a very short-term time frame (on average approximately one week) to a longer-term trend-following strategy that climbs aboard being short VXX on average for three

months while VXX trends lower. There are strong historical test results in these two strategies and these edges have been in existence since VXX was created and brought to the market in early 2009.

We'll then look at the Trading New Highs Strategy, a strategy we created based on a seminal academic study that was originally published in 2004 and is still often referenced today. This study shows how traders and investors use New 52-Week Highs as an anchor point. We added a fear component to this anchor point and you'll see that when combining their findings with fear, those stocks have risen over 77% of the time within days.

Chapter Eight looks at the times fear and greed build up in equity indexes, not only in the United States, but around the world. Applying a scaling-in approach, this strategy has correctly identified prices moving higher well over 80% of the time. This strategy is robust, meaning there are literally thousands of permutations you can apply to buy fear and sell greed in ETFs.

Chapter Nine looks at overnight fear. This strategy combines taking an ETF that has been pounded down by incessant selling and then gaps lower. Then a further intraday sell-off creates panic and terror to the owners of these ETFs. The majority of the time, many of these owners can't take the pain any longer (they exhibit a number of the symptoms we talked about earlier) and they sell out of their position in order to avoid any further pain. You'll learn to step in and take the position from them, oftentimes with large edges in place.

Then we'll tie everything together, including looking at how closely this type of trading resembles Warren Buffett's type of investing. Buffett has made a fortune from "buying fear." He has had a repeatable process in place — often buying when everyone else is selling. On a longer-term basis you'll see how Buffett has done this for decades with these investments. We'll tie together these same behavioral biases and doing so on a short-term trading basis. We'll also discuss the many ways to take these strategies and apply them to your trading.

In the Appendix, you'll gain further knowledge with additional resources I recommend that are available to you, along with additional ways to structure your trades to buy fear and sell greed. By the time you're done with this book, you'll be able to move ahead, quantitatively applying behavioral edges that will likely be in place for many years to come. Markets may change but, as you will repeatedly see, human behavior does not.

[Click here to order your copy of Buy The Fear; Sell The Greed - 7 Behavioral Quant Strategies For Traders](#)

16 THINGS YOU NEED TO KNOW TO GET THE MOST OUT OF THE STRATEGIES IN THIS BOOK

Before we get to the strategies, let's cover the following additional notes:

1. Every Strategy in This Book Is Quantified

This means every strategy has a fixed set of rules (fixed set of inputs) and is backed by anywhere from as short as nine years of historical test results to as long as 25 years of test results.

Buy signals occur when fear is high, and short selling signals on stocks and ETFs occur when greed is at its greatest. Throughout this book, we're going to do exactly as the title states: We're going to buy the fear and sell the greed. And the main reason we're going to do this is because there are quantified behavioral edges that occur over and over again for you to take advantage of.

We systematize and quantify fear and greed in many different ways. This includes doing so in both stocks and ETFs, trading volatility via VXX, trading both at the end of the day and also intraday, and trading both on the long side and the short side, along with every strategy trading with rule-based exits.

Every trade will have a reason to be entered, applying simple indicators to profit from fear and greed. You'll understand the behavioral reason for the trade ahead of time. Most importantly, because everything is structured and systematized, there will be no guessing when to enter or exit a position.

2. Here Is How We Ran the Tests

- a) Each test has a specific start date and the end date was the last day of trading in 2017.
- b) Norgate Data survivorship-free data was used for all tests. The data was adjusted for dividends and splits, and the universe of stocks or ETFs are predefined for you in each strategy.
- c) Unless limit orders were used, all tests were done on end-of-day prices. Commissions and slippage were not included.
- d) Each test was verified a second time with the same data. This means at least two separate researchers, located in different locations, came up with the exact same test results from the written rules.

