OPEN SQUARE CAPITAL

11281 Kensington Road, Los Alamitos, CA 90720 | Phone: (949) 870-5365
E-Mail: nwu@opensquarecapital.com | Web: www.opensquarecapital.com

January 5, 2018

Dear Limited Partners,

"*When the well is dry, we know the worth of water.*" - Benjamin Franklin

We are on the cusp of the next oil super cycle. Period. Full stop. Almost every data point that we've collected and analyzed this year points to the fact that as inventories draw further, oil prices will inflect sharply before production can or will recover. We've said that underinvestment in the face of low oil prices will inevitably lead to a reckoning, and 2017 proved that to be correct. This was a historic year, where in the history of oil data tracking as we know it (encompassing three decades), inventories have never declined as much as this year, and the rate of that decline continued unabated as we ended the year. Despite the pundits, the market experts and the noise, we've held firm because "lower for longer" is proving as shallow of an analysis as "this time is different."

Guess what? This time isn't different. In the market, this time is almost never different because people act and react the same. More importantly, the incentives that drive them rarely changes. Have capital and generous lending terms? Drill baby drill. Lose money amidst low prices? Restrict liquidity and tout "value over volume." Lower prices have sown the seeds of its own demise, and just as the remarkable decline of oil prices from $100 to $26/barrel became untethered from reality, the rise of energy prices will follow a similar path. A rationally based, fundamentally induced, price increase will give way to an emotionally driven rally when oil crosses the threshold from a supply shortage to an inventory shortage. World thy name is scarcity . . . get acquainted.

**Our Q4**

While we benchmark ourselves against the S&P 500, our energy concentration is driving our overall performance. Where energy prices go, we'll likely go, and for most of 2017 that was sharply lower. Fortunately, we were able to salvage the year by finishing slightly positive.

| Date | Open Square Fund I Performance (2017)* | S&P 500 Performance (2017) | Outperformance / (Underperformance) |
|---|---|---|---|
| January 1 – December 31 | 0.92% | 21.83% | (20.91)% |

* Net of fees.

Regardless, the broader market raced ahead and we failed to keep up given our concentration of energy holdings. Energy finished the year as one of the worst performing sectors, and for comparison the basket of oil producers (i.e., the ETF:XOP) ended the year down 9.3%. Even as oil prices rose, energy stock prices decoupled from the underlying commodity and the gap never closed. Despite these headwinds, our minor gains were thanks to some prescient portfolio reallocation heading into year-end. Much of our focus in Q4 has been priming and positioning ourselves to participate in the inevitable rise, and we can now do so without having to recapture significant losses.

Ultimately though, we benchmark against the S&P 500. Our goal is to outperform the index, and we believe taking this contrarian investment thesis can achieve stellar returns. We've been patient, but we're ready, it's time to ride the wave in 2018 because our time is now.

**Energy in the New Year**

Oil inventories have been drawing since mid-2016, and fell off a cliff in 2017. Make no mistake, this will continue absent a dislocation in the global economy. The material drawdown in oil inventories has shifted the burden of proof. We were one of the few funds to publicly make the case that today's oil prices are unsustainable, and inventory levels have proven us correct. We no longer need to prove if there will be a shortage, that scenario is already upon us. The question now shifts to how soon can producers increase production to mitigate the decline, and how high will oil prices rise in the meantime.

*Riding a Wave of Liquidity*

While our fund focuses on the fundamentals (i.e., earnings, return on capital, etc.), it doesn't mean we ignore liquidity. Here's a quote from the famous investor Stanley Druckenmiller, founder of Duquesne Capital Management:

> *"[E]arnings don't move the overall market . . . focus on the movement of liquidity . . . most people in the market are looking for earnings and conventional measures. It's liquidity that moves markets."*

