

“Schwager’s unique ability to illustrate winning strategies and interweave personal backgrounds and emotional highs and lows makes *Hedge Fund Market Wizards* both a highly entertaining read and learning experience.”

—Stanley Druckenmiller

HEDGE FUND MARKET WIZARDS



How Winning Traders Win

JACK D. SCHWAGER

FOREWORD BY ED SEYKOTA

Hedge Fund Market Wizards

Other Books by Jack D. Schwager

A Complete Guide to the Futures Markets: Fundamental Analysis, Technical Analysis, Trading, Spreads, and Options

Getting Started in Technical Analysis

Market Wizards: Interviews with Top Traders

The New Market Wizards: Conversations with America's Top Traders

Stock Market Wizards: Interviews with America's Top Stock Traders

Schwager on Futures: Fundamental Analysis

Schwager on Futures: Managed Trading Myths & Truths

Schwager on Futures: Technical Analysis

Study Guide to Accompany Fundamental Analysis (with Steven C. Turner)

Study Guide to Accompany Technical Analysis (with Thomas A. Bierovic and Steven C. Turner)

Hedge Fund Market Wizards

How Winning Traders Win

Jack D. Schwager



WILEY

John Wiley & Sons, Inc.

Copyright © 2012 by Jack D. Schwager. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

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, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the Web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books. For more information about Wiley products, visit our web site at www.wiley.com.

Library of Congress Cataloging-in-Publication Data

Schwager, Jack D., 1948–

Hedge fund market wizards : how winning traders win / Jack D. Schwager.

p. cm.

Includes index.

ISBN 978-1-118-27304-3 (hardback)

1. Floor traders (Finance). 2. Hedge funds. I. Title.

HG4621.H27 2012

332.64'524—dc23

2012004861

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

*With love to my wife, Jo Ann,
the best thing that ever happened to me
(I know because she tells me so, and she has never been wrong)*

Lara Logan: Do you feel the adrenaline at all?

Alex Honnold: There is no adrenaline rush. . . . If I get a rush, it means that something has gone horribly wrong. . . . The whole thing should be pretty slow and controlled. . . .

—Excerpt of *60 Minutes* interview (October 10, 2011) with Alex Honnold, acknowledged to be the best free-soloing climber in the world, whose extraordinary feats include the first free-solo climb up the northwest face of Half Dome, a 2,000-foot wall in Yosemite National Park

To do my vacuum cleaner, I built 5,127 prototypes. That means I had 5,126 failures. But as I went through those failures, I made discoveries.

—*James Dyson*

Contents

| | | |
|---------------------------------------|-----------------------------------------------|------------|
| Foreword | | ix |
| Preface | | xiii |
| Acknowledgments | | xvii |
| Part One Macro Men | | 1 |
| Chapter 1 | Colm O’Shea: Knowing When It’s Raining | 3 |
| Chapter 2 | Ray Dalio: The Man Who Loves Mistakes | 47 |
| Chapter 3 | Larry Benedict: Beyond Three Strikes | 77 |
| Chapter 4 | Scott Ramsey: Low-Risk Futures Trader | 103 |
| Chapter 5 | Jaffray Woodruff: The Third Way | 129 |
| Part Two Multistrategy Players | | 159 |
| Chapter 6 | Edward Thorp: The Innovator | 161 |
| Chapter 7 | Jamie Mai: Seeking Asymmetry | 223 |

| | | |
|------------------|--------------------------------------------------------------------|------------|
| Chapter 8 | Michael Platt: The Art and Science of Risk Control | 261 |
| | Part Three Equity Traders | 285 |
| Chapter 9 | Steve Clark: Do More of What Works and Less of What Doesn't | 287 |
| Chapter 10 | Martin Taylor: The Tsar Has No Clothes | 323 |
| Chapter 11 | Tom Claugus: A Change of Plans | 359 |
| Chapter 12 | Joe Vidich: Harvesting Losses | 385 |
| Chapter 13 | Kevin Daly: Who Is Warren Buffett? | 405 |
| Chapter 14 | Jimmy Balodimas: Stepping in Front of Freight Trains | 423 |
| Chapter 15 | Joel Greenblatt: The Magic Formula | 451 |
| Conclusion | 40 Market Wizard Lessons | 489 |
| Epilogue | | 507 |
| Appendix A | The Gain to Pain Ratio | 513 |
| Appendix B | Options—Understanding the Basics | 515 |
| About the Author | | 519 |
| Index | | 521 |

Foreword

Once upon a time, a drought comes over the land and the wheat crop fails. Naturally, the price of wheat goes up. Some people cut back and bake less bread while others speculate and buy as much wheat as they can get and hoard it in hopes of higher prices to come.

