SPECIAL UPDATE
April 21, 2020

What Does a Negative Oil Price Mean for Diversified Investors?

We continue to hope that you and your family are safe and healthy in these uncertain times. Given the downward spiral in crude oil prices this week, we wanted to provide some clarity on the situation and how it impacts the overall market.

If you have any further questions, please don't hesitate to reach out.

The nationwide shutdown in response to the coronavirus has hit all corners of the economy, including the energy sector. The oil market made historic moves on Monday with the headline price of crude falling into negative territory for the first time. Meanwhile, demand has plummeted, supply has been rising, and storage capacity is reaching its limits. Below, we attempt to explain in simplified terms what is happening in oil markets and how it affects long-term investors.

Oil is still a critical input into economic activity with the International Energy Agency (IEA) estimating that global demand was roughly 100 million barrels per day prior to this economic crisis. With shutdowns across the U.S. and around the world, demand for oil has fallen sharply – by about a third according to some projections. The fact that Americans aren't commuting, airlines have cut flights, and businesses have temporarily shuttered means that there's reduced need for crude oil. While this decline in demand is likely to be temporary, it creates significant challenges for the industry nonetheless, as is the case with all other parts of the economy.

The oil market is also different from the stock and bond markets. Whereas a share of stock is a purely financial asset, holding an oil futures contract means you are buying 1,000 barrels of oil to be delivered at a later date. As with other commodities, companies that need physical oil on a future date can use these contracts to lock in prices today and hedge price movements as well. Of course, not all buyers of oil futures contracts need or want physical oil to be delivered. In normal times, financial investors who trade oil contracts simply sell their contracts and close out their positions before the expiration date. In doing so, they can make a financial gain (or loss) without dealing with the logistics of receiving, delivering or storing oil. There are even ETFs whose purpose is to do this for investors.

Alternatively, there may be situations where oil prices may be much higher at future contract dates (i.e. the oil futures curve slopes upward). In these cases, very sophisticated investors and companies could buy futures contracts at the lower price today, then later take delivery of the oil and store it (in a storage facility, on a tanker, etc.). They can simultaneously sell this oil, via longer-dated futures contracts, at the higher price and lock in a gain today, taking into account the cost of storage between the two delivery dates. Later, they deliver the oil they stored for the buyer of the longer-dated contract, fulfilling their obligation.

Unfortunately, all of these dynamics broke down this week due to multiple factors. First, demand has dried up due to the economic shutdown as described above. Second, supply has remained high due to disagreements between large producers, namely Saudi Arabia and Russia. These countries only reached a deal over the past two weeks and are now considering accelerating their production cuts of roughly 10 million barrels per day. These cuts are insufficient to fully stabilize oil prices, but they could help toward keeping the global industry on life support. Third, supply and demand imbalance has resulted in a short-term glut of oil, which has to be stored. Over time, storage capacity fills up and it becomes incrementally more difficult and costly to store each barrel of oil.

This is why the May WTI futures contract fell to negative levels as it approached expiration. A negative price means that the holder / seller of a contract pays the buyer to take the contract (and physical delivery) off of the seller's hands. This occurred because 1) oil prices were very low to begin with and 2) there was a squeeze in the market whereby there are fewer buyers who can take physical delivery and either use or store the oil. Note that contracts beyond May are low, but not in negative territory - the June contract closed at $20 on the same day. Over time, this price could come down to converge with spot prices as well, depending on the dynamics of the oil industry.

There are both short-term and long-term impacts of what has happened in oil markets in recent weeks. The fact that oil prices fell into negative territory is likely to be a short-term phenomenon due to the mechanics of how oil trades. However, the fact that oil prices are low, and the fact that there are significant supply and demand imbalances, could persist for some time. As with everything else at the moment, this depends critically on if, when, and how the economy reopens in the coming months.

How does this impact long-term investors? For those who are properly diversified, the energy sector now only accounts for 2.7% of the S&P 500's market capitalization. This is because energy stocks have faced significant difficulty since oil prices began to plummet in 2014. Going forward, even large swings in energy prices and energy stocks will have a considerably smaller impact on overall index values.

