Taming the Unreliable
Price of Oil to
Secure Our Economy

DAN DICKER

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Introduction

The Oil Market Is Broken

to fill a tank with gas one year and \$75 the next.

Why have oil and gas increased in price six-fold from

2003 to 2008, only to plummet and rise again?

Why are we stripping our national wealth and handing it over to foreign oil producers, if the supply of cheap traditional energy is greater than it's ever been?

Where is the price of oil headed, and can we do anything to change its trajectory?

We've lost control of our oil markets—and it's become the biggest financial story of the decade. I've been an oil trader working in the center of the action, in the pits of the New York Mercantile Exchange, where I've been a member since 1982. I've watched the oil markets change dramatically over the last 20 years, particularly since 2005, when the idea of oil as an asset class, the invention of new financial products, and the advent of electronic access took a sleepy, club-like market into the national spotlight.

I was finally convinced to write this book while watching my screens in May 2008: I watched in amazement as the crude barrel spot price clicked to more than \$130 a barrel. One hundred and thirty dollars? That's just nuts!

That's when I realized the oil market was broken, running like a train off its tracks, totally out of control. I had seen it getting worse and worse and moving into absurdity during 2005 to 2008, the last three years I spent as a floor trader at NYMEX—the New York Mercantile Exchange—the hub for oil pricing. Oil prices had stopped responding to normal economic rules of supply and demand, and by 2008, the market was busted. In its place, oil had become dominated by a new flow of money pulsing through it—speculative money from investors and traders who had no natural connection to oil at all.

The Oil Market Isn't Like the Stock Market

This wasn't the way it was supposed to work. Futures markets were never intended to operate this way, and that \$130 price that day in May 2008 was proof of just how badly the market was buckling under the strain. Economists, oil analysts, company CEOs, pundits—just about everyone with an opinion—were weighing in with a different reason for this energy price spike. The explanations ran the gamut—from the falling value in the U.S. dollar, global economic growth, inflationary fears, or China's soaring energy needs. All of these explanations amounted to a bad alibi. Quite simply, a new set of players had come to dominate the oil markets and control them. Futures markets were designed to accommodate only a small group of hedgers—farmers providing raw products and manufacturers making finished products. Unlike the stock market or the bond market, the oil futures markets were never meant to accommodate investment, which it was now being forced to do.

Investment Banks Changed the Business of Trading Oil

When I entered the oil trading world in the early 1980s, the foremost actors trading oil were the Exxons and BPs and Chevrons and Shells. They used the futures markets as a tool only to guard the risks of their real physical assets. To them, trading oil was only a side note,

helping their primary business of selling oil. Outside of these giants of the market, small trading groups and independent traders like me provided the grease to match their hedging needs and create fluidity. We were tiny players picking up the leftover crumbs—our participation was never enough to concern (let alone overwhelm) the capital and interest of the big oil players.

But since 2000 or so, and particularly the years leading up to that price spike in the summer of 2008, a new set of players had come to displace the oil companies and dominate the trading of energy. These were the financial players—mostly the large investment banks, but also new energy hedge funds and managed futures funds.

Feeding the profit trough for these new financial traders at the banks and the funds was a flood of dumb money (as we used to call it on the trading floor): billions of dollars of investment interest in oil, entering the game overwhelmingly in the form of commodity index funds, but also appearing from individuals through online futures accounts and with stock-like ETFs. I began to refer to these overwhelming influences on price as "Oil's Endless Bid."

Commodities just aren't stocks. Oil can't be traded or invested in like a stock, not without these wild and unwanted consequences. Oil's endless bid created a new financial market, overwhelming the old physical oil market. Oil's endless bid was investors rushing in to add oil to their traditional portfolios of stocks and bonds.

Moreover, nobody was trying to stop it. On the contrary, trading and investing in oil continued to be universally encouraged. Investors and professionals alike were told by the futures industry, the wider financial industry, the media, and our government that our markets were fine and would take care of themselves. Meanwhile, oil's endless bid drove prices higher throughout that summer in 2008 to an unfathomable \$147 a barrel, with little fundamental evidence to support its rise.

