

August 2018

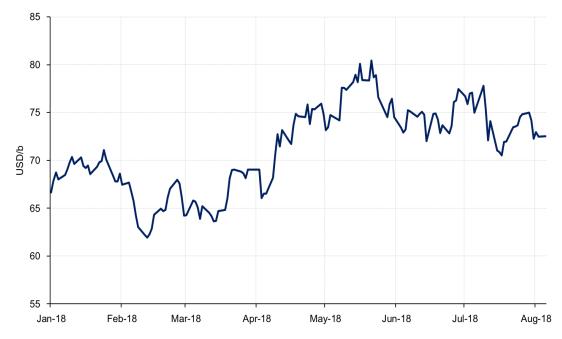
What to make of Saudi Arabia's **Recent Shift in its Output Policy?**



1. Introduction

After a sharp price rise in April/May this year, which saw Brent trading at above \$80/barrel for several days (reflecting output losses from Libya, Venezuela and Canada, the realization that the potential losses from Iran could be larger than originally expected and mixed OPEC signals about the future of the OPEC+ deal), the upward pressure on the oil price eased in July with the Brent structure flipping into contango. This may have come as a surprise to many analysts who were expecting oil prices to continue on their upward trajectory. Because, after all, with OECD stocks falling below the five-year average, spare capacity at very thin levels, oil demand still growing robustly, production in Venezuela continuing its decline, supply losses from Iran projected to exceed 1 million b/d, and general deterioration of the geopolitical backdrop, surely the Brent price should have broken the \$80/barrel ceiling? Instead, the oil price has held in the \$70-\$75 range for most of July and into August 2018 (see Figure 1).

Figure 1: Brent spot price, \$/Barrel

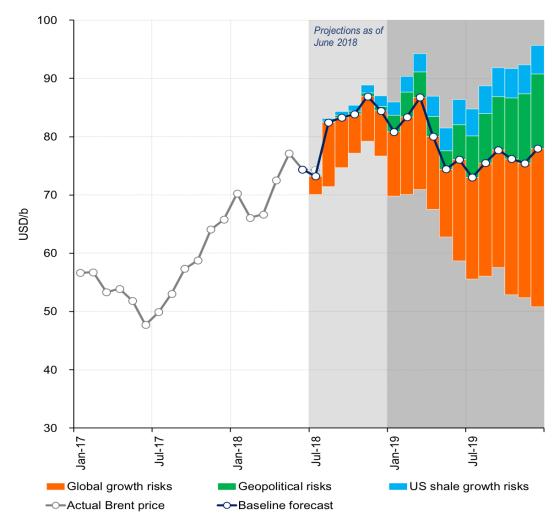


Source: EIA, OIES

Two main factors could explain the recent oil price 'softness'. Fears that the trade war between China and the US and growing concerns about the health of emerging markets, will slow economic growth and oil demand have had their impact on sentiment and oil prices. In fact, while the market has been focusing on the upside price risks related to supply losses from Iran and Venezuela, and to infrastructure constraints that could limit US shale output growth, it is the slowdown in global oil demand that poses the biggest risk to oil prices. Figure 2, which shows the balance of risks to the baseline price forecast produced based on the structural VAR model of the world oil market due to Economou et al (2017)¹, clearly indicates that an unexpected slowdown in the global activity, driven by escalated global trade tensions, would have by far the strongest and more durable downside effect on prices.



Figure 2: Balance of risks to the price outlook for 2018 and 2019



| Balance of risks | | | | | |
|-----------------------|-----------------------------------|----------|-----------------------------------|----------|--|
| Forecast scenarios | 2018 | | 2019 | | |
| | Assumptions | Ann. AVG | Assumptions | Ann. AVG | |
| Baseline forecast | n/a | 76.8 | n/a | 78.1 | |
| Global growth risks | -1.5% (chg. from 3.9%) | 73.0 | -1.5% (chg. from base 3.8%) | 60.4 | |
| Geopolitical risks | -1.2 mb/d | 77.0 | -0.25 mb/d | 85.1 | |
| US shale growth risks | -0.3 mb/d (chg. from 1.4 mb/d) | 77.2 | -0.2 mb/d (chg. from 1.1 mb/d) | 82.2 | |

