



Attention shifting from supply to demand

Summary

- Brent oil prices averaged \$50 per barrel (pb) in Q3 2015 compared to \$61 pb in Q2 2015 and we see little upside on oil prices considering global oil surpluses will remain above 1 million barrels per day (mbpd) in Q4 2015 and early 2016.
- Non-OECD demand is expected to hold up, regardless of the fragility in the Chinese economy, with yearly rises in Chinese oil demand forecast at 3.6 percent. Overall, the continued moderate pace of global economic growth will result in 1.4 percent year-on-year global oil demand growth, with similar annual growth rates in 2016.
- Crude oil output from non-OPEC sources dropped for the first time in four years, on a year-on-year basis, in Q3 2015, as low oil prices began to impact US shale oil growth. US crude oil production growth will contract at a more rapid pace in the last quarter of 2015 and show negative growth in 2016.
- Both Saudi Arabia and Iraq saw the largest year-on-year increases in OPEC supply in Q3 2015 pushing the organization's output to a two year high of 32 mbpd. The battle for market share within OPEC is likely to see output elevated at 32 mbpd in 2015 and 2016, contributing to keeping oil markets oversupplied.
- Latest data available shows that Saudi year-to-August exports were up 3 percent year-on-year, at 7.38 mbpd, below ten year highs of 7.54 mbpd, recorded in 2012. Saudi Arabia will not change course on its strategy of retaining market share and we therefore see exports remaining at around current levels for the remainder of 2015 and 2016.

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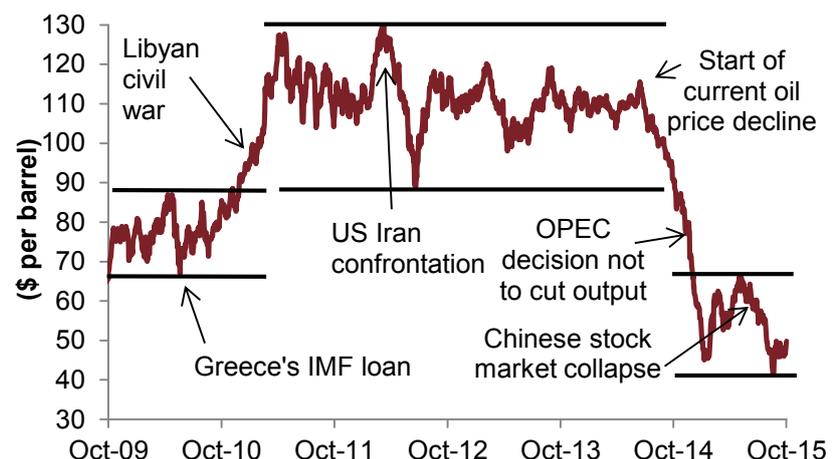
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Figure 1: Brent crude oil prices volatile in recent months.





Oil Demand

The continued moderate pace of global economic growth will result in 1.4 percent year-on-year global oil demand growth.

Rising volume of traffic on US roads is spurring oil demand, but crude and gasoline stocks remain high.

Oil demand rose modestly in Europe in Q3 2015 year-on-year.

Brent oil prices dropped 18 percent, quarter-on-quarter, in Q3 2015 as attention turned to the demand side of the oil market. Question marks were raised over Chinese economic growth while the International Monetary Fund (IMF) downgraded its forecasts for global GDP growth in October. Brent oil prices averaged \$50 pb in the third quarter, compared to \$61 pb in Q2 2015 (Figure 1). Looking ahead, the outlook for oil demand remains modest in 2015 and early 2016. Only Canada and the US, which account for 52 percent of OECD demand, are contributors to growth in the OECD. Weak economic growth from the EU and Japan will continue as a drag on oil consumption. Non-OECD demand is expected to hold up, regardless of the fragility in the Chinese economy. OPEC data points to yearly rises in Chinese oil demand by 3.6 percent whilst India will increase 3.7 percent and Middle East by 2.5 percent. Overall, the continued moderate pace of global economic growth will result in 1.4 percent year-on-year global oil demand growth, with similar annual growth rates in 2016 (Figure 2).

