OPEC

Monthly Oil Market Report

12 September 2017

Feature article:

The aftermath of Hurricane Harvey

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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket rose for the second-consecutive month in August to average $49.60/b, representing a gain of $2.67/b or 6%. Year-to-date, the Basket was 30.9% higher at $49.73/b. Crude futures prices also saw gains with ICE Brent increasing 5.5% to $51.87/b and NYMEX WTI up 3.0% at $48.06/b. Year-to-date, crude futures prices were more than 20% higher. During the week of 29 August money managers cut WTI futures and options net long positions by 105,671 contracts to 147,303 lots, the US Commodity Futures Trading Commission (CFTC) said. Money managers slightly reduced Brent futures and options net length contracts by 1,296 to 416,551 lots during the same week.

World Economy

World economic growth has been revised up for 2017 to 3.5% from 3.4%, while the growth forecast for 2018 remains unchanged at 3.4%. OECD growth has performed better-than-anticipated in the current year – particularly the Euro-zone and to some extent in the US – and is now forecast to grow by 2.2% in 2017 and 2.0% in 2018. India is expected to grow by 6.9% in 2017 and 7.5% in 2018. Brazil and Russia are both forecast to expand their recovery to 0.5% and 1.5% in 2017, respectively, followed by growth of 1.5% and 1.4% in 2018. China is expected to grow by 6.7% in 2017 and 6.3% in 2018.

World Oil Demand

World oil demand growth in 2017 is expected to rise by 1.42 mb/d after an upward revision of around 50 tb/d. The adjustment mainly reflects better-than-expected data from OECD region for the 2Q17, particularly OECD Americans and Europe, as well as China. In 2018, world oil demand is anticipated to grow by 1.35 mb/d, an increase of 70 tb/d from the previous report. This reflects higher growth expectations for OECD Europe and China.

World Oil Supply

Non-OPEC oil supply is expected to grow by 0.78 mb/d in 2017, unchanged from the last month due to offsetting revisions in Kazakhstan and US supply. In 2018, non-OPEC oil supply is forecast to grow by 1.0 mb/d, following a downward revision to Russia and Kazakhstan, totalling 0.1 mb/d. OPEC NGLs and non-conventional liquids production are seen averaging 6.49 mb/d in 2018, representing an increase of 0.18 mb/d, broadly in line with growth in the current year. In August, OPEC crude oil production decreased by 79 tb/d, according to secondary sources, to average 32.76 mb/d.

Product Markets and Refining Operations

Refinery margins in the Atlantic Basin strengthened in August. In the US, margins rose amid expectations for a product supply shortfall in the wake of Hurricane Harvey, coupled with already firm domestic demand, which supported product crack spreads. In Europe and Asia, product markets were supported by supply outages in the US, which encouraged higher arbitrage volumes, as well as healthy seasonal demand, which helped lift refinery margins.

Tanker Market

Average spot freight rates in August followed the typical trend seen in the summer months, with a weakening on most reported routes. Dirty spot freight rates fell, influenced by high vessel availability, as new deliveries were reportedly added to the fleet, putting pressure on an already oversupplied tonnage market. Clean tanker rates declined on average, influenced by lower rates registered on the West of Suez, despite a temporary hike in rates in the US due to Hurricane Harvey.

Stock Movements

Total OECD commercial oil stocks fell in July to stand at 3,002 mb. At this level, OECD commercial oil stocks were 195 mb above the latest five-year average. Crude and products stocks indicate surpluses of around 123 mb and 72 mb, respectively, above the seasonal norm. In terms of days of forward cover, OECD commercial stocks stood at 62.9 days in July, some 2.7 days higher than the latest five-year average.

Balance of Supply and Demand

Based on the current global oil supply/demand balance, OPEC crude in 2017 is estimated at 32.7 mb/d, around 0.5 mb/d higher than in 2016. Similarly, OPEC crude in 2018 is estimated at 32.8 mb/d, about 0.2 mb/d higher than in 2017.

Feature Article

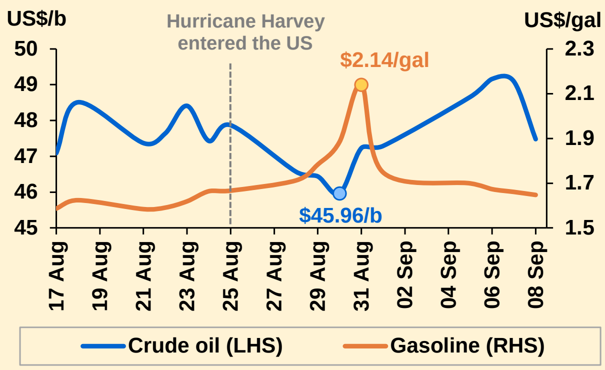
The aftermath of Hurricane Harvey

The impact of Hurricane Harvey has been particularly damaging to the energy centres of Texas and Louisiana, bringing to mind the destructive impacts of past storms, in particularly Hurricane Katrina in 2005. It also highlights some important shifts that have occurred in the US energy sector since then.

In 2005, Hurricane Katrina temporarily shut in 1.4 mb/d of US Gulf production, representing 95% of output in the area. Production was slow to return as the hurricane went directly through the offshore production area, causing considerable damage to rigs and platforms. Onshore, the flooding and high winds heavily impacted the refining sector, disrupting some 1.3 mb/d of refinery capacity concentrated along with US Gulf Coast, and inflicting major damage to four refineries.

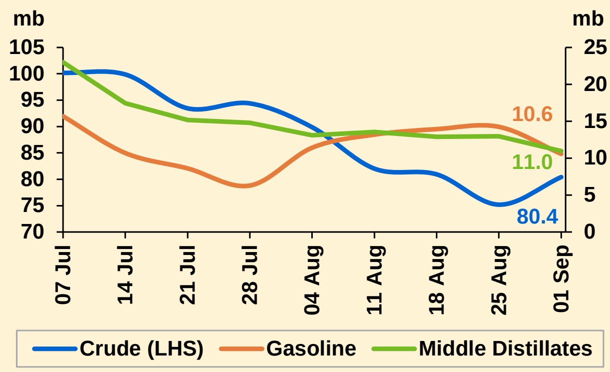
Hurricane Harvey, in contrast, has had less of an impact on US crude production, temporarily disrupting around 0.8 mb/d at its peak. Roughly half of this figure was from offshore production – which was spared the worst of the storm – while the other 0.4 mb/d was from onshore production in the shale producing region of Eagle Ford. While offshore production has been quick to return, there is still some uncertainty regarding the status of the affected Eagle Ford output due to the accompanying severe rains and flooding.

Graph 1: US crude oil and gasoline price movements



Sources: CME Group and OPEC Secretariat.

Graph 2: US crude, gasoline and middle distillates inventories overhang to 5-year average



Sources: US EIA and OPEC Secretariat.

Refineries and energy infrastructure – pipelines, port facilities, terminals – saw more of an impact, due mostly to the tremendous rains that stretched from Houston into Louisiana, although facilities around Corpus Christi also experienced high winds. At its peak, around 4.8 mb/d of refining capacity was offline. The Colonial Pipeline, which ships up to 2.5 mb/d of petroleum products from Houston to the US Northeast, was also shut down. Concerns about shortfalls led to a spike in gasoline prices, which jumped by 29% from the previous week to $2.14/gal, the highest level since mid-2015 (***Graph 1***). The restart of refineries and pipelines, together with the existing high stock levels (***Graph 2***) allowed gasoline futures prices to quickly return to previous levels, while the shortfall of US products exports to nearby destinations has been accommodated by cargoes from other regions.

Hurricane Harvey had a bearish impact on NYMEX WTI values, which slipped 5% from the previous week to $45.96/b. This was due to the fact that offshore facilities were not expected to see lasting damage. Additionally, the development of the US shale industry has made US supply less vulnerable to storms. Although US Gulf output has increased since Katrina, its share in US crude production has declined from 25% in 2005 to 18% in 2016, largely due to the emergence of the US shale industry. Also weighing on prices was reduced demand from US refineries at a time when US crude stocks were at comfortable levels of 80.4 mb above the five-year average.

Following Harvey, the US Department of Energy has made some 5.3 mb of crude available for sale from its Strategic Petroleum Reserve (SPR). Last week's inventory report showed a draw of only 0.3 mb in SPR for the week ending 1 September. This compares to a 20.8 mb release of SPR in the aftermath of Hurricane Katrina, as part of a coordinated 60 mb offer by IEA Members. OPEC had also expressed its commitment to fill any supply shortfall resulting from the effects of Hurricane Katrina.

In terms of the impact on US economic growth, the effects of Hurricane Harvey should be relatively minor, as disruptions are expected to be largely offset by the increase in activities related to the rebuilding efforts including $15.25 billion in aid approved by Congress. A similar impact was seen with Hurricane Katrina, where subsequent rebuilding efforts helped to stimulate the economy. Similarly, the impact on US oil demand is expected to be negligible, with offsetting revisions seen for 4Q17.

Despite the considerable damage, the US energy industry appears to be rebounding quickly. At the same time, the emergence of Hurricane Irma and other storms raises the possibility of the 2017 hurricane season being particularly destructive, with potential implications for the oil market. In response, OPEC reiterates its commitment to working together with other stakeholders for the stability and security of the oil market, which is essential for sustained economic growth and the advancement of global prosperity.

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Crude Oil Price Movements

The OPEC Reference Basket (ORB) moved higher for the second consecutive month to $49.60/b in August, up about 6%, the highest monthly percentage gain for the year. Global crude oil prices improved on continued signs of market rebalancing and a further decline in US stocks. Physical crude oil differentials also showed a noticeable improvement due to strong demand, firm refining margins and tight supplies. In addition to seasonal refined product demand, unplanned refinery shutdowns in Europe and the US Gulf Coast (USGC) have helped refining margins globally. Year-to-date (Y-t-d), the ORB's value was 30.9% higher or $11.74, at $49.73/b.