Source: Adapted from Fattouh and Economou (2018)²

² B. Fattouh and A. Economou (2018), OPEC at the Crossroads, Oxford Energy Insight 37, June, Oxford: Oxford Institute for Energy Studies (OIES). https://www.oxfordenergy.org/wpcms/wp-content/uploads/2018/06/OPEC-at-the-Crossroads-Insight-37.pdf



While fears of trade wars will continue to influence sentiment and shape price outcomes, it is the recent shifts in OPEC, and particularly its dominant player Saudi Arabia's, output policy which has had the biggest impact on physical balances, prices and the term structure to date. During the OPEC meeting, Saudi Arabia sent a clear message that it would 'be responsible' and 'release supplies to make sure that no shortage materialises' and put a cap on the oil price. This shift reflects in part changing market fundamentals and a more uncertain environment, but also changes in the importance attached to the various objectives pursued by the Kingdom.

The Shift

Up until April 2018 and before President Trump announced the US withdrawal from the Iran nuclear deal, the message from Saudi Arabia was very clear: despite crude stocks falling, it was premature to exit from the OPEC+ production deal and if producers 'err on the side of overbalancing, then so be it'.³ At that time, the discussion centered on whether an indicator based on the five-year average of OECD stock levels was adequate to declare 'mission accomplished', and whether OPEC should consider more sophisticated measures that exclude 'outlier' years in which stocks rose rapidly, or even consider new indicators altogether based on the flow of investment into the oil sector. The potential impact of higher oil prices on the global economy was downplayed as economies around the world have been experiencing a synchronized growth and 'reduced energy intensity and higher productivity globally of energy input' meant that 'there is the capacity to absorb higher prices'.⁴ Nevertheless, as OECD stocks have fallen below the five-year average, the issue has not been whether but when to ease the supply curbs.

In May, President Trump announced the US withdrawal from the Joint Comprehensive Plan of Action (JCPOA). Saudi Arabia welcomed Trump's decision to scrap the Iran nuclear deal as according to the Kingdom, the lifting of sanctions under Obama allowed Iran to 'continue its destabilizing activities'.⁵ Saudi Arabia also showed its willingness to meet any potential supply shortages, assuring the market that it had enough spare capacity to 'maintain oil market stability'.

Following the US announcement, there was much uncertainty surrounding the size of the potential loss of Iranian barrels, with initial estimates on the low side at around 0.3 to 0.5 mb/d.⁶ However, as time passed, it became clear that the potential losses from Iran could be much larger than originally thought and that the market should prepare for a big output disruption in November 2018 (if not earlier). Alongside the continuing decline in Venezuela's production and other disruptions (Libya and Canada), the supply picture looked very bleak and amidst expectations of robust demand growth in the second half of 2018, prices started rising, hitting the \$80/barrel mark in May. This prompted a reaction from a number of major oil-consuming countries, including the US, China, Korea and India. Indeed, on June 13, and two weeks before the OPEC meeting, President Trump tweeted 'Oil prices are too high, OPEC is at it again. Not good!' Also Russia, the main partner in the OPEC+ deal, had been calling for an easing of supply curbs with voices within the country expressing concerns about \$80 oil prices.⁷

The sharp rise in the oil price in April, the anxiety it created among key consuming countries, the change in the short-term supply outlook, Russia's push to increase output, and US pressures on Saudi Arabia to act to put a cap on the oil price caused a revision in Saudi oil policy. At the St. Petersburg International Economic Forum in May in Russia, Saudi Arabia showed its willingness to ease the supply curbs and the Saudi energy minister declared that the Kingdom was willing to do

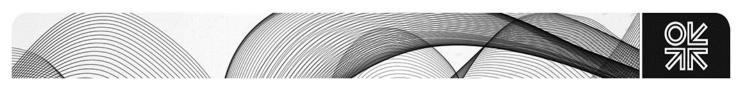
³ Financial Times 'Producers would rather tighten oil markets than exit cuts deal too early - Saudi oil minister', 14 February 2018.

⁴ Al-Arabiya English, 'Market has capacity to absorb higher oil prices, says Saudi minister Falih', 20 April 2018.

⁵ Kingdom of Saudi Arabia's Statement on the United States Withdrawal from the JCPOA, Saudi Press Agency, 9 May 2018.