The king hears about all the speculation and high prices and promptly sends his soldiers from town to town to proclaim that speculation is now a crime against the state—and that severe punishment is to befall speculators.

The new law, like oh so many laws against the free market, only compounds the problem. Soon, some towns have no wheat at all—while rumor has it that others still have ample, even excess, supplies.

The king keeps raising the penalty for speculation, while the price of wheat, if you can find any, keeps going higher and higher.

One day, the court jester approaches the king and, in an entertaining sort of way, tells the king of a plan to end the famine—and to emerge as a wise and gracious ruler.

The next day, the soldiers again ride from town to town, this time to proclaim the end of all laws against speculation—and to suggest that

each town prominently post the local price for wheat at its central marketplace.

The towns take the suggestion and post the prices. At first, the prices are surprisingly high in some towns and surprisingly low in others. During the next few days, the roads between the towns become virtual rivers of wheat as speculators rush to discount the spreads. By the end of the week, the price of wheat is mostly the same everywhere and everyone has enough to eat.

The court jester, having a keen sense for his own survival, makes sure all the credit goes directly to the king.

I like this story.

The loose end, of course, is how the court jester happens to know so much about how markets work—and how he happens to know how to express what he knows in an effective way.

While we may never know the answer for sure, my personal hunch is that the court jester makes frequent visits to the royal library and reads *Reminiscences of a Stock Operator* by Edwin Lefèvre, *The Crowd* by Gustav LeBon, *Extraordinary Popular Delusions and the Madness of Crowds* by Charles Mackay, and the entire *Market Wizards* series by Jack Schwager.

Trading, it turns out, is the solution to most economic problems; *free markets*, *sanctity of trading*, and *healthy economy* are all ways to say the same thing. In this sense, our traders are champions and the men and women in Jack Schwager's books are our heroes.

Schwager's books define trading by vividly portraying traders. He finds the best examples, he makes them human and accessible, and he allows them to express, in their own ways, what they do and how they do it. He gives us a gut feel for the struggles, challenges, joys, and sorrows all of them face over their entire careers. We wind up knowing each of his subjects intimately—and also as a uniquely complete expression of repeating themes, such as: be humble; go with the flow; manage risk; do it your own way.

Schwager's books are essential reading for anyone who trades, wants to trade, or wants to pick a trader.

I go back a ways with Jack. I recall meeting him while we were both starting out as traders, long on enthusiasm and short on experience. Over the years, I watched him grow, mature, and develop his talent, evolving to become our Chronicler-General.

Schwager's contribution to the industry is enormous. His original *Market Wizards* inspired a whole new generation of traders, many of whom subsequently appeared in *The New Market Wizards*, and then, in turn, in *Stock Market Wizards*. Jack's *Wizards* series becomes the torch that traders pass from one generation to the next. Now *Hedge Fund Market Wizards* extends, enhances, and perfects the tradition. Traders regularly use passages and chapters from Schwager's books as a reference for their own methods and to guide their own trading. His work is an inseparable part of the consciousness and language of trading itself.

Some 30 years ago, Jack reads *Reminiscences of a Stock Operator* and notices its meaningfulness and relevance, even 60 years after its publication. He adopts that standard for his own writing.

I notice that books that actually meet that standard tend to wind up in the libraries of traders and court jesters alike, on the same shelf with *Reminiscences*, *The Crowd*, and *Extraordinary Popular Delusions and the Madness of Crowds*.

That's exactly where you find Jack's books in my library.

Ed Seykota
Bastrop, Texas
February 25, 2012

Preface

This volume is part of my continuing effort to meet with exceptional traders to better understand the elements underlying their success and what differentiates them from the multitude of pedestrian market participants. The traders interviewed range from the founder of the largest hedge fund in the world, managing \$120 billion in assets with 1,400 employees, to a manager running a solo operation with only \$50 million in assets. Some of the managers trade from a long-term perspective, holding positions for many months and even years, while others focus on trading horizons as short as a single day. Some managers utilize only fundamental data, others only technical input, and still others combine both. Some of the managers have very high average returns with substantial volatility, while other managers have far more moderate returns, but with much lower volatility.

