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Commodity Cycles - Oil Prices – Human Nature

What does the price of commodities like oil have in common with human nature and the teachings of the "inspiration coach" of the Ohio State football team.

Allow me to begin with the teachings of the "inspiration coach" Tim Kight as was reported in the Wall Street Journal on January 8, 2015. He is credited with the Buckeyes reaching the national championship playoff game tomorrow after losing their two top quarterbacks earlier this season. He was hired by coach Urban Meyers to help his team develop a mental toughness and a philosophy of dealing with adversity.

Kight's formula for success is **E + R = O** or Event plus Response equals Outcome. Stated another way could be: Your response to stuff that happens will affect the outcome. In the college football world, if you **respond** with optimism and hard work to the adversity of losing two quarterbacks **(event)** the **outcome** is beating Alabama in the semi-final and the chance to play for the national championship. The game will be played before this is sent to you…..so we will see how it worked out.

As I type this, this formula really seems to be obvious, basic and to an extent rather lame. However, consider the following explanation for the changes of prices for oil.

Basic economics taught me that "supply varies directly with price" while "demand varies inversely with price." Allow me to offer an example. Gasoline prices of over $4.30 per gallon in 2008 and again 2011 (after the financial crisis) saw dramatic demand by consumers for fuel efficient hybrid and electric cars. Government policy mandated future increased fuel efficiency.

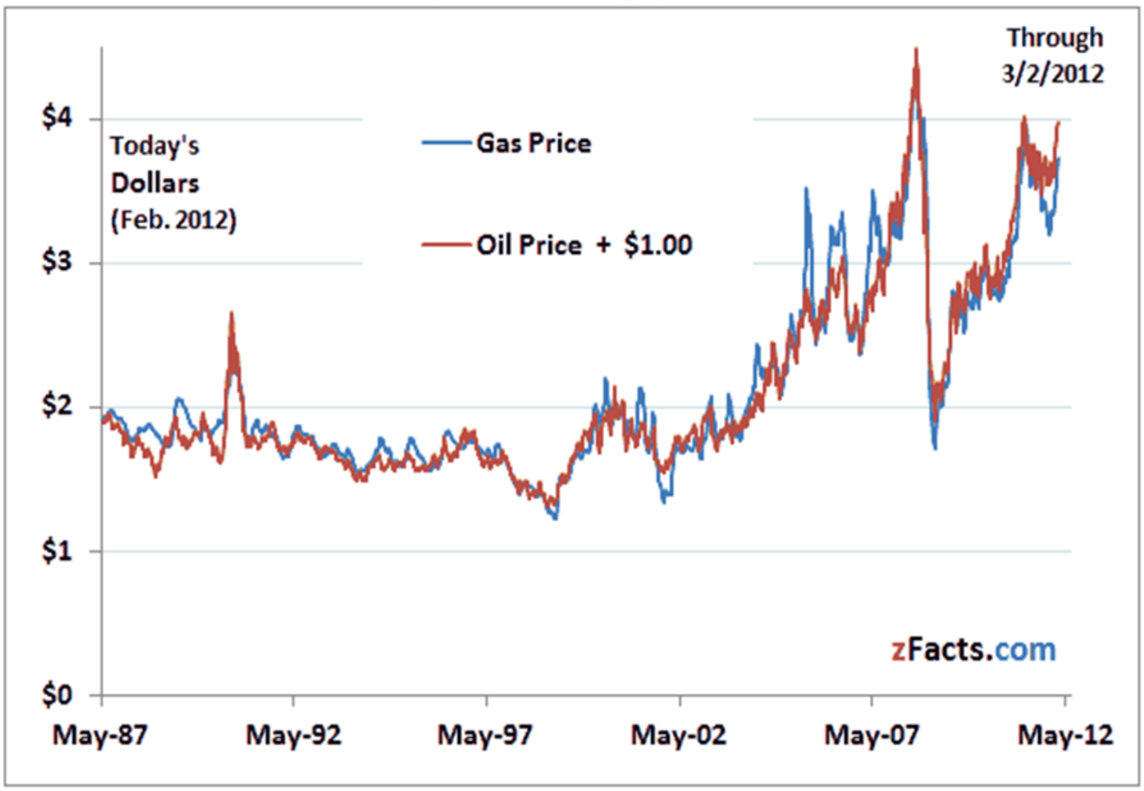
Typically, gasoline prices follow the pricing of global crude oil prices. If you take the price of crude oil and add $1.00 you get an approximate range of the expected price of gas. A barrel of oil contains 42 U.S. gallons. Current crude oil prices are in the $50 per barrel range. 50 / 42 = 1.16 plus the $1.00 means gasoline should be about $2.20 per gallon. This is pretty close to what you are paying now. In 2007 crude oil peaked at $140 per barrel. 140 / 42 = 3.33 plus the $1.00 means that gas should have been about $4.33. In 2007, gas prices peaked at $4.38.

The Iron Law of Gas Prices

Price of Gas = (World Price of Oil) + $1.00/gal

The price of gasoline (in 2012 dollars) has been $1.00 more[(1)] per gallon than the price of oil for the last 25 years (see graph below). There were some small deviations, but nothing systematic. There's nothing we can do about this unless we change the world oil price[(2)] **The US price or the World price of oil?** This graph uses the world price of oil which is best represented by the Brent (North Sea) price of Oil. — or we subsidize gasoline like Iran and Venezuela.

The Iron Law of Gas Prices (click to enlarge)



http://zfacts.com/node/424

In 1980, OPEC controlled oil prices because the members of the cartel controlled global production. At that time, North Sea and Alaskan production came into the market. The Saudis were asked by their OPEC partners to reduce production to keep prices up. They complied but lost market share. Finally the Saudis decided to regain their market share and brought their idle market share back on-line driving the price down and regaining market share. This was 1985 and Americans cheered at the gas pump.

