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

[1]The 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.

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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

[2]The 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?

Did you know what you wanted to do when you were in university?

Yes, become a trader. Although looking back at it, at the time, I didn't quite know what that meant.

What was your first job after graduating?

I got a job as a junior trader at Citigroup in the foreign exchange department. My first week at work was the week when the pound was kicked out of the ERM.

The Exchange Rate Mechanism (ERM), which was operative in the decades prior to the implementation of the euro, linked the exchange rates of European currencies within defined price bands. The U.K. was forced to withdraw from the ERM in 1992 when the pound declined below the low end of its band.

The week when George Soros in the popular vernacular "broke the Bank of England"?

Yes. As you may know, I worked for George Soros before starting my own fund. My favorite George Soros story concerns an interview with Chancellor Norman Lamont, who stated that the Bank of England had £10 billion in reserve to defend the pound against speculators. George apparently was reading an account of this interview in the next morning's paper and thought to himself, "£10 billion. What a remarkable coincidence!—that's exactly the size of the position I was thinking of taking."

At the time, I remember explaining to the head of the trading floor why the pound would not leave the ERM. I argued that it would be political suicide for the conservative government to drop out of the ERM; hence they would make sure it didn't happen.

What was your boss's response?

He just smiled and nodded at me. He said, "Okay, we'll see." About three hours later, the pound crashed out of the European ERM. I felt like a complete idiot.

I had absolutely no comprehension of the power of markets versus politics. The policy makers didn't understand that either. I think, as is

often the case, policy makers don't understand that they are not in control. It's not that speculators are in control, either, but rather that fundamentals actually matter. Fundamentally, the U.K. remaining in the ERM was untenable. The U.K. was in a recession with a greatly overvalued currency. Germany needed high interest rates to constrain the high inflation of the postunification period with East Germany. Because the currencies were linked, the U.K. was also forced to maintain a high interest rate, even though its ongoing recession dictated a need for the exact opposite policy. All that Soros did was to recognize that the situation was untenable. The Bank of England's effort to support the pound was the equivalent of trying to fight gravity.

You were lucky to make your first big mistake when you didn't have any money on the line. Did that episode make an impression on you?

It made a huge impression. I learned that markets matter more than policy. You have to look at real fundamentals, not at what policy makers want to happen. The willing disbelief of people can carry on for a long time, but eventually it is overwhelmed by the market. The genius of Soros was recognizing the turning point when things change—the ability to not only know that a position was right, but that it was right *now*, and that now was the time to have a big risk on the trade.

[A long discussion ensues about the current (2011) European debt crisis. O'Shea provides a fairly pessimistic assessment of the long-term prospects for the euro.]

You are a macro trader. You see the problem. How do you play it?

I don't. That is why it's a bit of a distraction.

You don't because the timing is so uncertain?

Because no one cares. As long as no one cares about it, there is no trend. Would you be short Nasdaq in 1999? You can't be short just because you think fundamentally something is overpriced.

What can you do?

You can wait until people start to care. Taking Nasdaq as an example, you want to be selling Nasdaq at 4,000, but only after it has gone to 5,000. So you are selling the market on the way down, not on the way up. Because in a bubble, who is to say how far a market can go. Even though something might be a good idea, you need to wait for and recognize the right time. I am not particularly original. If you read the *Financial Times*, it's all there. You don't have to be a brilliant economist; you just have to recognize when something matters. The financial crisis is another example of the need to wait for the right time. During 2006 to 2007, I was thinking the markets were in a completely unsustainable bubble. It was ridiculous. You saw insanity everywhere.

What was your perception of the insanity at the time?

Risk premium was too low in everything. Credit was trading at ludicrous spreads, and no one cared about quality. What is the one thing you know about a company that posts smooth earnings every single quarter?

They are manipulating the numbers.

Yes. You know nothing beyond that. They may or may not have a good business, but you know they are manipulating numbers. People love stable earnings. Isn't that great? I hate stable earnings. It just tells me the company is not being truthful. And what I knew about the whole system in 2006 and 2007 was that the true facts were being obscured. The problem was most obvious in the credit markets. But you can't be short because you lose carry [the interest rate payments on the credit instrument], and at the same time, the spreads get lower and lower. [A decline in the credit spread—that is, the difference between the credit instrument interest rate and the equivalent maturity T-note rate—implies an increase in the credit instrument price.] So you not only have to pay to hold the position, but the position is also going against you. Being short credit in 2006 and 2007 was exactly the same as being short Nasdaq in 1999. You just have to make money going the other way.

How then did you position yourself during 2006 and 2007?

We recognized that we would underperform the bulls by quite a bit because in a bubble the true believers will always win. That's fine. You just need to make decent returns and wait until the market turns. Then you can make great returns. What I believe in is compounding and not losing money. We were quite happy to be part of the bubble, but to do it in positions that were highly liquid, so that we could exit the market quickly if we wanted to. One of the biggest mistakes people made was to join in the bubble, but to do it in positions for which there was no exit. All markets look liquid during the bubble, but it's the liquidity after the bubble ends that matters. We did a lot of our trades through options—positions like buying calls in currencies with a carry because the positive carry paid for your option.

Carry currencies are currencies with higher interest rates. For example, if Australian short-term rates are 5 percent and U.S. rates are 1 percent, the Australian dollar would be a carry currency. U.S. investors could convert U.S. dollars into Australian dollars and earn an extra 4 percent interest income. The risk, of course, is that the Australian dollar could decline versus the U.S. dollar in the interim. Although this risk could be hedged by selling Australian dollars in the forward market, arbitrage will assure that the forward rates in the Australian dollar are discounted by the same amount as the interest rate differential. (Otherwise, there would be a risk-free trade in buying spot Australian dollars, investing the proceeds in Australian T-bills, and hedging with a short Australian dollar position in the forward market.) If the spot exchange rate is unchanged, over time, the forward rate will climb by the amount of this differential (i.e., the carry). The strike price on an at-the-money call on a forward contract in the Australian dollar will be lower than the current spot price by the same differential.[3] *If the spot price remains unchanged, the call will move in the money by this differential by expiration, serving as an offset to the premium paid for the option. Moreover, in a risk-seeking market, carry currencies will also tend to gain in the spot market as well.*

[3]Readers unfamiliar with options may wish to first review Appendix B, which provides a brief summary of option basics.

Since the underlying currencies are also very liquid, I assume the reason you preferred buying calls to being long carry currencies was to avoid the gap risk in the event of a sudden market reversal?

Yes, by being long options, you can never have a major drawdown. If the bubble continues, you make nice returns; if it collapses, you just lose the premium. You are never short that horrible tail. But there were also structural reasons for preferring long option positions at the time. One of the aspects of risk premiums being very low was that option prices were generally too cheap. I like buying options when they are cheap. It was a low-volatility bubble, which meant that options worked. That's not always the case.