In the **US** (21 percent of global oil demand), the sharp drop in benchmark crude West Texas Intermediate (WTI) since the middle of last year is stimulating demand. According to the US Federal Highway Administration, the volume of traffic on US roads in the first half of 2015, measured in vehicle-miles traveled, was up 3.5 percent, year-on-year. Rising US oil demand, however, will provide limited support to international or domestic crude oil prices since a build-up of commercial crude and gasoline stocks will not translate into a large rise in imports (Figure 3).

Lower year-on-year oil prices have not jolted oil demand in **Europe** (14 percent of global oil demand), so far, as demand grew by a modest 1.2 percent in Q3 2015, year-on-year. Structural factors such as improvements in fuel economy standards and low levels of economic growth have seen the region's long-term oil demand trend downwards. As such, oil demand is likely to grow at similar rates in Q4 2015 but trend downwards in 2016.

Concerns over future **Chinese** (12 percent of global oil demand) oil demand (and other commodities) have arisen after weak economic

Figure 2: Global oil demand year-on-year change.

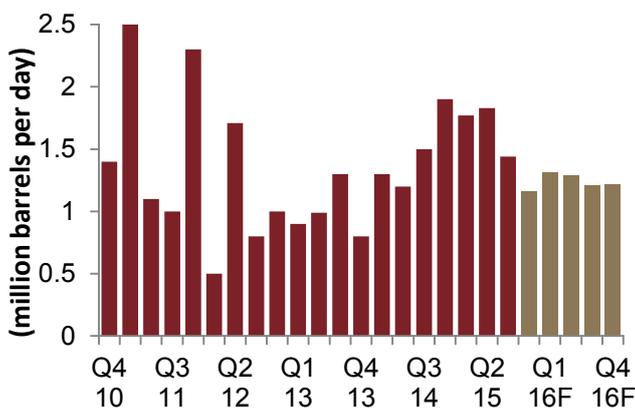
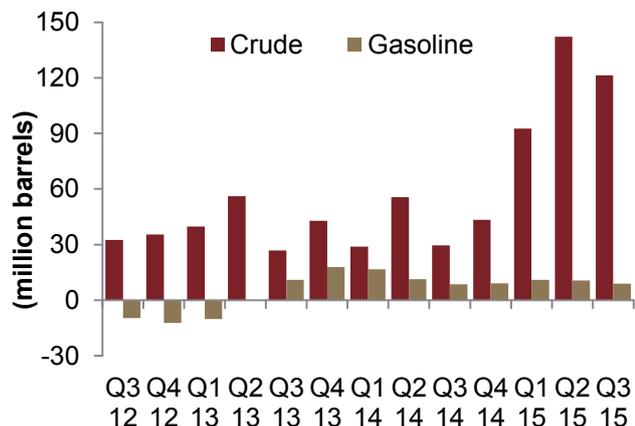


Figure 3: US commercial gasoline and crude stocks compared to 15 year average.



Note: 0 denotes 15 average.



Concerns over the future Chinese oil demand (and other commodities) have arisen...

...but growth in gasoline and LPG plus commercial crude stockpiling will keep yearly oil demand growth at above 3 percent.

Summer demand and lower crude oil prices saw crude oil imports in Japan rise 7 percent year-on-year.

data suggests that the economy may not reach growth at around 7 percent GDP, as targeted, in 2015. Manufacturing PMI's are at their lowest since March 2009 whilst investor sentiment has dampened. The government has responded by devaluing the Renminbi to boost exports and by pumping liquidity into the financial system. Although economic growth is likely to be weaker than forecasted, we do not see this adversely impacting oil demand in Q4 2015 and 2016. Firstly, China's gasoline demand, which accounts for around 30 percent of oil demand growth, will be boosted by lower pump prices and increase in sales of sport utility vehicles (SUVs), up 50 percent so far in 2015 year-on-year. Also, changes in the structure of China's industrial base will ensure the rise in the use of liquefied petroleum gas (LPG), which contributes around a third of oil demand growth. Secondly, continued stimulus measures designed to boost industrial activity will aid oil demand. Lastly, opportunistic buying by China at a time of low oil prices in an efforts to boost commercial crude stocks will also contribute in keeping annual oil demand at around 3 percent year-on-year, in both 2015 and 2016. Latest data shows that oil imports have remained robust with a 10 percent year-to-August rise with same period last year and 3.4 percent rise in Q3 2015 year-on-year (Figure 4). We also expect to see a similar growth in oil demand of around 3 percent in Q4 2015.

