



## All eyes on OPEC and the US

### Summary

- The first few weeks of the oil market in 2017 were a marked contrast to a year ago. In January 2016, oil prices hit multi-year lows due to concerns of oversupply. Currently, oil prices are much more stable, with Brent oil at around \$55 per barrel (pb), with little deviation from this level in the last two months.
- This stability in prices is mainly due to coordinated action by OPEC and some non-OPEC members to cut 1.8 mbpd, or 2 percent of global oil supply, during the first half of 2017. January crude oil production data shows that OPEC's oil output fell by 900 thousand barrels per day (tbpd) month-on-month.
- Despite the relatively stable start to the year, oil price volatility is likely to re-emerge during 2017 as global oil markets face up to a rising risk of OPEC noncompliance to production cuts, upward revisions in US oil production, and policy initiatives from the new US administration.
- Since taking office in January 2017, the new US administration has gone about bringing wholesale changes to the oil sector. Whilst an executive order was signed to build/expand two oil pipelines, there is also the potential of border taxes being applied to imported crude oil. In recent weeks, the risk of sanctions being reapplied to Iran, potentially taking 1 mbpd of oil offline, has also increased.
- Lastly, the new US administration has also clouded the outlook of the dollar. Whilst the dollar is expected to continue rising over the medium to long term, the short term outlook is less clear. Due to the dollar's negative correlation to crude oil prices, this uncertainty will only add to price volatility in the months ahead.

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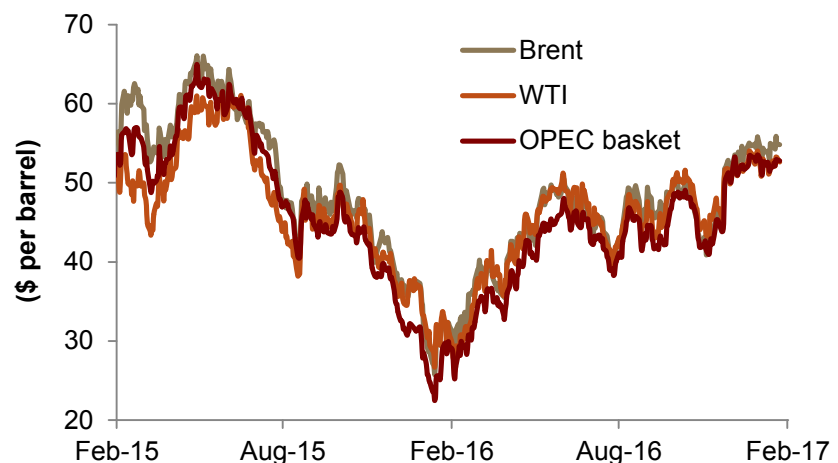
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**Figure 1: Brent oil prices currently trading around \$55 per barrel**





## Overview

*The first few weeks of the oil market in 2017 were a marked contrast to a year ago.*

*January data shows strong compliance with cuts.*

*Growth in global oil demand in Q1 2017 is expected to remain solid but unimpressive.*

*Growth in the rest of the year is likely to be at similar levels to Q1 2017, with year-on-year growth in 2017 averaging 1.2 mbpd.*

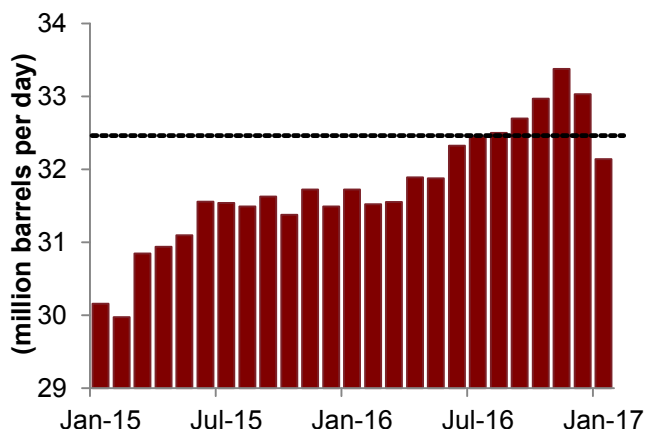
The first few weeks of the oil market in 2017 were a marked contrast to a year ago. In January 2016, intense competition amongst OPEC members, massive global oversupply, and the anticipated return of Iranian crude oil exports, following the lifting of sanctions, saw Brent oil prices drop to multi-year lows. In January 2017, oil prices were much more stable, at around \$55 per barrel (pb), with little deviation from this level in the last two months. This stability in prices is mainly due to the coordinated action by OPEC and some non-OPEC members to cut 1.8 mbpd, or 2 percent of global oil supply, during the first half of 2017. January crude oil production data shows that OPEC's oil output fell by 900 tbpd month-on-month (Figure 2). Compliance by non-OPEC is also set to be helping, with Russian oil output expected to contract by 100 thousand barrels per day (tbpd) in January 2017.