3. Indicators Used

- a) Price - The strategies in this book are highly reliant on price behavior. Price behavior often tells you the main story as to how much fear and greed exist at any given time.
 - b) Trend - In many cases we rely upon the longer-term trend to buy in the direction of the trend. This is primarily done with the 200-day simple moving average (SMA). Hedge fund legend Paul Tudor Jones said it best in Tony Robbins' *MONEY Master the Game* book: "My metric for everything I look at is the 200-day moving average (MA) of closing prices."
-

We agree. As a whole, equity index prices that trade above their 200-day moving average tend to be more predictable to the upside than when they are trading below their 200-day moving average. There's usually a reason an index or stock is trading below its 200-day MA, whether it's for market reasons, or sector reasons, or company-specific reasons. These reasons are often valid and trading in the direction of the trend (for example, only trading an equity on the long side when it's above its 200-day MA) has, on a quantified basis, proven to increase short-term edges.

- c) Relative Strength Index (RSI) to accurately measure how overbought and oversold a security is.

You'll see throughout this book that the more fear there is in the marketplace, the more oversold a security becomes. The same is true for greed, especially excessive greed. The more overbought a security becomes, the greater the greed there is in the marketplace. This is where the largest reversals take place and where the greatest quantified edges have existed.

Over the past 30+ years of researching equity prices, no indicator has proven better on a quantified basis than RSI. (You can find the formulas for RSI and our enhanced version of RSI, ConnorsRSI, in the Appendix.)

Throughout this book, you will see the use of the Relative Strength Index. RSI was originally created by Welles Wilder in the 1970s in his seminal book, *New Concepts in Technical Trading Systems*. For the next three decades after he published it, traders relied upon his default setting of a 14-period RSI. In fact, even today, most software packages use this as the default setting.

In 2002 I began overlaying stock prices with a much shorter reading: a 2-period RSI. Up until then, I had yet to see anyone use RSI in this manner. What struck me was just how in sync it was with short-term price movement, especially in equity indexes and in the S&P 500 futures markets.

I had my research team begin running back tests and we saw test results higher than anything we had ever tested. One year later, we published a strategy around our findings, and as far as we know we were the first to publish these findings applying a shorter-term RSI.

It's now a decade and a half later and Wilder's RSI, shortened to a shorter time frame, still tests better than any indicator available. We certainly have looked for something even better and we're always open and excited to test anything and everything. We've yet to see anything surpass Wilder's RSI.

You will see three different RSI time frames used in the strategies: the 2-period RSI, the 4-period RSI, and ConnorsRSI (I'll explain this one in a minute). For each strategy in the book, we stayed with the original way it was applied. This is our way of saying that RSI is robust and, as a whole, remains today a key to measuring short-term market sentiment (fear and greed) in equity prices.

ConnorsRSI (CRSI) was created by my research firm about five years ago. As far as we know, it's the only quantified oscillator available for equity traders. You can find the formula for ConnorsRSI in the Appendix. For those of you on Bloomberg, it's programmed into the terminal in the Studies section.

ConnorsRSI applies Wilder's RSI and goes further. It's much more difficult for a security to reach extreme levels with ConnorsRSI than it is for Wilder's RSI and historically when they've reached these extreme CRSI levels, quantified edges have existed.

4. Math

There is no advanced math used in this book. It's not necessary.

5. Stops

No stops were used in the testing. This was intentional and is consistent with our long-term belief of stops. I've added to the Appendix our position on stops for you to read. I've also made suggestions in the book on how to protect your positions in ways better than stops.

6. Buying Fear, in a Systematic Quantified Way, Is One of the Few Built-In Edges That Exist in the Marketplace

The greater the fear, the greater the mispricing of securities, which means the greater the edges are for you. In this book, we're going to identify when the fear is in place, why it's in place, how to systematically trade it when it's in place, and we're going to fully quantify this fear going back as far as 25 years of trading in some cases.

7. Fear Is Hardwired in Humans

This has been proven over and over by science. There are many dozens of scientific studies done with MRIs showing that the brain changes when fear is present.

"When people are frightened, intelligent parts of the brain cease to dominate," Dr. Bruce Perry explains, quoted in an article published on the *Time* magazine website. "When faced with a threat, the cortex responsible for risk assessment and actions cease to function. In other words, logical thinking is replaced by overwhelming emotions, thus favoring short-term solutions and sudden reactions."

Please remember this. It's an important part of the reason the trading edges and biases you're about to learn exist.

8. Not All Fear Is Equal

This means that the behavior associated with fear can be better pinpointed, potentially leading to greater returns based upon the overall market condition. This is important to remember, and the data proves this out.