What other types of trades were you doing during the financial bubble?

What were central banks doing at the time? They were hiking rates. So I did a lot of trades related to monetary policy. During the entire Fed hiking cycle of 2005 to 2006, the futures market kept on being priced on the premise that it was about to stop. The market kept paying you over and over again to take the trade that said maybe it won't stop. It's extremely unlikely that the Fed would go from hiking to cutting immediately. Also, monetary policy was still pretty accommodative considering you had all the signs of a bubble. It was quite obvious that you needed higher rates when everything about the economy was signaling that you were in a bubble. So you had a great risk/reward trade that in six months they would still be hiking. As the months rolled on, they kept on hiking, and the market kept on saying, "I'm sure they'll stop soon." You could keep on repeating the trade.

Why was the market at the time expecting monetary policy to ease?

I try to avoid conceptualizing the market in anthropomorphic terms. Markets don't think. Just like mobs don't think. Why did the mob decide to attack that building? Well, the mob didn't actually think that. The market simply provides a price that comes about through a collection of human beings.

Okay then, rephrase the question in your own words.

What you are asking is, "Why wasn't the market priced efficiently?" There are very few market forces to make macro markets priced efficiently. Hedge funds are tiny in the macro space. If you are talking about tech stocks, then sure, hedge funds are massive. But if you are talking about the foreign exchange (FX) market or Treasuries, hedge funds are tiny compared to real money. In comparison, PIMCO or the Chinese are enormous. There are trillions of dollars moving in these markets, which make the little people like me quite irrelevant. We are not a force in pricing. One reason I like macro so much is because I am a small fish swimming in a sea of real money. Fundamentals matter. I am not playing a game against people like me. That would be a zero-sum, difficult game.

Does there have to be an identifiable reason for every trade?

Not necessarily. For example, before the 1998 financial crisis began, I didn't even know who LTCM was.

Long Term Capital Management (LTCM) was the most famous hedge fund failure in history. (Madoff may have been even more prominent, but his operation was a Ponzi scheme rather than a hedge fund. Madoff simply made up performance results and never did any trading.) In its first four years of operation, LTCM generated steady profits, quadrupling the starting net asset value. Then in a five-month period (May to September 1998), it all unraveled, with the net asset value of the fund plunging a staggering 92 percent. LTCM's positions had been enormously leveraged, placing the banks and brokerage firms that had provided credit to them at enormous risk. Fears that LTCM's failure could have a domino effect throughout the financial system prompted the Federal Reserve to orchestrate (but not pay for) a bailout for the firm. LTCM's liquidation of its enormously leveraged positions caused havoc in many financial markets. What made LTCM such a compelling story was not merely the magnitude of the failure and its threat to the financial system, but also the firm's impressive roster of brainpower, which included two Nobel Prize winners.

At the time, I was doing my own prop trading with no contacts. At the start of the crisis, there was nothing about LTCM in the press, either. I had no idea of any reason for what was going on in the markets,

and I had no way of finding out. All I knew was that T-bond futures were going up limit every day. That told me there was something going on. I didn't need to know why. Once you realize something is happening, you can trade accordingly. Trades don't have to start based on fundamentals. If you wait until you can find out the reason for the price move, it can be too late. A great Soros quote is "Invest first; investigate later." You don't want to get fixated on always needing a nice story for the trade. I am an empiricist at heart. The unfolding reality trumps everything.

I believe in hypothesis testing. The hypothesis is that something big is happening. I don't know what it is, but it is so powerful that it will carry on for a long time. I should participate in this. But I will do it in a way that is liquid so that if it turns around again, I can get out quickly. If I am wrong, I will have a limited loss. If I am right, who knows what could happen.

Going back to the housing and financial bubble of 2005 to 2007, you originally participated in the bubble. How did you handle the transition to the subsequent market collapse?

I'll ask you a question: "When did the financial crisis start?"

That's a difficult question to answer. There are multiple possible starting points. You could say it was the beginning of the housing price decline in 2006, although there was no market response to that at the time. In fact, even Countrywide, who was the poster child for toxic mortgage issuers, went on to set new stock price highs well after that point. Alternatively, you could say it was the collapse of Bear Stearns, although the market rebounded after that event as well.

So, I'll ask you again: "When did it start?"

Well, that's a squishy question.

Well, since you're refusing to give me any kind of answer [he laughs], I'll give you my answer. Fundamentally, housing prices started to go down

in 2006, which didn't start the crisis, but provided a reason for one. The subprime credit indexes started going down in January 2007. Subprime credit is a niche market, and the equity market was ignoring it. Then in July 2007, there was a broad selloff in the credit markets, but it still was considered a contained credit market issue. Equity people tend to trace the start of the financial crisis to the collapse of Bear Stearns in March 2008. For me, the true start of the financial crisis was in August 2007 when money markets stopped working. Basically, banks didn't trust other banks. That was the month the world broke, and no one noticed.

How did you see the money markets breaking down?

The most obvious way was that LIBOR rates spiked. [LIBOR is the rate at which banks lend to other banks.] It was an indicator that the underlying assumption that money would flow smoothly was no longer true. If you spoke to money market desks to find out what was going on, they told you that liquidity had dried up. They had never seen anything like it. If a similar event happened in any other market, it would be front-page news. But the fact that it happened in the most important market—the money market, which is at the heart of capitalism—was largely ignored.

Wasn't the stress in money markets reported in the financial press?

It was reported. It was all public information, but the point is that no one thought it mattered. Even more than three years later, we are sitting here, and you are saying, "Really, money markets broke down in August 2007? Really?"

Well, I have to admit, when I think of money markets breaking down in the financial crises, I think of the breaking of the buck by some money market funds in the aftermath of the failure of Lehman Brothers and the subsequent freezing up of the commercial paper market. But these events occurred more than a year later in September 2008.

That's my point. No one seemed to think it was important. The S&P actually went on to make new highs in the next two months.

But you made your transition from bullish positions to bearish in August 2007?

Yes, I turned bearish when money market liquidity dried up in August 2007. Declining housing prices were the impending storm clouds, but it started raining when money markets stopped working. Most people, however, didn't notice. Fundamentals are not about forecasting the weather for tomorrow, but rather noticing that it is raining today.

The great trades don't require predictions. The Soros trade of going short the pound in 1992 was based on something that had already happened—an ongoing deep recession that made it inevitable that the U.K. would not maintain the high interest rates required by remaining in the ERM. Afterward, everyone said, "That was incredibly obvious." Most of the great trades are incredibly obvious. It was the same in late 2007. In my mind, it was clear that the financial system was imploding and that most market participants hadn't noticed.