## The US a wildcard in demand

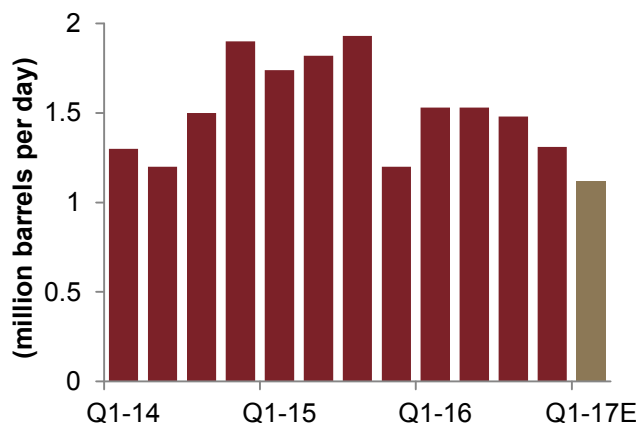
Growth in global oil demand in Q1 2017 is expected to remain solid but unimpressive. Latest OPEC data points to year-on-year oil demand growth of 1.2 mbpd in Q1 2017, way below the average of 1.54 mbpd in each of the quarters since 2014 (Figure 3). Almost all regions will exhibit growth in the first quarter with the exception of Europe and Asia Pacific regions. Growth in the rest of the year is likely to be at similar levels to Q1 2017, with year-on-year growth in 2017 also averaging 1.2 mbpd. The US, India and China, are expected to provide 50 percent of total oil demand growth in 2017. We see the US and China being the biggest wildcards to oil demand in the year ahead. An unexpected win in the recent US election for the Republican candidate has resulted in increased uncertainty on a number of issues. As wholesale policy change is implemented, the impact on the economy, and oil demand, is unpredictable. Meanwhile, China's oil demand grew by 3.5 percent year-on-year in 2016, even as the economy slowed, but there is no guarantee that strong demand growth will be replicated in 2017.

In the **US** (21 percent of global oil demand), Q4 2016 saw the first drop in yearly motor gasoline demand for at least two years. The reason for this decline seems to be higher year-on-year pump prices,

**Figure 2: Strong OPEC compliance to cuts in January 2017** (secondary sources)



**Figure 3: Global oil demand in Q1 2017 will be lower than recent years** (year-on-year growth)





*There are a number of policies being implemented by the new US administration that could affect US oil demand in 2017.*

*European oil demand will post flat growth in 2017 due to higher oil taxation and fuel substitution.*

*Although Chinese crude imports were up 14 percent year-on-year in 2016...*

*...if oil prices rise significantly, purchases of oil stocks could slow, thereby decreasing the level of overall oil import growth.*

*Indian oil imports were up by 15 percent in Q4 2016 year-on-year, with a massive 300 percent rise from Iran.*

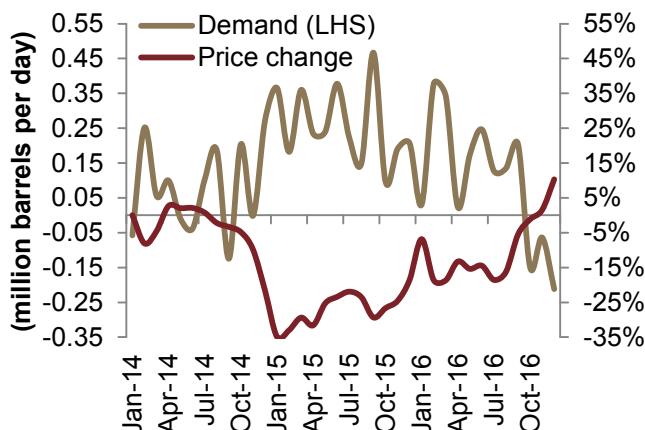
reflecting the upward trend in global oil prices (Figure 4). Looking ahead, the US Energy Information Administration's (EIA) forecasts point to 2017 gasoline demand growth slowing year-on-year, which will also be the case for total US liquid consumption. How the US's demand for liquids actually performs compared to EIA forecasts is not so clear since there are a number of policies being implemented by the new government that could ultimately affect oil demand (see Box 1 in Supply section).