- a) Fear in bull markets in equities and equity ETFs tends to have a much shorter duration than fear in bear markets.

Healthy bull markets quickly shrug off fear and then push prices higher. Simply adding a 200-day simple moving average and trading in the direction of the moving average many times proves this out. As I mention a number of times in the book, it's why it's hedge fund legend Paul Tudor Jones' favorite indicator.

- b) The behavior of prices leading into the days ahead of the signal plays a role. Mounting fear is a whole lot better than one day of fear. In military terms it's why multiple days of shelling is far more effective than one day of shelling. Humans naturally get worn down from multiple days of pounding. In trading, when they get worn down from losing money over multiple days, they get mentally fatigued, they begin making irrational decisions, and the buyers on the other side often get advantageous pricing (they get added edges in their favor).
 - c) Overnight fear leading to prices gapping lower is better than the times prices don't gap down. This is especially true after a security has sold off for several days. No one likes losing money multiple days in a row and then waking up to a stock or ETF gapping even lower, further increasing their losses.
 - d) Intraday fear (and, even better, panic) is one of the best times to buy the fear. Investors and traders have less time to rationally react to sell-offs and they oftentimes panic, especially if that security has been under siege heading into the trading day.
-

9. Types of Fear

As you would expect, fear of loss in trading is the predominate driver. Fear of losing money — and in the case of the money managers, fear of losing their job — drives buying and selling decisions.

Fear of loss is in fact one of the main drivers in life — loss of money, loss of losing a loved one, loss of love, loss of acceptance, the list is long. Many professionals agree that the fear of loss is the single biggest factor as to why people don't follow through with their dreams.

There's also the Fear of Missing Out (FOMO). I've seen this personally. It drives people crazy when others are making money in the market and they are not. Studies done after 2010 found that people minded less about losing money in 2008 as long as what they lost was in line, or less than, what others lost.

They also found that people who had lost less than others in 2008 but made less in 2009 were angrier than those who lost more in 2008 and gained more in 2009. Even though the net effect was the same, they felt cheated that others had larger gains in 2009! The Fear of Missing Out plays a role in two of the strategies in this book. FOMO creates the edges and we'll be there to take advantage of them when buyers irrationally run up prices.

10. The Structure of the Instrument

The two volatility strategies in the book have performed so well primarily because of the way VXX was built. VXX is structurally inefficient. I'll walk you through this in greater detail when we get to that section. If you can find a structural inefficiency in the marketplace, you can then build strategies to exploit the inefficiency.

11. Risk Management

We'll also touch upon ways to protect positions, especially the trades where fear and greed overshoot. Fixed risk positioning allows you to predetermine and control your risk more efficiently than those traders and investors who take on open-ended risk.

What you will see is very high historical test results across multiple liquid securities. You'll see signals being correct as high as over 90% of the time since 1993, and you'll see a strategy that has averaged double-digit percentage gains as fund managers and unsophisticated retail investors buy historically overpriced insurance in order to protect their portfolios. With this in mind, we need to protect from the historically minority of times the strategies didn't win.

12. What About Fundamentals?

Fundamentals are very important for investing. They're much less important for short-term trading. Fundamentals usually don't change intraday or daily. Prices and sentiment do. This is why we primarily focus on those two, and you'll see throughout this book that it's quantitatively backed.

The bottom line: Fundamentals matter most in the long run. Price and sentiment matter most in the short run.

13. As Far as We Are Aware, This Is the First, and Only (as of 2018, "Short-Term Quantified Behavioral Finance Book" Ever Written

I'm sure others will follow and possibly go even further than we did. As of now, though, you'll gain access to quantified behavioral information that's never been published before in one book.

[Click here to order your copy of Buy The Fear; Sell The Greed - 7 Behavioral Quant Strategies For Traders](#)

14. A Note About This Book and My Writing Style

My writing is brief and to the point. That's the way I was taught. I prefer to read something succinct than to read something that makes the same point in hundreds of pages.

