INSIGHT AUGUST 2016

WINNERS AND LOSERS IN A NEW OIL ERA, PART II

HIGHLIGHTS

- Recent supply and demand trends illustrate perfectly the old market adage that "the cure for low prices is low prices."
- Going forward, the Fed's primary goal of engineering modest inflation should continue to be supportive for commodities in general and oil prices in particular.
- The vast majority of Highland approved equity managers favor energy companies characterized by quality assets, low production costs, superior technology, and robust balance sheets.

As human beings, we often take for granted the phenomenal power of markets. At their core, markets function as a medium in which buyers and sellers come together to exchange goods, services, or currency. In the process, market participants determine the supply of and demand for an item, which ultimately sets the price at which transactions occur. Nothing about this process is static. Each day, the objectives and motivations of market participants change and evolve. In any market, supply/demand factors and prices are constantly adjusting to new information.

In this update to Highland's Insight, "Winners and Losers in a New Oil **Era**," we will discuss the changing nature of the energy landscape, with particular emphasis on the impact of production and consumption trends, global economic activity, and central bank monetary policy. Recent trends and activity in the production and consumption of oil offer an excellent illustration of the dynamic nature of markets. For most of the last seven years, unprecedented technological advances drove astounding growth in oil production, especially in the United States, where oil production doubled in less than a decade. As consumption growth failed to keep pace, a significant imbalance in supply/demand quickly developed. This explosion of excess supply created substantial downward pressure on the price of oil, which fell more than 75% to a recent low of just over \$26 per barrel in February. While some market "experts" were forecasting further price declines earlier this year, astute observers were beginning to notice powerful evidence of adjustment in the supply/demand dynamic. Specifically, sustained low oil prices had begun to drive a slight decline in production, while new data also showed a stronger than expected increase in consumption.



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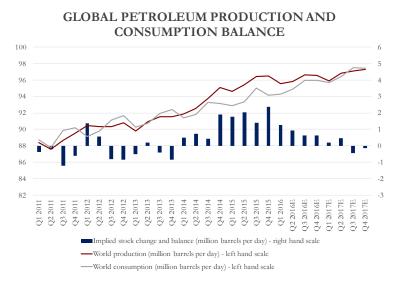
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OIL MARKET UPDATE

While supply and demand forces are certainly not the only drivers of oil prices, they are arguably the most powerful. As 2015 drew to a close, production gains in the U.S. had created the largest supply gap in the post-Global Financial Crisis era. However, as indicated in Figure 1, recent declines in production and continued growth in demand appear to be driving the market back toward equilibrium. In fact, the Energy Information Administration (EIA) forecasts a balanced supply/demand dynamic by the second quarter of 2017, while several oil producers expect this to occur even sooner. In fact, officials from Schlumberger recently commented, "The effects of the cuts that we have seen in E&P [exploration and production] spending are now clearly visible in falling oil production, and with demand remaining strong, we are heading more rapidly toward an increasing negative gap between global supply and demand for oil."

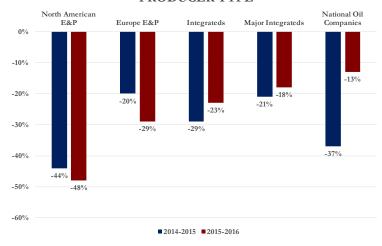
FIGURE 1



SOURCES: ENERGY INFORMATION ADMINISTRATION; HIGHLAND ASSOCIATES

Recent supply and demand trends illustrate perfectly the old market adage that "the cure for low prices is low prices." On the supply side, major oil producers around the world have responded to low prices with historically unprecedented cuts on capital expenditures, as many projects are no longer profitable at current price levels. As shown in Figure 2, every type of oil producer around the world has made substantial cuts to its capital spending programs. The magnitude of these reductions in capital investment is virtually unparalleled in modern history. FIGURE 2





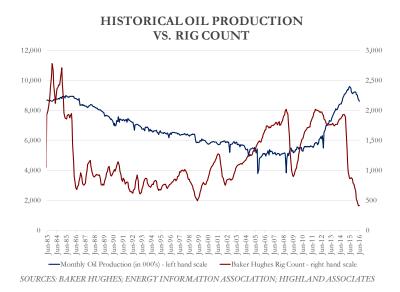
SOURCES: VAN ECK ASSOCIATES CORP; FACTSET; JEFFRIES GROUP LLC; HIGHLAND ASSOCIATES

Importantly, these spending cuts are only now just beginning to impact current rates of production, and the vast majority of capital budget cuts will only affect production in 2017 and beyond. Van Eck estimates that the total impact of these cuts will be the delay or cancellation of up to 13 million barrels of oil per day between now and 2020. (For reference, current worldwide oil production is just shy of 80 million barrels per day.) In addition, current production trends have already turned down. U.S. oil production - the greatest marginal driver of excess supply in recent years actually peaked over a year ago, and cumulative production in the Lower 48 states is expected to decline by more than 1 million barrels per day for the 2016-2017 period. So-called tight oil production in U.S. shale plays is especially sensitive to underlying oil prices, as these sources of production are characterized by high decline rates and short investment horizons. Outside the U.S., Canadian production has also declined materially, as the cost of extracting oil from tar sands is far too prohibitive at current oil prices. Wildfires have also contributed to production shut-ins in Canada. Within the Organization of the Petroleum Exporting Countries (OPEC), production has held up rather well, with particular strength in Iran more than offsetting weakness in Nigeria. However, nearly every OPEC nation is already producing at maximum capacity, which should limit further supply gains.