The one characteristic that all the managers share is that they have demonstrated an ability to generate superior return/risk performance. Because so much of what passes for high returns merely reflects a willingness to take more risk rather than being an indication of skill, I believe that return/risk is a far more meaningful measure than return alone. In fact, the fixation of investors on return without the appropriate

consideration of risk is one of the great investment mistakes—but that is a story for another book. One return/risk measure that I have found particularly useful is the Gain to Pain ratio—a statistic that is explained in Appendix A.

There were three key criteria for selecting interviews to be included in this book:

1. The managers had superior return/risk track records for significant length periods—usually (but not always) 10 or more years and often much longer.
2. The managers were open enough to provide valuable advice about trading.
3. The interviews provided sufficient color to allow for a readable chapter.

A half dozen of the interviews I did for this volume were not used because they fell short in one or more of these categories.

Over longer-term intervals (e.g., 10 years, 15 years), hedge funds consistently outperform equity indexes and mutual funds.¹ The typical pattern is that hedge funds, as a group, will have modestly higher returns, but far lower volatility and equity drawdowns. It is ironic that in terms of any type of risk measure, hedge funds, which are widely viewed as highly speculative, are actually much more conservative than traditional investments, such as mutual funds. It is primarily as a consequence of lower risk that hedge funds tend to exhibit much better return/risk performance than mutual funds or equity indexes. Moreover, with rare exception, the best managers are invariably found within the hedge fund world. This fact is not surprising because one would expect the incentive fee structure of hedge funds to draw the best talent.

When I conducted the interviews for my first two *Market Wizard* books (1988–1991), hedge funds were still a minor player in the world investment scene.² Based on estimates by Van Hedge Fund Advisors,

¹All the performance statements made in reference to hedge funds as an investment category implicitly assume hedge fund of funds data. Indexes based on fund of funds returns largely avoid the significant statistical biases inherent in hedge fund indexes that are based on individual manager returns.

²*Market Wizards*, New York Institute of Finance, 1989. *New Market Wizards*, New York, HarperBusiness, 1991.

total industry assets under management during that period were in the approximate \$50 billion to \$100 billion range. Since that time, however, hedge fund growth has exploded, expanding more than twentyfold, with the industry currently managing in excess of \$2 trillion. The impact of hedge fund trading activity far exceeds its nominal size because hedge fund managers trade far more actively than traditional fund managers. The enhanced role of hedge funds has itself influenced market behavior.

With hedge funds accounting for a much larger percentage of trading activity, trading has become more difficult. In some strategies, the effect can clearly be seen. For example, systematic trend-followers did enormously well in the 1970s and 1980s when they accounted for a minority of futures trading activity, but their return/risk performance declined dramatically in subsequent decades, as they became a larger and larger part of the pool. Too many big fish make it more difficult for other big fish to thrive.

Even if one does not accept the argument that the greater role of hedge funds has made the game more difficult, at the very least, it has made the game different. Markets change and good traders adapt. As hedge fund manager Colm O'Shea states in his interview, "Traders who are successful over the long run adapt. If they do use rules, and you meet them 10 years later, they will have broken those rules. Why? Because the world changed." Part of that change has been brought about by the increasing prominence of hedge funds themselves.

Not surprisingly, virtually all of the traders interviewed in this volume are hedge fund managers (or ex-hedge fund managers). The one exception, Jimmy Balodimas, a highly successful proprietary trader with First New York Securities, had to adapt to the presence of hedge funds. In his interview, he describes how hedge fund activity changed the nature of equity price movements and how he had to adjust his own approach accordingly.

Markets have changed in the generation since I wrote the first *Market Wizards* book, but in another sense, they have not. A bit of perspective is useful. When I asked Ed Seykota in *Market Wizards* whether the increasing role of professionals had changed the markets (a shift that the intervening years have demonstrated was then only in its infancy), he replied, "No. The markets are the same now as they were 5 to 10 years ago because they keep changing—just like they did then."

In many of the interviews, traders made reference to one or more of my earlier books. I did not include all such references, but I included more than I was comfortable doing. I am quite cognizant how self-serving this may appear to be. My guideline whether to include such references was to ask myself the following question: Would I include this comment if the reference were to another book, rather than my own? If the answer was yes, I included it.

Readers who are looking for some secret formula that will provide them with an easy way to beat the markets are looking in the wrong place. Readers who are seeking to improve their own trading abilities, however, should find much that is useful in the following interviews. I believe the trading lessons and insights shared by the traders are timeless. I believe that although markets are always changing, because of constancies in human nature, in some sense, they are also always the same. I remember, when first reading *Reminiscences of a Stock Operator* by Edwin Lefèvre nearly 30 years ago, being struck by how relevant the book remained more than 60 years after it was written. I do not mean or intend to draw any comparisons between this volume and *Reminiscences*, but merely to define the goal I had in mind in writing this book—that it still be meaningful and useful to readers trading the market 60 years from now.