Month-on-month (m-o-m), oil futures expanded further, with ICE Brent gaining 5.5%, to once again average above the $50/b mark, supported greatly by declining US crude oil stockpiles, somewhat lower supplies and healthy refined product market sentiments. However, by the end of the month, crude futures prices fell as Hurricane Harvey threatened oil operations along the energy hub on the USGC. US gasoline futures, however, jumped sharply and gasoline rose to its highest level in two years. ICE Brent ended August $2.72 or 5.5% higher at $51.87/b, while the NYMEX WTI increased by $1.38 or 3.0%, to stand at $48.06/b. Y-t-d, ICE Brent is $9.49, or 22.2% higher at $52.14/b, while NYMEX WTI increased by $8.24, or 20.1%, to $49.30/b.

The ICE Brent/NYMEX WTI spread widened significantly to near $4/b m-o-m in August despite consecutive weeks of US crude stock draws. Healthy demand for distillate- and gasoline-rich crudes, tightening fundamentals and the clearing of floating storage in the North Sea continued to support the Brent market. The spread widened to average $3.81/b, representing a $1.34 expansion. During the week of 29 August speculators cut WTI futures and options net long positions by 105,671 contracts to 147,303 lots, the US Commodity Futures Trading Commission (CFTC) said. Speculators slightly reduced Brent futures and options net length contracts by 1,296 to 416,551 lots during the same week.

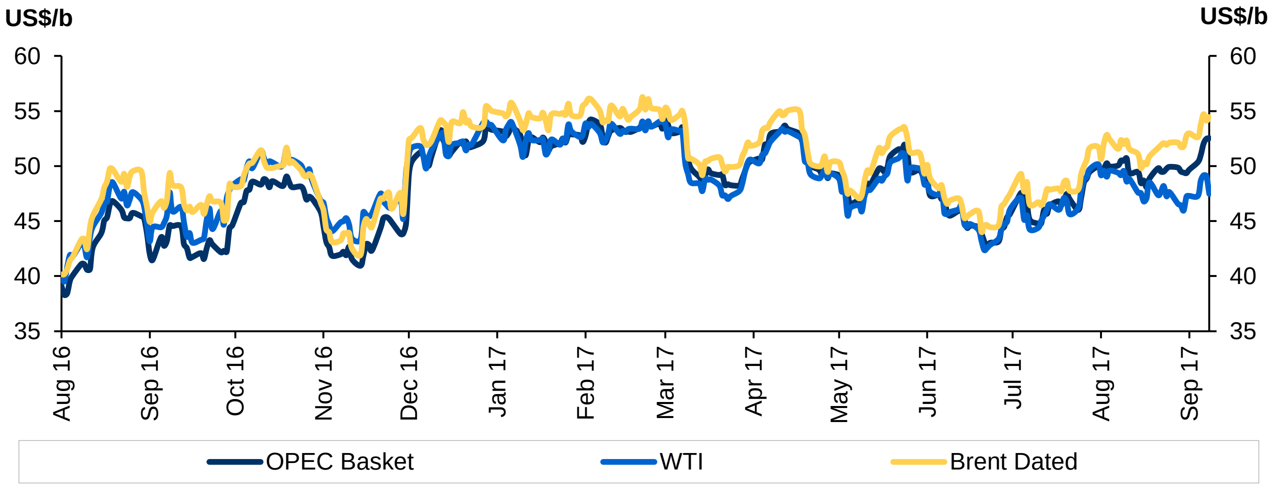
The contango structure in the market continued to ease, particularly for Brent, which flipped into backwardation for the first time since the second half of 2014. This took place as demand shot up for prompt-loading barrels and amid increasing sentiment that the oil market will rebalance over the next year with a major drawdown in crude and product stocks.

Global sweet/sour differentials were mixed in August; they widened further in Asia, while in Europe they narrowed again on tighter sour supplies. On the USGC, the spread remained unchanged. In Europe, the Brent premium to medium sour Urals crude decreased again by 36¢ to 33¢/b, the lowest in more than two years.

OPEC Reference Basket

The **ORB** moved higher for the second consecutive month, up by nearly 6%, the highest monthly percentage gain for the year. Global crude oil prices improved as OPEC and non-OPEC countries continued to conform with voluntary output adjustments and US stocks declined further. Physical crude oil differentials also showed a noticeable improvement due to strong demand, firm refining margins and tight supplies. In addition to seasonal refined product demand, unplanned refinery shutdowns in Europe and the USGC have helped support refining margins globally. Oil field maintenance – as well as diminished supplies of sour crude, particularly in Asia and Europe due to OPEC and non-OPEC production adjustments, which mostly affects sour grades – underpinned physical crude oil values. US crude oil stocks levels fell significantly over the month amid higher refinery throughput as well as increases in US exports due to favourable arbitrage economics. During the week of 25 August, US stock draws continued for the ninth consecutive week, with stocks falling 5.4 mb w-o-w, US exports also continued at significant levels, particularly to Asia, replacing lower OPEC sour crudes supplies to the region and capitalising on the record-breaking Brent/WTI gap, which favoured sweet crude arbitrage from the US to Asia. Sweet crudes in Asia are priced against Brent, so a wider Brent/WTI spread makes these grades more expensive relative to US crudes, which are priced against WTI. Over the month, US exports averaged around 0.9 mb/d.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

The **ORB value** rose m-o-m by $2.67 to settle at $49.60/b on average in August, up 5.7%. Compared with the previous year, the ORB value was 30.9% higher or $11.74, at $49.73/b.

Table 1 - 1: OPEC Reference Basket and selected crudes, US$/b

			Change		*Year-to-date*	
	Jul 17	Aug 17	Aug/Jul	%	2016	2017
Basket	**46.93**	**49.60**	**2.67**	**5.7**	**37.99**	**49.73**
Arab Light	47.12	49.63	2.51	5.3	38.23	49.86
Basrah Light	46.43	49.26	2.83	6.1	36.66	49.15
Bonny Light	48.66	51.69	3.03	6.2	41.37	51.58
Es Sider	46.96	50.31	3.35	7.1	40.30	49.76
Girassol	48.75	52.31	3.56	7.3	41.16	51.45
Iran Heavy	46.01	48.70	2.69	5.8	36.60	49.27
Kuwait Export	46.19	48.70	2.51	5.4	36.35	49.04
Qatar Marine	47.45	49.71	2.26	4.8	38.70	50.49
Merey	43.41	45.38	1.97	4.5	30.46	45.03
Murban	49.02	51.51	2.49	5.1	42.33	52.41
Oriente	45.21	47.45	2.24	5.0	35.52	47.05
Rabi Light	47.54	50.69	3.15	6.6	40.25	50.27
Sahara Blend	47.96	51.31	3.35	7.0	41.99	50.97
Zafiro	48.19	51.67	3.48	7.2	39.82	50.94
Other Crudes						
Dated Brent	48.51	51.66	3.15	6.5	41.30	51.29
Dubai	47.59	50.24	2.65	5.6	38.56	50.72
Isthmus	50.75	52.92	2.17	4.3	39.38	52.54
LLS	49.02	51.08	2.06	4.2	42.67	51.38
Mars	45.85	47.91	2.06	4.5	37.59	47.91
Minas	43.96	45.91	1.95	4.4	39.73	47.00
Urals	47.82	51.30	3.48	7.3	39.69	50.21
WTI	46.67	48.03	1.36	2.9	40.87	49.28
Differentials						
Brent/WTI	1.84	3.63	1.79	-	0.44	2.01
Brent/LLS	-0.51	0.58	1.09	-	-1.37	-0.09
Brent/Dubai	0.92	1.42	0.50	-	2.74	0.57

Sources: Argus Media, Direct Communication, OPEC Secretariat and Platts.

ORB component values improved along with relevant crude oil benchmarks and monthly changes in respective official selling price (OSP) differentials. Crude oil physical benchmarks, namely Dated Brent, Dubai and WTI spot prices, increased in August by $3.15/b, $2.65/b and $1.36/b, respectively.

Continuing improvements in price differentials, coupled with an uplift in crude benchmark Brent outright prices, supported light sweet crude Basket components from West and North Africa to prices above $50/b. Saharan Blend, Es Sider, Girassol, Bonny Light, Equatorial Guinea's Zafiro and Gabon's Rabi values increased by $3.32/b on average, or 6.9%, to $51.33/b. Physical crude differentials for these grades improved on higher demand from Asia, particularly China and India. Booming refinery profits are helping West African oil producers to sell cargoes at higher prices, aided by a shortage in certain types of crude amid OPEC production adjustments and geopolitical turbulence.

Tropical Storm Harvey caused in a shortage of refined products in the US, which also supported margins and increased demand for West African gasoline- and distillate-rich crudes. At least 3.6 mb/d of refining capacity was offline in Texas and Louisiana, or nearly 20% of total US capacity. Restarting plants even under the best conditions can take a week or more. As a result of the outages, major pipelines carrying gasoline, diesel and jet fuel started to adjusted deliveries or closed lines outright because of a lack of supply.

Latin American ORB components Venezuelan Merey and Ecuador's Oriente edged up to $45.38/b and $47.45/b, respectively. They gained $1.97, or 4.5%, and $2.24, or 5.0%, respectively. Tight sour crude supplies in the USGC and high exports supported these grades.

Buoyed again by an uplift in OSP offsets and supported by healthy global sour markets, the value of multiple-region destination grades Arab Light, Basrah Light, Iran Heavy and Kuwait Export improved further. On average, these grade's values expanded by $2.64 in August, or 5.7% to $49.07/b. Middle Eastern spot components Murban and Qatar Marine saw their values improve by $2.49, or 5.1%, to $51.51/b and $2.26, or 4.8%, to $49.71/b, respectively. The grades were underpinned by firm demand from Asia in general, but most noticeably from Taiwan and India.

On 11 September, the **ORB** stood at $51.82/b, over $2.22 above the August average.