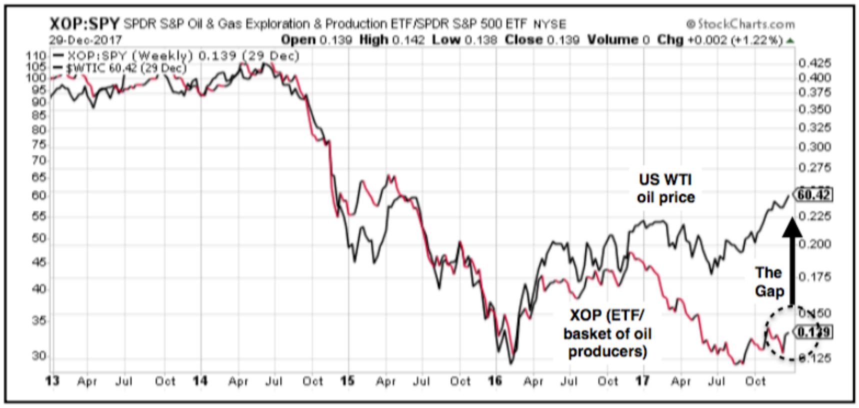
Liquidity is capital flow, it's the wave of capital that can inundate and run-up the price of assets to once unthinkable levels (look no further than everything bitcoin related). It can also retreat, leaving abandoned assets and crestfallen investors when it recedes. As we described in our Q1 2016 letter

> *"Investors will push and pull capital in an attempt to maximize risk-adjusted returns. They direct it to asset classes that exhibit stronger growth, which usually translates to higher demand, increasing prices and healthier returns. So when so much capital flows from one asset class to another chasing returns, it builds momentum like a wave."*

Most fundamental investors ignore liquidity mostly because it's the focus of traders, but in reality, whether liquidity (or the flow of capital) returns to a distressed asset will spell the difference between investing an an undervalued assets that recovers or a value trap. For us, we use fundamentals to preposition like surfers for the next wave. We'll paddle to where we think the liquidity wave will form. Sometimes we'll be there too early and have to paddle hard just to stay in place, but if we're reading things correctly, we're about to ride a monster one.

In the energy space, the flight of capital explains why energy asset prices have yet to recover, and the decoupling we noted above. The initial energy wave we caught in late-2016 turned into whitewash. As investors rushed into energy following the OPEC/Non-OPEC agreement to curtail production, high inventories prevented oil prices from climbing. For reasons we detailed in our prior letters (OPEC destocking leading to a Q1 build, investors sentiment, and US shale production growth), persistently high inventories took time to bleed down, and in a rising stock market, patience became the rarer of commodities.

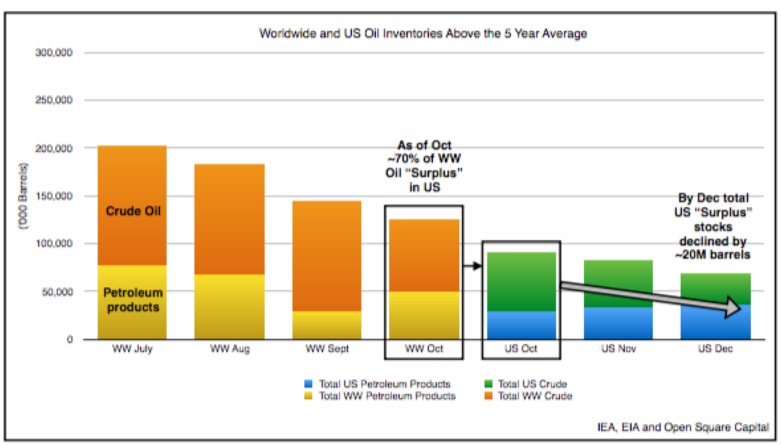
Energy investments are still a very deeply contrarian investment. According to the Wall Street Journal, about $800M flowed out of energy-focused equity funds last year through November. Numerous energy and commodity funds closed, which exacerbated the declines in 2017, leaving few specialists to bid up the price of these assets and reduce the outflow of capital. We previously showed this chart last quarter, but we've updated it here to the year-end.



