

## WINNERS AND LOSERS IN A NEW OIL ERA INTRODUCTION

It's certainly strange to consider now, but the price of oil traded above \$105 per barrel as recently as July 2014. Since that time a persistent and accelerating supply/demand imbalance and a meaningful appreciation in the U.S. dollar have conspired to drive a 75% peak-to-trough collapse in oil prices. The speed and size of this decline are nearly without precedent, as the second half of 2008 marks the only period in modern history where oil prices fell further and faster. Importantly, and somewhat surprisingly, capital markets are only just beginning to digest the first and second order effects of this significant shift in the energy landscape.

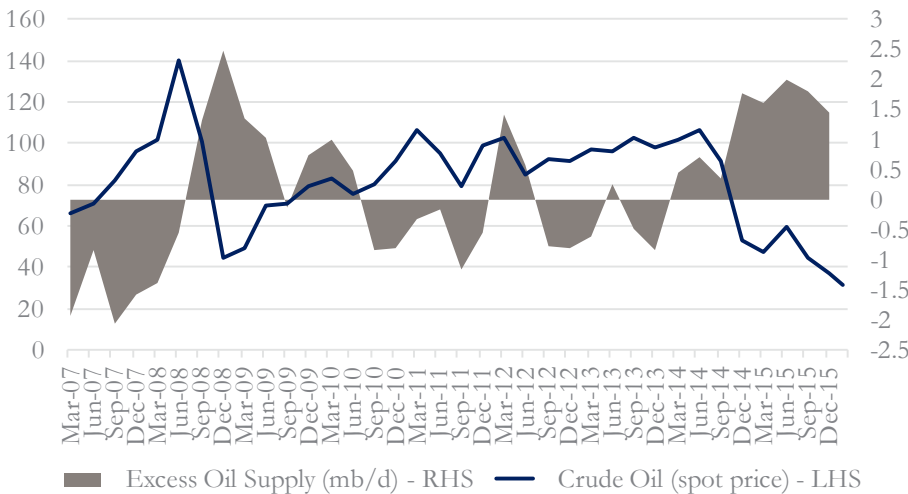
Investors must understand the drivers of past and future oil price movements, as well as the perceived winners and losers in a cheaper oil environment. Broadly speaking, Highland believes that lower oil prices are a net positive for the global economy, with particular benefits for energy consumers. However, select energy producers, service/equipment providers, and pipeline operators may suffer, as will nations that rely heavily on energy production to fund government spending initiatives.

## MARKET BACKGROUND

More than any other market force or factor, the surge in oil supply has had a profound impact on oil prices over the last 18 months. Total global oil production has grown by over 10 million barrels per day since 2009 to a current level of approximately 96 million barrels per day, driven primarily by non-OPEC production. While the demand for oil has also increased considerably over this time frame, it has clearly failed to keep pace with supply growth in recent quarters.

FIGURE 1

### CRUDE OIL PRICES VS. EXCESS SUPPLY



SOURCES: ENERGY INFORMATION ASSOCIATION; HIGHLAND ASSOCIATES



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The relationship between excess supply and oil prices carries several important implications for investors. While oil production has remained strong even as prices have collapsed, continued gains in supply may not be sustainable. On the demand side, investors must differentiate between physical demand and investment demand while also acknowledging that recent trends may not persist.

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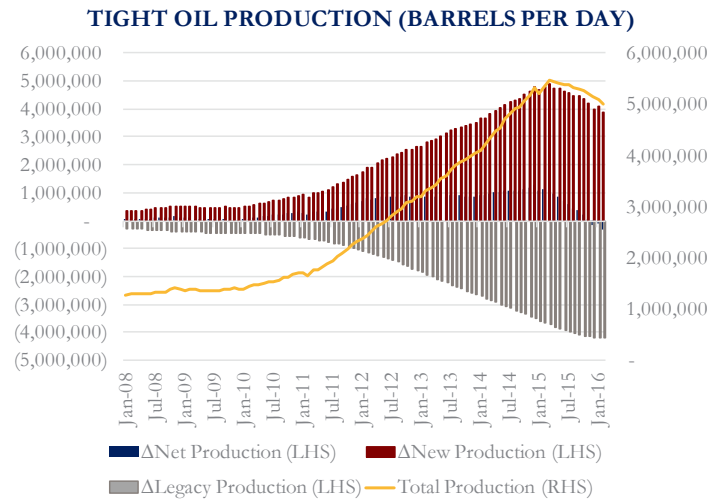
## SUPPLY FACTORS