Acknowledgments

First and foremost, I would like to thank my son Zachary for being my sounding board for this book. He had three essential qualifications for fulfilling this role: He understands the subject matter; he can write; and most importantly, he can be brutally honest in his opinions. His comments about one chapter: “Sorry, Dad, but I think you should pull it.” Although reluctant to see two weeks of work go to waste, on reflection, I realized he was right, and I did. Zachary provided many useful suggestions (besides “ax it”), most of which were incorporated. Whatever defects remain, I can assure the reader they would have been worse without Zachary’s assistance.

Four of the interviews in this book were suggested and arranged through the help of others. In this regard, I am deeply grateful to the following, each of whom was the catalyst responsible for one of the interviews in this volume: John Apperson, Jayraj Chokshi, Esther Healer, and Zachary Schwager. I also want to acknowledge that Michael Lewis’s terrific book, *The Big Short*, was the source for one of the interview ideas for this book. I would also like to thank Jeff Feig for his efforts.

Finally, I would like to thank the traders who agreed to participate in the interviews and share their insights, and without whom there would be no book.

Part One

MACRO MEN

Chapter 1

Colm O'Shea

Knowing When It's Raining

When I asked Colm O'Shea to recall mistakes that were learning experiences, he struggled to come up with an example. At last, the best he was able to do was describe a trade that was a missed profit opportunity. It is not that O'Shea doesn't make mistakes. He makes lots of them. As he freely acknowledges, he is wrong on at least 50 percent of his trades. However, he never lets a mistake get remotely close to the point where it would provide a good story. Large trading losses are simply incompatible with his methodology.

O'Shea is a global macro trader—a strategy style that seeks to profit from correctly anticipating directional trends in global currency, interest rate, equity and commodity markets. At surface consideration, a strategy that requires participating in directional moves in major global markets may not sound like it would be well suited to maintaining tightly constrained losses, but the way O'Shea trades, it is. O'Shea views his

trading ideas as hypotheses. A market move counter to the expected direction is proof that his hypothesis for that trade is wrong, and O'Shea then has no reluctance in liquidating the position. O'Shea defines the price point that would invalidate his hypothesis before he places a trade. He sizes his position so that the loss from a move to that price level is limited to a small percentage of assets. Hence, the lack of any good war stories of trades gone awry.

O'Shea's interest in politics came first, economics second, and markets third. His early teen years coincided with the advent of Thatcherism and the national debate over reducing the government's role in the economy—a conflict that sparked O'Shea's interest in politics and soon after economics. O'Shea educated himself so well in economics that he was able to land a job as an economist for a consulting firm before he began university. The firm had an abrupt opening for an economist position because of the unexpected departure of an employee. At one point in his interview for the position, he was asked to explain the seeming paradox of the Keynesian multiplier. The interviewer asked, "How does taking money from people by selling bonds and giving that same amount of money back to people through fiscal spending create stimulus?" O'Shea replied, "That is a really good question. I never thought about it." Apparently, the firm liked that he was willing to admit what he did not know rather than trying to bluff his way through, and he was hired.

O'Shea had picked up a good working knowledge of econometrics through independent reading, so the firm made him the economist for the Belgian economy. He was sufficiently well prepared to be able to use the firm's econometric models to derive forecasts. O'Shea, however, was kept behind closed doors. He was not allowed to speak to any clients. The firm couldn't exactly acknowledge that a 19-year-old was generating the forecasts and writing the reports. But they were happy to let O'Shea do the whole task with just enough supervision to make sure he didn't mess up.

At the time, the general consensus among economists was that the outlook for Belgium was negative. But after he had gone through the data and done his own modeling, O'Shea came to the conclusion that the growth outlook for Belgium was actually pretty good. He wanted to come up with a forecast that was at least 2 percent higher

than the forecast of any other economist. "You can't do that," he was told. "This is not how things work. We will allow you to have one of the highest forecasts, and if growth is really strong as you expect, we will still be right by having a forecast near the high end of the range. There is nothing to be gained by having a forecast outside the range, in which case if you are wrong, we would look ridiculous." As it turned out, O'Shea's forecast turned out to be right, but no one cared.