Did you go short equities then?

Equity markets would eventually notice, but being short equities is a hard trade because they might still keep going up for a long time. After a bull market that goes on for years, who is managing most of the money? The bears are all unemployed; they're not managing any money at all. You have a few very flexible smart people, but they run relatively small amounts of money; so they don't matter, either. The managers who are relentlessly bullish and who buy more every time the market goes down will be the ones who end up managing most of the money. So, you shouldn't expect a big bull market to end in any rational fashion.

The smart managers will be managing less because they don't look as good as the bulls, since they're going to have lower net long exposure?

Right. Because the bulls control most of the money, you should expect the transition to a bear market to be quite slow, but then for the move to

be enormous when the turn does happen. Then the bulls will say, "This makes no sense. This was unforeseeable." Well, it clearly wasn't unforeseeable.

I have to laugh when I hear people say it was unforeseeable that housing prices could go down. I think, "Did you ever look at a housing price chart?" If you look at a long-term inflation-adjusted chart of housing prices, you can see that excluding the postdepression bust, since the 19th century, housing prices consistently moved in a sideways range, until the mid-2000s when inflation-adjusted prices nearly doubled in a few years. It sticks out like a mountain in a plateau. Yet people can claim with a straight face that they were shocked that housing prices could go down after that abnormal surge.

If you live in a world where everyone assumes that everything goes up forever, then it is inconceivable that prices might go down. Big price changes occur when market participants are forced to reevaluate their prejudices, not necessarily because the world changes that much. The world really didn't change that much in 2008. It was just that people finally noticed there was a problem.

Consider the current U.S. debt problem. A lot of people say there is apparently no inflationary threat from the growing U.S. debt because bond yields are low. But that's not true. Bond yields will only signal that there is a problem when it is too late to fix it. You have to believe in market efficiency to believe that the market will adequately price fiscal risk. Could there be a crisis in five years? Sure. Why? Because people start to care. Currently, it's not in the price. But one day, it might be. If a major financial catastrophe happens, people will talk about how it was caused by this event or that event. If it happens, though, it will be because there were fundamental reasons that were there all along.

There will always be something that happens at the same time. Calling it a catalyst isn't very helpful in explaining anything. Did World War I start because the Archduke was assassinated? Well, kind of, but mainly not. I don't subscribe to the catalyst theory of history. But most

people love it, especially in markets, because they can point to that one cause and say, "Who knew that could happen?"

When you have tremendous fundamental imbalances, the change can occur anywhere along the way. Nasdaq topped above 5,000, but it could just as well have been 3,000 or 7,000. It just happened to top above 5,000. Predicting the top of a bubble is like trying to predict the weather one year out—the same set of conditions can lead to wildly different outcomes if replayed multiple times.

Absolutely right, and I can't predict that turnaround. It's very difficult. But you can notice when things have changed. Most people, though, don't. When Nasdaq is at 4,000 after having been at 5,000, there are lots of people buying it because it is cheap. They reason, "It used to be 5,000. Now it's only 4,000. I am getting a bargain." People are very poorly attuned to making decisions when there is uncertainty. Do you know the difference between risk and uncertainty?

Do you mean that in the realm of risk, you know the odds, but with uncertainty, you don't know the odds?

Right. If you play roulette, you are in the world of risk. If you are dealing with possible economic events, you are in the world of uncertainty. If you don't know the odds, putting a number on something makes no sense. What are the odds of Germany leaving the euro in the next five years? There is no way of assigning a probability. If you try to force it by saying something like "6.2 percent," it is a meaningless number because you would have to behave as if you believed it, and that would be a poor bet.

Going back to August 2007, recognizing that there was a change, how did you respond? You already explained why you didn't go short equity, but what did you do instead? Did you cover all your bullish positions right away?

Yes, getting out of everything was an easy decision. Then you look for trades that have great reward to risk. Since volatility was cheap, one trade we did was buying FX volatility.

When you say you bought volatility, does that imply that you were not playing for any directional move in currencies?

Yes, our assumption was only that it would move somewhere.

So you put on positions like long straddles and strangles in currencies?

Yes. Another big position was related to monetary policy. What did Greenspan do after the 1987 crash?

He injected liquidity.

Right. Add liquidity and cut rates. That was the policy response we expected. So that was our trade at the time: Rates would go lower and the yield curve would steepen.

So you put on long positions in short-term rate instruments?

Yes, but we coupled it with short positions on the long end because it was a better risk/reward trade. The yield curve was flat at the time and priced to stay flat. The market wasn't pricing in any risk that there would be a major problem.

So you bet on lower short-term rates through a yield curve spread rather than a long position in short-term rate instruments because you felt it was a safer way to do the trade.

Yes, because what I am trying to do is find trades that won't lose much money even if I am wrong.

Your reasoning was that if you were wrong, long rates would go up about as much as short rates, so you wouldn't lose much

money, but if you were right most of the rate decline would occur in short rates.

Yes, exactly.

So, you are not only looking for the right trade, but also for the best way to express it.

Yes, I think implementation is the key in everything. Implementation is more important than the trade idea behind it. Having a beautiful idea doesn't get you very far if you don't do it the right way. The point is that I tried to do the trade in a way so that my timing didn't have to be perfect.

Were there other trades you did at the time?

There were a lot. We were bearish on corporate credit, so we bought CDS protection. Since credit spreads were very narrow, if we were wrong, we would only lose a little bit of carry, but if we were right, the spreads could widen a lot. It was an asymmetric trade.

Corporate bonds pay a higher interest rate than U.S. Treasury notes to compensate investors for the higher risk. The yield difference is called the credit spread. *The lower the individual bond rating, the wider the spread. Overall credit spread levels will widen during times of financial crisis when investors will demand higher interest rate differentials for accepting the greater risk implicit in holding corporate bonds instead of Treasuries. There are several ways to initiate a trade that will profit if credit spreads widen. The most direct trade is shorting the corporate bond. The equivalent trade can also be implemented through derivatives by buying credit default swap (CDS) protection on the bond. A CDS is essentially an insurance policy that pays off if the bond defaults. The buyer of CDS protection, however, does not need to own the underlying bond—that is, the transaction can be made strictly as a speculative trade (one that profits from a deterioration in credit quality). The CDS price is quoted as an annual spread—the per annum amount the buyer of protection pays the seller (in quarterly payments). (The CDS spread is the "carry" on the trade.) If a bond's creditworthiness deteriorates (an event associated with the credit spread widening), the*

CDS spread will widen as well. A third way of placing a trade that will profit from widening credit spreads, and the one employed by O'Shea, is to buy a CDS on an index based on a basket of corporate bonds. Note that buying CDS protection has an option-like payoff: The maximum risk is limited (to the per annum spread paid, which is analogous to an option premium), while the gain can be much larger (up to a theoretical maximum of the amount protected).