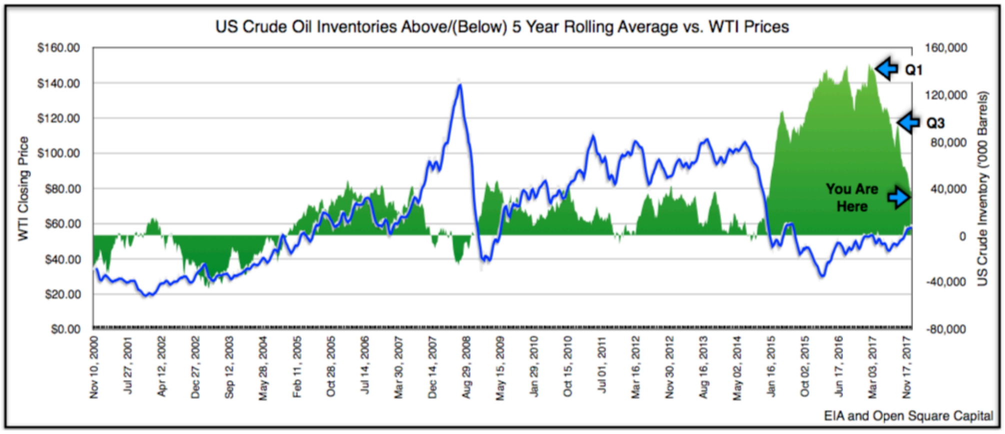

The top line represents oil prices (WTI) and the bottom line the ETF XOP (the basket of oil producers). The gap between how energy prices have performed vs. energy stocks remains significant, but it will eventually close when investors look for assets to play rising oil prices. Improving oil fundamentals begets higher oil prices and higher oil prices begets rising asset prices. This chain of events is inextricably linked, which is why we've stayed with our thesis despite our results.

*Our Chain*

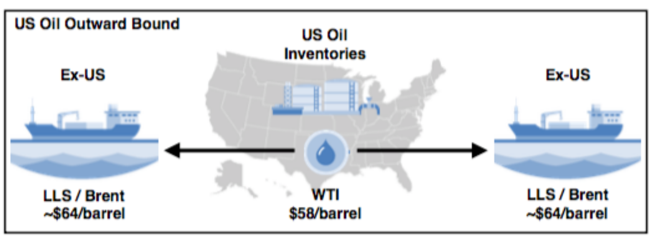
The first link in our chain has already been cast. Oil inventories are falling precipitously. Last year the world reduced excess inventories by close to 240M barrels, or almost 650K barrels per day ("bpd"). As of October, approximately 125M barrels remained and almost 70% of that was stored in the US. More recent US data indicates that even this 70% has fallen by over 20M barrels, which indicates that worldwide excess inventories are now below 100M barrels.



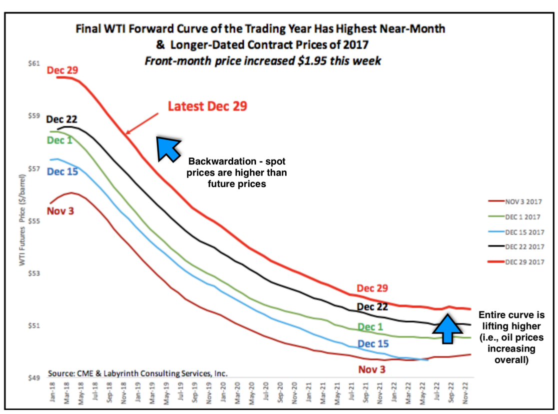
Undoubtedly, the global supply shortage will make short work of that in 2018, and the market will be rebalanced. Today, US inventories represents the last bastion of storage, and it's running on fumes. Here's another updated chart that shows the decline of excess crude inventories in the US.




What took almost three years of effort and capital to stockpile has taken less than nine months to draw. Much of this draw is coming from higher exports as strong international demand have pushed international oil prices higher than US oil prices (i.e., Brent vs. West Texas Intermediate ("WTI")). Currently, Brent prices are $6/barrel higher than US WTI prices. Thus, traders will rent tankers, buy US oil and resell it outside of the US, pocketing the difference (less transportation and storage costs). Have a 2M barrel oil supertanker? Make $12M (less a few million in rental costs). Here's an illustration at year-end.