When the bubble popped in July 2008 and the money fled from oil investment, everything was made crystal clear if there was even a lingering doubt: the oil market, for a brief moment relieved of much of the purely financial interest that had buoyed it higher, reflected true fundamental pricing for the first time in years. And it was trading at \$32 a barrel. That was closer to what oil was really worth.

But it didn't take long at all for money to find its courage again and resume its domination of the capital markets: equities surged, treasuries ceased paying a negative interest, bond spreads began to come back from Armageddon levels, and, yes, oil, the newest capital market, began its march back up, reaching \$82 in October 2009. In other words, the endless bid was back.

And it came back with a vengeance. The \$75 median price of oil in 2009 was arguably even less defensible than the \$100-plus prices we saw in 2008. Supplies were filled to the brim, reaching levels not seen since 1990, while demand was at generational lows, befitting the worse global recession since the Great Depression. The last time I had seen fundamentals as weak as these, oil was trading for \$22, not more than \$70.

Why Should You Care about the Volatility of Oil Prices?

I knew that 2009's price, indefensible as it was, was just a stepping-stone. Oil's wild moves were bound to get wilder, higher, and more uncontrollable in the not-too-distant future. The volatility of oil in 2009 and 2010 had been the equal of any year on record, following slavishly the wild swings in the stock market and the dollar. I knew that 2009's price was a springboard, and a powerful one, toward \$150, \$200, perhaps even \$250 per barrel, as soon as even the slightest hint of recovery was felt and an even greater hunger to own oil returned. Figure I.1 shows the history of oil prices—and it's a scary picture of the future.

Looking at the price of oil since 1990, it is incredibly stable, as flat as a highway rolling across the center of Texas, until around 2003. Then all hell breaks loose—with the price increasing sixfold in five years, then losing almost 80% of its value in less than six months, only to immediately triple again.

Can the American economy, which is increasingly dependent on oil, ever be expected to robustly grow, with a crazy swinging price like that?

"Why should I care about the swinging prices of oil?" I hear many people say. "America is a capitalist society; we believe in the free

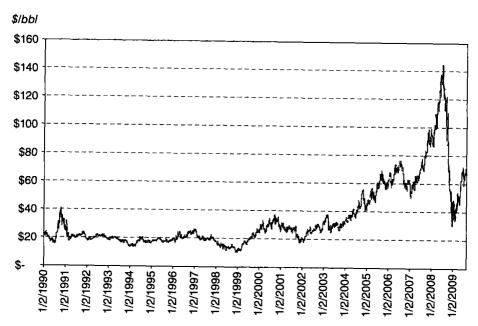


Figure I.1 Daily Crude Oil Price (WTI) from January 1990 to August 2009 SOURCE: Energy Information Administration

markets working; and we are always better off letting them take care of themselves." Indeed, the oil market in 2008 and 2009 showed a great similarity to other speculative bubbles where no one questioned the market's wild action, like the tech stock bubble in the Nasdaq of the late 1990s. The difference is that people choose to invest in stocks, therefore, they bear responsibility for their own risks and possible losses. But whether it is the heat in our homes or the fuel for our cars, even the foods we eat and the clothes we wear—just about everything in our lives is tied to the costs of energy. We are all invested in oil, whether we like it or not. Business is hardly exempt. More than 50% of the companies on the New York Stock Exchange rely on energy as their single largest input cost, and that doesn't even include the energy companies themselves (some of which were being put out of business by the high price of oil!)

Is there any single thing in the world with as much global impact as the price of the crude barrel?

The continuing high cost of oil causes everyone to suffer. Downstream costs of energy are passed on to the consumer, from airlines to railroads, from refrigeration to energy-dependent industrial

products as diverse as aluminum, plastics, and pharmaceuticals. But the consumer is balking, under pressure from an imploding housing market and increasing unemployment. Economic growth is in reverse for the first time in a decade and a half. The high costs of oil helped force the global economy off a cliff in 2008 and ensures that the current recession will be more long-lasting and recovery from it slower.