Why did you consider buying CDS protection a better trade than buying equity puts?

Actually, they are very similar trades. If the equity market stayed strong, the loss in both positions would be limited—to the option premium for the puts and to the carry for the CDS position. If the equity markets fell, credit spreads would widen, and both long puts and long CDS protection positions would have large profits. The advantage of CDS was that it was a cheaper way of doing the trade. One problem with buying equity puts is that equity volatility tends to be very expensive. Who is the natural seller of equity puts? No one. Who is the natural buyer of equity puts? Everyone. The world is long equities, and people like owning insurance, so there is an excess of natural buyers for equity puts. That is why equity option prices are structurally expensive.

After you turned bearish in August 2007, did you maintain that view all the way through the collapse of markets in late 2008?

Maintaining the same long-term view doesn't mean I kept the same positions. My typical time horizon for trades is one to three months. When prices change, the risk/reward on positions change.

I understand that your specific positions changed, but did you maintain an unwavering commitment to the bearish side, even during the significant rebound in the second quarter of 2008?

The reason the market bounced in the second quarter of 2008 was that people felt that the Bear Stearns bailout in March 2008 had solved the problem.

What did you think?

I thought that was clearly wrong. The big mistake people were making, and still make, was to confuse liquidity with solvency. People were acting on the premise that Bear Stearns and the banking system were solvent. They thought there was a liquidity crisis, which was just a matter of lack of confidence. The reality was that the banking system didn't have a liquidity problem; it had a liquidity problem because it had a solvency problem. You can't fix a solvency problem by adding more liquidity. If you have a house worth $100,000 with a $200,000 mortgage, I can lend you another $100,000, but it won't solve the underlying problem. You'll just end up with more debt. As long as housing prices kept going down, the solvency problem was getting worse and worse. The market, however, was behaving as if there was no problem.

Where does that leave you in terms of a trading stance when the market is acting as if everything is okay, but you think it's not?

Well, that happens all the time. In regards to the second quarter of 2008, we found better risk/reward trades to express our view. We had been very negative on credit at the start of the year. But by the second quarter, corporate and bank credit spreads had already widened sharply. Although the TED spread had also widened sharply, in the forward market, it was priced to narrow dramatically over the next few months.

The TED spread is the difference between the three-month LIBOR rate, the rate at which banks lend to other banks, and the three-month T-bill rate. The LIBOR rate is always higher than the T-bill rate because there is a small counterparty risk in interbank loans, while T-bills are considered to be risk-free. During most times, the TED spread tends to be relatively modest (roughly around 25 basis points). The TED spread, however, can widen significantly during periods of "flight-to-quality" when counterparty and liquidity concerns are heightened. It widened to more than 200 basis points in the money market liquidity freeze-up in August 2007 that O'Shea talked about earlier and to a record 485 basis points in the post-Lehman failure financial market meltdown in late 2008. The types of conditions that are conducive to a widening of the TED spread often occur during steep equity market declines. In this sense, a long TED spread is a bearish position.

In contrast, corporate and bank credit spreads were priced to stay wide in the forward market. So we rotated out of our short credit trades into TED spreads because the risk/reward was much better. During the second quarter of 2008, both corporate credit spreads and TED spreads narrowed. The TED spread, however, had been priced to narrow in the forward market, so the trade was near breakeven. If we had stayed with the short corporate credit positions during the second quarter of 2008, we would have lost a lot of money. The trade we had switched into to express our negative long-term view didn't have much downside. So when everybody got optimistic again in the second quarter of 2008, our bearish position [the TED spread] didn't change that much.

What about the second half of 2008, which was when markets collapsed?

If you started with the premise that there was a solvency issue, then everything that happened was straightforward. To begin, the banking system was underwater. Therefore, there was no reason for anyone to lend them money, unless the government was going to step in with more capital. The politics in Washington at the time, however, was for no more bailouts. [Treasury Secretary] Paulson had made multiple statements in which he was very clear that there would be no government bailout of Lehman. Once you know that Lehman has negative value and the government is not coming to the rescue, that means they're bankrupt. There isn't anything else that can happen. There is no sophisticated analysis involved. The odd thing is that Lehman going under was not a surprise. Most people knew it was going to happen, but they failed to understand what it meant.

So what were you doing at the time?

The main thing was to make sure our business was as safe as possible. We avoided counterparty exposure to Lehman. We simplified the book. We reduced leverage a lot during 2008. We restricted our trading to highly liquid positions, which meant avoiding OTC trades with lots of counterparties. Insofar as we had to have counterparty risk, we confined it to the strongest counterparties.

Okay, those are measures to reduce business risk, but what trades did you put on to take advantage of the situation you saw?

We had very similar trades to the ones we had on at the start of 2008. We were long volatility, short credit, long the TED spread, and long the dollar because of an expected flight to quality. All of these trades had one thing in common: They were all the-world-is-going-to-get-scary trades.

These were all trades that you put back on in the third quarter of 2008 prior to the Lehman failure?

Yes.

As the markets collapsed in the ensuing months, at what point did you decide it was a good time to take money off the table?

April 2009.

So you stayed with all these bearish positions all the way through the entire decline?

Yes, until we started to lose money.

What changed in April 2009 that prompted you to get out of your positions?

Two things changed: The economy stopped getting worse, and markets started going up. The underlying problems had not gone away, but that isn't the market driver. The fact that the economy was improving, even though it was still in bad shape, meant that the optimists could come back. Never underestimate the ability of people to be optimistic and believe that everything is going to be okay. Historically, what is important to the market is not whether growth is good or bad, but whether it is getting better or worse. Growth started getting less negative, and less negative is good news. Asia started going up. The Australian dollar started going up. The S&P was actually one of the last markets to turn higher in March 2009. By March to April, you were seeing a broad-based recovery in global markets.

What trades did you transition to?

Bullish strategies. Interest rates were pricing in another Great Depression. Once the market prices in a Great Depression, you think, "Well, maybe not." Ten-year yields were down near 2 percent. Things have to look really bad to justify that level. Once the outlook started to improve a little bit, yields could rise a lot from that level. So we went short long-term Treasuries, both outright and as a yield curve play. We went short the dollar, as a reversal of the prior flight-to-quality trade. We did a lot of different trades. Typically, in the portfolio, we will have 10 or 15 different trades on at any time. One reason why I am always hesitant to explain what trades we did is that if I get to the level of complexity of including all the trades, it can get very confusing. If I simplify it by saying that it's a bit like these two or three trades, then people say, "Oh, you did that; that's quite easy." Well, it isn't what we actually did, but you try to provide a simplification to make it understandable. Then people think that simplification is what you actually did. I think macro is most misunderstood when it is seen as storytelling. Storytelling is a nice way to talk about it, but it is only 10 percent of what is important.