An examination of the drivers behind increased oil supply is critical to understanding the past and future path of oil prices. OPEC has historically exercised considerable control over oil prices by determining maximum production levels among members and effectively acting as the swing producer for the commodity. The cartel enjoyed its status as the primary price-setter because non-OPEC producers seemed unable to materially increase their own output. However, in recent years, the increased adoption of hydraulic fracturing (“fracking”) technology has fundamentally altered the balance of worldwide oil production. Fracking has enabled the exploration and production of historically unconventional and/or inaccessible oil resources, most notably shale rock formations. This technology is also capable of extracting oil deposits at a rate substantially faster than more conventional drilling methods.

Oil production trends in the United States offer the best illustration of the power of these unconventional drilling techniques. Daily U.S. oil production nearly doubled from 5.5 million barrels per day in 2009 to a peak of 9.6 million barrels per day in 2015, as loose monetary policy and shale discoveries spurred substantial investment in the energy complex. So-called “tight” oil production of shale plays accounted for the overwhelming majority of production gains, as illustrated in Figure 2.

*While it was difficult to fully grasp the implications of this decision at the time, it is abundantly clear now that OPEC had openly declared an all-out price war on the highest cost marginal producers in the market, the U.S. shale producers.*

FIGURE 2



SOURCES: ENERGY INFORMATION ASSOCIATION; HIGHLAND ASSOCIATES

Until the summer of 2014, oil prices held up remarkably well in the face of these unprecedented production increases. By November of 2014, however, prices had fallen over 20% from their July peak, and many market participants expected OPEC to cut production to prevent further declines. Instead, sensing the significant threat posed by U.S. shale producers, OPEC chose to protect its market share by maintaining current production levels. While it was difficult to fully grasp the implications of this decision at the time, it is abundantly clear now that OPEC had openly declared an all-out price war on the highest cost marginal producers in the market, the U.S. shale producers. As the market came to terms with this development, oil prices naturally plummeted.

While OPEC has maintained production levels, unconventional production outside of the cartel has also remained quite strong. Motivations for both parties are actually quite similar. Both state-run oil producers in OPEC and private producers outside of OPEC have been forced to maximize production in order to generate cash flows to service obligations. As the economies of the OPEC member nations are not well diversified, they are overly reliant on oil export revenues to fund basic functions of government. Even with production levels relatively flat, total revenues for the cartel have collapsed from roughly \$1.2 trillion in 2012 to slightly over \$500 billion due to declining prices. Meanwhile, private producers must service the massive debt loads they accumulated during the production boom. Specifically, the Bank for International Settlements estimates that outstanding bond issuance by oil and natural gas firms skyrocketed from over

\$450 billion in 2006 to \$1.4 trillion in 2014. Syndicated bank loans to these companies exhibited a similar pattern, rising from \$600 billion to \$1.6 trillion over the same time frame.

Thus far, both state-run and private producers have succeeded in meeting obligations despite the dramatic fall in oil prices. However, there are serious doubts as to how long this can continue. While extremely low production costs have allowed many OPEC members to continue to turn profits on oil exports, these nations have begun raiding their sovereign wealth funds to close the revenue gap created by falling prices. In fact, the Sovereign Wealth Fund Institute estimates that in addition to over \$200 billion in redemptions in 2015, these funds may withdraw an additional \$400 billion in 2016 if oil prices remain below \$40 per barrel. This is clearly not a long-term strategy. On the other hand, private producers minimized their pain in 2015 through the use of hedges that allowed them to deliver oil at prices significantly in excess of the depressed current spot price. As most of these hedges will roll off in 2016, many private producers will struggle to make their loan payments unless oil prices rebound materially from current levels.