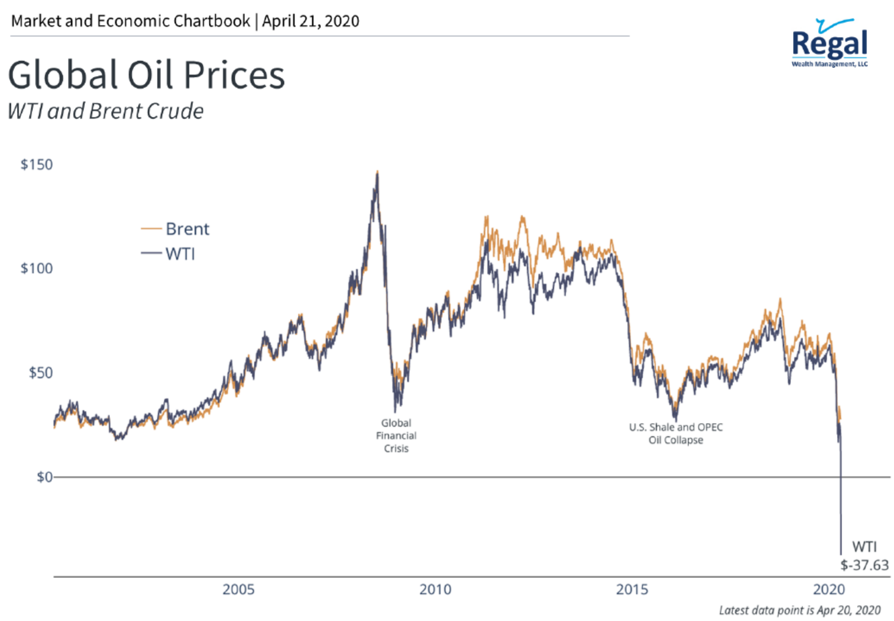
In general, cheaper energy prices are positive for U.S. consumers and the economy overall. Since lower energy prices reduce the cost of products and services both directly and indirectly, the emergence of the U.S. as a major energy player has been positive for consumers. For instance, as one of the charts below shows, gasoline prices were already well below average even before this crisis began. Additionally, the White House is reportedly planning to buy oil at these levels to potentially add 75 million barrels to the nation's Strategic Petroleum Reserve.

Of course, the aggregate numbers mask the serious challenges faced by individuals and businesses who directly and indirectly work in the energy industry. These areas will likely face ongoing challenges similar to other industries shut down by the coronavirus.

While the negative price of oil has captured the attention of investors and headlines, the longer-lasting implications will depend on how quickly the economy gets back on track. Long-term, diversified investors should seek to stay disciplined and see through these temporary developments as the coronavirus crisis evolves.

1. Oil prices have plummeted, even falling into negative territory due to technical factors

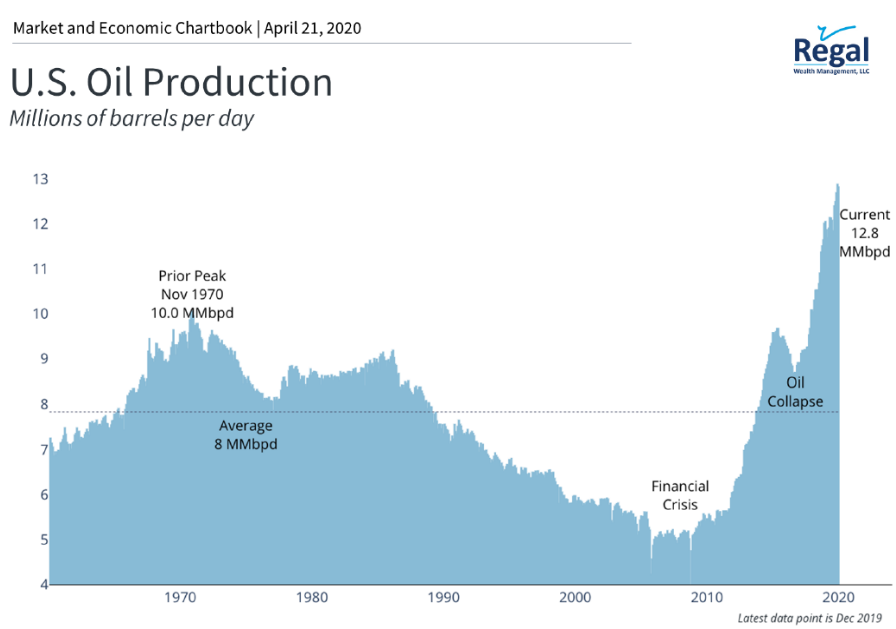
Global Oil Prices



Oil prices have fallen due to the economic shutdowns that have resulted from the coronavirus pandemic. The drying-up of demand and a glut of supply have pushed both WTI and Brent below levels last seen during the 2014-2016 period. WTI prices even fell below zero due to a technical squeeze stemming from limited storage capacity.