Preliminary Q3 2015 data shows that crude oil imports in **Japan** (4 percent of global oil demand) were up by 7 percent year-on-year. Peak summer demand and lower crude oil prices, compared to a year ago, resulted in increased substitution of liquefied natural gas (LNG) for crude in Japan's energy mix for a second quarter in row, reversing the historical medium term trend (Figure 5). Regardless, Japanese year-to-date crude oil demand remains 2.4 percent lower year-on-year. We see this downward trend continuing in Q4 2015 as the restart of a second nuclear reactor and sluggish economic growth keeps yearly oil demand growth negative.

The drop in year-on-year oil prices has acted as a economic windfall for **India** (4 percent of global oil demand) and encouraged oil demand to grow by 3.6 percent in Q3 2015 year-on-year. The IMF projects India to be the fastest growing economy in the world in 2015 and 2016, with GDP at 7.3 percent and 7.5 percent respectively. We see this strong economic performance driving oil demand growth in

Figure 4: Chinese oil imports holding up well.

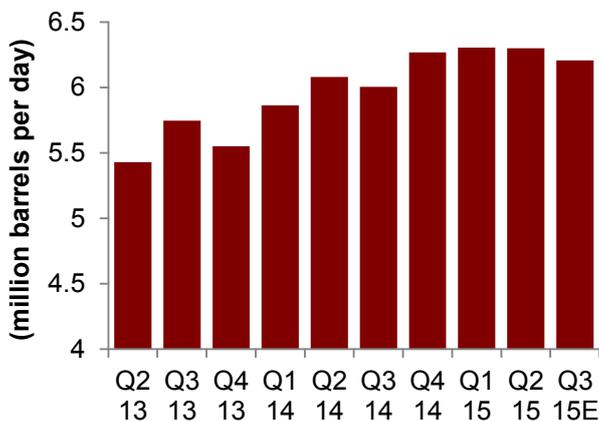
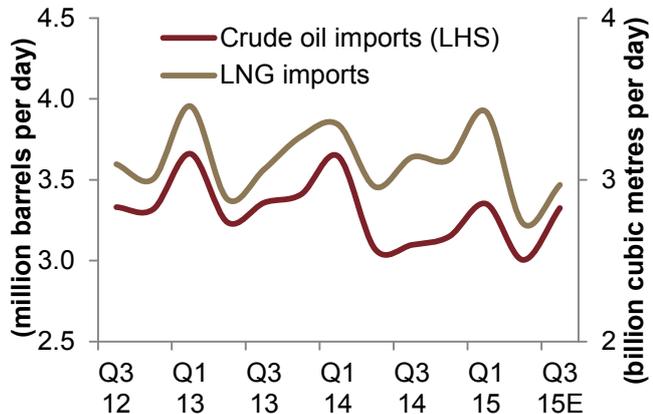


Figure 5: Japanese crude oil and LNG imports.





We see continued strong economic performance driving oil demand growth in Q4 2015 and 2016 as India's government takes measures to boost domestic manufacturing.

Increased refinery capacity and peak summer demand led to Saudi crude consumption averaging an estimated 3.1 mbpd during Q3 2015.

Non-OPEC supplies dropped in Q3 2015 year-on-year...

...but the decline in non-OPEC oil supply is likely to be compensated by year-on-year OPEC rises.

Total US oil production is estimated to have increased by 4 percent year-on-year in Q3 2015...