**European** oil demand (15 percent of global oil demand) was up marginally in Q4 2016 year-on-year. Higher consumption of road transportation fuels, notably diesel, and an improvement in vehicle sales resulted in higher year-on-year demand. Looking ahead, Q1 2017 demand is expected to drop slightly, and higher oil taxation and fuel substitution is expected to keep demand growth flat for the rest of the year.

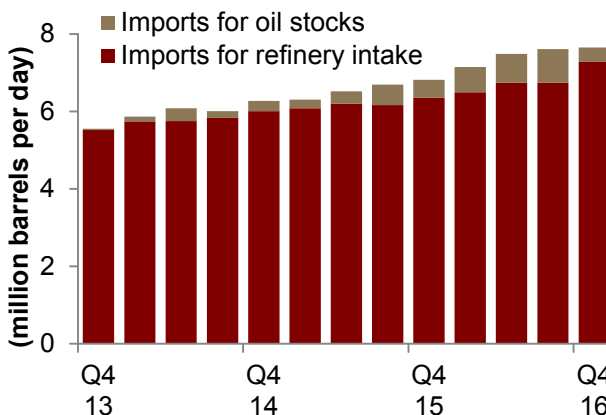
In the last quarter of 2016, **China** (12 percent of global oil demand) imported 12 percent more crude oil than a year ago. In 2016 as a whole, China imported 7.5 mbpd, a 14 percent year-on-year rise. According to the Chinese National Petroleum Company (CNPC), imports could rise a further 6 percent, to average 7.95 mbpd, in 2017, with rising refinery demand pushing total imports to 8.2 mbpd by 2020. Although crude imports in 2016 were supported by lower retail pump prices, rising vehicle sales, and higher demand from small, independent (teapot) refineries, they have also been boosted by ongoing efforts to raise strategic and commercial crude oil stocks (Figure 5). The risk is that if oil prices rise significantly, the purchases of these oil stocks could slow, thereby decreasing the level of overall oil import growth.

Strong economic growth with industrial expansion and rising car sales boosted diesel and gasoline consumption in **India** (5 percent of global oil demand). As a consequence, crude oil imports were up by 15 percent in Q4 2016 year-on-year, with a massive 300 percent rise from Iran. India was the fastest growing major economy in 2016 and this was reflected in overall crude oil import growth, at 8.3 percent year-on-year. Saudi Arabia was the largest supplier of crude oil to India during 2016, at around 831 tbpd, with Iraq second, at 631 tbpd, and Nigeria third, at 446 tbpd. OPEC forecasts that Indian crude oil imports will increase by 3.6 percent, or 160 tbpd, year-on-year in

**Figure 4: US gasoline demand and prices** (year-on-year change)



**Figure 5: Yearly growth in China's crude oil imports**





*Downside risks to oil demand and imports are present through current economic policies.*

*Japanese oil demand will remain in the negative territory in Q1 2017 and year-on-year in 2017.*

*Preliminary data shows Saudi Arabia's domestic consumption was up 1.7 percent year-on-year in 2016.*

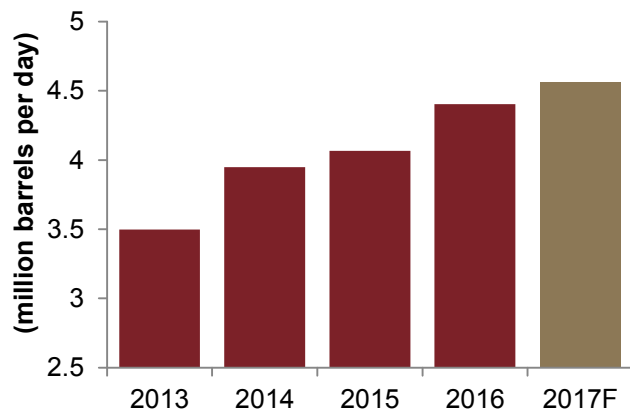
*Slower economic growth, higher energy prices and larger gas supplies led to slower growth in consumption.*

2017 (Figure 6). Downside risks to demand and imports are present through economic policies, including recent measures taken by the Indian government banning high denomination currency bills in a bid to stamp out the black economy. The impact on the economy is not fully clear, but the IMF recently downgraded GDP growth to 7.2 percent for 2017 compared with 7.6 percent previously, partially because of demonetization.