And the other 90 percent?

Implementation and flexibility. You need to implement a trade in a way that limits your losses when you are wrong, and you also need to be able to recognize when a trade is wrong. George Soros has the least regret of anyone I have ever met. Even though he will sometimes play up to his public image as a guru who knows what is going on, it is in no sense what he does as a money manager. He has no emotional attachment to an idea. When a trade is wrong, he will just cut it, move on, and do something else. I remember one time he had this huge FX position. He made something like $250 million on it in one day. He was quoted in the financial press talking about the position. It sounded like a major strategic view he had. Then the market went the other way, and the position just disappeared. It was gone. He didn't like the price action, so he got out. He doesn't let his structural views on how he believes the market will play out get in the way of his trading. That is what strikes me about really good money managers—they don't get attached to their

ideas. The danger in the narrative I have been giving you is that it may lead to the false impression that what you need to do to make lots of money is be really smart in economics and understand fundamentally what is going on. I don't really believe that is true.

What do you believe is true?

I actually subscribe to a lot of things in your books. You need a method that suits your personality. I don't believe that I am an amazing economist who predicts the future. What I actually believe is that I recognize the world as I find it and that I am flexible enough to change my mind. In April 2009, I was really pessimistic. I thought the world was in terrible condition. But the market was telling me that I was wrong. So I thought, "Okay, I'm completely wrong. What is a different hypothesis of what is going on? Ah, here is a different hypothesis. I see what's going on. Let's do that instead." Then there is an explanatory story that comes out afterwards. But actually, the story came after my previous hypothesis had been proven wrong. It wasn't that I was smart and caught the turning point. I didn't. I just noticed that what I was doing was wrong and that I needed to do something else. To construct a portfolio, I need to build a set of hypotheses that I can test in the market.

So the empiricism comes first, then the macro theme to fit the observations, and finally the implementation of the trades.

Yes, but the point is that the macro theme has to be testable empirically in the market. It is not about starting out with any grand theme. The difference between what I'm doing and trend following is that there have to be logical fundamental linkages for the price movements. China is turning around, metal prices are turning higher, and the Australian dollar is moving up. What is that telling me? There is recovery somewhere in the world. There is demand somewhere in the world. The S&P may still be going down, but there is divergence in the data. If the whole world is terrible, it doesn't fit anymore. So I can't stick with the-whole-world-is-terrible thesis. Something else is going on. What hypothesis would fit the actual developments? Asia actually looks all right now. A scenario that would fit is an Asia-led economic recovery.

If the new hypothesis is correct, then certain other things should happen in the future. In contrast to the trend follower, I am anticipating future trends, rather than waiting for the trends to develop and then jumping on. I may end up being in many of the same trades as a trend follower, but the timing is going to be very different.

Do you trade equity indexes or equities?

Equity indexes and baskets, yes, but not that much.

Why aren't you a fan of trading equities?

Interest rate markets or FX are usually better ways for me to express trades. The world is full of people who trade equities. I don't think another hedge fund that trades equities is particularly exciting. Also, a problem I have with equities is that equity stories make no sense to me. Equity people often make no sense to me. The reasons I think trades have worked are usually nothing like the reasons why equity people think they worked. In my entire life, I've personally only done one single-stock trade.

Out of curiosity, because it was the only one, what was it?

I bought Berkshire in 1999.

And that was because?

The price had halved because Buffett refused to be involved in the dot-com bubble. I thought that was the stupidest reason I had ever heard for a stock price to halve. Nasdaq is going through the roof. Warren Buffett, who is clearly one of the all-time legends of investing, is saying I don't understand this dot-com stuff; I'm staying away from it. And his stock price gets hammered because he's seen as a dinosaur that isn't part of the new paradigm. I thought that was idiotic.

Buffett being penalized for underperforming versus managers riding the long side of the dot-com bubble is a perfect illustration of a common investor mistake—failing to realize that often

the managers with the highest returns achieve those results because they're taking the most risk, not because they have the greatest skill. How long did you hold the position?

Until I started my hedge fund. I believed in myself more than I believed in Warren Buffett.

Let's go back to when you first started out at Citigroup the week the U.K. was forced out of the ERM. When did you begin trading?

My first trade ever was the year after. They gave new traders small limits they were allowed to trade. I remember doing a really good fundamental analysis about the U.K. economy and deciding that the rate hikes the market was pricing in were not going to happen. I proved to be perfectly correct. Three months later, they still hadn't hiked rates, and short sterling [U.K. short-term interest rate futures] rallied 100 basis points from where I had the trade idea. Well, I lost money.

How did you lose money when your forecast was exactly correct?

It's pretty straightforward. The implementation didn't match the hypothesis. The hypothesis was clearly a one-to-three-month horizon. So, I should have traded a one-to-three-month horizon. What did I do? I was constantly getting in and out because I was scared of losing money. The rational trade hypothesis was beautiful. The implementation was entirely emotional and stupid. I realized that you have to embrace uncertainty and risk. Over a three-month period, it is the trend that is important.

I guess the lesson is that the market is not going to let you make any money unless you're willing to take risk.

You have to embrace the logical consequences of your ideas, and that means that you have to have a stop loss that is wide enough.

So even though you were on the right side of the trend for three months, you lost money because you kept on getting stopped out.

Yes, because I had read trading books. It took me a while to realize that those trading books are counterproductive because the rules are generic and not specific. Most trading book rules are designed for people who have the error of excess optimism and are in emotional denial of their losses. Trading book rules are designed to protect traders who are gamblers. People who like trading because they like gambling are always going to be terrible at it. For these people, the trading books could be greatly shortened to the message: "Don't trade. You are really bad at this. So just don't do it." I don't actually have a gambler's mentality. I make different emotional mistakes. So, imposing trading book rules on me is a terrible misfit.

That is why your books are important. All the traders you write about have a method that is personal and fits them. You learn from everyone around you, but you have to do what makes sense for you, even if it's the opposite of what makes sense for other people.

So you don't use stops?

No. I do. I just set them wide enough. In those early days, I wasn't setting stops at levels that made sense based on the underlying hypothesis for the trade; I was setting stops based on my pain threshold, and the market doesn't care about your pain. I learned from that mistake. When I get out of a trade now, it is because I was wrong. I'm thinking, "Hmm, that shouldn't have happened. Prices are inconsistent with my hypothesis. I'm wrong. I need to get out and rethink the situation." In my first trade, prices were never inconsistent with my hypothesis.

