

CHAPTER 1

Market Basics and Market Mechanics

*What Is Going On and
How Does It All Work?*

[New market] complexity suggests that there is no longer any room for the individual investor in today's institutionalized markets. Nothing could be further from the truth. You can do as well as the experts—perhaps even better.

—Burton G. Malkiel

A Random Walk Down Wall Street

As long as humans and cultures have been exchanging and trading goods, price has been at the center of that trade. This is true whether it took 10 bags of rice to purchase a goat or 150 U.S. dollars to buy a barrel of oil. Discovering a price or value of goods, commodities, housing, land, and so forth has been essential to cultural sustainability, global social and economic growth, and in the end, for some, prosperity. It has also led to the demise of great nations for that matter. This chapter explains the basic mechanics of the marketplace and offers insight as to how stocks are traded and valued.

THE MARKETS

Trading and speculating on prices is in our nature. It takes place every day around us. For most of us the forever changing price of gasoline is the first exposure we get to the marketplace, although many don't even realize it. The price you see at the pump is determined by supply and demand, along with people called *speculators* (folks who don't really want to own

anything, but rather take risk on prices going up or down) and by our friends at the Organization of the Petroleum Exporting Countries (OPEC), who actually control supply (that's a topic for another book).

For something to increase in value there must either be high demand for that *widget* or a reason or motivation that one would pay a higher price than the masses are willing to pay at that moment in time.

So why would someone think something is going to rise in price?

Maybe that motivation is sentimental; maybe it is because you have done more research than most and you believe that the item is worth more or will be worth more to you or someone else either now or in the future. Maybe the value of that tangible item has not been realized yet (think back to the early days of the Internet or a company like Google or maybe Apple), because of the lack of a catalyst or a distribution channel. Maybe you know that if you bought this item in Europe for \$10, you could ship it for \$2 and sell it for \$15 in the United States. This is a basic form of arbitrage and takes place every day in the marketplace (we discuss this later).

These theories (reversed) can work against the price of something as well, driving the price lower.

All of this unique reasoning applies to stocks in companies, (which are referred to as "intangibles") as well and this is why we actually have a (stock and option) marketplace, so people with varying opinions can come together in one place and exchange their assets. There are many reasons why prices are constantly changing; I offer you insight on stock price movement. But it's not just stocks. From gasoline to gallons of milk to sweaters, there is an exchange where people can trade just about anything. Farmers use the commodity markets to lock in prices of their crops or to speculate on the price of corn, wheat, or another commodity.

Many Varying Opinions

A wide array of reasoning, emotions, and other forces can actually help to stabilize the market, because buyers and sellers with varying opinions will create a more balanced and stable marketplace as opposed to everyone having one view and one directional opinion, which would create exaggerated moves in one direction or the other. This is why it is important to allow markets to trade freely and allow the traders of the world to continue to create their own systems, algorithms, strategies, and interpretations of the market with minimal regulatory influence. Some folks, in Washington particularly, have tried to change this and restrict free trade. Although it is obviously important to have rules and regulations when it comes to risk, we must be careful when regulating the rationale or reasoning behind the trades that are made. When you restrict what a person can trade and how they trade it, you may create unnatural price trends.

It's like being forced to buy fuel only from Exxon if you live in Texas. If Exxon knew that everyone in Texas was allowed to buy gas only from them, what do you think they would do with the price? Probably raise it a little bit. The beauty of the marketplace is the ability for anyone of legal age from anywhere in the world to buy and sell shares according to his or her own thesis. The stock exchanges centralize all this trading activity and allow for consistent and liquid (high volume) markets that are transparent. Think of the stock exchanges as the world's biggest flea market of stocks, one place where you know you can go to shop for the item (stock) that you want, knowing that there will be always be tons of buyers and sellers there to find the best value at that moment in time.

Unfortunately, there will be winners as well as losers when it comes to investing—it is the way the game has always been played.

I bring all this up because at times you may feel like the market makes no sense or you might hear things like “this market is cheap or expensive based on earnings” or the market is overbought or oversold. How can one make these assumptions? I know I have heard pundits en masse state the markets are overbought (too expensive) and yet they continued to rise another 10% and vice versa. Human emotion plays a large role in the behaviors and subsequent price actions of any marketplace. Get yourself in tune with mass sentiment, but don't be a slave to it. Use it to adjust what risks you are willing to take and how much profit you are looking to make. That tactic is developed as you read through this book.