Even for me, a career oil trader, little about the way oil trades now makes sense. Oil prices now incredibly chase the equity markets in lockstep: if the stock market rallies, oil now follows. For most of my career, the stock market and oil moved in opposite directions. That just made common sense that anyone could understand: a high price for energy is bad for most business.

More than a market or a regulatory issue, oil's high price has become a serious U.S. national security issue. With oil prices spiking, huge chunks of money, now more than \$200 billion a year, is flowing from the pockets of Americans into the pockets of the OPEC cartel. That's happening now four times faster than even two short years ago. Talk about a war on terrorism! The modern oil pricing system now works to fill the coffers and sovereign wealth funds of the nations most likely to fund our worst and most diabolical enemies.

We have caused this; there is no one else to blame. We have inspired this disaster with lax regulation, a blind belief in free markets, and unfettered greed. The oil market has followed a similar pattern to other modern asset markets, becoming enmeshed in more and more complex derivative products that benefit mostly the people that sell them. We encourage and reward best the people who create and squeeze profits out of these new product markets, and we invite—no, warn—every investor to participate as well, lest they miss the latest and greatest money-making opportunity. The result of this avalanche of activity is clear, causing prices to boom, only to bust violently before beginning the cycle over again.

Is Anyone Out There?

But in Washington, Congress is slow to see the danger, confused as to the causes, and incompetent at understanding possible solutions.

Hearings called to figure out what was going on were dominated by industry spokesmen, derivative salesmen, and bank loyalists, all touting the advantages of increased liquidity and financial innovation. Congressmen used those platforms to pander to their constituencies and scream about rising prices with no apparent desire to understand why it was happening or how to fix it. The financial media lost an opportunity to seriously question the system and inform the public on causes and possible solutions.

When the banking crisis of mid-2008 hit its fever pitch with the failure of Lehman Brothers and the subsequent rapid deleveraging of all capital markets, it also violently burst the oil bubble and removed 80% of its traded value in less than seven months. I felt vindicated. Nothing proved a speculative bubble more convincingly than the rapid price collapse we saw then. But I knew that the fall of oil was only a side effect of a larger market collapse and did nothing to answer the question of how bad things were and how bad they were sure to get in the future. The price collapse had taken the heat off of investigating how the oil markets really operate.

In the midst of a greater economic crisis, oil's price drop ended the motivation to understand speculation as the cause of commodity inflation. This, I knew, was an awful, terrible mistake. The bottom line was that nothing, absolutely nothing, had changed or was likely to change in the way that oil was being priced, making it a sure thing that the boom/bust cycle would replay itself soon.

How had it changed? How did my sleepy, quiet, and insular market become this over-active whirlwind, in need of thousands of written articles and 20 CNBC hits a day? Three enormous changes rocked the oil markets forever, and Part I of this book describes these in detail.

Problem #1: The Assetization of Oil

First and probably most important, new institutional and individual investor interest in commodities, and particularly the price of crude, became the hottest game in town, and the world is rushing to play. Using commodity index funds and exchange-traded funds (ETFs), through dedicated energy hedge funds as well as individual futures

accounts, the price of oil is now as easily investable as any stock or bond.

This is why the bid has become endless: although stocks and bonds have been around for centuries, oil has only been available as an investment for a few years. As an asset class, oil has a lot of catching up to do, and a lot of new money yet to assimilate. Chapters 2 and 3 describe the assetization of oil in detail.

Problem #2: Financial Finagling

Second, as I'll discuss in Chapter 4, there had been a rush for fresh financial innovation. Following patterns from similar derivative markets, the investment banks and energy marketers created and sold a whole new category of specialized and customized products to cater to every kind of energy client they could imagine, products that would help mitigate risks from differing grades of crude, of transporting and refining crude, and from the output products from crude and their final sale. This created dozens of new markets, most of them over the counter and designed to be closed to most investors and accessible only to in-house traders of proprietary accounts.

Commodity exchanges rushed to offer clearing of these side markets and get in on the new action. While West Texas Intermediate was the only traded crude product in the world when I first started on the floor, by the time I left it, the exchange was offering clearing on more than 75 futures and derivative of derivatives on crude with even more numerous and complicated products offered in refined products and natural gas. While the opportunity for profiting from the sale and proprietary trading of this unnecessary diversity grew, so did the nominally traded market in oil, now 15 times greater than the amount of real physical oil.