Q4 2015 and 2016 as India's government takes measures to boost domestic manufacturing. India's industrial output grew by 6.4 percent in August, a near three year high according to latest available data. Plans to build up strategic crude stocks will also add to oil demand, and with imports constituting 80 percent of total crude oil demand, India is likely become the third largest global importer of crude oil, at near 4 mbpd by the end of 2015.

Increased refinery capacity and peak summer demand led to an estimated 9 percent or 200 thousand barrels per day (tbpd) year-on-year increase in **Saudi** (3 percent of global oil demand) refinery intake in Q3 2015, with total crude consumption averaging an estimated 3.1 mbpd over the same quarter. We expect some declines in Saudi crude consumption due to lower seasonal demand in the last quarter of 2015 and forecast full year Saudi crude consumption at 2.7 mbpd over the year in 2015 and 2016.

Oil Supply

Crude oil output from non-OPEC sources dropped for the first time in four years in Q3 2015, on a yearly basis, as low oil prices began to impact US shale oil. OPEC data shows that non-OPEC supply dropped by 650 tbpd in Q3 2015 year-on-year. Looking ahead, further declines are expected in non-OPEC oil supply in Q4 2015, leading to a slowdown in the annual growth in oil output in 2015. For 2015 as a whole we expect to see a 1.6 percent year-on-year increase, down from an average yearly increase of 2.3 percent between 2010-14. Elevated levels of production from Russia will ensure growth, albeit modest, in non-OPEC oil supply, at 0.6 percent year-on-year, in 2016. In addition, the battle for market share within OPEC will lead to year-on-year rises from the organization too, in both 2015 and 2016, and will contribute to keeping the oil market oversupplied.

US shale oil maintained growth despite low oil prices, as cost-cutting measures and hedging is allowing year-on-year production rises, so far. According to the latest Energy Information Agency (EIA) data, total **US** oil production is estimated to have increased by 4 percent, in Q3 2015 year-on-year. However, on a monthly basis US shale oil

Figure 6: US crude oil production year-on-year change.

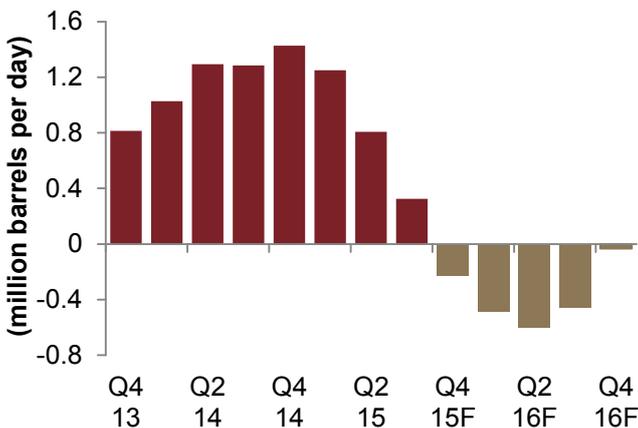
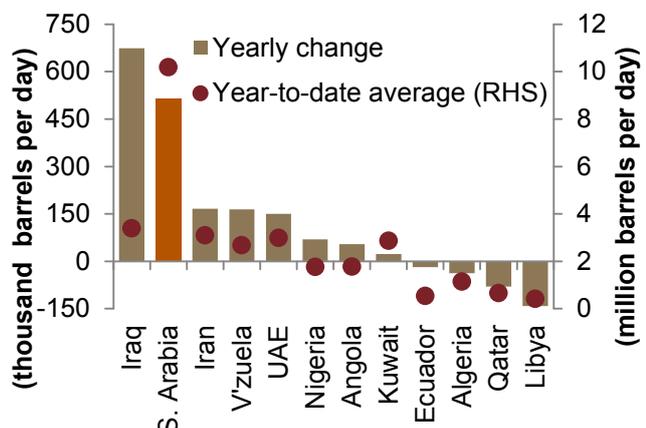


Figure 7: Change in yearly OPEC production and year-to-date average production.





...but month-on-month growth in shale has been negative since May 2015.

We expect Russian crude oil production to remain at elevated levels year-on-year, in the Q4 2015 and 2016.

OPEC members Saudi Arabia and Iraq had large increases in Q3 2015 year-on-year.