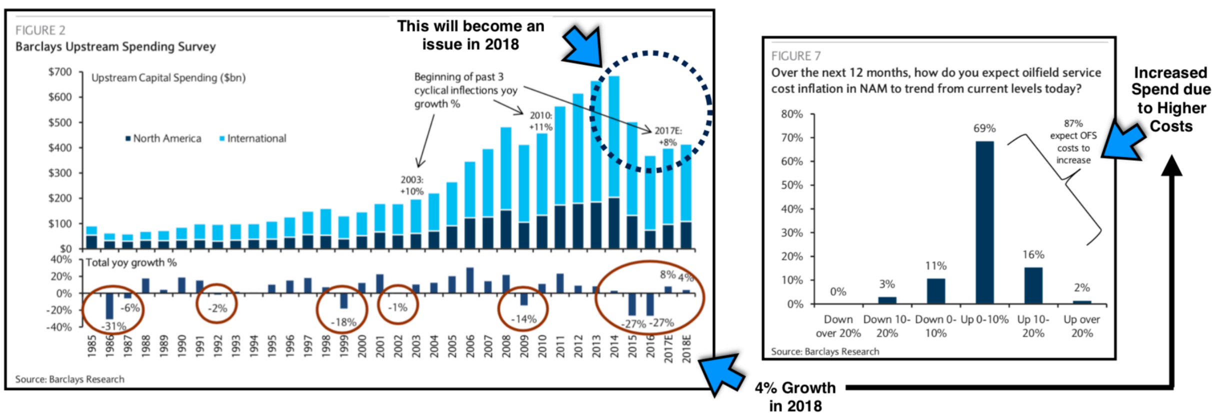

This $6 per barrel delta has existed since last quarter, which means the shortage/demand outside of the US is persistent. As inventories decline, the entire price curve is now lifting higher. Makes sense right? Low inventories, higher prices.



In 2018, the oil market will blow past being "balanced." The global supply deficit will remain until new production is coaxed online by higher oil prices. Until then, this daily supply shortage will morph into an inventory shortage, and that's the difference between your car running low on gas versus the gas station running out of gas. The former engenders a sense of urgency, but the latter a sense of panic. Accustomed to years of low oil prices, when the price inflection happens it will be fast and surprising. When scarcity forces oil prices to inflect, the decoupling between energy prices and energy stocks will cease as the wave of liquidity returns. We'll be ready for it. The world, however, is anything but because what it doesn't know is that there's no one coming to save it.

**Tragedy of the Common Goal**

We're now past the point of no return, that finite period in time when the world could have, but failed to, reinvest in energy development to arrest declines. There was no appetite to do so, for political reasons (Saudi Arabia and Russia) and economic reasons (producers worldwide), and why would there be when everyone is losing money? In Barclay's mid-year Upstream Spend Survey (conducted in August 2017), we see this tepid desire play out. This survey of 200 major oil producers indicates that in 2015/2016 oil companies globally halved their spending.




While 2017 spending appears to increase by 8%, we see on the right side that most of this increase was absorbed by service cost inflation. With numerous oil service providers having consolidated or liquidated in the downturn, the survivors now have pricing power. As we look to 2018, the Barclay's survey indicates another year of anemic growth, which again factoring in inflation is largely flat. Three years of underinvestment, and now likely a fourth.

If you think that's bad, wait there's more. Remember outside of shale, oil projects take years to develop and bring online. If oil companies fail to make such long-lead investments, decline rates will increase. Yet, what little spending that remained was redirected from long-lead projects to short-life shale projects in North America, which increased by 31% (dark blue portions of the graph above).

We already know that shale wells decline dramatically in their first year of operation, which means E&P companies will have to devote more of their future capital to such short-life projects just to maintain production levels. It's akin to running on a treadmill that tilts higher and runs faster the longer you're on it. You'll have to expend more capital and energy just to stay in place. Moreover, it siphons resources from large-scale projects with lower decline rates, projects that can form a bedrock on which to grow future production.

Even the US shale has limits though. Many analysts on Wall Street continue to claim that US production will keep rising, eclipse demand and lead to inventory rebuilding in 2018. Nonsense. In the past three years as oil producers pulled back, demand has raced ahead. Today, increasing demand is almost wholly being met by US production increases. As we showed in our last letter, by the end of 2018, demand will have increased by 6.2M bpd in the last three years, which means the world will need as much oil as US shale producers can pump.

In fact, any shortfall in US production will exacerbate the shortage. 2018 US production growth still looks aggressive to us because we think well productivity declines will begin to matter when the core sweet spots are drilled and secondary/tertiary drilling spots are brought online. Moreover, we think the recent push towards capital discipline could further slow US growth.

*Value Over Volume*


After years of spending beyond cash flows, E&P companies have lately faced a chorus of criticism from institutional investors. Tired of the unrestrained and largely unprofitable growth, shareholders have demanded that management teams focus on generating free cash flow, return capital, and peg management compensation to such metrics. Wall Street analysts dubbed the strategic shift "value over volume."