The oil futures market

Oil futures rose further in August, with ICE Brent gaining 5.5% and averaging above the $50/b mark, supported greatly by a decline in US crude oil stockpiles, somewhat lower supplies and healthy refined product market sentiments. Crude futures prices climbed earlier in the month on US dollar weakness and momentum toward oil market rebalancing. Geopolitical developments also supported gains to two-month highs. Prices advanced further with surging US fuel demand and strong refinery runs. US gasoline demand was at 9.842 mb/d for the week ending 28 July, the highest on record. Before the end of first decade of the month, crude oil futures prices continued increase further after a strong US jobs report bolstered hopes for growing energy demand. Subsequently, oil prices started to fall amid concerns over global oversupply of crude. During the same week, the biggest weekly draw in US crude stocks since September 2016 could not prevent a slide in oil futures, as a surprise build in gasoline inventories and a continuing rise in US output dictated market reaction. Before long, prices rebounded sharply as the dollar fell, US drillers cut rigs and refined product futures led the oil complex higher after Energy Information Administration (EIA) data showed a gasoline stock draw, while traders continued to track a potential hurricane in the Gulf of Mexico. However, gains were limited amid the reopening of Libya's largest oil field.

By the end of the month, prices fell again as Hurricane Harvey threatened oil operations along the energy hub on the USGC. US gasoline futures temporarily spiked as severe flooding disrupted refineries and energy infrastructure. In contrast, crude prices dipped on expectations for reduced refinery demand. However, prices normalized quickly with the return to the market of disrupted facilities.

ICE Brent ended August $2.72, or 5.5% higher, to stand at $51.87/b on a monthly average basis, while the NYMEX WTI increased by $1.38, or 3.0%, to $48.06/b. Y-t-d, ICE Brent is $9.49, or 22.2% higher at $52.14/b, while the NYMEX WTI rose by $8.24, or 20.1%, to $49.30/b.

Crude oil futures prices improved in the second week of September. On 11 September, **ICE Brent** stood at $53.84/b and **NYMEX WTI** at $48.07/b.

Table 1 - 2: Crude oil futures, US$/b

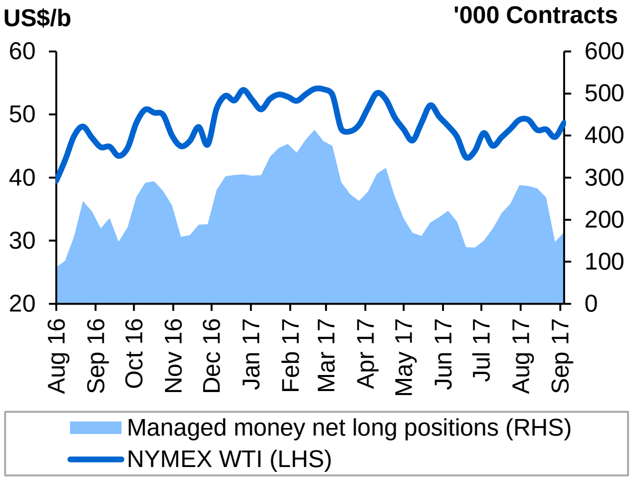
			Change		*Year-to-date*	
	Jul 17	Aug 17	Aug/Jul	%	2016	2017
NYMEX WTI	46.68	48.06	1.38	3.0	41.06	49.30
ICE Brent	49.15	51.87	2.72	5.5	42.65	52.14
Transatlantic spread	**2.47**	**3.81**	**1.34**	**2.57**	**1.59**	**2.84**

Note: Totals may not add up due to independent rounding.
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

As WTI futures rose during the 1st week in August, touching over $50/b for the first time since May, hedge funds and other **money managers** raised their net long WTI crude futures and options positions, according to CFTC data. Hedge funds raised combined futures and options positions by 43,861 contracts to 282,362 lots during the period. The level was the highest seen since mid-April. Hedge funds and other money managers also raised their net long positions in futures and options contracts in Brent futures by 53,777 contracts to 342,348 lots during the same period.

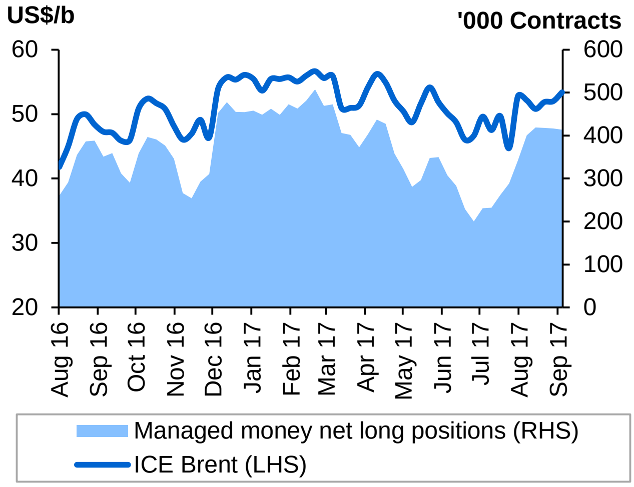
Subsequently, hedge funds and money managers trimmed their bullish bets on WTI crude futures and options positions for the third straight week. During the week of 29 August, the speculator group cut its futures and options net long positions by 105,671 lots to 147,303 contracts, the highest amount in about a month, the CFTC said. Money managers also slightly reduced Brent futures and options contract net lengths by 1,296 lots to reach 416,551 contracts during the same week. This continued strength in Brent futures and options net lengths is likely connected to a sudden tightening of inter-month spreads, which saw Brent move from contango into backwardation between October and December. More generally, Brent inter-month spreads have tightened much more than WTI's since the last week of July, which has made Brent more profitable for hedge fund managers with long positions. Total futures and options open interest volume in the two exchanges was down at 5.66 million contracts.

Graph 1 - 2: NYMEX WTI vs. Managed money net long positions



Sources: CFTC , CME Group and OPEC Secretariat.

Graph 1 - 3: ICE Brent vs. Managed money net long position



Sources: Intercontinental Exchange and OPEC Secretariat.

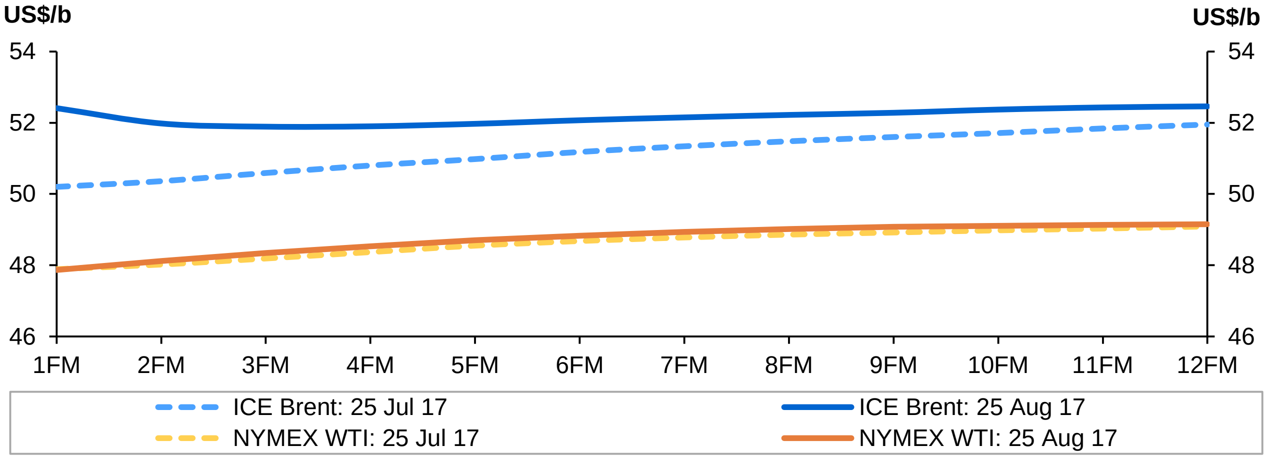
The daily average **traded volume** for NYMEX WTI contracts increased further by 128,898 lots, or 9.3%, to 1,509,803 contracts, while that of ICE Brent was 89,643 contracts higher, up by 10.5% at 941,999 lots. Daily aggregate traded volume for both crude oil futures markets increased by 218,541 contracts to 2.45 million futures contracts. In August, total traded volume for NYMEX WTI and ICE Brent futures were higher at 34.73 and 21.67 million contracts, respectively.

The futures market structure

The global oil market **contango structure** continued to ease, particularly in Brent, which flipped into backwardation for the first time since it slumped into contango in the second half of 2014 when the oil market became oversupplied. This is due to the shooting up of demand for prompt-loading barrels, and amid increasing sentiment that the oil market will rebalance over the next year with a major drawdown in crude and product stocks. This first stirring of backwardation since oil prices were above $100/b is seen as sign of tightening supplies and strong demand. It should also encourage those who have held physical crude in storage during the oil glut to sell barrels into the market as it is no longer profitable to hold them. Furthermore, the entire Brent forward curve continued to flatten and the back end is in backwardation. Meanwhile, the contango in Dubai is almost flatt, buoyed by robust demand for spot crude in Asia and lower supplies due to the OPEC production adjustment agreement. WTI remained in the same light contango over the month on average, despite consecutive weeks of inventory draws.

The Dubai M1 52¢/b discount to M3 decreased to 9¢/b, contracting by 44¢. The North Sea Brent M1/M3 40¢/b contango flipped into a backwardation of 30¢/b, a 70¢ improvement. In the US, the WTI contango was almost unchanged as WTI's M1/M3 widened by 2¢ to negative 35¢/b.

Graph 1 - 4: NYMEX WTI and ICE Brent forward curves



Note: FM = future month.
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

The **ICE Brent/NYMEX WTI spread** widened significantly to near $4/b despite consecutive weeks of US crude stock draws. Healthy demand for distillate and gasoline-rich light sweet crudes, tightening fundamentals and the clearing of floating storage in the North Sea continue to support the Brent market. The larger Brent/WTI spread has widely opened arbitrage trade from the US to Europe and Asia. US exports stayed elevated at 0.9 mb/d. Although this record high should have helped narrow the WTI-Brent spread, Tropical Storm Harvey will prevent this from happening, as refinery outages will weigh on Cushing balances while strengthening those of Brent, further widening the spread. The first-month ICE Brent/NYMEX WTI spread widened to $3.81/b in August, a $1.34 or 2.57% expansion.