Indonesia had previously been a member of OPEC but left in 2008.

production is starting to show signs of slower growth. Month-on-month growth in shale has been negative since May 2015. The expected lower price environment going forward will increase financial pressure on shale oil companies, especially some smaller and mid-sized ones. This will result in US crude oil production growth contracting at a more rapid pace in the last quarter of 2015, with the EIA forecasting falls by 2 percent, year-on-year. Full year US crude production growth in 2015 will not be negative but it will slow to 6 percent year-on-year, compared to an average growth of 16 percent between 2012-2014. If this pace of decline in shale oil continues we will see the first negative annual growth in US crude production since 2008, at minus 4 percent year-on-year in 2016 (Figure 6).

Tax changes implemented by the government and international sanctions limiting oil companies from seeking financing from abroad, at a time of lower oil prices, have resulted in record **Russian** output. Preliminary data for September points to Russian oil output reaching a new post-Soviet monthly high of 10.74 mbpd whilst year-on-year growth was up by 1.8 percent in Q3 2015, at 10.65 mbpd. We expect Russian crude oil exports and production to remain at elevated levels, year-on-year, in the last quarter of 2015, with little change in output expected in 2016.

Total oil output from OPEC was up by 5 percent in Q3 2015, year-on-year, as a result of large increases from Saudi Arabia and Iraq (Figure 7) which pushed the organization's quarterly average above 32 mbpd for the first time in two years. OPEC has boosted production by almost 1.5 mbpd since November 2014, when it switched to defending market share from its previous policy of cutting output to prop-up prices. We see competition both amongst OPEC members and with non-OPEC producers for market share resulting in OPEC output levels showing stronger year-on-year growth in Q4 2015 and 2016. Furthermore, the readmission of Indonesia into OPEC will also add a further 800 tbpd to OPEC output (Box 1).

Box 1: Indonesia's re-entry into OPEC

Indonesia, the world's 23rd largest crude oil producer, had previously been a member of OPEC but left the organization in 2008 as crude oil exports became negligible (Figure 8). It has

Figure 8: Indonesian crude oil production and consumption

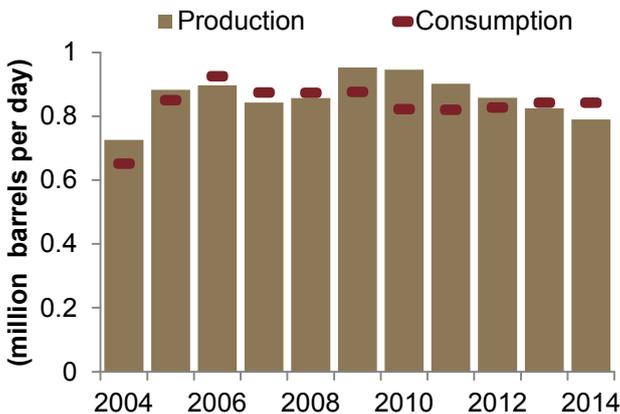
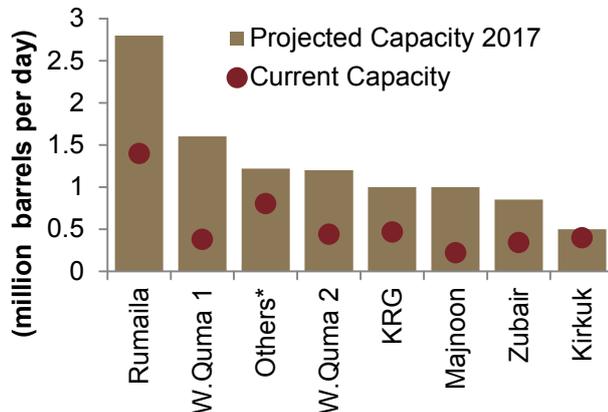


Figure 9: Current Iraqi capacity well below projected capacity (by oil field)



Note: *Dhi Qar & Missan & Ahdab
Source: Energy Intelligence and Jadwa Investment



Indonesia's re-entry could be a sign OPEC is moving towards a group for producers not just exporters.