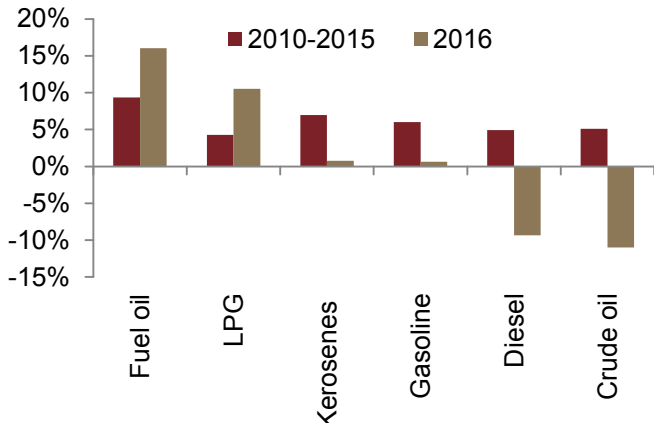
**Japanese** (3 percent of global oil demand) crude oil imports have been declining consistently, year-on-year, in the last two years due to slower economic growth, rising fuel efficiency and cuts in refining capacity. Accordingly, Q4 2016 oil imports were down by 1 percent, year-on-year. The Japanese economy is not expected to improve massively and further closure of refinery capacity will keep crude oil demand in the negative territory in both Q1 2017 and 2017 as a whole, with further downward pressure on demand if more nuclear reactors are restarted.

Preliminary data shows **Saudi Arabia's** domestic consumption (3 percent of global oil demand) was up 1.7 percent year-on-year in 2016, on account of higher refinery intake, which was up 14.7 percent year-on-year, resulting in higher refined product exports, up 27 percent year-on-year. Despite the steep rise in refinery intake, slower economic growth, higher energy prices and larger gas supplies, from the Wasit gas plant, led to slower growth in domestic consumption (1.7 percent in 2016 versus an average of 4.1 percent between 2010-15). Higher gas supplies led to a 11 percent year-on-year drop in direct crude burn for electricity generation. Meanwhile, on a refined product basis, diesel was the only product to see a reduction in demand, down 9 percent year-on-year, compared to an average increase of 5 percent per annum during 2010-15. Liquefied petroleum gas (LPG) usage was up 11 percent, largely as a result of some major petrochemical projects coming on-line during the year, such as Sadara and Petro Rabigh II, whilst fuel oil usage was up a sizable 16 percent, year-on-year, reflecting its higher usage in electricity generation given the lower cost (\$4 pb) compared to diesel (\$14 pb) and crude oil (\$ 5pb). Lastly, gasoline demand was up slightly, by 1 percent year-on-year, but this still represents a major decline considering the average increase was 6 percent per annum between 2010-15.

**Figure 6: Indian crude oil imports forecasted to grow by 3.6 percent year-on-year in 2017**



**Figure 7: Saudi demand growth for oil and refined products: 2010-15 versus 2016**





*A continued slow down in the economy and seasonally lower consumption will see Q1 2017 demand declining.*

*January crude oil production data shows that OPEC's oil output fell by 900 tbpd.*

*Assuming cuts continue until mid-2017, we would expect to see oil markets balancing more aggressively by Q2 2017, when the deal expires...*

*...although this is based on discounting two major risks.*

*A significant risk is present through a swift rebound in US oil production. As oil prices have rebounded recently, so too has the US oil rig count...*