Table 1 - 3: NYMEX WTI and ICE Brent forward curves, US$/b

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	25 Jul 17	47.89	48.02	48.19	48.68	49.09	1.20
	25 Aug 17	47.87	48.12	48.34	48.83	49.15	1.28
	Change	**-0.02**	**0.10**	**0.15**	**0.15**	**0.06**	**0.08**
ICE Brent	25 Jul 17	50.20	50.36	50.59	51.18	51.95	1.75
	25 Aug 17	52.41	51.98	51.89	52.07	52.46	0.05
	Change	**2.21**	**1.62**	**1.30**	**0.89**	**0.51**	**-1.70**

Note: FM = future month.
Sources: CME Group and Intercontinental Exchange.

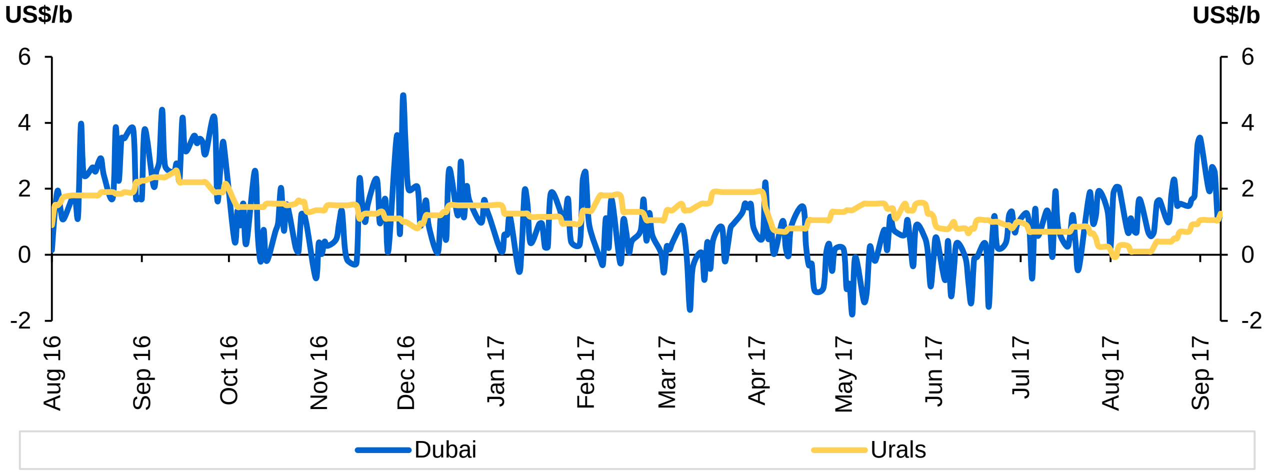
The light sweet/medium sour crude spread

Global sweet/sour differentials were mixed in August when they widened further in Asia, while in Europe they narrowed again on tighter sour supplies. In the USGC, the spread remained unchanged.

In **Asia**, Tapis premium over Dubai increased for the third month in a row, despite ongoing lower sour crude supplies. The spread grew as the Brent/Dubai spread widened further to around $1.35/b, which further slowed west-east arbitrage movement for Atlantic Basin crudes. Lower supplies of Vietnamese sweet crudes amid the start-up of a new refinery there also supported the Asia Pacific light sweet oil market. Moreover, continuing healthy demand for Asia Pacific light sweet crudes amid firm refining margins in Asia and new requirements for refined products for export to the US in the aftermath of Harvey, supported the trend. The Tapis/Dubai spread widened by 45¢ to $3.37/b in August. The Dated Brent/Dubai spread widened, improving by 42¢ to the advantage of Brent, a $1.34/b premium compared with the previous month's 92¢/b premium.

In **Europe**, light sweet North Sea Brent premium to Urals medium sour crude decreased again by 36¢ to 33¢, a fresh two-year high on firm demand for sour crudes. Urals price differentials to Dated Brent strengthened in the Mediterranean amid strong margins, limited supply and a steady flow of Baltic barrels to Asia, which offset an outage at Shell's Pernis refinery. Meanwhile, late in the month Urals crude differentials to Dated Brent in Northwest Europe weakened for an eighth consecutive session. The grade has been under pressure after a loading plan for Baltic ports and Novorossiysk showed ample supplies amid a heavy domestic refinery maintenance season, limited buying interest and weaker refinery margins.

Graph 1 - 5: Brent Dated vs. Sour grades (Urals and Dubai) spread



Sources: Argus Media, OPEC Secretariat and Platts.

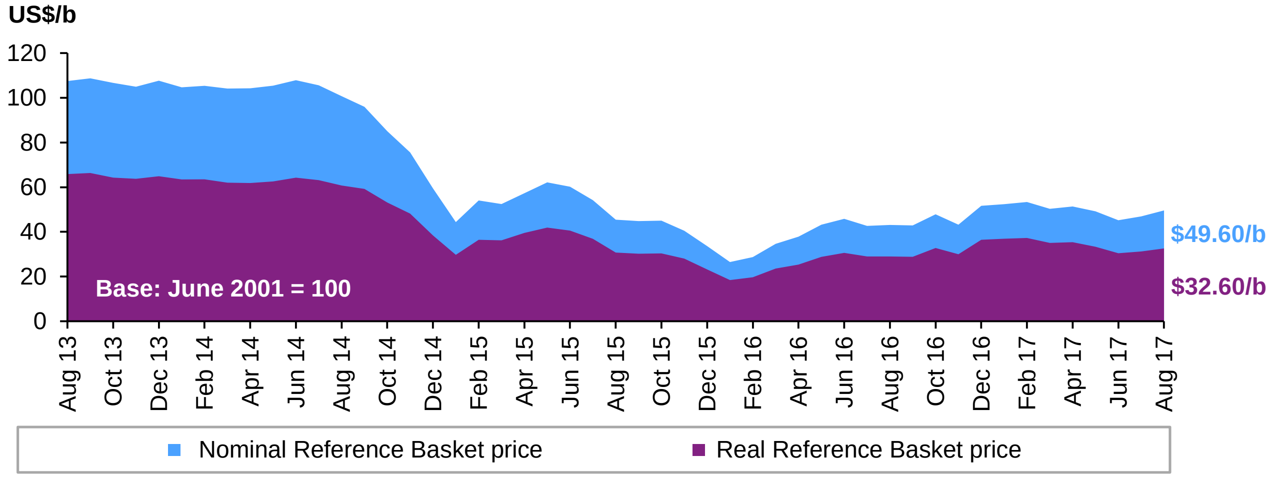
In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars remained at $3.17/b. The USGC grades rallied to their strongest levels in nearly two years after Brent's premium over US crude widened, helping to increase the amount of crude exports overseas to Asia. Meanwhile, differentials on the USGC were mixed in volatile trade with low liquidity, as tropical depression Harvey caused destruction throughout the USGC energy industry. Trading was fairly thin, with many Houston traders out of their offices because of flooding. About 4.4 mb of US refining capacity has been shut down by the height of the storm, representing nearly a quarter of US refining production.

Impact of US dollar and inflation on oil prices

The **US dollar (USD)** generally declined in August against both major currency counterparts and emerging market currencies, mainly on the anticipation of a more gradual pace of interest rate increases by the US Fed. On average, the dollar dropped by 2.4% m-o-m against the euro – down 10.7% compared with last December. Part of the weakness against the euro is related to the expectation that plans for the removal of some degree of monetary policy accommodation, would be announced by the European Central Bank in the upcoming meetings. The USD declined by 2.2% m-o-m against the Japanese yen, partly as a result of uncertainties associated with tensions in the Korean Peninsula. It lost 0.6% against its Canadian counterpart. These losses accelerated at the beginning of September after the Bank of Canada raised interest rates for the second time this year. However, the dollar was slightly up by 0.2% against the pound sterling and by 0.4% against the Swiss franc.

On average, the US dollar declined by 1.4% against Chinese yuan in August – down by 3.5% since December. China's international reserves have risen since February on the effect of tightening capital controls as well as some valuation effects. The dollar declined by 0.8% m-o-m against the Indian rupee, in spite of the Reserve Bank of India cutting interest rates at the beginning of August, and it is down by 5.8% since December. The dollar declined by 1.7% m-o-m against the Brazilian real, while falling by a slight 0.1% on average against the Russian ruble, though declines accelerated towards the end of the month in tandem with strengthening oil prices. The US dollar declined against the Mexican peso by a slight 0.2% - down 13.2% since last December, and is currently below the levels preceding the US election.

Graph 1 - 6: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price[1]



Source: OPEC Secretariat.

In nominal terms, the price of the **OPEC Reference Basket (ORB)** increased by $2.67, or 5.7%, from $46.93/b in July to $49.60/b in August. In real terms, after accounting for inflation and currency fluctuations, the ORB increased to $32.60/b from $31.23/b (base June 2001=100). Over the same period, the US dollar declined by 1.4% against the import-weighted modified Geneva I + US dollar basket[1], while inflation declined by 0.1%.

[1] *The 'modified Geneva I+US$ basket' includes the Euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the Basket.*

Commodity Markets

In the group of energy commodities, crude oil prices increased as a result of both the continuing decline in US inventories and signs of continuing market rebalancing. Meanwhile, coal prices jumped due to higher demand for power generation in China. With regard to non-energy commodities, agricultural price declines were led by drops in grain prices based largely on receding fears of drought in the US plains and the expectation of plentiful global supplies. However, at the end of the month and beginning of September, cotton and orange prices increased in response to the potential damage caused by Hurricanes Harvey and Irma to the US southern states' crops. Base metals were supported by improving prospects for global manufacturing activity and the continuing expansion of Chinese infrastructure and real estate investment, while some supply disruption also played a part. Gold prices rose on reduced expectations of a rate hike in December by the US Federal Reserve.