What are some other mistakes you have learned from?

I don't have any great example of a mistake that cost me a material amount of money because I have very tight risk discipline on the downside. Stopping yourself from losing money is quite easy. I've never really had that problem. I'd say that most of my big errors have been opportunity errors. I sometimes believe in something so strongly that it acts as a constraint on doing trades that could be very profitable. For example, in late 2010, my underlying belief that the European sovereign debt crisis was a really big problem made it hard for me to participate in a

sentiment and liquidity driven bull market. I failed to take part in the biggest macro theme of the year. From September on, equities were up a lot, and commodities were up a lot. It was a massive opportunity that I should have been in, and I wasn't. I missed the key point that no one else cared, and as long as no one cares, there is no crisis. It's the same reason I didn't make any money in the Nasdaq bubble. I thought, "I can't buy Pets.com."

But actually you can't make money in the Nasdaq bubble by definition.

You can.

How do you go long a bubble and protect yourself?

When it starts to go down, you sell it.

It turned out that the Nasdaq move up was relatively smooth, but a bubble could be very volatile.

That's when you don't get involved. Actually what I've learned is that bubbles last a long time, and that there's money to be made out of bubbles.

Without the benefit of hindsight, how could you play a Nasdaq-type move now?

The main thing about bubbles is that you need to be early. The worst thing you can do in a bubble is to be stubborn and then late to convert. I have avoided late conversions. But what I am trying to learn is to be an earlier convert to things that make no sense. I have an aversion to things that make no sense, and I should get over that.

I guess that sometimes the reason for a bull market is psychological rather than fundamental, and participating in the euphoria of a psychological move is itself the rationale for the trade.

Yes, and I don't mind that. What I have difficulty with is when the fundamentals are in conflict with the euphoria. I have tended to be

premature in worrying about the conflicting fundamentals. I think in terms of the next 10 or 20 years I'd like to do a better job of monetizing other people's irrational euphoria.

So, one of your shortcomings has been in letting your rational assessment of a situation keep you from participating in a psychologically driven trade.

Yes, failing to participate in markets when the fundamentals are less important than the psychology.

But how do you recognize that type of situation?

Well, that's the key question, isn't it? [He laughs.] There are various gauges. A simple one is just price action. If it trades like a bull market, it's a bull market. Another indication is how passionately people defend things that make no sense. For example, some people believe that Barack Obama is not a U.S. citizen. The point is that beliefs that are completely invulnerable to evidence and passionately defended can be quite durable. It has nothing to do with the fundamental logic.

That's a political example. But what would be a tradable example?

Gold is special, magical, and great. It's not. But if people believe it, they buy it. And if they buy it, it goes up. That's why there's a bull market. You can't go to a meeting without someone saying, "What do you think about gold?"

What does that tell you?

It tells you that you should be long gold.

So, going back to the Nasdaq bubble, another example would be people saying that it doesn't matter if a company is losing money, all that matters is how many clicks they are getting on their website.

Yes, exactly. The utter irrationality of the fundamental justification doesn't matter. And if you try and point that out to somebody, they will just give you an even more ridiculous justification why the market should go up. You cannot shake them at all from their belief. Those are the characteristics of bubble markets. The reason why they have legs is because it takes such enormous evidence to make people change their minds.

How do you know when it does change?

You know the dot-com bubble is over when it starts going down. It will be the same thing with gold.

Right now as we talk, gold is somewhere just north of $1,500 and not far from its all-time high. So what you are saying is that the gold top could be now; it could be at $2,000; it could be at $2,500; it could be any number.

And that's okay. The thing about gold is that if you told me gold has a price of $100, that's fine. If you told me it's $10,000, that's fine as well. It can be any price. Gold is worth exactly what people think it's worth.

I am sure you know why that is true for gold.

What do you think?

This is one of those questions that can be answered unambiguously. Gold is the only commodity where the amount of supply is literally about 100 times as much as the amount physically used in any year. That is not true of any other commodity, such as wheat or copper, where total supply and annual consumption are much closer in balance, and true shortages can develop. There is never any shortage of gold. So gold's value is entirely dependent on psychology or those fundamentals that drive psychology. Many years ago, when I was a commodity research director, I would totally ignore gold production and consumption in analyzing the market. I would base any price expectation

entirely on such factors as inflation and the value of the dollar because those are the factors that drive psychology. I always found it ridiculous when other analysts would write lengthy reports on gold analyzing such things as annual production prospects and jewelry usage. Annual production and consumption of gold are always a tiny fraction of supply, maybe around 1 percent, so who cares how much they change. It has nothing to with the price.

Yes, that's exactly right.

It's one thing to say that a market in a bubble can go to any price, but quite another to determine when the bubble is over. You said just before that you know it's over when the price starts going down. But how do you differentiate between a correction and a reversal in the market?

That is a good question and quite a difficult one. There are several possible methods. The simplest method is to pretend you are a CTA.[4] A CTA will have a systematic way of defining when a trend has changed. Another way you can tell is if the market displays price action that is characteristic of the late stages of a bubble, such as an exponential price rise, similar to what we recently saw in silver [in May 2011].

Did you trade that market?

Yes, through options. The problem with markets like silver is that when they break, they can collapse rapidly, and there is gap risk. I think the natural way to trade a market that is in a bubble is from the long side, not the short side. You want to be long the exponential upmove without taking on the gap risk of a collapse. Therefore options provide a good way of doing this type of trade.

[4]Commodity Trading Advisor (CTA) is the official designation of regulated managers who trade the futures markets. The majority of these managers use trend-following systems to generate trades.

Since the silver price move exhibited characteristics of a bubble, why wouldn't you also consider trading the market from the short side?

Because tops are messy, and the reversals in bear markets are horrendous. It is very rare to find comfortable shorts in bear markets. If you consider Nasdaq as an example, it was quite an easy trade from the long side for a long time. It went from 1,500 in late 1998 to over 5,000 in early 2000 with hardly any meaningful corrections. From the short side, it was a really tough trade. After breaking down in very whippy fashion to under 3,100 in June 2000, the market then rallied back to near 4,300 in the next two months. This was a 40 percent rebound in a market that was clearly dead. Postbubble dead cat bounces can be vicious.

Sounds more like a dead tiger bounce.

I don't think you will find many people that have made the majority of their money shorting bubbles.

Does that imply that you didn't trade the Nasdaq from the short side even after you were sure the bull market was dead?

No, I didn't because the repercussions of the top were a lot easier to play than being short the Nasdaq itself. You had a broad bubble in assets. The U.S. economy had been built up by a massive mispricing of assets. Once the Nasdaq burst and everything unraveled, it was clear the economy would slow down. The economic downturn led to a big move in fixed income that provided a much calmer way to play that idea than a direct trade in equities.