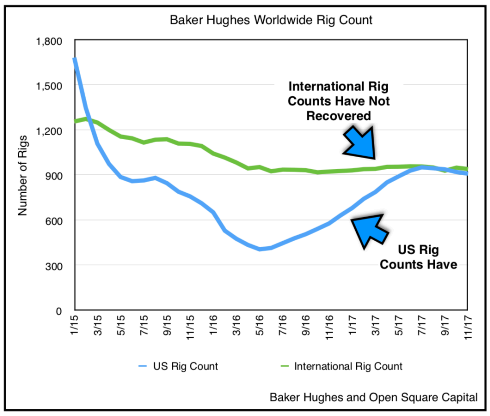
In Q3/Q4, "value over volume" became the rallying cry, and management teams began addressing the issues. The new mandate will only truly take hold when management compensation metrics are revised, but it appears that process has begun. In our Q3 letter we stated

> *"As companies gain scale and shale operators consolidate, further discipline will set-in, and shale production growth may become even more tempered. The Wild West of today eventually matures into the well-managed oil fields of tomorrow, and production growth inevitably falls."*

That discipline may come faster than even we anticipated as companies pivot from unrestrained growth to a workmanlike manufacturing process. According to consulting firm Wood Mackenzie, 30 companies account for 70% of US shale production, and if only a few commit to spending within cash flows, US production growth may slow from its blistering pace. Just like lenders, shareholders provide capital, and this is a prime example of shareholders telling management teams that the terms for their capital are tightening and the cost is rising.

**No Will and No Way**

Yet hyper-focusing on US production growth is akin to admiring the furniture on a sinking ship. The dearth of international investment and flat rig count tells you that production outside of North America will likely disappoint. Absent an increase in well productivity, international production will continue to stagnate, which means offsetting decline rates become even more difficult. Internationally, producers either lack the wherewithal or the will to increase production.




In 2018, the International Energy Agency ("IEA") projects that global oil supply and demand will be perfectly balanced at 1.3M bpd apiece. Much of the supply depends on US, Canada and Brazil growing. Growth in the first two countries are likely, but a 200K bpd growth from Brazil? Not so much, given that analysts had forecasted Brazil to also grow by 200K bpd in 2017, but it managed to eke out barely half that.

What's more likely to happen in 2018 is what happened in 2017. Demand growth outpaced supply growth because various Non-OPEC countries underperformed and acted as a drag on US/Canada production growth. Hence the deficit. 2017's deficit won't disappear just because the calendar turned, and any shortfall in 2018 will be accretive to the overall deficit we've been experiencing and erode inventories faster.

It's clear that US shale didn't simply displace more expensive foreign produced oil, it's threatening the very existence of some producers. By depressing prices for so long, maintenance capital has not kept pace to stem the decline rates. Worse, in some countries, prolific US production has politically and economically destabilized economies that depend on oil revenues to support their social programs.

The prime example is Venezuela whose oil industry is crumbling in real time as the political and economic structure implodes. Consequently, we've seen Venezuela's production output spiral downwards. While other countries such as Mexico or Brazil haven't experienced such political turmoil, production has stagnated, and in Mexico's case is declining, which means rebuilding these supply channels won't be easy, as it takes time to arrest the decline and even more time to increase production. More time than the world has, which brings us to our last point . . . no one cares.

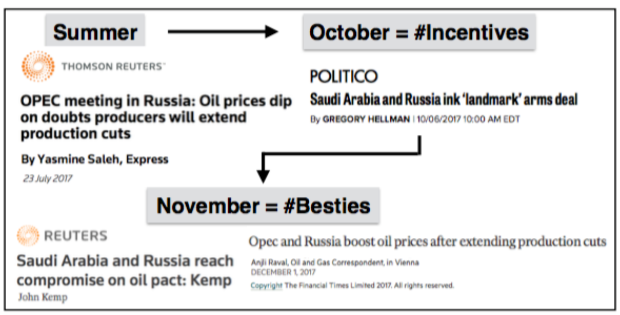
*Collusion*

In our Q1 2016 letter, my son Mason introduced us to the concept of liquidity and why that adds to volatility, but in a recent conversation I had with him, he wanted to impart on us the power of incentives.

**Mason**: I like mommy and Addy the best.
**Me**: Wait . . . what about daddy?
**Mason**: No.
**Me**: Want some candy?
**Mason**: Okay.
**Me**: How 'bout now?
**Mason**: I like daddy the best.
**Me**: That's the spirit.

Incentives work just as well in questionable parenting practices as it does in geopolitics, except you replace "candy" with money. As you may recall, OPEC and Non-OPEC countries, a collection of 24 countries representing more than 50% of the world's total oil output, agreed in November 2016 to cap oil production and rebalance the oil market ("Vienna Agreement"). OPEC and Non-OPEC members met again in November 2017 and agreed to extend their accord for the the entirety of 2018.