Trends in selected commodity markets

During the month, further improvement in global manufacturing activity led a rally in metal prices to their highest level since 2014. The JPMorgan global manufacturing purchasers managers index (PMI), which achieved a 75 month high of 53.1 compared to 52.6 from the previous month, signals the resilient pace of global industrial production, while at the same time, supply disruptions from strikes, regulatory led mine closures and weather related events has also tightened the market. Further support has arrived from expectations of fewer interest rate increases by the US Federal Reserve in the short run, which is associated with a weaker US dollar and stronger gold prices. Meanwhile the effects of Hurricanes Harvey and Irma have supported the prices of various commodities. In the agricultural commodities' group, cotton prices have jumped by more than 12% since mid-August on concerns about the cotton crop in the State of Texas, which according to the US Department of Agriculture (USDA) accounted for around 43% of the US cotton output in 2016. Furthermore, the expected path of Hurricane Irma will impact on the South East region, which accounts for an additional 26% of US cotton production. The impact of Irma has also been reflected in a 15% jump in the price of concentrated orange juice futures, as the State of Florida produces more than half of US orange output.

Beyond the aforementioned storm related issues, monthly average agricultural prices declined with the downward trajectory of food prices. Grains led the drop in food prices, largely reversing the gains achieved in 2Q17, as the impact of drought in the US plains, and flooding in South Asia during that quarter appear to have been overestimated and global stocks of wheat, soybeans and rice are expected to increase due to higher global supplies. USDA projections for global stocks of wheat at the end of the marketing year 2017/18 increased to 264.4 million metric tonnes (MMT) from 258.6 MMT in the previous month estimation, mainly due to higher expected output from Russia and Ukraine. Average winter wheat prices declined by around 15% m-o-m. In the case of soybeans, the USDA revised up the 2017/18 global stocks forecast from 93.5 to 97.8 MMT due to higher expected US production which represents an increase from the 97.0 MMT of the previous year. In the case of rice, global stocks estimations for 2017/2018 were slightly revised upwards to 122.9 MMT versus 119.4 MMT the previous year by the USDA in spite of lower expected output from Bangladesh and Sri Lanka.

Metal prices were supported by improving prospects for global manufacturing and investment in infrastructure in China. In spite of some recent slowdown, strong growth in fixed asset and real estate investment has translated into higher steel demand. As a result, Chinese steel output has increased by 10.3% y-o-y in July and by 5.1% y-o-y from January to July. Iron ore prices rose by 12.3% during the month, also supported by flat y-o-y mine output in July, in China. Amid rising Chinese steel and aluminium output, with aluminium up 9% y-o-y, regulatory actions from the US Government will require close monitoring. During the month, the US Department of Commerce preliminarily ruled that Chinese aluminium foil production benefits from subsidies ranging from 16.7% to 81%, which could trigger tariffs in that same range. This could be a harbinger of similar actions to other aluminium and steel products as well. Commodities used for steel product making such as zinc and nickel have also risen due to higher steel product demand. Nickel prices have also been supported by the Philippine Government's continuation of the restrictions to open pit mining. Copper prices have jumped to top strong manufacturing prospects globally while the effects of the supply disruption in Chile and Peru at the beginning of the year supported prices. Average copper inventories at the London metal exchange warehouse system dropped by 23% to 228k tonnes during the month, suggesting a temporary tightening market as well.

In the group of energy commodities, oil prices advanced on sustained withdrawals from inventories and the continuing conformity with the Declaration of Cooperation. Natural gas prices declined in the US in the first weeks of the month on lower temperatures in eastern and southern regions which limited demand, but prices recovered toward the end of the month, partly in anticipation of the impact of Hurricane Harvey. In the aftermath of the storm, prices have remained stable in the band between $2.90/mmbtu and $3.1/mmbtu, were they have stayed since mid-March. Natural gas prices in Europe advanced due to higher demand resulting from low temperatures and lower natural gas deliveries from Norway. Natural gas inventories for the EU Member States increased to 76.7% of capacity at the end of August from 63.4% in the previous month, though last year's end of August inventories were at 83.7%. Thermal coal prices jumped by 9.6% as a result of strong demand for power generation in China and supply delays in Indonesia and Australia due to severe weather. Thermal power generation in China increased by 10.5% in July, and by 7.8% y-o-y from January - July, as a result of a summer heat wave, higher industrial production and reduced hydro electrical output which was down by 3.4% y-o-y in the January - July period according to the National Bureau of Statistics. The Government of China recently banned coal, iron ore and lead imports from North Korea to comply with the UN resolutions. In 2016, shipment of Anthracite (high quality coal) from North Korea to China reached 22.4 MMT, while due to a preliminary suspension as of February 2017, only 2.67 MMT have been shipped in 2017, according to Chinese customs official data.

Table 2 - 1: Commodity price data

Commodity	Unit	*Monthly averages*			*% Change*	*Year-to-date*	
		Jun 17	Jul 17	Aug 17	Aug 17/Jul 17	2016	2017
Energy*		**60.4**	**62.3**	**65.0**	**4.4**	**51.3**	**65.3**
Coal, Australia	US$/mt	81.0	87.5	95.9	9.6	54.7	83.5
Crude oil, average	US$/b	46.2	47.7	49.9	4.8	40.2	50.6
Natural gas, US	US$/mbtu	2.9	3.0	2.9	-2.7	2.2	3.0
Non-energy*		**81.7**	**83.3**	**84.3**	**1.3**	**79.4**	**84.0**
Agriculture*		**87.4**	**88.0**	**86.5**	**-1.7**	**88.7**	**88.8**
Food*		**91.9**	**92.6**	**89.5**	**-3.4**	**91.9**	**92.6**
Soybean meal	US$/mt	336.0	352.0	342.0	-2.8	385.5	358.1
Soybean oil	US$/mt	827.0	834.0	855.0	2.5	779.1	831.6
Soybeans	US$/mt	380.0	408.0	390.0	-4.4	403.5	401.4
Maize	US$/mt	157.9	157.5	148.5	-5.7	163.1	157.6
Wheat, US, HRW	US$/mt	189.6	202.5	171.2	-15.4	175.6	171.5
Sugar, world	US$/kg	0.3	0.3	0.3	-1.7	0.4	0.4
Base metal*		**79.2**	**82.1**	**88.4**	**7.6**	**65.9**	**81.4**
Aluminum	US$/mt	1,885.3	1,903.0	2,030.0	6.7	1,565.9	1,900.7
Copper	US$/mt	5,719.8	5,985.1	6,485.6	8.4	4,731.3	5,874.3
Lead	US$/mt	2,132.9	2,269.9	2,348.5	3.5	1,754.7	2,241.5
Nickel	US$/mt	8,931.8	9,491.4	10,890.0	14.7	9,073.7	9,862.1
Tin	US$/mt	19,658.8	20,223.5	20,521.0	1.5	16,659.4	20,065.9
Zinc	US$/mt	2,573.4	2,787.2	2,980.7	6.9	1,905.6	2,735.5
Iron ore, cfr spot	US$/dmtu	57.5	67.7	76.1	12.3	53.9	73.9
Precious metals*		**97.9**	**95.6**	**99.4**	**4.0**	**97.3**	**97.1**
Gold	US$/toz	1,260.3	1,236.9	1,283.0	3.7	1,249.9	1,243.8
Silver	US$/toz	16.9	16.2	17.0	4.9	16.9	17.2

*Note: * World Bank commodity price indices (2010 = 100).*
Source: World Bank, Commodity price data.

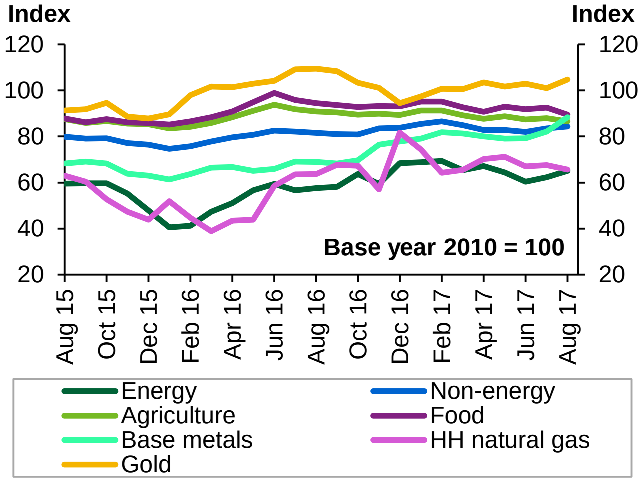
Average **energy prices** in August increased by 4.4% m-o-m and by around 27% in the Jan-Aug period compared to the previous year. This has supported headline consumer price inflation readings, though the effect would tend to fade towards the end of the year should energy prices stay around current levels. The largest monthly average increase in the energy group was in Australian benchmark thermal coal prices which increased by 9.6% m-o-m and are 53% higher y-o-y in the January-August period.

Agricultural prices decreased by 1.7% in August, with average food prices decreasing by 3.4%. Agricultural commodity prices have been relatively flat on average in a year to date comparison therefore their contribution to inflation has been relatively muted compared to energy commodities. Prices of winter wheat, rice, maize and soybeans decreased m-o-m by 15.4%, 5.8%, 5.7% and 4.4%, respectively.

Average base metal prices increased by 7.6% in August, with advances among all group components. Metal prices are around 23% higher year to date and have experienced the best performance among commodity groups since the beginning of the year. Copper, aluminium and nickel advanced by 8.4%, 6.7% and 14.7% during the month, respectively.