Problem #3: Electronic Access to the Oil Markets

Finally, as I'll discuss in Chapter 5, the change from the human trading floor where I spent my career to an electronic virtual world of price discovery destroyed many of the governors on price swings. While the world of on-floor trading that I experienced in the pits seems quaint now, it did provide as near to perfect a pipeline for orderly trade, forcing all the participants to transparently appear at one place to transact business. Universal access of internet-based electronic platforms to oil spurred massive increases in volume and open interest, but also created massive volatility and higher prices with it.

We Can Fix This

It's not too late to stop the continuing havoc that the modern energy markets wreak on the price of oil. The price of oil has become too violent, too high, and too unreliable. I want to see that highway-across-Texas price restored that had allowed business to grow steadily without being derailed by spiking costs. I want to see the consumer relieved of an energy burden that is killing the wallet. And I want to see our country become self-sufficient and quit pouring money unnecessarily into Arab hands.

To see this happen, some major changes would have to take place. The Federal regulating agencies in Washington charged with market oversight had advanced a number of possible ideas. Unfortunately, most of these measures have been watered down by lobbyists, and even those weakened ideas have little chance of passing through a partisan Congress anytime soon. Moreover, the first thing that needs to happen to see any substantive change in the oil markets will have to be a conviction on everyone's part—whether inside the industry or inside the beltway—that the mechanism is broken.

That's the hope of this book.

Oil's Endless Bid charts the changes that I saw and continue to see: Chapters 2 through 5 in Part I describe how the oil market was and how it worked and why it operated fairly and with respect to fundamentals; it also describes how and why the oil market changed and how it operates now. Chapters 6 through 10 in Part II explain why the price of oil is unfair and without respect to economic laws. Finally, Chapter 11 offers some solutions to what can be done about the broken oil markets ... Throughout this book, I give a taste of what it was like to sit at the nexus of oil price discovery for more than two decades—which was, without question, the most exciting, interesting, and intrepid job any person can be lucky enough to have,

even for a day. Follow me and by the end of this book you'll know what's really moving oil's price and what you can do to prepare and take advantage of its wild swings. Toward the end, I hope my case is made strongly enough to suggest some rather progressive measures with which to deal with our financial energy crisis, by taking some of the profit opportunity away from the largest investment banks and hedge funds, removing a lot of the investor access to the direct price of the crude barrel, but also by restoring some of the smaller, independent traders and trading groups, who have been sidelined by recent innovations, back in their roles as legitimate market makers and liquidity providers. I think we can do it.

And I think we have to do it. Without serious reform, I believe our economy and we as individuals are destined to be routinely crippled, manacled to an oil price that whips around without warning like a roller coaster and cuts through our economy like a chain saw.

It's been a long, nearly 20-year process to see our oil markets destroyed and the price of energy become wholly unreliable. Some of the changes I track in this book are simple to understand and obvious, while others require at least a cursory understanding of commodities and how the oil markets work. But stick with me, and I promise as clear a description as I can muster—from the simplest hedge an oil consumer might use to the most complicated derivative offered from a broker's over-the-counter platform—and from the quickest scalp trade of a local floor trader looking to make \$100 for rent money, to the multi-million-dollar bets that huge energy traders from Goldman Sachs or Morgan Stanley undertake. Although the mechanisms require some work to understand, the motives don't: it is, of course, all about money, and not about providing the most reliable and honest price for oil and oil products to business and individual consumers.

Before we can even dig into oil's endless bid, getting a flavor of how oil was traded in the good old days gives some perspective to how differently oil prices are arrived at today. Chapter 1 gives a little insight, from my own experience. However, if you know nothing about the futures market or want a practical refresher course, Appendix A offers a brief tutorial that I recommend everyone read before getting started.

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Chapter 1

A Brief Look Back at the Good Old Days of Oil Trading

n old chché says: "To know where you're going, you have to know where you've been." The oil markets have become broken, but they weren't always. In the first 20 or so years of my career as a trader, the oil markets worked much better—at least for consumers and the economy at large; it provided much steadier and generally much, much cheaper prices. Describing how things used to work will quickly show you why.