⁶ See for instance, David Rami Jalilvand (2018), 'The US Exit from the JCPOA: What Consequences for Iranian Energy?'Oxford Energy Comment, Oxford: OIES. https://www.oxfordenergy.org/wpcms/wp-content/uploads/2018/06/The-US-Exit-from-the-JCPOA-What-Consequences-for-Iranian-Energy-Comment.pdf

⁷ Reuters, Russia's Novak says oil production curbs could be eased 'softly': Ifax, May 24 2018.



'what is necessary' to reassure consumers, though there was no clear commitment on the size of the supply boost which could be 'a million (b/d), more, or less'.8 This issue was to be left to the OPEC meeting in June.

As the June OPEC meeting approached, Saudi Arabia was trying to strike a fine balance between multiple objectives:

- Not to risk the rebalancing of the market and to keep a floor under the oil price, vital for the Saudi economy and for oil market stability;
- To maintain the current framework of cooperation with OPEC and non-OPEC producers an agreement which Saudi Arabia worked very hard to put together and wishes to maintain for the long-term;
- To meet any potential shortages in the market caused as a result of possible supply disruptions to ensure market stability and to reassure consumers;
- To be responsive to consumers' concerns about rising oil prices, the most vocal of which has been the US. Saudi Arabia supported the US withdrawal from the Iran nuclear deal and saw this move as vital for enhancing its regional position (President Trump expressed his unambiguous views in a tweet: 'The OPEC Monopoly must remember that gas prices are up & they are doing little to help. If anything, they are driving prices higher as the United States defends many of their members for very little \$'s. This must be a two way street').9

It is important to stress that the weights attached to these objectives are not equal. Also importantly, the weight attached to each objective tends to change over time.

During the OPEC meeting, when it appeared that oil prices were heading in only one direction, it was the last objective, which was given the most weight, albeit Saudi Arabia and Russia were able to keep the OPEC+ deal alive amid textbook diplomacy and 'constructive ambiguity'. The fact that OPEC compliance stood well above 100 per cent gave the Organization room to increase output and still comply with the collective output ceiling under the OPEC+ deal. However, the recent letters sent by the Iranian oil minister to the OPEC President and the OPEC Secretary-General clearly show that some parties have 'a different understanding from the decision of the (OPEC) conference'. This would not be the first time that OPEC has been confronted with this challenge. As argued in Fattouh and Economou (2018), 'whenever there has been an output disruption in the past, those producers with spare capacity and the ability to hike output often acted unilaterally and increased their share at the expense of the disrupted countries'. This time is no different.

Production numbers communicated to the OPEC Secretariat reveal that Saudi Arabia started to hike its production even before the June 2018 OPEC meeting. Saudi Arabia increased its production to 10.5 mb/d in June, an increase of almost 0.5 mb/d on the month of May, and there were some media reports that it planned to boost its production to 10.8-11.0 mb/d in July. Saudi exports surged to a 15 month high of 7.50 mb/d in June from 7.15 mb/d in May. ¹² The other producers that had the capacity to increase production followed suit. In July, Kuwait's crude oil production increased by 90,000 b/d from the June level taking the country's production to 2.8 million b/d¹³ (in May, Kuwait communicated a production

The National, Saudi minister sees 'likely' oil supply boost in second half of 2018, 25 May 2018,
https://www.thenational.ae/business/energy/saudi-minister-sees-likely-oil-supply-boost-in-second-half-of-2018-1.733841
Reuters, Trump to OPEC: Reduce Pricing Now!, July 4, 2018 https://www.reuters.com/article/us-oil-opec-trump/trump-to-opec-reduce-pricing-now-idUSKBN1JU2S8

¹⁰ Reuters, Iran says OPEC may need extraordinary meeting over output changes, August 8, 2018, https://uk.reuters.com/article/us-opec-oil-iran/iran-says-opec-may-need-extraordinary-meeting-over-output-changes-idUSKBN1KT1GF

¹¹ B. Fattouh and A. Economou (2018), OPEC at the Crossroads, Oxford Energy Insight 37, June, Oxford: Oxford Institute for Energy Studies (OIES). https://www.oxfordenergy.org/wpcms/wp-content/uploads/2018/06/OPEC-at-the-Crossroads-Insight-37.pdf