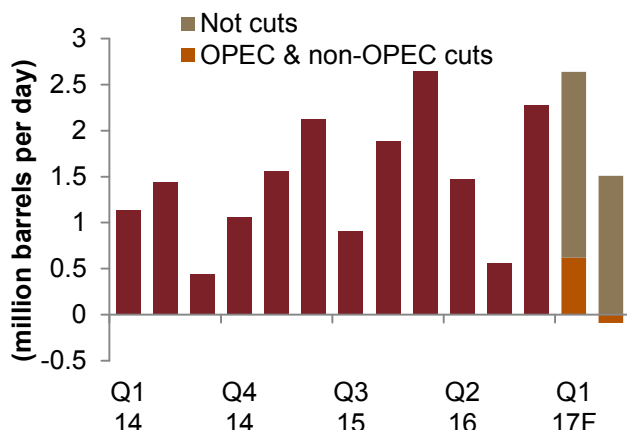
Going forward, a continued slow down in the economy and seasonally lower consumption during the first few months should see Q1 2017 demand declining slightly year-on-year. Lower demand is also likely to be seen after the government links household electricity prices to a reference price from mid-2017. Despite this, six power plants are scheduled to come on-line during the year, and both Sadara and Petro Rabigh II will reach full capacity, which should push Saudi consumption back up. Overall, due to the above factors we see Saudi consumption remaining flat, at around 2.9 mbpd year-on-year in 2017.

### OPEC and the US major risks to oil supply

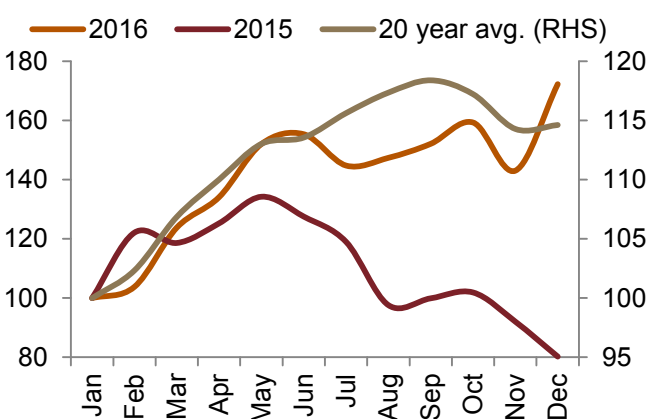
January crude oil production data shows that OPEC's oil output fell by 900 tbpd month-on-month. Compliance by non-OPEC is also set to be helping, with Russian oil output expected to contract by 100 tbpd in January 2017. Assuming that cuts at agreed levels continue until mid-2017, we would expect to see oil markets balancing more aggressively by Q2 2017, when the deal expires. In fact, oil markets could fall into deficit by 100 tbpd in Q2 2017, compared with a surplus of 1.5 mbpd without cuts (Figure 8). This forecast is, however, based on discounting two major risks which could delay balancing. The first of these risks relates to OPEC. Whilst the above January data shows genuine commitment from key OPEC producers, non-compliance still remains a big risk, with the risk growing the longer the cuts go on. A crucial test in OPEC compliance is likely to come around March/April time, when global oil prices tend to rise following a period of refinery maintenance (Figure 9). The danger is that as prices rise, the economic incentive to cheat, especially for financially troubled producers such as Iraq and Venezuela, will become more appealing. Any substantial production above agreed OPEC ceilings is likely to bring about reciprocal action from both OPEC and non-OPEC producers, resulting in higher output all round.

Another equally significant risk is present through a swift rebound in US oil production. The rise in oil prices following the OPEC agreement also saw rises in key oil indicators from the US as well. Aside from a rebound in the oil rig count, US producers have also taken out a record number of contracts on short positions against the

**Figure 8: OPEC cuts could help re-balance oil markets more quickly (year-on-year change)**



**Figure 9: Average monthly movement in Brent oil prices**



Note: January = 100



...with a record number of contracts on short positions against the US crude oil benchmark WTI being taken out.

In addition, the new US administration, with a very pro-oil agenda, could dramatically change the oil market in the months ahead by...

...i) lowering regulatory oversight and corporate taxes for US oil companies...

