

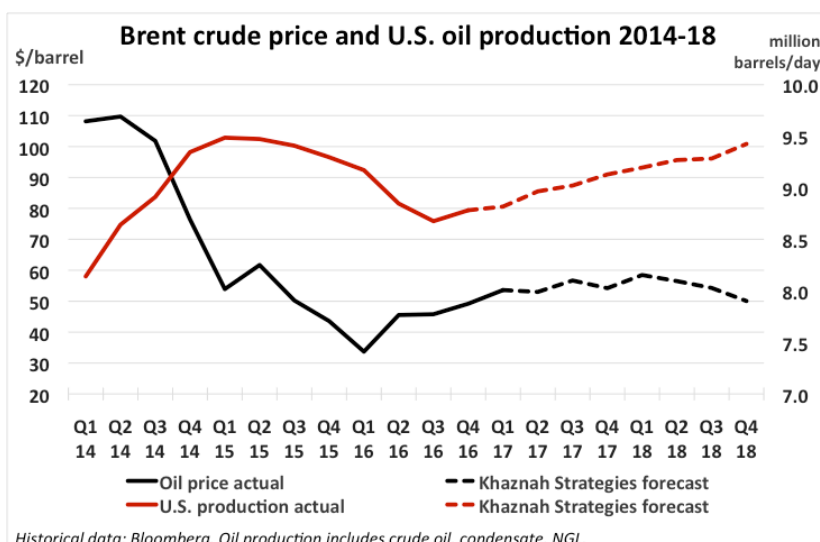
U.S. Crude Production, Economic Growth in China and India – not OPEC Cuts – are Driving Oil Prices in the Longer Run

17 May 2017

- Although 2016 and Q1 2017 saw oil regain some of its value, Brent crude plunged below \$47 in early May. Saudi Arabia and Russia reacted by renewing production cuts ahead of the OPEC meeting in Vienna on May 25 – but doubts abound as to whether they will maintain these cuts in the longer run.
- Our multi-factor econometric model forecasts that the Brent crude oil price will stay within the \$50-\$60 corridor in 2017-18 (WTI on average – about \$1/barrel less than Brent).
- Based on our model, key oil price drivers can be grouped into two major categories:
 - *Negative influence on the oil price.* U.S. oil production is the key factor. The other two are the U.S. dollar exchange rate and global oil inventories.
 - *Positive influence on the oil price.* The two key factors are oil demand in India and China. Emerging market equity indices are another factor and an important proxy for emerging market growth.

U.S. production balancing OPEC cuts

- We expect that some agreement on extending the production cuts will be reached on May 25 but volumes and implementation remain unclear. Renewed cuts can lead to limited price increases but not a lasting price appreciation. Further extensions of cuts beyond 2017 will have a diminishing effect.
- U.S. oil production is a key component of the global oil market rebalancing. Over the last three years, U.S. crude output has demonstrated impressive adaptability. The shale oil breakeven price has fallen from \$80/barrel in 2014 to only \$55/barrel in 2016. It is likely to fall to \$50/barrel by 2018.
- If the Brent price stays within the \$50-\$60 corridor, U.S. oil production will continue to increase. By the end of 2018 it will exceed 9.5 mln barrels per day (mb/d) – its historical peak level of Q1 2015.



Historical data: Bloomberg. Oil production includes crude oil, condensate, NGL.

Bulk of demand growth coming from emerging markets, primarily China and India

- Almost all of the growth in world energy demand will come from emerging markets, and China and India will generate half of the increase. India is catching up with China in terms of absolute demand growth: in 2016, India added 0.25 mb/d, and China – 0.34 mb/d. Given India's strong economic activity, and the consumption-driven nature of growth we expect this trend will continue. In 2017, a rebound in some other emerging markets (including some commodity exporters, like Brazil), will also contribute.

Market shift requires a fresh approach to forecasting

- We believe that the 2014-15 oil price crash was the result of a profound market shift – not just another price cycle. This new reality requires a fresh approach to oil price forecasting and market analysis.
- Our *integral price forecasting* approach combines several methods in one econometric model. Its distinguishing feature is that at the stage of initial evaluation it analyses the influence of over 100 external factors. They include industry fundamentals, such as supply, demand and inventory, and a variety of financial market, FX and macroeconomic indices. We then develop a map of the most important primary and secondary oil price drivers, identifying signposts for a price change.

Disclaimer: © Khaznah Strategies 2017. All Rights Reserved. No duplication or redistribution of this document is permitted without written consent. Khaznah Strategies Ltd. (England and Wales registration number: 6935983) does not conduct "investment research" as defined in the FCA Conduct of Business Sourcebook (COBS) section 12 nor does it provide "advice about securities" as defined in the Regulation of Investment Advisors by the U.S. SEC. Khaznah Strategies Ltd. is not regulated by the SEC or by the FCA or by any other regulatory body. This report has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. The views and conclusions expressed here may be changed without notice. Khaznah Strategies Ltd., its partners and employees make no representation about the completeness or accuracy of the data, calculations, information or opinions contained in this report. Views expressed herein have not been influenced by any relationship to any entity referred to herein nor to any client of Khaznah Strategies Ltd.