Bloomberg, 'Saudi Crude Exports Jump in June as OPEC Oil-Cuts Deal Fades', 2 July 2018,
https://www.bloomberg.com/news/articles/2018-07-02/saudi-crude-exports-jump-in-june-as-opec-oil-cuts-deal-fades
S&P Global Platts, 'Kuwait crude oil production at 2.8 million b/d, highest since December 2016: minister', August 1, 2018.
https://www.spglobal.com/platts/en/market-insights/latest-news/oil/080118-kuwait-crude-oil-production-at-28-million-bd-highest-since-december-2016-minister

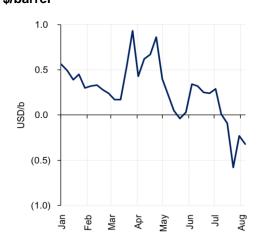


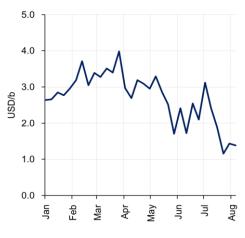
figure of 2.7 mb/d). UAE boosted its crude production by about 85,000 b/d in July, taking the country's production to 2.975 million b/d, the highest since the country reported output of 2.977 million b/d in July 2017¹⁴ (in May, UAE communicated a production figure of 2.86 mb/d). Iraqi crude oil production hit its highest level in 13 months in July at 4.46 million b/d, while Russia increased its crude production in July by as much as 0.25 mb/d from May levels.15

Timing Mismatch and Adjustment

This increase in production from core GCC producers and Russia arrived at a time when the market did not need additional supplies despite the rising concerns about outages. In June, Iranian exports had not yet fallen sharply, and after a brief disruption, Libya restored its production in July/August. Also US crude exports to Europe reached an unprecedented level this year and were competing with other light sweet crudes such as West African crudes. 16 Furthermore, the type of extra crude on offer from Saudi Arabia and UAE was Arab extra light and Murban, while Asian customers were seeking heavier crude slates given the increased complexity of their refining systems. The additional supplies overwhelmed the Atlantic basin, pushing Brent prices lower and flipping the term structure into contango (See Figure 3). The Brent-Dubai price differential fell sharply to allow the light sweet crude to be absorbed into Asia (see Figure 4). There have been many reports suggesting that Saudi Aramco may not have been able to market the additional crude volumes (indicating a well-supplied market and/or not competitively priced crude).¹⁷

Figure 3: Brent time structure 1-2 month Figure 4: Brent-Dubai spread, \$/barrel \$/barrel





Source: Argus, OIES Source: Argus, OIES

The fall in the oil price and the reemergence of the contango, amidst growing fears about the impact of trade wars and the growing risks to demand, undermined one of the Kingdom's key objectives: Not to risk the rebalancing of the market, to maintain a floor under the oil price and 'prevent the severe downturns that choke the industry, cause bankruptcies, and jobs being lost across the world'. If Saudi Arabia were to have increased its output to 10.8 mb/d in July as indicated by various reports¹⁸, the

¹⁴ S&P Global Platts, 'UAE's July crude production hits one-year high: source', August 1, 2018, https://www.spglobal.com/platts/en/marketinsights/latest-news/oil/080118-uaes-july-crude-production-hits-one-year-high-source

S&P Global Platts, 'Novak sees Russia to bring up to 250,000 b/d of crude oil output cut back in July', July 27 2018, $\underline{https://www.spglobal.com/platts/en/market-insights/latest-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil/072718-novak-sees-russia-to-bring-up-to-250000-bd-of-crude-oil-output-cut-back-news/oil-output$ in-july

⁶ See Fattouh, B. (2018), 'The Oil Market's Mixed Price Signals', Oxford Energy Comment, May.

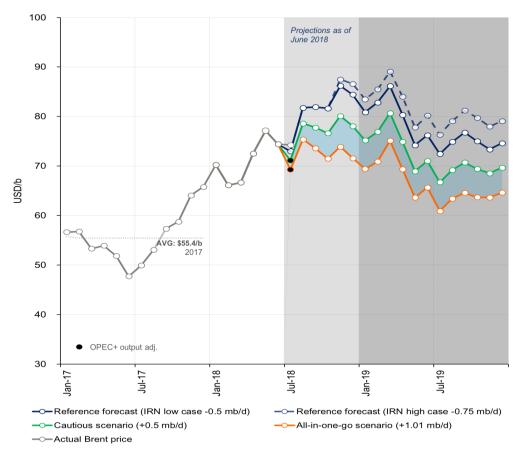
¹⁷ See for instance S&P Global Platts, 'Analysis: Saudi crude oil production data catches market by surprise, but not all are convinced', August 7, 2018, https://www.spglobal.com/platts/en/market-insights/latest-news/oil/080718-analysis-saudi-crude-oil-production-data-catchesmarket-by-surprise-but-not-all-are-convinced