So rather than consider the short side of the Nasdaq, you traded the long side of the bonds.

That's right.

Are there any current examples of markets that are in euphoria-driven states that are running counter to fundamentals?

I wouldn't say they are counter to the fundamentals, but rather that they are overpricing one particular outcome. For example, European

sovereign debt may be fairly priced if you have a strong conviction that the outcome will be a federated Europe in which the German taxpayer will pick up the bills. If you anticipate a less optimistic scenario, then current prices may not make much sense. A few weeks ago, Spanish debt was trading at only 150 basis points over Germany.

So the market is pricing in a solution.

Yes, it's pricing a solution that may not happen; 150 basis points is not zero, but it is a lot closer to zero than the current 1,000-plus basis point premium on Greek debt. The relatively small premium for Spanish debt reflects a high degree of confidence in a particular outcome. I am not suggesting the more negative outcome is more likely, but simply that there is more uncertainty than implied by the current moderate premium.

In a situation like this where there is a binary outcome that is highly uncertain, but the probabilities are different from what the market seems to be pricing, do you participate in the market?

That is the main part of what I do. I look for deviations between the fundamental probability distribution I perceive and the probability distribution priced in by the market.

Being short Spanish debt is a trade where the downside is limited to the annual carry, but the upside can be very substantial. It seems that an inherent characteristic of most of your trades is that they have an asymmetric quality—the maximum loss is limited, but the profit potential is open-ended.

Yes, having a positive skew is very important. It is not about being right all the time. Most good macro traders will be right only about half the time or even less.

Is trading a skill that can be taught?

It can't be taught, but it can be learned.

What do you mean by that?

My natural trade time horizon is one to three months, but that doesn't mean it would be right for you. Since I don't know you, I can't tell you what your trading style should be. But if you are willing to put in the effort, you can learn what that style should be. If I try to teach you what I do, you will fail because you are not me. If you hang around me, you will observe what I do, and you may pick up some good habits. But there are a lot of things you will want to do differently. A good friend of mine, who sat next to me for several years, is now managing lots of money at another hedge fund and doing very well. But he is not the same as me. What he learned was not to become me. He became something else. He became him.

Are there traits that determine who will be a successful trader?

Perseverance and the emotional resilience to keep coming back are critical because as a trader you get beaten up horribly. Frankly, if you don't love it, there are much better things to do with your life. You can't trade because you think it is a way to make a lot of money. That won't cut it. No one who trades for the money is going to be any good. If successful traders were only motivated by the money, they would just stop after five years and enjoy the material things. They don't. They continue well beyond any financial need. They can be somewhat obsessive. Trading is simply what they do. Jack Nicklaus has plenty of money. Why did he keep playing competitive golf well into his sixties? Probably because he really liked playing golf. He probably had a compulsive need to do it.

Are there trading rules you adhere to?

I use risk guidelines, but I don't believe in rules in that way. 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. Rules are only applicable to a market at a specific time. Traders who fail may have great rules that work, but then stop working. They stick to the rules because the rules used to work, and they are quite annoyed that they are losing even though they are still

doing what they used to do. They don't realize that the world has moved on without them.

Besides failure to adapt, what other mistakes get traders into trouble?

People run large amounts of money with relatively unsophisticated risk management. Throughout 2008, I spoke to managers who said they had halved their risk. I would say, "Half, that's quite a lot." Then they would continue and say, "Yes, my leverage was four, and it is now two." I would answer, "Do you realize volatility has gone up five times?" In terms of volatility-adjusted leverage, their risk exposure had actually gone up.

I notice that you use VAR as a risk measurement. Aren't you concerned that it can sometimes be very misleading regarding portfolio risk?

Value at Risk (VAR) can be defined as the loss threshold that will not be exceeded within a specified time interval at some high confidence level (typically, 95 percent or 99 percent). The VAR can be stated in either dollar or percentage terms. For example, a 3.2 percent daily VAR at the 99 percent confidence level would imply that the daily loss is expected to exceed 3.2 percent on only 1 out of 100 days. To convert a VAR from daily to monthly, we multiply it by the square root of 22 (the approximate number of trading days in a month). Therefore the 3.2 percent daily VAR would also imply that the monthly loss is expected to exceed 15.0 percent (3.2 percent × 4.69) only once out of every 100 months. The convenient thing about VAR is that it provides a worst-case loss estimate for a portfolio of mixed investments and adapts to the specific holdings as the portfolio composition changes. There are several ways of calculating VAR, but they all depend on the volatility and correlations of the portfolio holdings during a past look-back period—and therein lies the rub. The VAR provides a worst-case loss estimate assuming future volatility and correlation levels look like the past.

The main reason the VAR gets a bad name is because people don't understand it. VAR does exactly what it says on the tin.

Which is?

It tells you how volatile your current portfolio was in the past. That is all. VAR is entirely backward looking. You have to recognize that the future will be different. If I think the world in the future will be highly volatile, then I will run a current VAR that is relatively low because I think the future will be more volatile than the past.

VAR gets a bad name because people manage risk by it, and the shortcoming is that volatilities and correlations can change very radically on an existing portfolio vis-à-vis what they were in the past.

But that is patently obvious.

If it is so obvious, how come so many people manage risk that way?

VAR doesn't blow up portfolios; people do.

Do you ever have a problem getting out of a losing trade?

I start by deciding where the market would have to go for me to be wrong. That's where I place my stop. That means that it's not difficult for me to get out of a position if the market goes there. The most common money management error I see is people setting stop losses that are really pain thresholds. When the market reaches their stop, they don't really want to get out because they still think they are right. They will get out because their stop is hit, and they are disciplined. But very soon afterwards, they will want to get back in because they don't think they were wrong. That's how day traders in Nasdaq in 2000 and 2001 lost a ton of money. They were disciplined, so they would close out their positions by the end of the day. But they kept on repeating the same trading mistake. They failed to recognize that they were completely wrong because we were in a bear market.

So the disciplined use of stops that are set too close could lead to the proverbial death by 1,000 cuts.

Yes, and that is why I think trading books that provide specific rules can be quite dangerous. They can lead to the illusion that you are in control and being disciplined. And it is true that you are restricting yourself from a single catastrophic loss, but it doesn't prevent repeated losses on the same idea.

Sometimes a close stop may be appropriate. If it is a short-term technical idea, and you don't like the trade anymore if the market breaks a level, then getting out on a close stop is fine. If, however, it is a fundamental idea that needs a long time to play out, then a short-term stop makes absolutely no sense. If your entry and exit strategy is out of sync with the reason you like the trade, then you don't have an internally consistent money management plan, which means it will fail.