## DEMAND FACTORS

The demand picture for oil is less complicated. Despite highly publicized fears of slowing growth in both emerging and developed markets, physical demand has continued to grow. In fact, total worldwide demand grew by 1.6 million barrels per day in 2015, the highest increase in five years. Nonetheless, many market observers have expressed surprise that demand has not been even stronger. As it turns out, consumers' personal savings rates appear to have been the primary beneficiary of lower oil prices thus far. Nonetheless, to the extent that oil prices remain lower for longer, physical demand should continue to increase and could potentially accelerate.

Of course, a very important but often overlooked piece of the demand equation is investment demand. Historically, speculators have taken advantage of large price declines in oil by purchasing longer dated futures contracts in anticipation of a price rebound. In addition to potential returns from price gains, these speculators earned a roll yield because the oil futures curve has typically been in backwardation, where futures prices are actually below spot prices. Today, however, the oil futures curve is in steep contango, as futures prices are well above spot prices. As a result, investors today have little desire to hold long positions in oil. In fact, Figure

3 indicates a very tight relationship between the price of oil and investors' financial commitments to the commodity.

FIGURE 3



SOURCES: CBOE; EACTSET; HIGHLAND ASSOCIATES

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## A NEW EQUILIBRIUM?

Many of the supply/demand dynamics discussed thus far are reminiscent of and consistent with prior oil market cycles. For example, while it may seem counterintuitive that producers would respond to low prices by expanding supply, this is the historical norm. As alluded to earlier, state-run producers' principal concern is to keep revenue flowing to fund government programs, and they have typically tried to "make it up with volume" when price declines work against them.

So what's different this time, and what are the implications going forward? Most importantly, the United States appears to have usurped OPEC's long-running status as the world's swing producer of oil. This is an extremely important development because it completely changes the price-setting mechanism of the market. With OPEC's price war, the cartel has lost control of its ability to influence price. Instead, crude oil prices are currently being set in

the free market by marginal producers' cost of production. While that cost is slightly above \$50 today, technological advancements could drive breakeven prices closer to \$40 in the next few years.

Of course, a new equilibrium oil price of \$40-50 is by no means a foregone conclusion. Most importantly, recent gains in supply may not be sustainable, creating potential upward pressure on price. Many U.S. shale producers face considerable financial difficulty, as hedges are set to expire while debt payments must be made. Indeed, Highland expects that several of these higher cost producers will be forced to enter bankruptcy this year, resulting in significant disruptions to operations and thus production. At the same time, for those firms that survive, significant reductions in energy capital expenditures will likely drive declines in production. BCA Research notes that real fixed investment in the U.S. energy and mining sector has collapsed from a peak of \$168 billion in the spring of 2014 to just \$82 billion in the final quarter of 2015. On the other hand, further downward price pressure could come from increased supply in areas such as Iraq and Iran. In addition, to the extent that investors continue to accumulate net short positions in oil futures contracts, price may continue to fall.