Event + Response = Outcome

https://ycharts.com/indicators/brent_crude_oil_spot_price

Oil prices of $140 per barrel and the triggering **event** is the financial crisis and the "Great Recession." The **response** was global financial contraction and drop in demand for oil which in turn led to the **outcome** of $44 oil prices by the first quarter of 2009.

The resulting economic recovery takes old prices back to $120 by 2011 for a new **event.** This encouraged oil field operators to develop better drilling technology and extraction techniques so they could sell some of the $120 oil….the **response** to the higher prices. This led to development of oil fields in Pennsylvania and North Dakota and U.S. "energy independence." So as Saudi Arabia, Russia, Norway, Venezela and now the U.S. battle for market share, the **outcome** is the decline of oil prices from $107 in July of 2014 to $48 on January 9, 2015. That is a decline of 55%.

Human nature is more event + response = outcome. Gasoline prices of over $4 per gallon in 2007 and again in 2011 **(event)** led to the demand for fuel efficient hybrids and electrical vehicles (**response)** and government programs like "cash for clunkers" and mandated increased fuel efficiency. The **outcome** is that not only are Toyota and Honda making hybrids and electric cars but so are Chevrolet, Ford, and Chrysler, BMW and Porsche. New car companies like Tesla are having an impact on the business model of the auto industry.

With gasoline prices now about half of what they were in 2011, human nature kicks in. What type of vehicles are Americans buying the most today? Trucks and SUVs. **The event is cheaper gas prices which leads to the response of increased sales of gas-guzzling greedy** (granted these trucks get better than older models) **vehicles which eventually leads to the outcome of** ____________ (you fill in the blank).

Another different yet similar example of the effect of higher energy prices is the increased interest in alternative energies like solar power. High petroleum prices had no impact on solar energy until electric utility bills started to go up with threats to go up more **(event)**. This led consumers to install solar panels **(response)**.

This resulted in an increasing market which in turn led to more manufacturers and installers to enter the market which in turn leads to lower prices for consumers which encourages more consumers to install solar panels (**outcome)**. A secondary **outcome** is the increased use of solar power by consumers which in turn is impacting the amount of power that utility companies are selling. Utility companies are concerned about the profitability of their business model in the face of increased use of solar energy and are asking for rate adjustments to offset their lost revenue ----- it remains to be seen how this will play out in our regulatory environment.

Retirement Income Planning

Are you aware of how much money you need to have prior to giving up your job or business? Have you factored in the potential for needing medical / household assistance due to declining health with age? What about replacing vehicles, travel, and the unpredictable but inevitable "stuff happens?"

If you have any doubt if you have enough money, call me and we can arrange to get together and have a discussion about your situation.

Event + Response = Outcome

Market Volatility

Do you have a financial plan and an investment policy? Or do you make investments when things feel right? Or buy a stock because you like to shop at the company's store or use their products?
Event + Response = Outcome

Think about it for a moment. Would you start to build a house without blue prints? Without knowing how much it will cost? Or what it will look like when it is finished? No you wouldn't. Yet if you don't know how much money you will need to support the last one-third of your life, that is exactly what you are doing.

Event + Response = Outcome

Think about it. You are not feeling well and go to a doctor who takes one look at you and says that you will be scheduled for surgery the next day and will start chemo in a week. When you ask the doctor why, the response is "I am feeling very good about the your prospects of having successful surgery tomorrow and we can further insure the success of the surgery if we follow it up with chemotherapy. Would you trust the rest of your life to this treatment plan?
Take a look at the value of the S&P 500 on some random dates I selected.

	S&P 500	% Change
My date of birth (1953)	24.8	
21st birthday	84.7	242%
When I got married (1979)	108	28%
First child born (1984)	181	68%
Second child born (1987)	321	77%
Dot.com BOOM (2000)	1469	358%
Crash following BOOM (2002)	815	-45%
One year later	995	22%
Next peak (2007)	1526	53%
Finacial crisis "Great Recession" March 2009	677	-56%
One year later	1139	68%
January 2011	1325	16%
US debt downgrade August 2011	1119	-16%
Six months later (Feb 2102)	1361	22%
NOW (January 2015)	2044	50%

What if you never invested in stocks and just kept all the money in the bank? Then unless you have a huge pile of cash and modest lifestyle you may have a higher than normal of probability of dying broke.

If you invest based upon emotions, feelings, hunches, you are subject to all of the biases I read about in the behavioral finance textbooks. This could lead you to sell at market lows, not invest when financial worlds look scary or worse yet, sell when the market "feels like it is just too high."

What if you rode the market down to the low of 677 in the financial crisis and decided to stick it out until it went back up. Then sold at 1,139 one year later (you are up almost 45% of the bottom) and went to cash? But maybe not and held out to January 2011 to the S&P of 1325. But gosh that is really high and maybe it cannot go up more so you sell.

Or maybe you stayed fully invested and then by August of 2011 with the U.S. debt downgrade and the federal government shutdown you get spooked and sell out at 1,119. Opps, six months later the market is at 1,361…..but at that point, your emotions get the best of you and "volatility fatigue" overcomes you and you say "I cannot stand it anymore, get me out." Double opps…..almost three years later, the S&P 500 is now 2,044 as of January 9, 2015.

Based upon emotion, guts and feelings…..good chance you will be wrong most of the time.

Create a plan. Determine what the rate of return is required to accomplish your financial goals. Create the asset allocation model that will accomplish your return needs within your risk tolerance range. Keep your eyes on the horizon and don't sweat the small stuff but above all don't overthink the market and believe you are really smarter than perhaps you may be.

Event + Response = Outcome

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