What Exactly Is a Stock?

When you are long a share(s) of stock (meaning you have purchased that share), you actually own a part of the company, albeit a small one usually. You have certain rights as a shareholder, but they are minimal. You have the right to vote on certain corporate actions (not many) and you have the right to a dividend, if a company is offering one. If a company falters and declares bankruptcy, stockholders are on the bottom of the list when it comes to getting paid. Remember, you are *not* a creditor; you are theoretically an owner, with skin in the game. It's just as if you bought a lemonade stand with three of your friends, things are good for a while, but then take a turn for the worst—no one is buying lemonade and you decide to shut down for lack of profitability. Unfortunately, you only have \$10 in the bank and you owe your lemon supplier \$10; if the business shuts down and you pay your “lemon guy” what you owe him as a creditor, the four of you are each left with zilch. That can happen with a large company in bankruptcy as well, but generally not that often with major, well-established companies.

When a company “goes public” they sell a certain amount of shares to retail stock investors, typically through a process called an IPO, or *initial public offering*. The price at which stock is first sold for and subsequently trades for can be extremely subjective. Companies have many reasons for going public, but the most typical reason is to raise capital.

By offering shares of stock, a company is able to raise money to expand its business in a multitude of ways. Stock can also be used for employee bonuses, as a means to acquire other companies, and for many other uses during the lifetime of that company. Companies can buy and sell their shares in the open market as well after going public. These actions, respectively, are called a *stock buyback* and a *secondary offering*, but basically what you need to know is that if a company is acquiring shares in the open market, it may be a sign that the company is healthy, as it is reinvesting in itself.

If you are new to the marketplace or if you have limited knowledge of how the stock market functions, I encourage you to read more on this topic because it will be essential to perfecting your trading of options, which derive their prices from stocks.

How Stocks Get Priced

If I could tell you exactly what a stock should be trading for at any given time, I would most likely be the richest man on Earth, lounging on a tropical island somewhere sipping mojitos with little paper umbrellas in the glass, while the surf tickled my toes.

In reality, there is a fairly complex process that a company will undergo when offering shares to regular investors. Even more esoteric is the “value” that the markets assign to a stock at any given time once it has begun trading publicly.

Companies generally offer shares to the public to attain capital to expand their businesses. Shares can be offered in a couple ways. Prior to the stock even trading on an exchange, a company can sell its shares through a private placement offering, at which time the shares are typically illiquid. Those shares may never trade on a public exchange.

An IPO is when the company has decided to “bring its company public,” allowing just about anyone to invest in its stock (these are the types of companies that I discuss). In an IPO, the issuing company and an underwriter will determine the initial offering price. From there, it is purely supply, demand, and the profitability of the company that drives the price of its stock.

The Initial Public Offering When a company decides to list its stock on an exchange, this is called *taking the company public*. This process

enables a company to sell some of its corporate shares to the public and allows it to raise capital in the process (the company usually retains a large amount of its shares initially). A company will hire an investment banking firm like Goldman Sachs to sell its shares to investors and structure the deal. Depending on the size of the deal, several firms may participate in the offering; this selling group is called a *syndicate*. There are also different types of commitments that the investment bank makes to the company going public. For the sake of brevity, there are essentially two points and prices that are important in an Initial Public Offering (IPO). Just before the company's shares begin trading on the open market, shares are distributed to investors at a price that is determined by the issuer and the underwriter (aka the investment bank).

Historically, on average, IPOs have been underpriced, meaning that the price for shares offered to investors directly from the issuer before they are traded publicly is cheaper than the price at which the general public pays for the shares in the open market once they begin trading on an exchange, which is the next step in the process for a newly trading company.

There is much more reading on this subject and I highly encourage you to learn about how companies come to the marketplace. As a beginner, realize that IPOs generally carry more risk than buying stock that has been established in the marketplace. Even if you are able to obtain shares of a company before it goes public, there is no guarantee of future appreciation, and sometimes buying a stock right after the IPO can be extremely risky because the hype surrounding the IPO temporarily inflates the price and when it comes back to a more realistic level, you may be left with a loser. Do your homework here and realize that purchasing an IPO just as it begins trading can be extremely risky!