Indonesia's inclusion could also be related to reconciling two opposing camps in OPEC.

Iraqi crude production increased by 22 percent year-on-year, in Q3 2015, to 3.8 mbpd.

Iran's crude output increased 2 percent year-on-year in Q3 2015...

nevertheless been approved for re-entry by all OPEC members for December 2015. Since the current members are all net oil exporting countries, as the name OPEC implies, there is some uncertainty as to why Indonesia has been let back in. One reason could be that as global oil markets have evolved in recent years, with the rise in 'new' forms of oil such as shale and tar sands, and in order for OPEC to have a sustainable and larger role in oil markets, the organization could also be evolving too. Allowing Indonesia back in could be a sign that OPEC is slowly moving towards an organization not just for exporters but also for major producers as well.

Indonesia's inclusion could also be related to reconciling two opposing camps in OPEC that have emerged since oil prices have dropped. Gulf members of OPEC are the main proponents of the strategy to elevate levels of output in order to maintain market share, whilst more financially troubled members such as Iran, Venezuela, Algeria, Libya and Iraq, have suggested cutting production to prop up prices. Indonesia, which enjoys good relations with all OPEC members, could be seen as perfect mediator between the two

Iraqi crude production increased by a substantial 22 percent, year-on-year, in Q3 2015, to 3.8 mbpd, and we see additional production rises during Q4 2015 and in 2016. Upstream investment since 2009 has culminated in Iraqi crude production capacity reaching 4.5 mbpd, but this is significantly below targeted capacity of 10 mbpd (Figure 9). The country's fiscal situation has deteriorated since 2013 due to lower oil prices, higher military spending, and costs associated with civil conflict. Although all efforts will be made to pump crude oil production to full capacity going forward, we do not see Iraqi production consistently reaching 4.5 mbpd. Continued fighting in the northern part of the country, infrastructure constraints in the south, and a delicate political resolution between the central government and the Kurdish Regional Government (KRG) will keep production around 4 mbpd during Q4 2015 and 2016.

Iran's crude output increased 6 percent year-on-year in Q3 2015 although sanctions continued to limit growth in exports with crude shipped to Iran's four main customers (China, Japan, India and South Korea) down two percent year-on-year (Figure 10). In July 2015 the US and its allies (P5+1) implemented a framework

Figure 10: Iranian exports to four main customers down year-on-year.

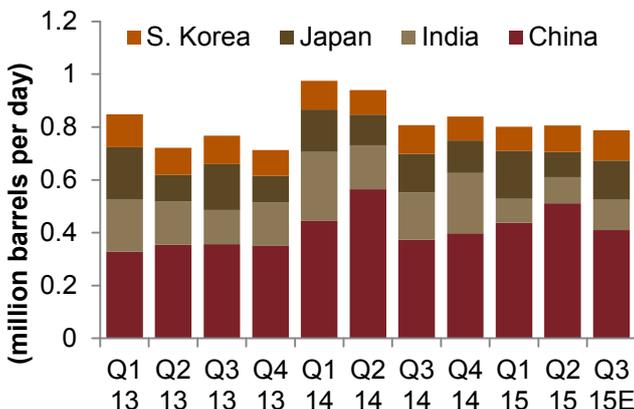
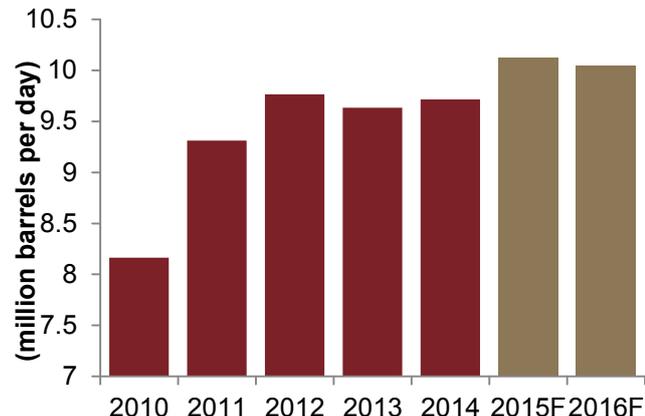


Figure 11: Saudi Arabian crude oil production forecast.