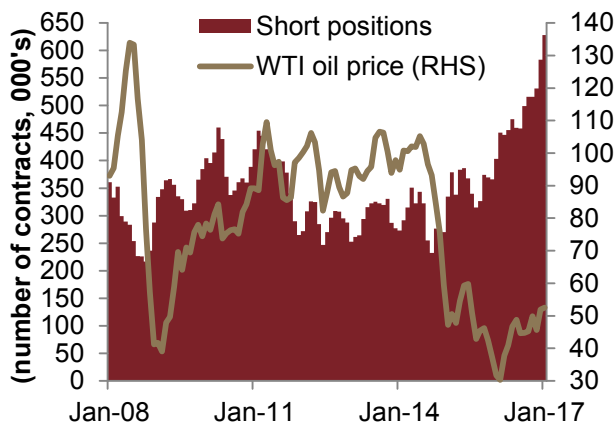
US crude oil benchmark WTI, thereby protecting themselves against a drop in prices. Ever since global oil prices started declining in mid-2014, the number of contracts for short positions have been rising. In January 2017, these short contracts were the largest on record since the financial crisis (Figure 10). Due to all of the above factors, US oil production has seen sizable revisions in recent months. According to the EIA's January 2017 Short-Term Energy Outlook report, US oil production is forecast to be 760 tbpd higher at the end of 2017, compared to January 2016 forecast, which amounts to roughly 60 percent of the proposed OPEC cut of 1.2 mbpd (Figure 11). In addition, the new US administration, with a very pro-oil agenda, could dramatically change the oil market in the months ahead, not only by implementing changes to US crude oil-related regulations, but also through taking decisions on major international issues that could directly impact global oil markets (Box 1).

**Box 1: US oil policy and global oil markets**

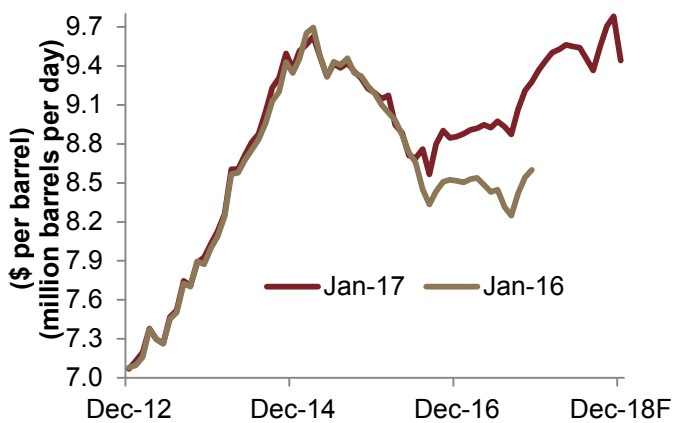
Since taking office in January 2017, the new US administration has gone about bringing wholesale changes to a number of areas, including the oil sector. Whilst an executive order was signed to build/expand two oil pipelines, there is also the potential of border taxes being applied to imported crude oil. In recent weeks, the risk of sanctions being reintroduced on Iran, potentially taking 1 mbpd of oil offline, has also increased.

One area where US oil companies are likely to get help is through decreased regulation and reduction in corporate taxes. The new US government believes that excessive regulation limits job creation and increases expenses. As such, regulation that was promoted under the previous government, such as control of methane emissions and a reduction in gas flaring, is likely to be pushed back. The US oil industry has stated that compliance to such rules adds to costs. In addition, corporate tax for all US companies, is also likely to be decreased. Currently, the US has one of the highest corporate tax rates in world, with the top marginal tax rate at 35 percent. The US government's stated priority is tax reform, with suggestions that the top-line tax rate could be reduced to 15 percent. Taken together, the reduction in regulatory oversight and lower taxes would not make uneconomic shale plays economical again, but they would be enough to influence investment decisions if oil prices increased further.

**Figure 10: Number of US futures market contract short positions and WTI oil price**



**Figure 11: Recent upward revision in US oil output forecast equal to 60 percent of OPEC cuts**





*...ii) building the Dakota Access and Keystone XL pipelines, which could see rises in domestic production and higher Canadian oil imports...*