In my earliest days, from 1983 until about 2000, it was very difficult surviving as a day trader in oil. Statistically, only 15% of those who tried to be floor traders during this time period were able to survive for more than five years. Why was that? Well, simply put, it was about volume and volatility. Nobody outside of the oil companies and our small band of traders cared much at all about oil. So our days were an endless string of small volumes and small ranges. After all, if nothing much moves, how can you make money? It's tough, believe me. We'd wait for something to happen and take advantage of the

spurts of interest and motion. In those days, the trick was surviving long enough to see the good days ahead.

In the second part of my career, the world began to see oil as a financial opportunity, although they first struggled with how best to capture it. These were the golden days for us on the floor—from about 2000 until around 2006. Enormous daily volumes and movement began to come into our oil markets, and we finally began to live the dream that most people imagine when they think of oil traders. Opportunities, both to win and lose, arrived practically daily. Floor traders had their best years ever.

The final stage of my career began in 2006, when markets began shifting to electronic venues, and OTC markets began to really swell. But it was a confusing time for the career oil trader on the floor. Volatility, which was normally the lifeblood for profits, had never been greater. Volumes were astronomical and growing daily. And yet, there were no profits to be had. On the contrary, our honed skills seemed to be working against us, and the rules that we had learned were turned upside down by the financial market forces that now completely dominate price. But the story of energy futures trading on a tiny New York commodity exchange begins in 1979, and there, on the floor of the New York Mercantile Exchange is where I appeared, as a fresh-faced participant soon after, in 1982.

Who Grows Up Wanting to Be an Oil Trader?

Going through high school, I had little idea what I would do for a career. I had certainly never heard of commodities. I was ignorant of what that word even meant. "Commodities? You mean like pork bellies?" Why pork bellies always comes to mind when anyone mentions commodities (even today) is a cruel joke to anyone in the industry. But that's what I thought of whenever I heard talk of commodities on the news.

Meanwhile, my father ran a small hospital on the south shore of Long Island, NY, and he was keenly aware of the advantages to being an MD. "You don't know what you want to do? You're good at the sciences—be a doctor," he told me.

Good enough. I headed off to college to undertake pre-med courses, with a couple thousand other smart kids whose fathers also thought that was a pretty good major—if you didn't have a better idea.

However, I quickly found out the work required to actually *become* a doctor wasn't so much fun. I was good at school, good at taking tests and retaining information, and I was a decent writer. But I hated the long classes and the arcane material—organic chemistry being a particularly difficult course to bear. I was far more of an instant gratification kind of guy, never happy working at something for weeks and months at a time for a grand result.

Besides being impatient for success and a bit lazy, something else began to take hold of my interest and thwarted my father's (and my) plans of me becoming a doctor. I fell in love with the horse races. I started going to Belmont Park almost as soon as I could drive and could legally bet. I loved that feeling of vindication and validation—of having taken the raw information of the arcane numbers and symbols in the daily racing form, and converting those to relative odds and a betting strategy. That process had just enough math, just enough analysis, and just enough exposure to real risk to create the perfect cocktail for me.

I knew I was pitting myself against the rest of the betting population in every race, that I was in silent competition with them. To continually make money at the track according to this system, the foolproof plan to follow was simply to be smarter than the rest of the betting public. I wasn't a genius, and I didn't come up with any grand new theories of assessing the abilities of horse flesh that gave me any kind of significant edge over the rest of the betting public. Like most other players, I wasn't a long-term winner at the track. But that didn't stop my passion. And 'a good score' (a nice payoff on a race) would go a long way to bringing me back again and again looking for that fantastic, validating feeling.

I remember my first \$500 wager on Slew o' Gold, a four-year-old horse running against three-year-old contenders and winners of that year's Triple Crown races. At almost three-to-one odds, Slew o' Gold was clearly being overlooked, but Slew had been racing beautifully in other handicaps and stakes races. To me, he seemed to have only gotten stronger since his own Triple Crown campaign a year earlier.