Stock Value After the IPO After a stock begins trading publicly on a major exchange, the issuing company is required to meet certain criteria, such as reporting their earnings and audited financials on a regular basis. If a company is listed on an exchange, the SEC (Securities and Exchange Commission) and the exchanges themselves require the company to disclose detailed financial information on a quarterly basis (earnings reports) as well as to provide investors with an annual report (10-K report). This not only helps us to value a company, but this data should be used by you (the investor) to decide whether to buy, sell, or hold the stock. This is why I encourage you to invest in stocks that are listed on major exchanges and be wary of foreign companies that may not be subject to our same accounting rules and regulations.

Because of the ever-changing demand for a company's products or services, it is next to impossible to predict with 100% accuracy the amount of goods or services that will be sold to the public over a given period of time.

This uncertainty, coupled with the fact that the stock market is also driven by the whims of its investors, makes it next to impossible to predict the future price of a company's stock (if it were easy, none of us would need day jobs). Although, I will offer you a set of guidelines and strategies to follow to put the odds on your side.

Speaking of day jobs, we do have analysts who crunch these numbers (sales, costs, economic trends, etc.) day in and day out, which can certainly help us gain future perspectives and create somewhat realistic expectations for a company's sales and revenue, which can help project future demand for the shares. But even analysts get it wrong. Once a stock begins trading publicly, the price is solely determined by the supply and demand of the marketplace. This is why it is extremely difficult to place a specific value on a stock. What you can do is compare a stock to its peers to find relative value and/or use the historical prices of the stock to help you assess its current value in comparison. Analyst reports can help you with your decision making; they are available from different brokerage firms, usually for a fee.

What Goes into Determining a Company's Worth? The input costs (like raw materials, commodities, etc.) that a company may use to produce its goods or services may be rising or falling, which would influence profit margins. Miners, oil producers and refiners, and agriculture and fertilizer companies are all examples of companies that are highly susceptible to this risk. Another example of how high raw material costs could affect a company (or another in a completely different space) would be the price of oil. We all remember the oil price spike of 2008. Although this was great for the companies getting oil out of the ground, we must always remember that necessity is the mother of invention. What I mean is that with oil above \$125 and gasoline, heating oil, and natural gas getting extremely expensive, other businesses may become viable alternatives, like solar power and wind energy. Sustained high energy prices may have kept the price of solar and wind stocks high, so when oil prices fell, their prices fell as well. The lesson here is to fully understand how a company makes money and what their dependencies are, as their future may rely on another's. Other companies depend more on intellectual capital and/or patents and have minimal exposure to the ebbs and flows of commodities. Google is a good example of this sort of company.

Public sentiment about the company's business may also be shifting. For instance, a company may be in the coal business and as the green revolution continues, the masses may make a conscious effort to switch to alternative fuels, which may have an adverse effect on a company's earnings and thus their stock price. The reverse could obviously work in favor for a company as well.

Executive management also plays a large role in the vision of the company and its growth and/or its demise. Having an adaptable management team that has proven to evolve with an ever-changing market climate certainly helps. We can look in the past history of a company (or its CEO) to evaluate this; for newer companies, it may be more difficult. Apple computer is an example of a company that has changed with the times and continues to manufacture products that sell and are adopted by the masses. Xerox, on the other hand, struggled to roll with the punches as consumers shifted from the analog world to the highly integrated digital climate of the twenty-first century.

Economic, social, and geopolitical climate changes may also affect a company's success.

Recession, growth, housing values, unemployment rates, technology, societal shifts all can obviously play a role in a stock's value and the market's value for that matter. In tough times or when the United States or global economy is entering into a contraction phase, traders begin to sell certain stocks in anticipation of the global downturn, which eventually may decrease the amount of goods and services that companies are able to sell, which in turn may lower their revenue and thus their earnings per share or how much income (revenues–costs) a company brings in. Companies can cut costs by laying off employees or streamlining their businesses by consolidation, technology, reduction of expenses in marketing, bonuses, and so forth. This affects a company's bottom line or what it brought in total income. Some analysts and traders want to see "top-line" growth or an increase in real goods or services sold when a company is emerging from a downturn, as a company can only cut so many costs, which would increase their bottom line only. Know whether your investment tends to be more cyclical or defensive. I will discuss that in more depth shortly.

For the average investor, a knowledge of the different macro industries that stocks are categorized by and what stocks, industries, and sectors are currently in favor combined with a general knowledge of the current economic climate can help you understand why your company will continue to be in favor or fall out of favor. Don't worry if you don't understand it all, most people don't and that is where options theory and strategy can offer an edge.

