DECEMBER 2014

Over a Barrel

A special report by the Portfolio Advisory Group

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RBC Wealth Management™

OIL MARKET OUTLOOK

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The rising threat of U.S. shale oil has been a major concern amongst energy investors for several years. At this time last year, we saw the impact of shale oil as becoming meaningful and likely contributing to a surplus in 2014. With continued rapid development this year, the vast resources of oil bound up in shale formations have been unlocked in size and have begun to impact the global market. While rising supply has been in focus, faltering demand growth and geopolitical considerations could be even greater concerns.

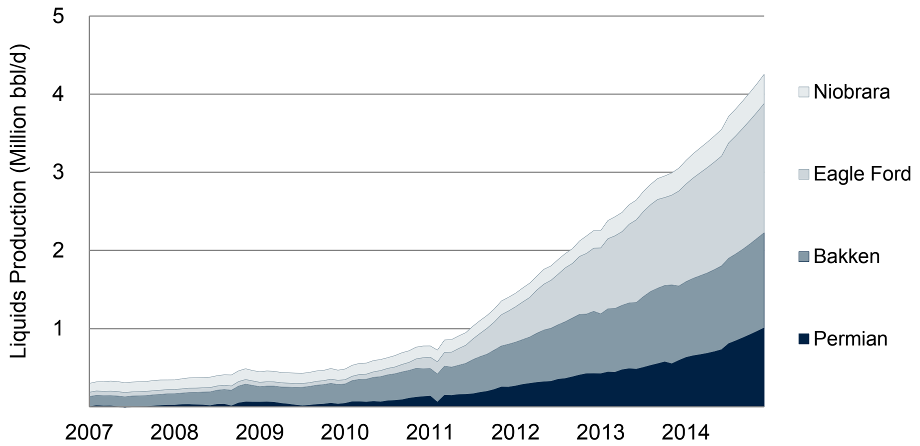
Against a backdrop of relentless U.S. shale oil expansion, a slowdown in global oil demand coupled with a flush of production from Libya and the threat of higher volumes from Iran has led to a steep price decline. In the wake of U.S. quantitative easing winding down, the negative impact of a rising U.S. dollar on commodity prices in general has also pressured oil.

Commodity markets are determined at the margin. The price of crude oil has tumbled about 40% on a surplus that industry experts estimate at just 1%, or 800,000 bbl/d on a global market of 92 million bbl/d.

SUPPLY – SEVERAL MOVING PARTS

In addition to strong U.S. supply growth, which has expanded by about 1 million bbl/d for each of the last three years, there have been two recent potential sources of significant supply awaiting relief from political constraints—Libya and Iran. The former saw a surge in output during the late summer and early fall, driving the global market into surplus. Supply from Iraq, OPEC's second-largest producer, has been another key source of uncertainty this year given insurgency from ISIS.

U.S. Shale Oil Production



Source - EIA, RBC Wealth Management

Rapid shale oil production growth has thundered forward in 2014.

United States

U.S. tight oil has continued to deliver impressive production increases this year, up about 1 million bbl/d, taking total U.S. tight oil to nearly 4 million bbl/d, or just over 4% of the global market. Total U.S. oil and liquids production is now over 12 million bbl/d, exceeding that of Russia and Saudi Arabia (albeit still lower than Saudi's estimated capacity).

Libya

Volumes increased from about 200,000–400,000 bbl/d this spring to 900,000 bbl/d in October, contributing to the sudden surge in global supply. Conditions in Libya remain volatile with various factions struggling for power as evidenced by production falling back to 500,000 bbl/d in early November as the nation's largest oil field was driven offline by militants.

Iran

A recovery of Iranian output depends on an agreement with the United Nations Security Council members plus Germany (P5+1) on Iran's nuclear program and related sanctions on its oil exports. Absent political constraints, Iran's oil fields could produce an additional 500,000–800,000 bbl/d within months.