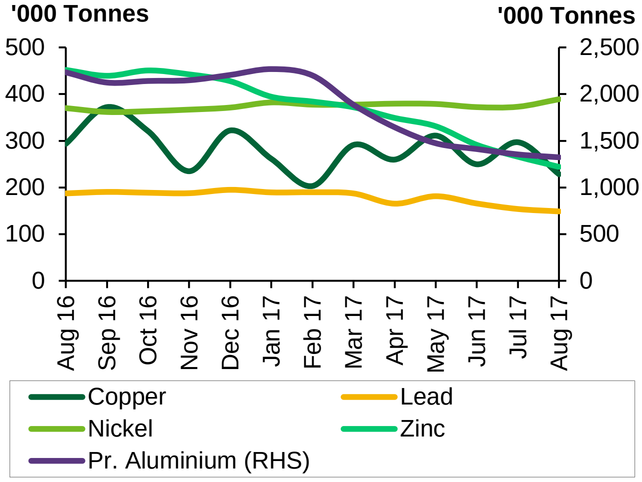
In the group of **precious metals**, gold prices increased by 3.7% on average, a trend that has continued at the beginning of September on the expectation of a lower path of interest rates in the US.

Graph 2 - 1: Major commodity price indices



Source: World Bank, Commodity price data.

Graph 2 - 2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

In August, the **Henry Hub natural gas index** declined. The average price was down by 9¢, or 2.7%, to $2.88/mmbtu after trading at an average of $2.96/mmbtu in the previous month.

The **EIA** said utilities added 65 bcf of **working gas in underground storage** during the week ending 1 September 2017. This was slightly above the median analysts' expectations of a 63 bcf injection. Total working gas in underground storage stood at 3,220 bcf, 6.2% lower than at the same time the previous year, but 0.5% higher than the previous five-year average.

Investment flows into commodities

Open interest (OI) increased in August for selected US commodity futures markets such as copper, crude oil and livestock while it was relatively stable for natural gas, agriculture and precious metals. Meanwhile, in monthly terms, speculative net length positions increased for precious metals, copper and crude oil, while they declined for agriculture, natural gas, and livestock.

Table 2 - 2: CFTC data on non-commercial positions, '000 contracts

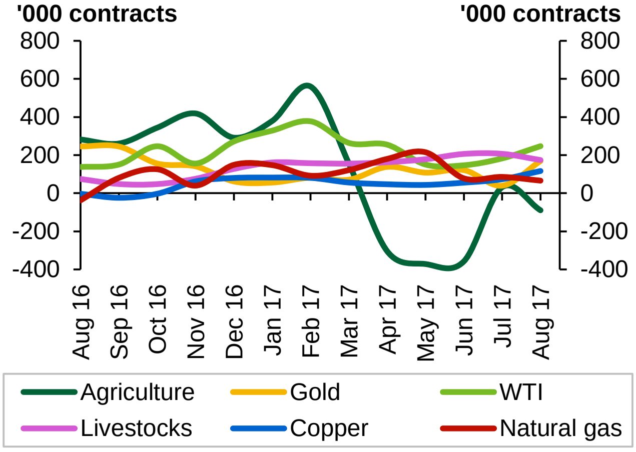
	Open interest		*Net length*			
	Jul 17	Aug 17	Jul 17	% OI	Aug 17	% OI
Crude oil	2,149	2,246	183	9	247	11
Natural gas	1,339	1,324	86	6	66	5
Agriculture	4,955	5,034	32	1	-89	-2
Precious metals	677	675	39	6	206	31
Copper	277	329	74	27	117	36
Livestock	712	647	207	29	174	27
Total	**10,109**	**10,255**	**620**	**77**	**721**	**107**

Note: Data on this table is based on monthly average.
Source: US Commodity Futures Trading Commission.

Agriculture's OI increased by 4.4% in August. Meanwhile, money managers' aggregate net position turned bearish again with a net short of 89 thousand lots, following a short lived push in July. The switch to a combined net short position was mainly concentrated in net short positions in soft red winter wheat.

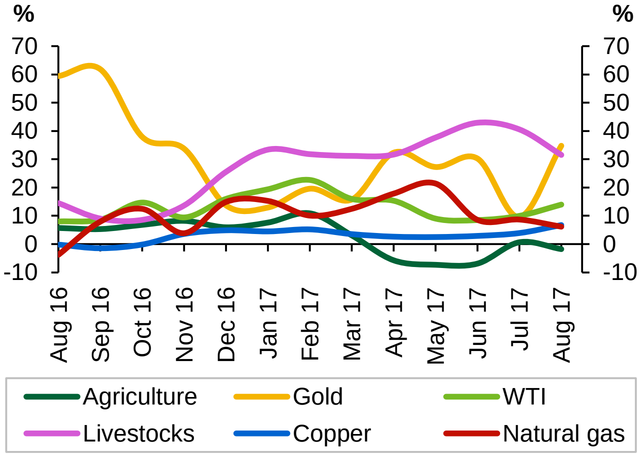
Henry Hub's natural gas OI decreased slightly by 1.1% m-o-m in August. Money managers decreased their net length by 22.8% to 66 thousand contracts, though speculators have held a net long position for the last 12 months.

Graph 2 - 3: Money Managers activity in key commodities, net length



Note: Data on this graph is based on monthly average.
Source: US Commodity Futures Trading Commission.

Graph 2 - 4: Money Managers activity in key commodities, as % of open interest



Note: Data on this graph is based on monthly average.
Source: US Commodity Futures Trading Commission.

Copper's OI increased by 18% m-o-m in August. Money managers increased their net long positions by 58% to 118 thousand contracts in August. Speculator positions have increased 2.7 times since May, amid a price rally of around 16% during the period.

Precious metals' OI was relatively stable in August, however Money managers turned bullish, as shown by a jump in their net long positions by 5.3 times to 206 thousand contracts. This put the Money managers' net length as a share of open interest at 30%, their highest level since April.

World Economy

Global economic growth momentum has gained traction lately and has become more balanced, with all major economies now showing positive growth this year, a trend that is forecast to continue into 2018. With mainly better-than-expected growth seen recently in the OECD group of economies, global growth for 2017 was revised up to 3.5%, while the economic growth forecast for 2018 remains unchanged.

The OECD's GDP growth in 2017 was revised up to 2.2%, while the 2018 forecast remains unchanged at 2.0%. This uptick was mainly supported by an ongoing strong growth dynamic in the Euro-zone and the US economy also showed solid growth in 1H17. Additionally, the major emerging economies held up well, as China's growth in 1H17 was better-than-expected and is now forecast to reach 6.7% in 2017 and 6.3% in 2018. India's 1H17 growth dynamic was negatively impacted by major structural reforms (GST and demonetisation), but it is forecast to remain considerably supported at 6.9% in 2017 and to rebound to 7.5% in 2018, boosted by ongoing structural reforms. Russia and Brazil will also continue their recovery and are forecast to grow by 1.5% and 0.5% in 2017 and by 1.4% and 1.5% in 2018, respectively, though this also depends on developments in commodity prices and politics, as well as presidential elections in both countries in the coming year.

With the expected continuation of ongoing growth momentum in 2H17, there is still some room to the upside for currently anticipated global growth levels in both 2017 and 2018. At the same time, challenges remain, mainly related to global political developments and upcoming monetary policy decisions, particularly in the US and the Euro-zone. Seemingly high valuations in equity and bond markets, in combination with low volatility, pose a risk at a time when central banks have become more willing to reduce monetary stimulus measures. Debt levels also remain high in some key economies, an issue that will probably require further attention if interest rates continue to rise gradually, particularly in the US. Finally, sustained stability in commodity prices, particularly oil prices, is viewed as necessary for ongoing improvement in global economic growth.

Table 3 - 1: Economic growth rate and revision, 2017-2018*, %

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
2017	**3.5**	**2.2**	**2.1**	**1.4**	**2.1**	**1.5**	**6.7**	**6.9**	**0.5**	**1.5**
Change from previous month	0.1	0.2	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	0.3
2018	**3.4**	**2.0**	**2.2**	**1.2**	**1.8**	**1.4**	**6.3**	**7.5**	**1.5**	**1.4**
Change from previous month	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

OECD

OECD Americas

US

US GDP growth in 2Q17 was revised up to a considerable level of 3.0% q-o-q at a seasonally adjusted annualised rate (SAAR), after a previous estimate of 2.6% q-o-q SAAR. This makes the recovery from 1Q17 GDP growth of only 1.2% q-o-q SAAR even more visible. Consumption was confirmed as the main driver; it expanded by 3.3% q-o-q SAAR. While lower than in 1Q17, exports also performed well, growing by 3.7% q-o-q SAAR, after rising by 7.3% q-o-q SAAR in 1Q17, despite a still relatively strong US dollar. Moreover, investments continued to grow, with a considerable share coming from the energy sector. This positive momentum is now expected to continue in 2H17, albeit at a lower level.

The labour market is continuing to improve and consumer sentiment is positively developing, an important factor when considering that private household consumption accounts for more than two-thirds of US GDP. Additionally, the recently weakening US dollar may lift exports and the energy sector's rejuvenated investment programmes will also support this trend. In the meantime, it remains to be seen to which magnitude Hurricanes Harvey and Irma may have negatively impacted growth in the current quarter, but based on past experience the negative effect is forecast to be visible, but minor, while the damage may be severe. This damage may, however, result in rebuilding efforts in 4Q17 and 1H18 that may have a positive impact on GDP growth. Another upside risk for the coming quarters may be the implementation of the US administration's envisaged tax reform, which is supposed to be finalised by the end of the year. This may also provide some upside to growth, but political uncertainties still seem to be great. Even more significant is the challenge of a re-emerging debt ceiling debate after a recent agreement that may only last up to the end of the year. US treasury bills have already started to reflect some uncertainty before the agreement was made and uncertainty may again re-emerge. In addition to a short-term solution on the debt ceiling, the budget for the upcoming fiscal year still needs to be finalised.