When's the Right Time to Buy and Sell?

First off, when you look at a stock quote, you are viewing the best price at that moment in time. The guy who was willing to sell for the least and the guy who was willing to pay the most meet and determine price (for that millisecond). We all know how quickly that price can change.

Let's assume you like a company (for whatever reason) or its products and you want to buy its stock. That's the first step of the battle! But how do you know where or when to buy? Everyone has heard "buy low, sell high," but that is certainly easier said than done and is completely relative. The question of "fair price" has plagued investors forever, whether they are analyzing stocks, mutual funds, or even the latest fashion craze.

The wide span of investor opinions and motivations are what create fair value for the current trading price of a stock or other instrument. In fact, the many ways of determining value, coupled with the varying opinions toward risk and timing are just a couple of the factors that create the free marketplace, as I discussed earlier.

For example, what if you bought a home 15 years ago for you and your young family in a developing neighborhood for \$50,000? Flash forward 15 years to 2010, when your home value has increased to \$175,000. The neighborhood is now crowded with condos, traffic, and young urban professionals, and it is no longer desirable for you and your teenage kids who are about to enter high school. Now you want to move to the suburbs and upgrade your home, so you sell your single house for \$175,000, which is a win for you (you made a profit and got what you wanted) and it is probably also a win for the twentysomething couple that bought it, because they are getting a relatively good deal on a home in a hip neighborhood that they believe will not only be a perfect living situation, but also will increase in value because of the density and demand in the neighborhood. A trade has been made!

This happens every day in the stock market as well, where traders who have owned a stock for some time (maybe at a much lower price) sell to other traders, who maybe just want to hold it for a week, day, or even an hour to see a little appreciation. Investors don't always sell because they think the stock is going to tank; there may be other motives involved, such as their need for money or having found another opportunity. And even if there isn't another reason, there is usually someone there to buy it because they believe there is value at that price.

One trader's trash may be another's treasure, as they could have completely different investment objectives.

Timing Your Entries into Stocks Projecting the future direction in a stock or the market as a whole is everyone's goal and obviously an impossible task. I believe it's more realistic and statistically easier to bet on a "range" or an "area" of price that the market or stock will be at in the future and certain option strategies will allow you to do this.

There are a myriad of methods and techniques that are used by traders and investors around the world. They range from insanely complex to relatively simple. Some investors spend countless hours looking at dozens and

dozens of different data points combined with economic theories and technical indicators before they even think about making a trade. Others maybe have one technical indicator or maybe just *read the tape*¹ to decide when to jump in and out. The interesting thing is that you have this huge gap in style and on both ends you have immensely successful traders and at the same time complete failures. There is no secret sauce! All I can tell you is that you should try to keep your analysis and tools relatively simple, but use the data consistently and with that you should at least improve your chances to succeed. You don't want to find yourself stuck in that cliché *paralysis by analysis*, where you are looking at so many different things you can't come to a decision, because the more data points you need to agree with one another, the lower probability you have of them doing so. In the coming chapters I give you the fundamental (data driven) and technical (chart driven) indicators and methods that I use to time my entries and exits. You need to test them in a "paper trading" environment until you create your plan and hone your own methods.

SECTORS AND INDUSTRIES

Stocks can be broken up and categorized into industries and sectors. Doing so will help you understand and target which sectors and companies are in favor. This can also help you choose which strategy to employ. Stocks are first broken up into two basic large groups: cyclical and noncyclical (or defensive). These designations define a stock's sensitivity to economic and broad market fluctuations. The main difference between the two is necessity versus luxury.

Cyclical names are companies that produce a luxury, or discretionary item (such as apparel or electronics). Noncyclical (defensive) companies are those that offer goods and services that humans need to maintain their basic health and home, things we *cannot* live without.

Noncyclical or defensive stocks will typically experience profit regardless of economic fluctuations because they produce or distribute goods and services humans need even when times are tough. Examples are food, energy, water, and some hygiene products (nondurable goods— toothpaste, soap, etc.).

Industry Groups

Stocks can be broken up into about 10 to 12 basic sectors and then further separated into microsectors. For example, within health care, companies like Johnson & Johnson and UnitedHealth are lumped together, but one is a health-care insurance provider and the other is a consumer goods

manufacturer. Both may be considered defensive in nature. In my opinion, classifying your stock in its broad market classification is more important than figuring out which microsector it falls into, as I want to have an idea about its sensitivity to an economic gyration and where it lies in the sector rotation. I discuss this later.