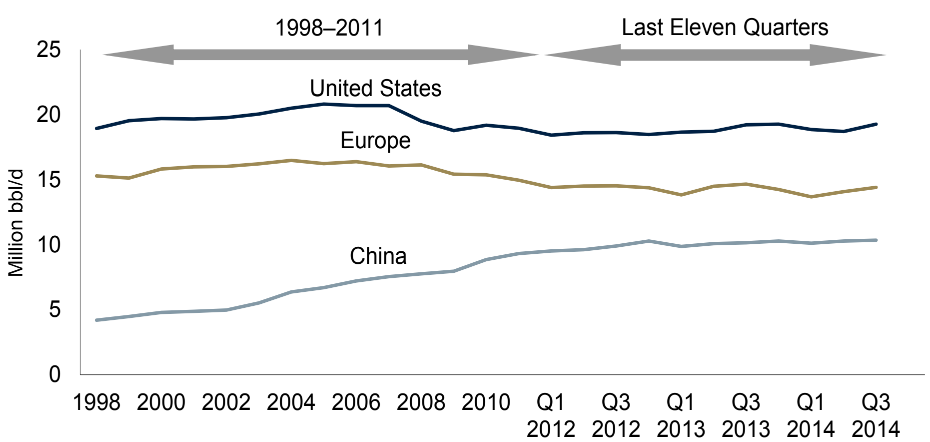
Iraq

Volumes have been holding in above 3 million bbl/d, modestly higher than year-prior levels; however, the ISIS insurgency remains an ongoing threat. A disruption of just one-third of Iraqi production would fully erase the current global surplus. Furthermore, industry observers have been looking to Iraq as the single largest source of OPEC supply growth in the next five years with Baghdad targeting total production of 8.5–9.0 million bbl/d (down from its original 12 million bbl/d target by 2020). The presence of ISIS may slow this development which is in partnership with global oil majors.

Demand Slowdown

While still expanding, year-over-year, global demand growth for oil fell to roughly one-quarter to one-half its normal pace in the spring and summer of this year. Challenging economic conditions in Europe, a shift to more coal use for electricity in Japan, and positive, but sporadic demand growth from China have all contributed to the demand slowdown. Lower gasoline prices may now encourage more spending at the pump, which could stem demand destruction in Europe and spur renewed growth in the U.S. Overall, global demand is expected to be restored to +1.1 million bbl/d next year, according to the International Energy Agency. This rebound is based on a stronger pace of global economic growth, which the International Monetary Fund pegs at +3.8% for 2015 (up from +3.3% in 2014) in its latest World Economic Outlook. A rebound to this level of global demand would imply a 500,000 bbl/d pick-up from 2014 levels.

Oil Demand by Major Region



Source - RBC Capital Markets, RBC Wealth Management

Europe's recession led to local demand destruction.

Something's Gotta Give

At $65–$80/bbl or lower, a supply response may arise from OPEC or marginal, price-sensitive producers. Many OPEC nations require oil prices over $90/bbl to balance their government budgets, which will likely lead to heated talks at future OPEC meetings.

Saudi Arabia remains the key participant as the traditional swing producer given that it controls about three-quarters of OPEC spare capacity. Saudi Arabia has been producing at 9.7 million bbl/d of late, towards the upper end of its roughly 8.5–10.0 million bbl/d range in recent years. As such, the kingdom has considerable scope to lower production by perhaps 1+ million bbl/d, and thus swiftly restore market balance.

A key question is Saudi's motivation for encouraging a lower oil price environment. Reasons often cited include hurting rivals such as Iran or Russia, whose economies depend on oil or forcing U.S. producers to slow their advance of shale development. Improved relations between Western nations and Iran is a considerable threat to Saudi power. U.S. imports of Saudi crude have dropped to roughly 1 million bbl/d since May of this year, down from more typical levels around 1.5 million bbl/d, making shale oil another serious threat.