Frankly, we anticipated this outcome because the participants all had mutually aligned interests. When Saudi Arabia's King Salman visited Russia in October we knew the deal was done because shortly thereafter, the two countries announced that Saudi Arabia would invest in various Russian led energy projects and acquire Russian made weaponry (i.e., "candy").




The economic inducements were undoubtedly a means to solidify Russia's continuing support . . . Mason would be proud. This was critical for Saudi Arabia because the oil market is still rebalancing, and given its plan to list Saudi Aramco in an initial public offering ("IPO") in 2018, it needed further certainty that oil prices were headed higher.

Saudi Arabia, along with its Gulf Coast partners, carries the major burden of the cuts. So as the largest OPEC producers there's a high likelihood that OPEC compliance will remain high. For Russia, which carries half of the Non-OPEC production cuts, their sacrifice is and has been significantly smaller. Russia's 300K bpd production cut is small relative to OPEC's entire commitment, and given the other economic inducements, it's essentially a free rider at this point.

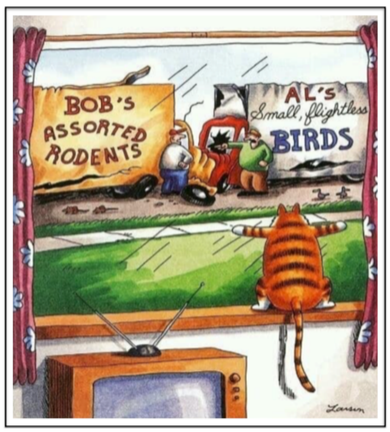
By the time the Vienna Agreement ends in 2018, it will have blunted the impact of increasing US shale production. If you doubt that, just look at Russia's Minister of Energy Alexander Novak's recent testy comments on CNBC about US shale production:

> *"I am asked this question every interview and I have already answered it many times. This is not news for us. For some reason when people ask this question they seem to believe that we didn't think that shale oil would grow . . . . Either you underestimate us or you think we lack professionalism. I think that if you think we are professional you need to understand that we are including all this in our calculations."*

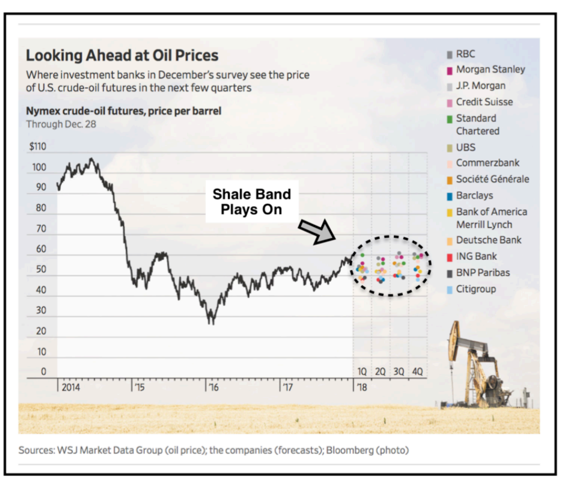
Now many commentators have discounted the Vienna Agreement as a mirage, a production cut in name only because prior to the 2016 agreement OPEC had intentionally overproduced and then set the ceiling at the higher production level. We agree to some extent, but in the midst of a shortage any foregone production becomes meaningful. In addition, the restraint and high compliance rate reveals much about the commitment level of these producers. The consistency bias is even stronger now that oil inventories have declined materially; success begets success and there's momentum to see the cuts through. We believe the market underestimated the group's resolve, and when producers accounting for over half of the world's oil production collude to constrain an already tight market, their unadulterated self-interest will become our tailwind.

**Parting Thoughts**

Some days we feel like this cat, but we know our time will come.




For all the tumult, disappointment, and capitulation around us, we're still confident because this is "lower for longer" paying out on Wall Street at the end of 2017.



As we write, Brent is hovering around $67/barrel, exceeding even the highest analyst forecast made a few weeks ago. If inventory trends hold, the analysts who've perennially called for "lower for longer" will revise their forecasts under the guise of new information, but the results will be the same. They will all chase oil prices higher.

Oil inventory declines haven't been small, they haven't been immaterial, and they haven't been slight. The drawdown was larger and faster than anyone, outside of a few outlier contrarians, predicted, and it will accelerate. Our oil thesis is very much intact for 2018, and as you've likely gathered . . . we're optimistic. Happy New Year everyone.

As always thank you for investing and please let us know if we can explain any of our ideas above in more detail.

Sincerely,

Nelson Wu
Managing Director