One of the first acts of the new US president was signing executive orders that fast track the building of the Dakota Access pipeline (DAP) and expanding the Keystone pipeline, called Keystone XL (KXL). The building of DAP would directly benefit oil producers in the Bakken shale play. The Bakken currently produces close to 1 mbpd, but can only ship half of this via pipelines, with the rest being shipped via rail. The DAP pipeline would reduce Bakken producer's cost, with train shipping costs estimated at \$6-12 pb, thereby incentivizing higher output. The KXL pipeline, on the other hand, would add roughly 830 tbpd of additional Canadian oil to the 1.3 mbpd already being transported through the existing Keystone Pipeline. Since US shale oil is of a light oil variety, it needs to be blended with heavier oil in order to meet technical US refinery specifications. Canada (3.3 mbpd), along with Saudi Arabia (1 mbpd), Venezuela (800 tbpd), Mexico (500 tbpd) and Colombia (500 tbpd) are currently the major suppliers of heavy oil to the US. The KXL, once finished, would raise Canadian imports of oil, thereby displacing other countries' imports. At this point in time, Mexico would seem the ideal candidate to lose oil market share in the US. This is because the US has stated it intends to build a wall on its border with Mexico, with the funding of this coming from a tax of 20 percent on all Mexican imports. Saudi exports to the US are least at risk since Aramco will retain a 603 tbpd refinery in Texas after dividing its US assets with Shell Plc in Q2 2017.

*...iii) a 'border tax' regime potentially bidding up the price of the US oil benchmark WTI...*

The US proposal to tax Mexican imports comes in addition to a general 'border tax' regime being looked into by the US government. A destination-based taxation is currently being proposed by the government that would tax all goods and services from any country coming into the US. From an oil perspective, such a tax could increase the procurement cost of foreign oil for US refiners, who would in turn purchase domestic barrels instead, potentially bidding up the price of the US oil benchmark WTI, which could encourage higher supply from US producers.

*...iv) and the risk of sanctions being reapplied on Iran, thereby taking up to 1 mbpd oil offline.*

Lastly, the new US administration's stance towards Iran has become more hardline. Iran was one of the countries in which temporary travel bans (now repealed) were implemented by the US and this follows on from the US president's rhetoric during the election campaign which criticized Iran's nuclear agreement and the lifting of sanctions. Diplomatic tensions between the two countries have risen and so has the risk of sanctions being reapplied on Iran. Such an action would have the most extensive and immediate impact on oil markets, since it could take up to 1 mbpd of Iranian crude offline. Such measures would also dent Iran's ambition of increasing crude oil capacity by roughly 1 mbpd by 2020, to a total of 5 mbpd. The EIA estimates that Iran needs to attract around \$200 billion of infrastructure investment over the next four years to reach these targets.

*Saudi Arabia's full year average crude oil production (based on direct communication data) was 10.5 mbpd in 2016.*

Saudi Arabia's full year average crude oil production (based on direct communication data) averaged 10.5 mbpd in 2016. This was directly a result of the Kingdom maintaining its market share in a highly competitive global oil market, but also a result of higher year-on-year refined product exports. Going forward, there are obvious implications for Saudi crude oil production following the OPEC deal, with January direct communications data showing a 700 tbpd month-on-month decline in the Kingdom's output (Figure 12). Assuming OPEC sticks to proposed production cuts, we expect to see a



*Assuming OPEC sticks to proposed production cuts, we would expect to see a decline in Saudi crude oil exports and domestic consumption.*

*Saudi Arabia is committed to cutting production but this does not guarantee other OPEC countries will follow.*

*The current OPEC agreement is for six months and, although it can be extended, there is no guarantee it will be.*

*As such, our full year Saudi forecast remains at 10.4 mbpd for 2017.*

*Oil price volatility is likely to re-emerge during 2017.*

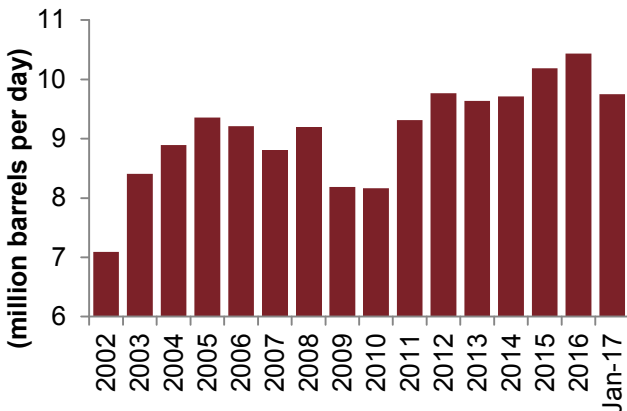
decline in both Saudi crude oil exports and domestic consumption. Lower Saudi domestic consumption will be easier to achieve since, as JODI data highlights, the Kingdom usually sees a sizable dip in consumption in first few months of each year, as cooler temperatures result in less energy usage. On the export side, Europe is likely to see less shipments in oil due to the absence of any major refining assets held by Aramco in that region. Meanwhile, the key growth markets in Asia, such as China and India are not likely to see any significant year-on-year declines in exports. Lastly, in the case of non-compliance from other OPEC members, we would expect to see Saudi production rebounding pretty quickly to around 2016 levels.