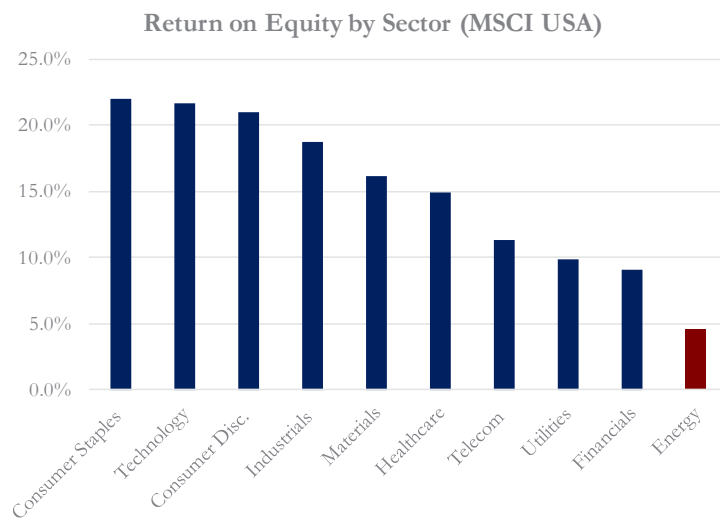
## INVESTMENT IMPLICATIONS: WINNERS AND LOSERS

Highland's house view is that oil prices are likely to be range-bound in the near to intermediate term. In terms of further downside price pressure, we believe that any future net production gains will be too small to meaningfully move the needle and that investors have already discounted the potential for such gains. Bankruptcies and drastically reduced investment may drive incremental reductions in supply, but declining marginal production costs should limit significant advances in price. Highland is less concerned with making a precise call on the price of oil and more concerned with understanding how current circumstances and future scenarios may ultimately affect client portfolios. Highland has identified several winners and losers in the new energy landscape.

Winners include economic growth in general and consumers and savers in particular. Cheaper oil prices support the broader global economy in many ways. For one thing, oil is a primary input cost in several industries, from packaging to manufacturing to transportation (among many others). Lower costs should ultimately allow better returns to shareholders in these industries, while also passing savings on to end market customers. In addition, as investment in oil production declines substantially, capital can

then be redeployed into more efficient areas. As indicated in Figure 4, energy sector returns on equity are dwarfed by every other sector in the MSCI U.S. Index.

FIGURE 4



SOURCES: MSCI; HIGHLAND ASSOCIATES

Individual consumers should also benefit significantly from lower oil prices. As mentioned earlier, sizeable increases in personal savings rates in the U.S. have occurred nearly in lockstep with the drawdown in oil. Although consumer spending increases have not been as robust as some economists predicted, Highland expects spending to accelerate as consumers gain confidence that prices will remain lower for longer.

Select energy producers and energy equities may also emerge as winners. While there is certainly no consensus regarding the attractiveness of energy stocks, many of Highland's approved equity managers have identified energy stocks with quality assets, limited financial and operating leverage, and low production costs. These companies appear well positioned to outperform their peers going forward.

Losers in the new energy era include high cost energy producers and pipeline operators, and their pain is likely not over yet. Deloitte estimates that up to one-third of producers could enter bankruptcy this year, although smaller sized producers represent the majority of those at risk. Pipeline operators, including master limited partnerships (MLPs), could also see continued challenges. The majority of these firms are already rated below investment grade, as they have struggled to maintain adequate working capital

and dividend coverage. Going forward, producer bankruptcies and reductions in production could drive significant declines in pipeline revenues, further exacerbating weakness among these firms.

Two recent developments illustrate the significant uncertainty that MLPs face going forward. First, a New York bankruptcy court judge indicated in February that she could potentially allow energy producer Sabine Oil & Gas to end its pipeline contract as part of its Chapter 11 bankruptcy agreement. If this were to become legal precedent, material declines in MLP revenues could force dividend cuts to investors. Secondly, the planned merger of pipeline companies Energy Transfer Equity and Williams Companies is in jeopardy due to funding challenges. Under the original agreement determined in September, Energy Transfer had planned to borrow \$6 billion to complete the transaction. However, as oil prices continued to decline, access to debt markets have dried up. Each of these situations have served to exacerbate uncertainty and undermine investor confidence in the MLP space.

## CONCLUSION

Thus far, the pain felt by commodity producers has outweighed the ultimate benefits to consumers. However, we expect this to change in the near future as bankruptcies and capital expenditure reductions bring more clarity to the capital markets. Highland has worked meticulously to structure client portfolios to avoid taking unnecessary and/or under-compensated risks, but we remain mindful that risks also bring opportunities. We will continue to monitor the situation carefully going forward.

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