Following are some examples of sectors and the stocks contained within. In times of plenty, when investors become less discerning, all stocks within a favored sector may rise together, with some unjustly because their business and earnings may not be as strong as their peers. This can also work in the opposite direction; make yourself aware of sectors that are in and out of favor and try to pinpoint the strongest and weakest stocks in each by examining earnings growth, price and earnings, popularity, and so on. Within each broad sector there are subsectors. For example, within the energy space you could have oil stocks, wind, and solar.

Sector Examples

Consumer Goods	Consumer Services	Industrial	Energy	Financial	Tech
PG	WMT	BA	XTO	GS	GOOG
PEP	DIS	LUK	LVN	BAC	IBM
PM	UPS	HON	HAL	JPM	AAPL
KO	HD	CAT	XOM	C	AKAM

When Is it Time to Get In (or Out of) the “Broad” Market?

Use the market as a primary gauge for the health of our economy.

If we are emerging from a recessionary phase, the stock market is typically the first to rally, with the other indicators falling in line eventually. The stock market is the über leading indicator of economic growth (or the perception thereof) for many investors and economists (there are several others, such as building permits and the money supply). When the equity market begins its march higher, market participants look to coincident indicators like personal spending, consumer confidence, gross domestic product (GDP), retail sales, and so on, as well as earnings for confirmation, justification, and acceptance of the higher stock prices. Finally, economists and investors want to see the lagging indicators such as the unemployment rate and consumer price index come in line with other indicators, in addition to performance based on historical observations. Generally by this time, according to Econ 101, the economy may be well on its way to recovering. If the indicators remain stable, so should your bullish outlook. When they begin to change, you must re-examine just how bullish you want to be.

Don't Overreact to News or Data

Economists, like doctors, are constantly practicing what they were taught. Each day, as more and more data is observed and crunched, regression models created and articles written, they learn a bit more. Past observations and methods can indeed help all of us to understand the future, but as we evolve globally, certain theories may not hold like they once did. Relationships between indicators may become disconnected and once-normal occurrences or deviations that we look for may become exaggerated or muted.

The point is that economists (and analysts) are not predictors of the future. The amount of variables involved in the global economic equation is staggering. I believe it's impossible to relate some data points to one another, let alone to use this data to predict future momentum. What we *can* do is look at correlations over a certain period and conclude that two things are related—the reason *why* they are correlated may be unrelated to either, however, and disconnect may be unexplainable.

The average investor can review little pieces of economic news at a time and become aware of market catalysts. We can then follow trusted sources to help us form opinions about the outcome of those market catalysts and use options strategies to adjust our risk based on the confidence we have in our hypothesis.

The equity market was certainly in the lead in mid- to late 2009, when the major indexes rallied more than 50% without all of the economic indicators showing real strength. Where we may see corrections is when the stock market's anticipation of future earnings and economic growth overshoots reality; in other words, the estimates that traders and analysts projected that earnings are too aggressive. Basically, by inflating their expectations, they inflate the stock prices at the same time and when prices get too far ahead of themselves, the chances for disappointment increase.

Before you jump into any investment, just give it a quick checkup at least.

I use the P/E ratio (stock price divided by annual earnings) and not just earnings reports alone, because, remember, it is all about price. Compare a company's PE ratio to its peers. Does it seem really high or low? If so, dig a bit deeper and find out why.

If a company's stock price does not change and its earnings growth is even moderate, its P/E ratio should decrease, potentially making that stock a potential value compared to its peers. This can happen if there are other more exciting or more popular stocks in its sector that traders tend to favor.

ETFs—A DIFFERENT KIND OF INVESTMENT

Exchange Traded Funds (ETFs) are a new product that has seen meteoric growth over the past several years. They are similar to a mutual fund in that they typically hold a basket of assets that have some sort of a common trait, investment objective, or are all part of a specific index. The difference is that unlike mutual funds, ETFs are traded like stock and you can buy and sell them during market hours because many of them are listed on major exchanges. An ETF, like a mutual fund, may have fees associated with it (most do) that are in addition to any commissions your broker may charge you. The fee structure of a standard ETF is typically a flat annual percentage that is paid to the administrator of the fund. These operating costs are typically low because most ETFs are not actively managed.