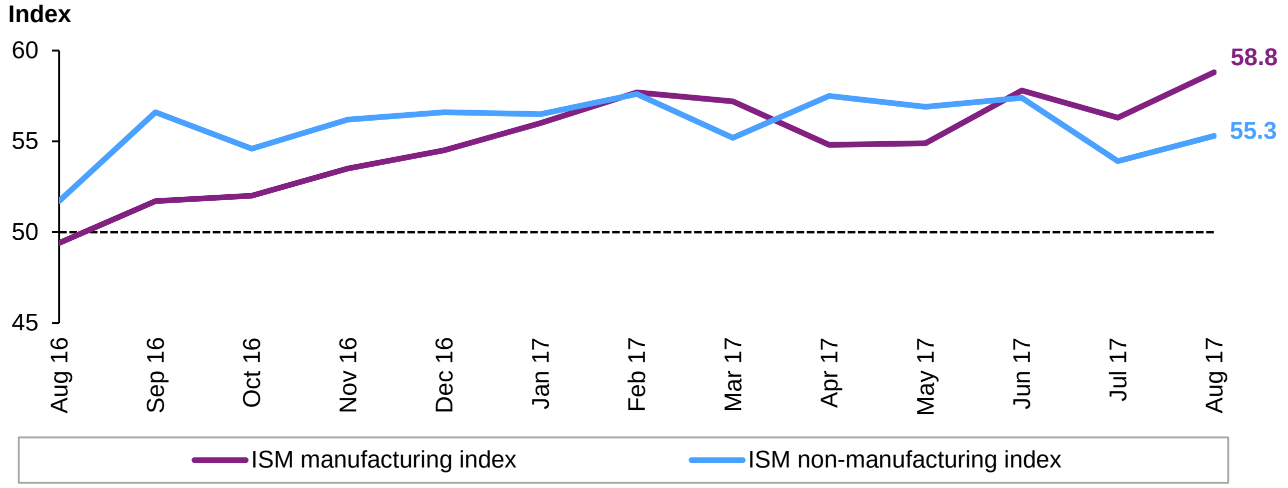
While the fiscal side is facing some uncertainties, the **US Federal Reserve's (the Fed's)** monetary policy decisions are an important factor to be monitored. Currently, it seems the Fed may go ahead with its plans to gradually normalise its monetary policy, given the ongoing momentum in the US economy. This normalisation plan not only includes a gradual increase in interest rates, but the managing down of the balance sheet. While the Fed's intention seems to be to gradually raise interest rates, officials have made clear that this is contingent on continued confidence that the Fed will eventually achieve its 2% inflation goal and in this respect some concern has been raised, as inflation has again started falling in the past months. It stood at 1.7% y-o-y in July, slightly higher than the 1.6% y-oy- recorded in June. Core inflation remained at 1.7% y-o-y for the third consecutive month, below the Fed's target. Upcoming meetings in the second half of September will provide further insight into the near-term development of the US monetary policy and an interest rate rise seems to be relatively unlikely until the end of the year, while a reduction in the Fed's balance sheet may be implemented.

The **labour market's** positive momentum continued, but progress has been mixed again. Non-farm payroll additions were slightly below expectations at 156,000 job additions in August, after a downward-revised figure of 189,000 new jobs in July and 210,000 additions in June. Average hourly earnings growth for the private sector remained stable as they increased by 2.3% y-o-y, the same level as in the past months. Long-term unemployment numbers improved slightly to 24.7% in August, compared with 25.9% in July. Finally, the participation rate remained at 62.9% in August, the same level as in July.

Industrial production improved again in July, rising by 2.2%, compared with 2.1% y-o-y in June and May. It was again supported by a better situation in the energy sector. Mining – which includes oil sector-related output – rose by 10.2% y-o-y compared with 9.3% y-o-y in June and 6.9% y-o-y in May. Manufacturing, another important sub-group of industrial production, rose by 1.4% in July, after reaching 1.5% y-o-y in June. **Domestic demand** was also supported by retail sale numbers, which stood at 4.2% y-o-y in July, after reaching 3.4% y-o-y in June. The generally positive trend in domestic consumption was also visible in the Conference Board's Consumer Confidence Index, which rose to 122.9 in August, after hitting 120.0 in July and 117.3 in June.

August **Purchasing Managers' Index** (PMI) for the manufacturing sector, as provided by the Institute of Supply Management (ISM), also indicated ongoing support in the underlying economy, with stronger numbers in both the manufacturing and non-manufacturing sectors. The manufacturing PMI increased to 58.8 in August, compared with 56.3 in July and 57.8 in June. The important index for the services sector, which constitutes more than 70% of the US economy, rose to 55.3, after being retraced to 53.9 in July.

Graph 3 - 1: Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

The **GDP growth** forecast for both 2017 and 2018 remains unchanged at 2.1% and 2.2%, respectively. While the 3Q17 growth may be negatively impacted by the two current hurricanes, further GDP growth may materialise via reconstruction efforts after the hurricane season and particularly if the government successfully pursues envisaged reforms, predominantly tax reforms. However, numerous uncertainties remain, mainly in political decisions, but also for monetary policies. To some extent these are dependent on the potentially re-emerging debt ceiling debate towards the end of the year.

US trade policies and global trade

Global trade is once again attracting attention. The new US Administration has decided to review numerous trade agreements, including the North American Free Trade Agreement (NAFTA), to withdraw from the Trans Pacific Partnership (TPP), open discussions on trade with China and announce a potential change in its trade agreement with South-Korea (“Korus”). Furthermore, a border adjustment tax with neighbouring Mexico has also been debated over the past months, however this idea is currently not being pursued further. While these US-driven initiatives indicate a trend toward a more protectionist global trade regime, China is pushing to finalise a large trade agreement in Asia-Pacific – the Regional Comprehensive Economic Partnership (RCEP) – by the end of this year.

Global trade has been very supportive to global economic recovery and 2Q17 trade growth of 4.3% marked the largest rise since 2011. The ongoing NAFTA negotiations, in combination with US trade talks with China need close monitoring, given that the main trading counterparts for the US – Canada, Mexico and China – not only account for around 47% of its imports, but also for 42% of its exports. It should be noted that due to the elimination of tariffs between the participating NAFTA nations, the US was able to import much of its oil more cheaply from Mexico and Canada. However, should the US Administration insist on one of its demands to impose higher tariffs on goods imported from Mexico, this could have severe impacts on the cost of imported goods in the US in the short term. In turn, Mexico could revert to the high tariffs it had before NAFTA, which would impact US exports of many commodities, including oil products, for which Mexico is the one of the largest export destinations.

In addition, long-standing global trade arrangements may also be impacted by the ongoing Brexit negotiations as well as the discussion of additional sanctions imposed by the US on several world economies affecting global trade patterns. Depending on the outcome of all these developments, the results may have a significant impact on global economic growth, oil-trade and oil-demand.

Canada

Economic development in Canada continued to improve significantly. **GDP growth** in 2Q17 was reported to reach a considerable level of 4.5% q-o-q SAAR, after achieving an already high level of 3.4% q-o-q SAAR in 1Q17 GDP. Private household consumption was a significant driver of this positive development at 4.6% q-o-q SAAR and 4.7% q-o-q SAAR. Additionally, exports turned out to be very supportive in 2Q17 with a growth rate of 9.6% q-o-q SAAR, compared with 1.5% q-o-q SAAR in 1Q17. **Industrial production** increased by 7.4% y-o-y in June, after reaching 10.3% y-o-y in May, marking the highest rate since 2000 and compared with 4.6% in April. **Retail trade** also continued to expand to the considerable level of 7.4% y-o-y in June, after reaching 7.3% y-o-y in May and 7.0% y-o-y in April, all at a seasonally adjusted level. The **PMI** for manufacturing remained at a significant level, standing at 54.6 in August, after reaching 55.5 in July and 54.7 in June. Taking this positive momentum into consideration, the **GDP growth** forecast for 2017 was revised up to 2.5% from 2.3% Growth in 2018 remains unchanged at 1.9%.

OECD Asia Pacific

Japan

Japan's recovery seemed to continue, as **GDP** for **2Q17** was reported at 2.6% q-o-q SAAR, compared with 1.2% q-o-q SAAR in 1Q17. While this underlines solid momentum and strengthening of the Japanese economy, it is much lower than the initial growth estimate by the Statistical Office of 4.0% q-o-q SAAR for 2Q17. This revision was obviously due to a considerable markdown in corporate capital spending. Private consumption, which makes up 60% of GDP growth, rose by 3.4% q-o-q SAAR, significantly more than in 1Q17, when it only increased by 1.5% q-o-q. The positive trend is also visible in the latest labour market developments, with ultra-low unemployment and open jobs to application rates that are at a record high. Besides these improving circumstances on the domestic front, exports are also doing well, and a rise in investment and ongoing monetary and fiscal stimulus are all currently shoring up growth for this year and the next. However, the upside to the current annual growth rate of more than 1% still seems to be limited by tightness in the labour market and very high utilisation rates in the industrial sector.

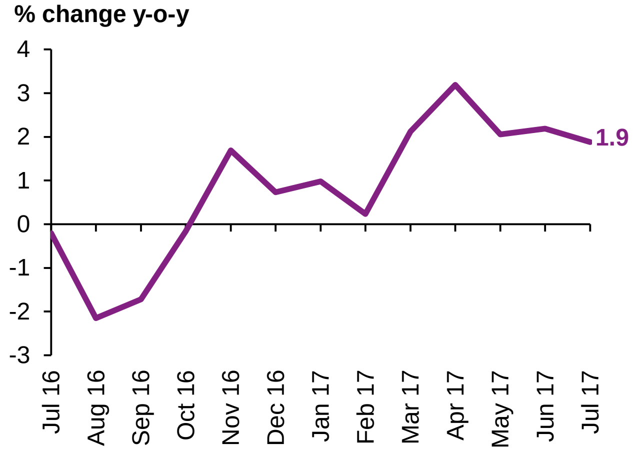
Business sentiment is holding up well and supporting the current growth trend. Inflation rose in the last available month of July, although it remained very low. Wage growth also remained very low, despite tightness in the labour market. In the meantime, the Bank of Japan (BoJ) continued its monetary stimulus with negative or ultra-low interest rates. Ongoing geo-political tensions on the Korean-Peninsula may add some risk to the growth dynamic in the Japanese economy. So far these developments have not impacted economic activity, but continued turmoil raises the risk of a yen appreciation, with a consequent negative effect on exports and lower investments.