...although exports to its four main customers were down two percent, year-on-year.

Saudi Arabian crude production was up 5 percent year-on-year, averaging 10.2 mbpd.

We see Saudi oil production average 10.1 mbpd in 2015 and 2016.

Global oil surpluses will remain above 1 mbpd in Q4 2015, but will trend downwards throughout 2016.

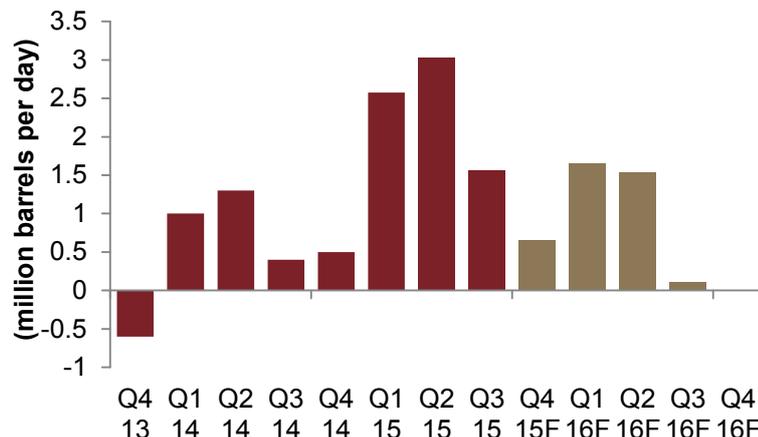
agreement with Iran in which a number of financial and energy-related sanctions on Iran would be lifted. Currently, the process of ending sanctions is still ongoing but these are expected to be lifted sometime in Q1 2016. Between now and then, we do not see a large volume of Iranian crude flooding the market, as production is expected to rise gradually by around 150 tbd year-on-year. After sanctions are lifted further output expansion will depend on foreign investment. Although foreign oil companies have shown interest in investing in Iran, most companies are likely to move forward cautiously and are not expected to sign contracts before 2017. Nevertheless, we see the potential for up to 500 tbd increase in Iranian exports by the end of 2016, taking total exports to around 1.8 mbpd.

OPEC data shows that **Saudi Arabian** crude production was up 5 percent year-on-year, averaging 10.2 mbpd. Latest data available shows that year-to-August exports were up 2 percent year-on-year, at 7.38 mbpd, below ten year highs of 7.54 mbpd recorded in 2012. Saudi Arabia is not changing course on its strategy of retaining market share which is evidenced by the fact that it is expected to cut the prices of crude it sells to Asia in November. We therefore expect exports to remain at current levels for the remainder of 2015 and 2016. The policy implemented by Saudi Arabia over regaining market share seems to be paying off with Saudi crude exports amounting to around 8.1 percent of the global market since November 2014, after falling to 7.9 percent in 2014. Maintaining market share is even more of a priority now for Saudi Arabia than when prices began to fall in the second half 2014. Global oil markets are more competitive and the Kingdom faces competition from both within OPEC and outside it. As a result, our 2015 forecast for Saudi oil production is at 10.1 mbpd and, even as non-OPEC supply slows in 2016, we see competition amongst OPEC members keeping yearly Saudi production at 10.1 mbpd in 2016 as well (Figure 11).

Global oil balances and prices

The glut in global oil markets has resulted in OECD commercial crude stocks rising, especially in the US, where rises in shale output and a ban on crude oil exports has seen record stockpiling. Stockpiling is expected to continue for the remainder of 2015, with

Figure 12: Global oil balances will tighten in the second half of 2016.





some easing in 2016. This combined with modest demand and continued supply increases will see global oil surpluses remaining above 1 mbpd in Q4 2015 but trending downwards throughout 2016 (Figure 12). All of this means that there is little upside to oil prices until 2017. Our full year 2015 Brent forecast is therefore \$56 pb and 2016 forecast is at \$61 pb.

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