The Baker Hughes Rig Count offers another truly incredible example of the power of markets to adjust to changing conditions. As illustrated in Figure 3 below, the number of active oil rigs in the U.S. declined by nearly 80% in less than two years, peaking at 1,930 in September 2014 before falling to just over 400 in May of this year. This decline is a function of both the growing imbalance in supply and demand and the extraordinary breakthroughs in hydraulic fracturing ("fracking") technology that have enabled vastly more efficient production at the wellhead.

FIGURE 3



On the consumption side, low prices have also emboldened demand. The International Energy Agency (IEA) projects total global oil demand growth of 3 million barrels per day for the 2015-2016 time period, marking the fastest growth rate in five years. In the U.S., the Department of Transportation has reported a sharp uptick in total vehicle miles traveled, and that metric now stands at record highs. Gasoline consumption also continues to set records in the U.S, where sales of sport utility vehicles (SUVs) grew 15% in 2015, while sales of electric power vehicles actually declined 20%. Beyond the U.S., demand appears quite strong in Asia. China and India are projected to account for the majority of total demand growth in 2016. Total vehicle sales in China over the last 12 months total more than 25 million, an increase of over 5 million in just the last three years. Investment demand is also strongly correlated with oil prices. As indicated in Figure 4, an increase in aggregate holdings of long-dated futures contracts earlier this year coincided nicely with the strong rebound in underlying oil prices. The so-called "smart money" seems to have shrewdly anticipated the changing supply/demand fundamentals in the oil market and acted quickly to take advantage.

FIGURE 4



While current production and consumption data overwhelmingly support a move toward balance in oil supply and demand, there remains a significant buildup of inventory. The EIA estimates that crude oil and other liquid fuel inventories totaled roughly 3 billion barrels at the end of 2015 and projects a slight increase in 2016 before excess supply begins to draw down in 2017. Relative to total consumption, this inventory overhang should not represent a huge headwind. Nonetheless, it is likely to limit the potential for significant upward price movement in oil in the near to intermediate term.

Beyond supply and demand, global economic conditions and central bank monetary policy have also played an important role in driving a strong rebound in oil prices from their February lows. Specifically, concerns regarding a "hard landing" for the Chinese economy have dissipated. The government has continued to employ accommodative fiscal policy, and capital outflows from China have slowed dramatically since the beginning of the year. While China's "old economy" based on manufacturing and infrastructure



continues to exhibit weakness, the "new economy" based on consumption appears remarkably resilient. In developed Europe and Japan, growth remains below long-term trends, but strong support from central banks has helped instill confidence among consumers.

The U.S. Federal Reserve's continued dovish monetary policy has also contributed to stronger oil prices in recent months. As we have written before, the Fed is caught in a feedback loop that is making it difficult to raise interest rates in an uncertain economic environment. While the Fed began the year with an expectation of up to four interest rate hikes, they have yet to raise a single time, and the current probability of a single raise before year end is roughly 50%. With limited upward pressure on interest rates, strength in the U.S. dollar has been contained. As oil is priced in dollars, the lack of continued appreciation in the dollar has created a mild tailwind for the commodity. Going forward, the Fed's primary goal of engineering modest inflation should continue to be supportive for commodities in general and oil prices in particular. Of course, if U.S. economic growth accelerates relative to other developed and emerging economies, corresponding dollar appreciation could actually act as a headwind for oil.

MARKET OUTLOOK

It is clear that the supply and demand responses to low oil prices have helped propel the recent rally. However, the future paths of production, consumption, and underlying oil prices are anything but certain. If central bank monetary policy remains accommodative and global economic growth accelerates, the related inflationary effects should support higher oil prices. At the same time, higher economic growth would likely spur stronger than expected growth in oil demand, which would also support higher oil prices in a supply-constrained environment. On the other hand, if global economic growth continues to struggle at belowtrend levels, growth in oil demand could decelerate. Stronger than expected production represents another scenario in which oil prices may be biased to the downside. While meaningful production gains may seem unlikely due to dramatic capital spending cuts, this could be largely offset by continued technological advances that drive increasingly more efficient production.

HIGHLAND'S VIEW

Highland believes that client portfolios can be adequately prepared for these competing scenarios. First, fixed income allocations can be structured to act as their intended "safe haven" in the event that economic growth struggles and energy prices fall. This is accomplished by focusing on traditional core fixed income sectors and limiting a portfolio's exposure to high yield debt. These highly levered energy companies account for roughly 15% of the Barclays High Yield Corporate Index but have accounted for 71% of all defaults over the trailing 12-month period. Second, investors can be selective in regards to the types of energy company stocks they own within their equity allocations. Specifically, they can overweight energy companies characterized by quality assets, low production costs, superior technology, and robust balance sheets. On balance, such companies tend to be less sensitive to underlying oil prices and less volatile during uncertain environments. Finally, investors can take advantage of higher energy prices through direct exposure to commodities and commoditylinked equities. These assets have performed remarkably well year-to-date as oil prices have climbed. The Dow Jones Commodity Index has rallied over 14.2% on a year-tobasis through June, including a 24% gain from its January trough. The MSCI ACWI Commodity Producers Index, which comprises global companies in the energy, metals, and agricultural sectors, is up 20.6% year-to-date through June. Today, on a cyclically adjusted price-to-earnings basis, commodity producers are trading 64% below their average valuation, implying substantial upside from these levels. While recent strength in this commodities index has yet to recover the substantial losses of recent years, it does illustrate the benefits of a diversified portfolio of non- or low-correlated assets.

Under either of the two competing scenarios outlined above, we could see upside and downside moves in security prices. We would not expect to see the huge swings we saw from either the oil market top in 2014 or the trough earlier this year. Of course, we never take for granted the market's remarkable power to surprise us. To that end, we will continue to anticipate and prepare for a variety of outcomes.



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