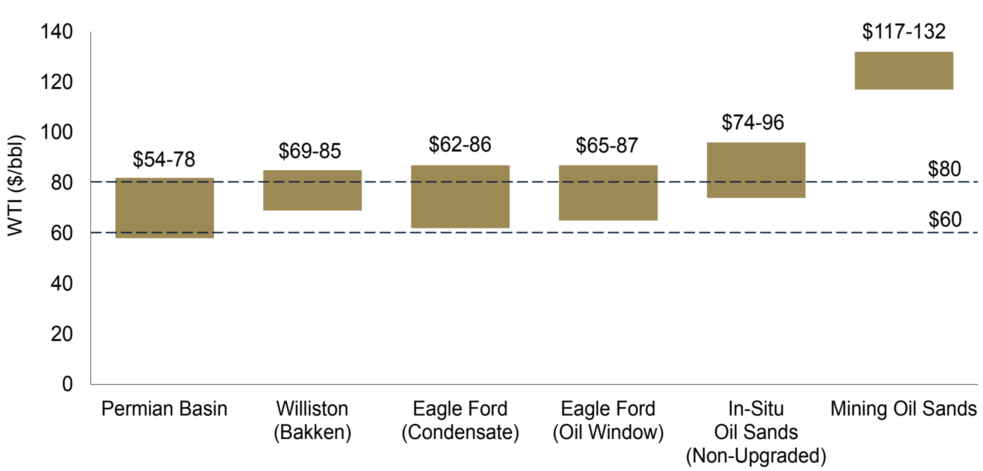
If any or all of these geopolitical factors represent the primary reason(s) for Saudi Arabia's behavior, a deeper market rout could be in store. However, domestic violence and security within Saudi Arabia may become a concern, at lower oil prices, which could put pressure on officials to act. The kingdom may be willing to endure budget deficits and heightened security risk for a while, but likely not for too long.

The primary engine for non-OPEC supply growth is North America; however, maintaining a rapid pace of this supply growth requires high oil prices. RBC Capital Markets sees U.S. shale oil as economically viable from $54 to $87/bbl and Canadian oil sands at $74+/bbl (albeit certain projects are viable at $50–$60/bbl). Capital spending budget cuts are underway, although their impact will take time. Even a 25% industry-wide cut to U.S. producer budgets would lead to only a modest deceleration in supply growth for 2015 overall, largely affecting H2 2015 and beyond. Spending cuts for oil sands may also be seen; however, budget changes for these long-life assets are likely to be slower and more measured.

A lower oil price environment is likely to elicit a supply response elsewhere as well. Key regions such as Russia, the North Sea, Mexico, and Brazil are likely to be impacted by lower capital spending and earlier abandonment of higher cost wells. Natural production declines of 4–7 million bbl/d globally are also a powerful force to reset the market as drilling slows.

North American Supply Costs

Oil Sands vs. Select Tight Oil Plays (15% Pre-tax IRR)



Source - RBC Capital Markets, RBC Wealth Management

Key drivers of non-OPEC supply growth marginal at $60–$80/bbl.

Price Outlook

Tempered demand, steady U.S. shale expansion, rebounding Libyan output, limited impact from ISIS in Iraq, and a rising U.S. dollar have all combined to weigh heavily on the price of oil in recent months. There are two self-correcting mechanisms that come to the fore as prices plunge: (1) OPEC output quotas and (2) price-sensitive development activity. The former is quicker to implement, but is political and, hence, harder to predict. The latter is likely to materialize should prices remain soft; however, it may take some time for production levels to ultimately respond to a curtailment in spending. Provided global demand growth remains consistent with the levels observed in recent years, we would look to supply costs broadly in the $60–$80/bbl range for major U.S. shale plays to provide medium-term cost support.

The lower prices go and the longer they persist, the more likely and pronounced a supply response we can expect from OPEC and other market participants. Of greater concern is a continuation of demand weakness observed in the spring and summer of this year. If demand growth is not restored to the 1+ million bbl/d levels observed through much of the last decade, marginal supply growth from high-cost sources such as Canadian oil sands and U.S. shale plays may become less important, and cost support for the industry could fall to a lower baseline.

We believe that constrained demand is likely to reverse course in a more moderate price environment, and we see a price range of $60–$80/bbl (WTI) as reasonable given the industry cost profile. The timing of the adjustment period and the bottom in price are difficult to predict. Momentum can be powerful and commodities often overshoot reasonable cost support levels in the short term. Catalysts such as talks with Iran, any reaction from OPEC ahead of its next meeting in June 2015, and other supply-side unknowns in the Middle East could move prices sharply.

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