His one-year stint as an economist before he attended university taught O'Shea one important lesson: He did not want to be an economic consultant. "As an economic consultant," he says, "how you package your work is more important than what you have actually done. There is massive herding in economic forecasting. By staying near the benchmark or the prevailing range, you get all the upside of being right without the downside. Once I understood the rules of the game, I became quite cynical about it."

After graduating from Cambridge in 1992, O'Shea landed a job as a trader for Citigroup. He was profitable every year, and his trading line and responsibilities steadily increased. By the time O'Shea left Citigroup in 2003 to become a portfolio manager for Soros's Quantum Fund, he was trading an exposure level equivalent to a multibillion-dollar hedge fund. After two successful years at Soros, O'Shea left to become a global macro strategy manager for the multimanager fund at Balyasny, a portfolio that was to be the precursor for his own hedge fund, COMAC, formed two years later.

O'Shea has never had a losing year. The majority of his track record, spanning his years at Citigroup and Soros, is not available for public disclosure, so no precise statements about performance can be made. The only portion of this track record that is available is for the period at Balyasny, which began in December 2004, and his current hedge fund portfolio, which launched in June 2006. For the combined period, as of end of 2011, the average annual compounded net return was 11.3 percent with an annualized volatility of 8.1 percent and a worst monthly loss of 3.7 percent. If your first thought as you read this is "only 11.3 percent," a digression into performance evaluation is necessary.

Return is a function of both skill (in selecting, implementing, and liquidating trades) and the degree of risk taken. Doubling the risk will

double the return. In this light, the true measure of performance is return/risk, not return. This performance evaluation perspective is especially true for global macro, a strategy in which only a fraction of assets under management are typically required to establish and maintain portfolio positions.¹ Thus, if desired, a global macro manager could increase exposure by many multiples with existing assets under management (i.e., without any borrowing). The choice of exposure will drive the level of both returns and risk. O'Shea has chosen to run his fund at a relatively low risk level. Whether measured by volatility (8.2 percent), worst monthly loss (3.7 percent), or maximum drawdown (10.2 percent), his risk metrics are about half that of the average for global macro managers. If run at an exposure level more in line with the majority of global macro managers, or equivalently, at a volatility level equal to the S&P 500, the average annual compounded net return on O'Shea's fund would have been about 23 percent. Alternatively, if O'Shea had still been managing the portfolio as a proprietary account, an account type in which exposure is run at a much higher level relative to assets, the returns would have been many times higher for the exact same trading results. These discrepancies disappear if performance is measured in return/risk terms, which is invariant to the exposure level. O'Shea's Gain to Pain ratio (a return/risk measure detailed in Appendix A) is a strong 1.76.

I interviewed O'Shea in London on the day of the royal wedding. Because of related street closures, we met at a club at which O'Shea was a member, instead of at his office. O'Shea explained that he had chosen to join this particular club because they had an informal dress code. We conducted the interview in the club's drawing room, a pleasant space, which fortunately was sparsely populated, presumably because most people were watching the wedding. O'Shea spoke enthusiastically as he expressed his views on economics, markets, and trading. At one point in our conversation, a man came over and asked O'Shea if he could speak more quietly as his voice was disrupting the tranquility of the

¹The derivatives normally used to express directional and relative value exposure in global macro (e.g., futures, FX, options, swaps) require only a small capital outlay (as margin or premium) relative to the face value exposure.

room. O'Shea apologized and subsequently dropped his voice level to library standards. Since I was recording the conversation, as I do for all interviews—I am such a poor note taker that I don't even make the attempt—I became paranoid that the recorder might not clearly pick up the now softly speaking O'Shea. My concerns were heightened anytime there was an increase in background noise, which included other conversations, piped-in music, and the occasional disruptive barking of some dogs one of the members had brought with him. I finally asked O'Shea to raise his voice to some compromise level between his natural speech and the subdued tone he had assumed. The member with the barking dogs finally left, and as he passed us, I was surprised to see—although I really shouldn't have been—that it was the same man who had complained to O'Shea that he was speaking too loudly.



When did you first become interested in markets?

It was one of those incredible chance occurrences. When I was 17, I was backpacking across Europe. I was in Rome and had run out of books to read. I went to a local open market where there was a book vendor, and, literally, the only book they had in English was *Reminiscences of a Stock Operator*. It was an old, tattered copy. I still have it. It's the only possession in the world that I care about. The book was amazing. It brought everything in my life together.

What hooked you?

What hooked me early about macro was . . .

No, I meant what hooked you about the book? The book has nothing to do with macro.