So, you need to decide where you are wrong before you determine the stop point.

First, you decide where you are wrong. That determines where the stop level should be. Then you work out how much you are willing to lose on the idea. Last, you divide the amount you're willing to lose by the per-contract loss to the stop point, and that determines your position size. The most common error I see is that people do it backwards. They start with position size. Then they know their pain threshold, and that determines where they place their stop.

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The popular perception of the successful global macro manager is a trader who has an ability to forecast major trends in world markets (FX, interest rates, equities, commodities) through skillful analysis and insight. O'Shea emphasizes that his edge is not forecasting what will happen, but rather recognizing what has happened. O'Shea believes that it is very difficult to pick a major turning point, such as where a market bubble will top, and that trying to do so is a losing strategy. Instead, he waits until events occur that confirm a trading hypothesis. For example, he thought that excessive risk-taking during 2005 to 2007 had inflated various markets beyond reasonable levels and left the financial markets

vulnerable to a major selloff. Nevertheless, insofar as he sees his role as trading in response to the prevailing market facts, rather than forecasting turning points, he actually had bullish positions on during this time. He did not switch to a bearish posture until an event occurred that he saw as a confirmation that the markets were in the process of rolling over—the drying up of liquidity in the money markets in August 2007. He didn't need to forecast anything, but he did need to recognize the significance of an event that many ignored. Indeed, the S&P 500 went on to make new highs in the next two months.

O'Shea believes that how a trade is implemented is more important than the trade idea itself. He seeks to implement a trade in the way that provides the best return-to-risk and limits losses in the event the trade is wrong. For example, after liquidity dried up in the money markets in August 2007, O'Shea expected rates to be cut. Instead of expressing this trade idea only through long short-term interest rate instrument positions, O'Shea also implemented the trade as a yield curve spread: long short-term rate instruments/short long-term rate instruments. His reasoning was that the yield curve at the time was relatively flat, implying that a rate decline would most likely be concentrated on the short-term end of the yield curve. If, however, rates went up, the flat yield curve implied that long-term rates should go up at least as much as short-term rates and probably more. The yield curve spread provided most of the profit potential with only a fraction of the risk. In essence, it provided a much better return-to-risk ratio than a straight long position in short-term rates alone.

The Nasdaq peak provided another example of how O'Shea seeks the best return-to-risk strategy to implement a trade idea. After the break from the March 2000 peak, O'Shea felt fairly certain that the bubble had burst. Yet he did not consider short positions in Nasdaq, even though he believed the market had formed a major bubble top, because he recognized—correctly, as it turned out—that trading the short side was treacherous. Even though the market ultimately went sharply lower, in the summer of 2000, the index witnessed an approximate 40 percent rebound. A move of this magnitude would very likely have resulted in a short position being stopped out. O'Shea reasoned that a Nasdaq top implied that most assets would recede from inflated levels, which would lead to an economic slowdown and lower

interest rates. A long bond position provided a much easier and more comfortable way to trade the same idea. Bonds subsequently witnessed a fairly smooth uptrend, in contrast to the highly erratic downtrend in Nasdaq.

Flexibility is an essential quality to successful trading. It is important not to get attached to an idea and to always be willing to get out of a trade if the price action is inconsistent with the trade hypothesis. O'Shea cites George Soros as a master of flexibility who has no attachment to his trades and shows the least regret about getting out of a position of anyone he has ever met. In April 2009, O'Shea was very pessimistic about the financial outlook, but the market behavior was telling him he was wrong. Since his bearish hypothesis was inconsistent with the market price action, he formulated an entirely different hypothesis that seemed to fit what was happening—that is, the markets were seeing the beginning of an Asia-led economic recovery. Staying with his original market expectation would have been disastrous, as both equity and commodity markets embarked on a multiyear rally. The flexibility to recognize that his premise was mistaken and to act on that awareness allowed O'Shea to experience a profitable year, even though his original market outlook was completely wrong.

O'Shea believes that the best way to trade a market bubble is to participate on the long side to profit from the excessive euphoria, not to try to pick a top, which is nearly impossible and an approach vulnerable to large losses if one is early. The bubble cycle is easier to trade from the long side because the uptrend in a bubble is often relatively smooth, while the downtrend after the bubble bursts tends to be highly erratic. There are two components necessary to successfully trade the long side of a bubble. First, it is important to initiate a trade early in the bubble phase. Second, since bubbles are prone to abrupt, sharp downside reversals, it is critical that the long-biased position is structured so that the worst-case loss is limited. For this reason, O'Shea would never be outright long in a bubble market, but instead would express a bullish posture through a position such as a long call, a trade in which the maximum risk is defined by the premium paid for the option. Low volatility bubble markets are especially well attuned to being traded via long calls.

Although macro trades are typically based on a fundamental market view, there does not always have to be a reason for the trade. Sometimes, the market price action itself can reveal that something important is going on, even if the fundamental reason is not apparent. O'Shea experienced this situation in the course of LTCM's demise, an event that strongly impacted most markets. Although O'Shea did not know the reason for the market action at the time, he reasoned that the magnitude of the move implied there was an important fundamental development, and he adjusted his positions accordingly. He quotes George Soros on this concept: Invest first; investigate later.

Many of the traders I have interviewed have emphasized the importance of a disciplined money management plan. O'Shea provides an insightful, more nuanced view. O'Shea explains that money management discipline could even be counterproductive if it is inconsistent with the underlying trade analysis. Many traders have the discipline to set stops and stick with them, but make the critical mistake of determining the stop points as pain thresholds rather than price levels that disprove their original trade premise. When they get stopped out, they still believe the original trade idea was correct. As a result, there will be a strong temptation to get back into the trade, leading to multiple losses on the same idea. The money management discipline may prevent a single large loss, but if the stop point is inconsistent with the trade analysis, it may not prevent a cumulative loss that is even larger. O'Shea's advice is first decide where you are wrong, and then set the stop. If the stop implies a larger loss than you are comfortable taking on a single trade, then size the position correspondingly smaller. Using this approach, if the market reaches the stop point, it will be consistent with your own beliefs that the original trade premise was wrong.

One common theme that seems to underlie almost all the trades that O'Shea discussed in this chapter is that they are structured to be right skewed—that is, the maximum loss is limited, but the upside is open-ended. Long options, long CDS protection, and long the TED spread are all examples of trades in which the maximum loss is constrained.[5]

[5]Maximum loss is limited to the premium paid for long options, the annual payments for long CDS protection, and zero for the TED spread (since it would be virtually impossible for the T-bill rate to be higher than the LIBOR rate).