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## Oil Supply Balances: The Four Cycles of the OPEC Oil Output Policy

*Executive Summary*

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OPEC exit strategy has been one of the key uncertainties engulfing the oil market. Most market focus has been on the level of inventories, as this is seen by many as a key indicator as to when OPEC may shift its current output policy. In this presentation, it is argued that the level of inventories, however measured, is a backward looking indicator, and hence is of little use for guiding OPEC's next steps. Instead, through thorough analysis of previous cycles, we show that demand related shocks could play a key role in shaping OPEC behaviour looking forward.

Using a new measure of global oil supply balances, it is possible to identify four short cycles between 2013 and 2018. These cycles are presented in terms of OPEC behaviour:

- **Cycle 1 (November 2013 – March 2015):** The build-up to the large supply-demand imbalance in 2014 and OPEC's decision to leave it to the market to clear the imbalance and the resultant great oil price fall;
- **Cycle 2 (April 2015 – May 2016):** OPEC's adoption of high output-low price strategy aimed at driving high cost production out of the market;
- **Cycle 3 (June 2016 – April 2017):** OPEC's shift in output policy and the long journey to reaching an agreement on output cuts;
- **Cycle 4 (May 2017 – Ongoing):** OPEC's decision to target inventories to bring them down to 'normal' levels.

For each of the cycles, we estimate the importance of the various shocks to the price movement. Our findings reveal the following:

- **Cycle 1 (November 2013 – March 2015):** Although the positive endogenous supply shock, represented mainly by the rapid increase in US shale, was the main contributor to the \$57/b oil price collapse between November 2013 and March 2015, the synchronization of several unfavorable oil demand and exogenous supply shocks in the second half of 2014 combined to produce a 'perfect storm' that led to the sharp fall in the oil price.
- **Cycle 2 (April 2015 – May 2016):** OPEC's strategy of high output-low price strategy did work in the sense that non-OPEC production did adjust sharply to low oil prices and the market was showing strong signs of rebalancing. However, a negative demand shock reflected in the deterioration of the global economy in the second half of 2015 resulted in a sharp fall in oil prices and rising inventories. The sharp fall in oil revenues induced a shift in OPEC policy and the abandonment of the strategy of high output-low price strategy.
- **Cycle 3 (June 2016 – April 2017):** During the negotiations leading to the decision to cut output, OPEC producers dragged prices down. At the same time, the decline in US shale production



steadied near 4.1 mb/d for the remainder of 2016. The December 2016 price surge had little to do with changes in market fundamentals, but rather was due to speculative stock building in anticipation of the implementation of the OPEC agreement. As such, the price reacted very little to the upside in early-2017, as the response to the output cuts was already priced in. Instead, the price corrected to the downside in the following months in anticipation of US shale response and doubts about OPEC compliance.

- **Cycle 4 (May 2017-Ongoing):** The rapid growth in US shale production in the remainder of 2017 marked the beginning of a new expansive cycle of excess oil supplies despite the subdued production from OPEC. A positive demand shock is obscuring the impact of the rise in US shale production.

Based on the analysis of the recent cycles, it is possible to draw a number of lessons:

- Targeting inventories, however measured, is backward looking and the decision as to whether OPEC should exit or not exit the deal should be based on forward-looking indicators.
- A key factor potentially shaping OPEC decision-making is the expected strength in demand growth. The evidence from the latest cycles shows that in the presence of a new source of supply, which is highly responsive to price signals, demand related shocks become much more important in shaping OPEC behaviour. The high output strategy adopted in 2015 was undermined by a negative demand shock. The current strategy of cutting output has succeeded in large part due to a strong positive demand shock, which caused inventories to continue to decline despite strong US shale response. Thus, the risks of potential 'trade wars' and the potential negative impact on the global economy, and on oil demand if these risks do materialise, should constitute a serious concern for OPEC.
- OPEC's current strategy hinges heavily on the prospects of future demand growth. If demand continues to surprise on the upside (positive demand shock), then OPEC will most likely maintain its strategy and may decide to release some of the withheld crude back to the market. If demand surprises on the downside (negative demand shock), then OPEC's choices become very stark: OPEC could either decide to cut output to support prices or shift toward a higher output strategy. Both choices carry hefty risks reflecting the delicate situation that OPEC finds itself in as a result of the shift in policy back in November 2016.