2. The U.S. is a leading global producer

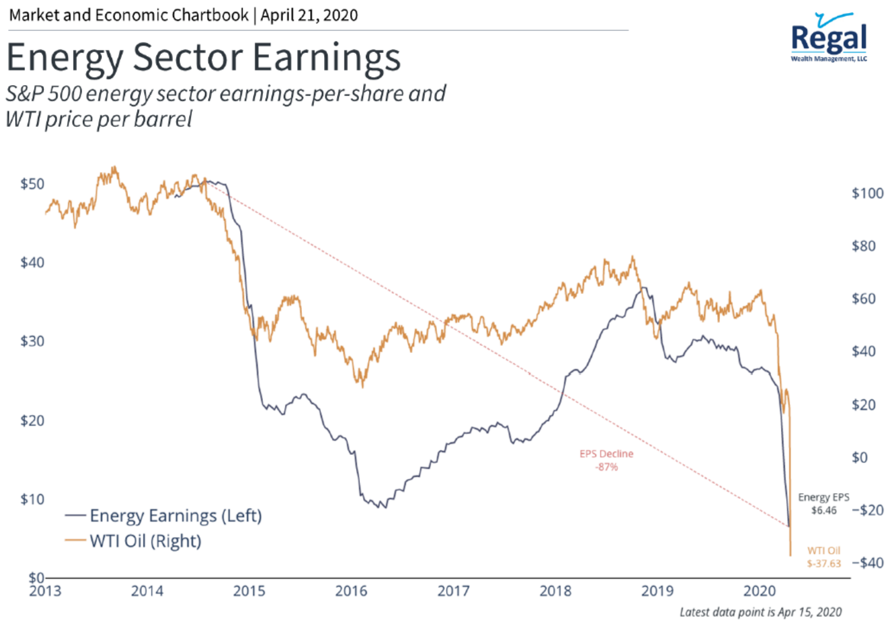
U.S. Oil Production



The U.S. energy renaissance of the past decade has seen U.S. energy production climb steadily. The U.S. produced about 13 million barrels per day prior to the coronavirus crisis.

3. The energy sector's earnings are tied to oil prices

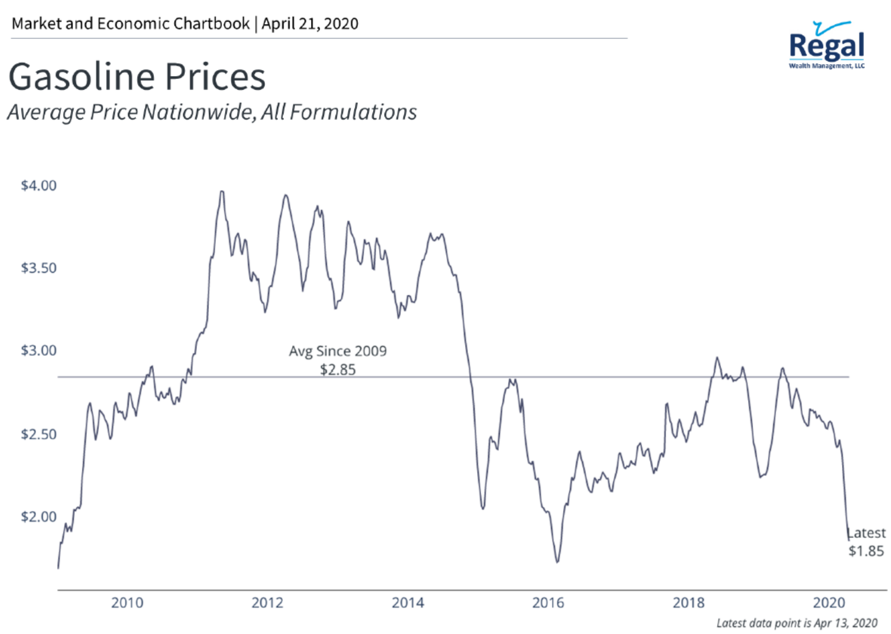
Energy Sector Earnings



It's no surprise that the health of the energy sector depends heavily on oil prices. Oversupply and plummeting demand are expected to significantly reduce the sector's earnings over the next year. Since the last oil price peak in 2014, the sector's estimated earnings-per-share have declined by about 87%.

4. In general, lower energy prices are good for the U.S. economy and consumers

Gasoline Price



As an input into everything we buy and use, lower oil prices are generally positive for the U.S. economy as a whole. Gasoline prices, for instances, were already below average before the economic shutdowns hit. Cheaper energy prices *effectively translate into more money in the pockets of all Americans - good news for when the economy eventually reopens.*