Under the OPEC agreement, Saudi Arabia will cut its production to 10.1 mbpd in H1 2017 (according to secondary sources data). Despite this, we have kept our Saudi crude oil production forecast unchanged year-on-year at 10.4 mbpd for 2017. As latest data shows, Saudi Arabia is committed to cutting production but this does not guarantee that other OPEC countries will follow through on their agreed cuts. In fact, historical data shows that OPEC has consistently exceeded its own production ceilings since 2001. Additionally, Russia committed to cut 558 tbpd gradually over a six month period, but does not have a history of following through on agreements, as highlighted by a similar deal 15 years ago, in which it failed to deliver on promises to cut in tandem with OPEC. Besides this, the current OPEC agreement is for six months and, although it can be extended, there is no guarantee it will be, meaning higher Saudi production is still possible in H2 2017. Lastly, on a technical note, OPEC's deal is based on output data from secondary sources (independent global oil agencies) whereas we use direct communications data (official production statistics) in our coverage of Saudi oil production. Historically, there are notable differences between the two, with direct communication data being consistently higher. Due to all the above factors, our full year Saudi forecast remains at 10.4 mbpd for 2017.

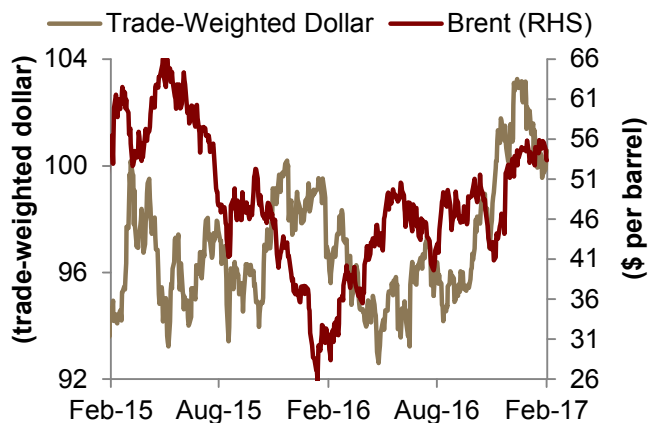
### Volatility in oil prices to return

In Q4 2016 oil prices increased by 7 percent quarter-on-quarter, as OPEC announced and then agreed to implement a production cut. Although oil prices have remained stable since then, with Brent at

**Figure 12: Saudi crude oil production averaged 10.5 mbpd in 2016 (direct communication)**



**Figure 13: Trade-weighted dollar and Brent oil prices**







*This volatility will be based on rising risk of OPEC and non-OPEC noncompliance to cuts...*

*...changes in key oil indicators from the US...*

*...and policy initiatives of the new US administration.*

around \$55 pb, volatility is likely to re-emerge during 2017. This volatility will be based on a rising risk of OPEC and non-OPEC noncompliance to production cuts, changes in key oil indicators from the US, and policy initiatives of the new US administration. In the case of the latter, aside from policy measures that directly affect oil markets (discussed in Box 1), there are risks that non-oil related policies will also affect oil markets. For example, in January 2017, we saw a number of controversial and protectionist policies being implemented by the new US president, which led to investor's appetite for the US currency being reduced, resulting in the dollar recording significant losses. The dollar, which has been strengthening for at least the last two years, has also contributed to downward pressure on oil prices over this period (Figure 13). Oil prices and the US dollar have a negative correlation since the global market for crude oil is generally priced in dollars. Whilst we expect the dollar to continue rising over the medium to long term, the short term outlook is less clear, and this uncertainty will add to volatility in oil prices in the months ahead.

Considering all of the above, we have stuck to our Brent oil forecast of \$55 pb in 2017.

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