ETFs provide investors with diversity and a potential hedge against a catastrophic move in an individual stock. The first ETF actually began its life in 1989 with the Index Participation Shares (IPS), which was created as an S&P 500 proxy that traded on the American Stock Exchange and the Philadelphia Stock Exchange. IPS did not last long because of a lawsuit filed by the Chicago Mercantile Exchange.

The Toronto Stock Exchange (TSE) created its version of the Index Participation Shares, which began trading in 1990. This ETF tracked the TSE 35 and later the TSE 100 stocks, and was extremely well received. The American Stock Exchange would follow in 1993 with the then-largest ETF in the world and still popular today, the SPY or “Spiders,” which allowed investors to trade the S&P 500 index like a stock at one-tenth of its cost.

The Pros and Cons of ETFs

Here are a couple key points you must understand about ETFs. For the most part, ETFs offer unique investment vehicles—just be sure that you read the fine print and understand exactly what you are buying when you are investing in an ETF.

- ETFs have changed the investing landscape, opening doors for novice retail investors to professional hedge fund managers to trade just about any commodity, sector, index, future, currency, or other complex investment vehicle like a stock.
- ETFs are much like mutual funds in that they can contain many different stocks or other securities, but unlike mutual funds that are only settled at the end of the day and are not easily tradable, ETFs trade like stocks—they have bids and offers and some have heavier volume than

others. Many ETFs, unlike mutual funds, are not actively managed. In other words, there is no fund manager who buys and sells positions within the fund trying to get the best return for you. That is not to say that the funds run themselves—depending on the ETF's objective it may require more active management. Check the prospectus to learn how and who runs the fund.

- These funds can buy anything from a basket of tech stocks to futures contracts in oil and gas. Some funds even purchase hard assets like gold (GLD).
- ETFs can offer investors a quick way to diversify their portfolios and mitigate certain risks. (Some ETFs can also increase risk.)
- Some ETFs may provide a slight buffer against volatility and risk in some cases, but add to one or both in others. Do your homework.
- Many ETFs are also optionable.
- ETFs come in all shapes, sizes, and flavors. From gold to oil to retail, if there is a need for it, an ETF can be created.

Commodity- and Futures-Based ETFs—Danger Sometimes Lurks

One of the more popular ETFs in the beginning of the twenty-first century was the United States Oil Fund NYSE: USO; it was never a favorite product of mine, for several reasons.

At times, the flattening of the crude oil forward (futures) price curve may actually provide a benefit for this unique ETF. The USO is a security that invests in and attempts to track the price of West Texas Intermediate Crude Oil by purchasing crude oil futures (and others) on the New York Mercantile Exchange (NYMEX). The USO charges a management fee of 45 basis points (back in 2010), which investors pay not in commissions, but in holding the ETF over time.

The USO does provide a vehicle for the average investor who does not trade futures to speculate or hedge themselves with or against the changes in price in crude oil.

One of my biggest sources of contention with the fund has to do with its monthly rolls, which are posted on its website for everyone to see. A “roll” is similar to what we do with the options trades we choose to extend to a later month. The USO only holds futures contracts in the front month, so that each month, it sells its front-month contracts and buys the next month. There are two issues here. The first is the fact that these dates are known and the market makers can take advantage of this immense order flow, which they know will always be the same: Sell the front month, buy the next month. This could be a detriment to the holders of the USO because they may not be getting the most advantageous pricing.

Now in the USO's defense, I am sure it has top-tier traders working those rolls and doing everything they can to make the best of it.

The word *contango* doesn't typically roll off the tongues of most retail investors; however, contango can have an effect on some of the products that retail traders may invest in.

Contango Contango relates to the futures markets specifically and basically means that the forward curve or future price of that commodity is positive. This is considered a "normal" situation, especially with futures on commodities with a cost to carry, like oil. Oil costs money to store, transport, insure, and so on. All of these things are contributors to the future price of oil being higher than today's spot price (see Table 1.1).

When you think about it, if a trader were to buy oil on spot today and store it and insure it for delivery at a future date, that future price should reflect those costs. This is why it is a normal occurrence to see contango in the oil futures markets.

The second and even more important than the roll dates being a foregone conclusion is the "negative roll yield" that USO will experience each month in a contango situation (see Table 1.2).

Normally, each month the USO sells its thousands of contracts (22,000-plus in early 2010) for a certain price in the front month, and then has to go out and purchase more contracts at a slightly higher price the next month, meaning that the USO is able to buy fewer contracts, thus having a negative effect on yield.