I've written many books over the past 23 years, including one that was selected by *Stocks & Commodities* magazine as one of the "10 Trading Classics Written in the 20th Century" (*Street Smarts* with Linda Raschke). All of these books were relatively short in length — they more importantly focused on quality. I have multiple objectives in sharing the knowledge in this book with you. One is of course to show you quantitatively where behavioral short-term edges repeatedly exist. Another is to do so succinctly.

15. Overfitting Data

As quantitative analysis becomes more mainstream, I'm seeing a new generation of quantitative traders and researchers who have data science backgrounds. Those who are not classically trained in our industry are applying data techniques that are successful in other fields. Some of these techniques as they apply to financial engineering are very good. Others are bad.

One of the techniques I don't like that is currently being applied more and more is taking a large data set and trying every possible combination until good results come out.

Overfitting is exactly as it sounds: Take an abundance of data and mine through it to find variations that work. Never mind if the parameters don't make sense. The data knows better. "Trade the data!" is their mantra.

For example, let's create something that's not remotely logical. Let's assume that if the Red Sox win by three runs on a Thursday night, buy the S&P 500 on the open the next morning and sell on the close. Let's say hypothetically this actually has made money 80% of the time over the past 30 years, providing traders with large returns. We then test it changing one variable:

the total number of runs they win by. When the Red Sox win by four runs, it doesn't work. It's 50% correct and loses money. And when they win by only two runs it's only 45% correct.

The data says to trade this. When the Red Sox win by exactly three runs on a Thursday night you buy the S&P on Friday morning and you sell it on the close. It's been 80% correct for 30 years!

There are now two large problems...

1. **The rules are nonsense.** Why in the world would the S&P 500 rise after the Red Sox won on a Thursday by three runs? Boston fans are happy they won, so they're buying? Well, if that's logically true, then the Yankees fans are not happy and they are selling. But even if a win by three runs by the Red Sox led to higher prices the next day, why three runs? Why didn't it work for two runs, or four runs?
2. **The data has been overfitted.** I've met data miners and optimizers with very few years of professional trading experience who will say, "This is what the data says and this is a valid trading strategy!" And the rest of us who live in the real world will say, "Uh-huh."

Dr. Marcos Lopez de Prado writes about this topic in his great book, *Advances in Financial Machine Learning*. Dr. de Prado is an expert in this field. He founded Guggenheim Partners' Quantitative Investment Strategies Business where they managed over \$13 billion. I recently attended a conference he spoke at and he discussed the many pitfalls of systems testing, including overfitting, as it applies to finance. I recommend you read his book. In the meantime, unless a strategy takes advantage of an arbitrage opportunity, a structural inefficiency opportunity, or a repeatable behavioral opportunity such as fear and greed, it potentially runs the risk of having been overfit.

In this book, we're quantifying repeatable human behavior. As we move ahead, you'll see over and over again that fear creates liquidity holes (lack of buyers), and sometimes when the fear turns into panic, not only

do the buyers step aside at reasonable prices, the sellers don't care at what price they sell their securities for — they just want out.

16. Why Do So Many Panic Sell-Offs Eventually Reverse?

I first read the following in an interview with legendary market strategist and technician Tom DeMark. He said real market bottoms (both short-term and long-term) don't occur because buyers come piling back in at the same time. They occur because the selling has lessened or stopped.

It took me years to fully grasp the magnitude of this insight. The bottoms that occur when fear is high occur after all the scared money is out. Sometimes the buyers immediately step in. Other times (and this is more often), the buyers gradually return after they see conditions to be *safer than they were*. These buyers are buying after the fear has subsided. And they're often paying a higher price and are buying when there are no longer short-term edges in place. Those who stepped in near the peak of the fear are the ones who are most rewarded.

In this book, we'll see numerous statistically proven ways to systematically buy the fear, oftentimes when fear is at its highest. We're often buying as the final sellers are selling out their stock or ETF, usually because they can no longer take the pain.

Warren Buffett created his wealth by following his own advice to “be fearful when others are greedy and greedy when others are fearful.”

Let's move ahead and find the times to be fearful when others are greedy and greedy when others are fearful. Let's now find the times to *Buy the Fear and Sell the Greed*.

[To order your copy of “Buy The Fear; Sell The Greed - 7 Behavioral Quant Strategies For Traders” click here now](#)