I disagree. It's all there. It starts off with the protagonist just reading the tape, but that isn't what he developed into. Everyone gives him tips, but

the character Mr. Partridge tells him all that matters, “It’s a bull market.”²

That’s a fundamental macro person. Partridge teaches him that there is a much bigger picture. It’s not just random noise making the numbers go up and down. There is something else going on that makes it a bull or bear market. As the book’s narrator goes through his career, he becomes increasingly fundamental. He starts talking about demand and supply, which is what global macro is all about.

People get all excited about the price movements, but they completely misunderstand that there is a bigger picture in which those price movements happen. Price movements only have meaning in the context of the fundamental landscape. To use a sailing analogy, the wind matters, but the tide matters, too. If you don’t know what the tide is, and you plan everything just based on the wind, you are going to end up crashing into the rocks. That is how I see fundamentals and technicals. You need to pay attention to both to make sense of the picture.

Reminiscences is a brilliant book about the journey. The narrator starts out with an interest in watching numbers go up and down. I started out with an interest in politics and economics. But we both end up in a place that is not that far apart. You need to develop your own market experience. You are only going to fully understand what the traders in your books were saying after you have done it yourself. Then you realize, “Oh, that’s what they meant.” It seems really obvious. But before you experience it and learn it, it’s hard to understand.

What was the next step in your journey to becoming a trader after reading *Reminiscences*?

I went to Cambridge to study economics. I knew I wanted to study economics from the age of 12, well before my interest in markets. I wanted

²The passage that O’Shea refers to is the following:

I think it was a long step forward in my education when I realized at last that when old Mr. Partridge kept on telling the other customers, “Well, you know this is a bull market!” he really meant to tell them that the big money was not in the individual fluctuations but in the main movement—that is, not in reading the tape but in sizing up the entire market and its trend.

to do it because I loved economics, not because I thought that was a pathway to the markets. Too many people do things for other reasons.

What did you learn in college about economics that was important?

I was very lucky that I went to college when I did. If I went now, I think I would be really disappointed because the way economics is currently taught is terrible.

Tell me what you mean by that.

When I went to university, economics was taught more like philosophy than engineering. Since then, economics has become all about mathematical rigor and modeling. The thing about mathematical modeling is that in order to make problems tractable, you need to make assumptions. Assumptions then become axiomatic for the entire subject—not because they are true, but because they are necessary to get a solution. So, it is easier to assume efficient markets because without that assumption, you can't do the math. The problem is that markets aren't efficient, but that fact is just conveniently ignored.

And the mathematical models can't include the unpredictable impact of speculators, either.

That's right. Because once you introduce them, you have a mathematical model that can't be solved. In the current world of economics, mathematical rigor is valued above all else. It's the only way you will get your PhD; it's the only way you will get a career in academia; it's the only way you will get tenure. As a consequence, anyone I would call an economist has been moved out of the economics department and into history, political science, or sociology. The mathematization of economics has been a disaster because it has greatly narrowed the scope of the field.

Do you have a favorite economist?

Keynes. It's a shame that Keynesianism in the United States has become this weird word whose meaning is barely recognizable.

That's because in the United States, people apply the word Keynesianism to refer to deficit spending, regardless of whether it occurs in an economic expansion or contraction.

That's not what he said.

I know that. Although he certainly would have favored deficit spending in 2008 and 2009, he would have had a very different perspective about deficit spending in the expanding economy that prevailed in previous years.

Yes, Keynes was a fiscal conservative.

I'm curious as to your views regarding the critical dilemma that currently faces the United States. On one hand, if deficits are allowed to go on, it could well lead to a catastrophic outcome. On the other hand, if you begin substantially cutting spending with current unemployment still very high, it could trigger a severe economic contraction, leading to lower revenues and upward pressure on the deficit.

The argument for fiscal stimulus is a perfectly coherent, logical case. The counterargument that we should cut spending now is also a perfectly rational case. But both sides are often expressed in totally irrational ways. I think the biggest mistake people make is to assume there is an answer when, in fact, there may not be a good answer.

I actually had the same perception after the 2008 presidential election. I thought the economy had been so mismanaged between the combination of exploding debt and a postbubble collapse in economic activity that there might not be any solution. The American humor newspaper, the *Onion*, captured the situation perfectly. Their headline after Obama was elected was, "Black Man Given Nation's Worst Job."

All solutions that will work in the real world have to embrace the fact that the U.S. is not as rich as Americans think it is. Most political solutions will be in denial of that fact. The relevant question is: Which difficult choice do you want to make?