¹⁸ Bloomberg, 'OPEC Sources: Saudis Cut July Production, August 3 2018



term structure would have weakened further and according to Fattouh and Economou (2018), prices would have fallen below \$70/barrel (see Figure 5). Also, marketing this additional crude would not have been feasible without offering deeper discounts to refineries, causing further declines in oil prices. Also by lowering its production, Saudi Arabia would have avoided using all its 'ammunition' in case it needed to increase output later in the year.

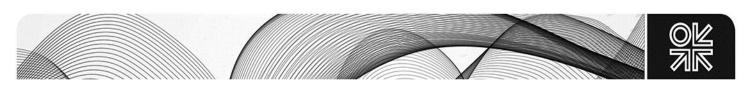
Figure 5: OPEC+ oil output policy scenarios



| Price outcome (USD/b) | | | | | |
|----------------------------|-----------------|------|------|--|--|
| Base = Reference (IRN-low) | | 2018 | 2019 | | |
| Reference | IRN – low case | 76.3 | 77.3 | | |
| | IRN – high case | 76.6 | 81.1 | | |
| OPEC+ cautious sc. | | 74.1 | 71.8 | | |
| OPEC+ all-in-one-go sc. | | 71.8 | 66.2 | | |

Source: Adapted from Fattouh and Economou (2018)

The mismatch in the timing of the output increase required that Saudi Arabia adjust its output. In July, Saudi Arabia sent another message to the market that 'fears that Saudi Arabia would flood the market were without basis' and rather than increasing production, 'July production would not rise much higher



than June numbers'. ¹⁹ In July, Saudi Arabia communicated to OPEC a production number of 10.29 mb/d, a decline of 0.2 mb/d from the June number while its exports fell sharply - by as much as 0.46 mb/d according to some estimates. ²⁰

Implications for Signaling and Prices

In effect, Saudi Arabia is trying to manage the Brent price within a very narrow range of \$70 to \$80/barrel for now:

- Put a cap on the oil price (in order to achieve some of the key objectives discussed above, but also amidst growing concerns about the impact of high oil prices on demand as the trade war between US and China escalates and emerging market currencies weaken).
- Keep a floor on the oil price to maintain high revenues and oil market stability.

Lowering its output in July, may have indicated to some in the market that the Kingdom is no longer interested in capping the price on the upside. However, this is premature. Its behaviour in the last few months suggests that Saudi Arabia did react (some may argue even over-reacted) to higher oil prices. The adjustment of output in July does not change this, but asserts that the price floor and not risking the market rebalancing are as important as putting a cap on the price, though the 'bulls' should not get excited that Saudi Arabia is in the process of cutting supplies and over-tightening the market. The drivers behind the shift in output policy back in May and June are still in play.

Striking a balance between the various objectives, and doing it within a narrow price range, is an extremely difficult task given the wide uncertainties and the different shocks hitting the oil market. In a more uncertain environment, Saudi Arabia is in need of flexibility in its output policy, but this has the effect of diluting its signals at times, to the dismay of many in the market, making them less informative for guiding market participants at a time when its guidance is most needed. This does not imply that the market can afford to ignore the Saudi signals; after all its output policy will continue to be the major factor shaping price outcomes in the next few months. But the market should adapt to more regular adjustments in its output response as it continues to balance its different objectives and the various shocks hitting the market.

¹⁹ S&P Global Platts, 'Saudi Arabia keeps status quo on oil exports, but supply risks still abound', 20 July 2018 https://www.spglobal.com/platts/en/market-insights/latest-news/oil/072018-saudi-arabia-keeps-status-quo-on-oil-exports-but-supply-risks-still-abound

²⁰ S&P Global Platts, Saudi crude oil production data catches market by surprise, but not all are convinced, August 7, 2018. https://www.spglobal.com/platts/en/market-insights/latest-news/oil/080718-analysis-saudi-crude-oil-production-data-catches-market-by-surprise-but-not-all-are-convinced