Think about it like this (I'm oversimplifying here):

- You have 10 contracts of crude in May that you can sell for \$80—you net \$800.
- You must buy \$800 of the next month's contracts, which are trading at \$85, which means you can only buy nine contracts. (Balance goes into cash, which is invested in short-term Treasuries.)

TABLE 1.1 Crude Oil Futures Prices

Ticker	Month	Last
CJK0	Apr 10	↓79.81
CLK0	May 10	↓80.08
CLM0	Jun 10	↓80.45
CLN0	Jul 10	↓80.75
CLQ0	Aug 10	↓80.95
CLU0	Sep 10	↑81.28
CLV0	Oct 10	↓81.48
CLX0	Nov 10	82.30
CLZ0	Dec 10	↑82.21

TABLE 1.2 Roll Dates

Roll Start	Roll End
March 8, 2010	March 11, 2010
April 6, 2010	April 9, 2010
May 6, 2010	May 11, 2010
June 8, 2010	June 11, 2010
July 6, 2010	July 9, 2010
August 6, 2010	August 11, 2010
September 7, 2010	September 10, 2010
October 6, 2010	October 11, 2010
November 5, 2010	November 10, 2010
December 6, 2010	December 9, 2010

- Now let's assume that crude rallies \$10 to \$95. You would make \$90 (9 contracts \times 10), whereas the month before you would have made \$100 on the same price advance.

This does also mean that you would lose less if it dropped.

Although the roll doesn't make you "lose" money necessarily—it may slow the rate at which the USO responds to movements in the long term in crude oil; this is the key to this chapter.

Some traders may become frustrated that their investments in USO did not grow as fast as the underlying futures contracts.

The lesson here is that you must always research and understand the nuances of the products you invest in. It may not just be the fees that could potentially cost you money.

The opposite of contango is called backwardation. Let's explore an example.

What Happens in Backwardation? In early 2010, gas and oil futures in Europe flipped into backwardation mode—the opposite of contango—where the forward price of a commodity is *less* than the spot price. In this case, you are able to potentially buy *more* contracts during each roll, thus potentially increasing yield.

I pulled the futures strip for West Texas Intermediate Crude (WTI) futures and it looks like the curve has flattened a bit, but is not in backwardation yet, in any month. The good news is that this flattening helps USO, but certainly does not eliminate risk or costs associated with trading in this product. Be sure you check on the futures prices of WTI as well as the roll dates of the USO before investing.

Leveraged ETFs—Risk Amplified

Leveraged ETFs use complex financial instruments like total return swaps along with derivatives and other techniques to gain leverage (amplified movement) in a certain sector or underlying security but are more commonly based on a group of securities, or index. They can also be contrary and move opposite to the index in price.

Basically, although a 3:1 leveraged ETF may provide you with 300% of the return of an underlying index in a day's time (if the index moves 1%, the ETF might move 3% during the trading day), they will *not* provide you with this return over time. This means that if an index moved up 5% over a year's time, there is no telling where the ETF would be; in fact, there is a possibility the ETF has actually lost money or is flat. This is partially due to daily rebalancing of the ETF, amongst other things.

Many are optionable, but it may be best to steer clear of these products unless you are extremely advanced. They are *not* meant to be long-term instruments!

Also keep in mind that although these ETFs can provide amplified returns, they can also amplify losses.

Most importantly, to gain this leverage, these ETFs often have costs that may make them even more disadvantageous to hold over a long period of time and some can be quite costly, so read your prospectus.

If you have no clue what a total return swap is, let alone how they work, you should probably steer clear of leveraged ETFs such as some of the products offered by companies like ProShares, Rydex, Direxion Shares, and Horizon. Not that these firms are bad or have ill intent, but these products were developed for sophisticated investors and typically are meant to be extremely short-term trading instruments.

FINAL THOUGHTS

The markets can seem extremely complex and overwhelming at times, so remember the simple principles that govern their behavior. They are simply interpretations of human emotions—mainly greed and fear. The successful trader is able to interpret the *tone* (sentiment) of the market and then choose the best vehicle to invest in.

As you progress in your trading journey, make it a priority to specialize! No one understands everything about every product and process. The real winners find a niche and exploit it.

Do your homework and read as much of the fine print as possible. Don't deviate from investing in what you know.