

The New Oil Paradigm

This past January, I wrote an Armchair essay entitled, “Is Oil Over?” Unlike all other Armchair essays, I didn’t notify readers it had been posted to the Armchair site. After all, its message—lower for longer—was not what any of us tied to the oil and gas business wanted to hear so soon after the holidays.

The end of the year holidays kick off with that wonderful Thanksgiving feast many of us spend with family, followed by a season of merriment and almost unavoidable gluttony. But this past holiday season was also kicked off with the Saudis declaring they would no longer act as the swing producer of oil. The Saudis, they made known, would no longer decrease production to hold up the price of oil for everyone else. Instead, they would let the market decide an appropriate price.

The holidays are so consuming that few of us fully digested the implications of what the Saudis had done. But as this year has unfolded, a new normal reality for the price of oil has become harder and harder to deny.

At first, the general mood was this too shall pass, and pass swiftly because all it was going to take was for US producers to reduce their capital investment, causing the production of oil to fall, which would drive the price higher. Literally everyone was sure that by the second half of 2015, the price of oil would return to a much more favorable level. This was certainly the “hopium” talking.

My January “Is Oil Over?” essay provided a significantly different perspective. Fearing that people would shoot the messenger or accuse me of being out of touch with reality, I chose to share the essay with only a small number of close friends. Today, though, its message rings much clearer; the new normal for oil looks more and more like it will be lower for longer.

The natural instinct for human beings is to think today more or less how we thought yesterday. Step change is something very few can see as it’s happening. It’s often only with hindsight that we can recognize a shift occurred. Now, several months after the Saudis dropped their turkey at Thanksgiving, we seem to have gained some hindsight.

In just this past couple of weeks, we have seen an avalanche of essays from all manner of well regarded financial, investment and economic pundits suggesting that with oil we are truly in a new “lower for longer” normal.

Some essayists have centered on how innovation and technology have unleashed supply. Others have commented on the enormous amount of capital on the sidelines that would make its way to zombie companies, allowing for more production to surface than if we let those zombies die. A good number of people have emphasized current global economic challenges holding back demand growth. And a few have rightly focused on the weaker global economic backdrop causing the dollar to rise, which naturally causes the price of oil to fall.

All of those influences, as well as a few others, were discussed in “Is Oil Over?” But the essay did miss two very large influences: the potential for Iran’s production to hit the market and the need for nations dependent on oil production to increase their production just to maintain cash flow. It goes to show us just how many factors can influence the price of oil besides the amount of capital investment reductions US producers make.

The central theme to my January essay was that too much supply was less the problem than more and more supply being cheaper and easier to get. In essence, we have reached a step change in the oil (and gas) extraction business.

The clearest indication of this step change is that in the US, it is highly unlikely we will drill a dry hole any time soon.

For younger readers, it should be pointed out that a generation ago drilling dry holes happened a fair amount of the time. When all wells were only vertical, and when geophysical data and its interpretation was still nascent, oil and gas producers drilled a good number of dry holes, as well as holes that proved uneconomic to produce. This has, of course, changed dramatically. Today there are so many places to drill for known reserves that capital doesn’t need to be wasted on a potential dry hole.

The current dynamic is less about the risk of dry holes and more about prices being at levels that could prove profitable for one’s investment. Today’s industry chatter is about investment only being profitable if oil is at \$90, or \$75 or at whatever price the last well drilled in a given area needed to be in order to pay a reasonable return. But what people have forgotten to consider is innovation and productivity.

In today’s world of ubiquitous information, instantaneous communication, big data and the analytical tools capable of solving all manner of problems, it doesn’t take much time to figure out how to turn \$90 oil economics into \$80 economics and then into \$70 economics. Technology and the new world order of data and efficiency are constantly working to decrease the cost of everything, including the cost to drill and produce oil (and gas).

So when we consider the “problem” with oil (and gas) today, we must realize that this industry is not immune to the enormous productivity increases that modern technology and communications have unleashed everywhere. We don’t just have an imbalance between oil supply and demand. We have a world awash in oil, a world where we know where oil (and gas) is and one where the cost to get at it is becoming cheaper by the day, which makes it ever easier to increase supply.

Alongside of our too-easy and ever-cheaper-to-get-at supply comes an unsettling demand dynamic, most specifically for oil.

Over the course of the last three decades, China has been a significant economic engine for the global economy. A few years after President Nixon’s visit, the country started to move

out of its Dark Age socioeconomic period and into the global market economy. China's economic emergence proved hugely simulative to the global economy.

But as we have recently seen, China's economic growth is slowing so considerably that they decided to devalue their currency. We should not consider this an event unique to China. Both the Japanese and EU central banks are working hard to devalue their currencies in order to make their own economies more competitive in the global market. China is only reacting to the competitive pressures they see from other struggling global economies.

Slowing global economies do not make for worthwhile increases in the demand for oil, nor many other commodities for that matter, as evidenced by so many commodity prices falling measurably in the last few months. Perhaps even more important is that weakening global economies drive more capital to the dollar, the world's reserve currency and the currency in which oil and other commodities are priced. The higher the value of a dollar, the lower the price of oil.

No matter how much US domestic capital investment falls, and no matter how much it causes US production to fall, the bottom line seems to be that neither the dynamics of supply nor demand for oil is in a position to drive its price higher.

Lower for longer, the reality more and more people are struggling to come to grips with, may not play out in a mere 12 to 18 month period. Prices for oil, and quite possibly also for gas, could be lower for much longer. Over the last three decades, global demand growth combined with technological innovation and cheap capital created such a gold rush that today there is no need to talk about peak oil.

Can a market price rise well above the marginal cost to produce when there is an almost endless supply of product?

As with the end of all gold rush periods, there will need to be some serious consolidation in the oil and gas extraction and the oilfield service and supply markets. This process will likely increase in momentum as lower for longer persists.

Markets always have an over capacity of "picks and shovels" when gold rush periods come to an end. It will be difficult for companies in the oilfield service and supply industries to regain any control over pricing and margins until the industry reduces down to a handful of "big fish in small pond" providers. A big fish in a small pond has some control over pricing, while a small fish in a large ocean has no control over anything.

Over capacity in the oilfield service and supply market should keep the cost of drilling and production reasonable, while innovation will continue to add ever more barrels of production for every dollar of investment. Whether oil is at \$90 or at \$50, the best assets combined with the best management teams will likely still earn worthwhile profit.

The oil and gas business isn't going away any time soon. It's just going to experience a typical post-gold rush period of consolidation and re-rationalization of resources, capital

and people. And thanks to today's never ending push of innovation, those oil and gas companies that survive will likely earn even higher profits than they did when oil was over \$100 a barrel.