Inflation was higher in July, increasing by 0.5%, compared with 0.3% y-o-y in June and 0.4% y-o-y in May. Despite tight labour markets, wages rose slowly in the past months, up by 0.2% in July, the lowest level in the past four months. This is certainly also a concern and is keeping inflation from moving higher in Japan. Core inflation (which excludes food and energy) actually fell by 0.1% y-o-y in July, however this is still the highest level in five months and above the -0.2% seen in June. Core inflation now remains negative for the sixth month in a row as low inflationary or deflationary trends remain persistent. Given this muted price environment, the BoJ revised its inflation target lower in the past months and now expects only to reach 2% inflation by around 2019. The **unemployment rate** remained at the extremely low level of 2.8% for a second month in a row.

Japanese exports rose by a large 13.3% y-o-y in July after hitting 9.7% y-o-y in June and after already seeing strong growth in the previous months of the year. The rise in exports was again very much supported by the export of industrial goods and capital equipment, which mostly backed this positive trend in trade. Additionally, **industrial production** continued its recovery, rising for the twelfth consecutive month, up by 4.9% y-o-y in July, after a rise of 5.2% y-o-y in June. This was supported again by a strong trend in manufacturing, which climbed by 4.6% y-o-y in July, compared with 5.5% y-o-y in June. A continuation of the positive trend is expected, when considering that manufacturing orders – a front-running indicator – rose by 4.9% in June and 8.3% y-o-y in May.

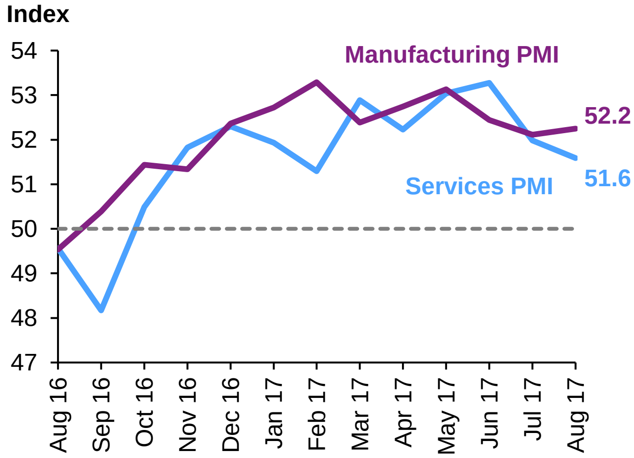
Some improvement was also reflected in **domestic demand**. Retail trade rose by 1.9% y-o-y, but the expansion trend is decelerating after reaching 2.2% y-o-y in June and 2.1% y-o-y in May. While near-term growth is uncertain, given wage developments, the trend still seems solid.

Graph 3 - 2: Japanese retail trade



Sources: Ministry of Economy, Trade and Industry and Haver Analytics.

Graph 3 - 3: Japanese PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

The latest **PMI** numbers confirmed a healthy trend as they remained almost unchanged and above the growth-indicating level of 50 in August. The manufacturing PMI stood at 52.2 in August, after reaching 52.1 in July. The services sector PMI slowed a bit, moving down to 51.6 in August from 52.0 in July.

The most recent developments confirm a solid underlying growth dynamic in the Japanese economy, but uncertainties in the 2H17 remain. Hence the 2017 GDP growth forecast remains unchanged at 1.4% Moreover, numerous issues persist, and given the tight labour market situation and high-capacity utilisation rates, further growth advancements seem challenging. Moreover, the income situation – in combination with consumption and inflation – will need to be closely watched in the coming months. The 2018 growth forecast was lifted slightly, now standing at 1.2% compared with 1.1% in the past month.

South Korea

South Korea's economy continues to perform well, but geopolitical concerns on the Korean-Peninsula and some economic indicators are sending mixed signals that indicate challenges still persist. So far the ongoing conflict with its neighbour had little economic impact, as consumer sentiment is holding up well and industrial production and some lead indicators also support a good trend in the short-term. Industrial production rose by 2.3% y-o-y in July, much better than the 1.6% y-o-y in June and 1.7% y-o-y in May. The latest PMI number for the manufacturing sector in June indicated some slow down, remaining below the growth-indicating level of 50, while at the same time improving to 49.9 in August from 49.1 in July. GDP growth was confirmed at 2.9% y-o-y in 1Q17 and 2.7% y-o-y in 2Q17. While some softening signs remain, solid 1H17 momentum led to an upward revision in 2017 GDP growth to 2.7% in 2017 from 2.6% the previous month. Growth figures for 2018 remain unchanged at 2.4%.

OECD Europe

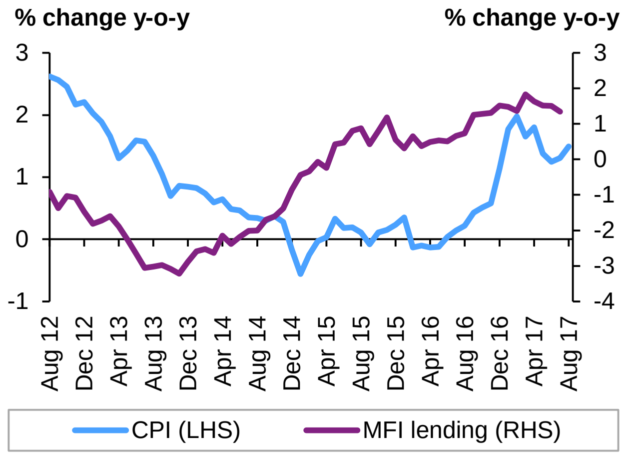
Euro-zone

The Euro-zone's economic performance remained stronger than expected. Momentum from **robust growth** in 1H17 was carried over into 2H17. This positive trend is visible in all economies at varying rates, with improving performance not only in the major economies, but also in the so-called peripheral economies, which are all recovering to some extent and are supporting the growth trend. The labour market improved in the past months, leading to better domestic consumption, and while positive developments lifted economic activity, room to the upside remained. On the sensitive price front, core inflation remained low, but this could provide further room for improvement. While the European Central Bank (ECB) hinted again that its monetary stimulus will potentially be reduced at some point, the low inflation pattern probably makes it more flexible. Business sentiment reflects the bettering situation, with the European Commission's economic sentiment index improving to 111.9 in August from 111.3 in July. This – in combination with comments by the ECB's president about possibly reducing monetary stimulus, at least to provide further details on phasing out quantitative easing in the upcoming October meeting, and the latest developments in the US, which is considerably negatively impacted by the hurricane season and the Fed now expected to lift rate rates only in the coming year – has impacted the Euro, which rose to its highest level since the beginning of the year, standing at more than $1.20/€ at the beginning of September. Challenges in the Euro-zone remain. While concerns about sovereign debt levels in some Euro-zone economies have gone away somewhat, sovereign debt levels in several economies remain high and issues may re-emerge again if current economic improvements slow.

Labour market developments continued to improve and the unemployment rate remained at 9.1% in July for the second month in a row, marking the lowest level since 2009. So far, the improving labour market seems to have been a positive driver for inflation. But while job additions have been an important support factor, further evidence of rising wages must still be seen. Moreover, developments differ widely within the Euro-zone. Germany's unemployment rate stood at 3.7% in July, down from 3.8% in June, while in Spain, it was still at 17.1% in July, unchanged from June. **Inflation** improved, but remains muted. The recent August number has, however, improved in this respect, moving up to 1.5% from 1.3% in July. Core inflation – that is, the consumer price index (CPI), excluding energy, tobacco and food – remained unchanged at 1.2% y-o-y in August, the same level as in July. Both numbers must be compared with the ECB's approximately 2% inflation target.

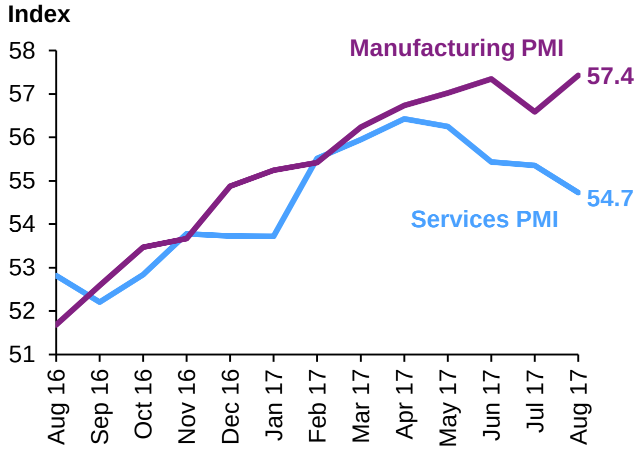
The **ECB** will provide further details about potentially phasing out its quantitative easing programme in its upcoming October meeting. As the ECB's inflation expectation moves up in the coming months, a reduction in monetary stimulus towards the end of the year remains the most likely scenario, as has been indicated already. In addition to the somewhat softening inflation trend in the Euro-zone, credit supply growth from financial institutions to the private, non-financial sector appears to be decelerating again to stand at 1.3% y-o-y in July, the lowest level since November 2016 and the fourth consecutive month of slow down. While this remains at a good level, it may indicate a softening investment environment, given the importance of bank lending to the Euro-zone economy. Moreover, banking sector-related issues remain, and while the banking sector in the rest of the Euro-zone seems to be in a relatively better situation compared with previous years, the sector is only slowly healing.

Graph 3 - 4: Euro-zone CPI and lending activity



Sources: Statistical Office of the European Communities, European Central Bank and Haver Analytics.

Graph 3 - 5: Euro-zone PMIs



Sources: IHS Markit and Haver Analytics.

Industrial production grew by 2.7% y-o-y in June, after reaching 4.0% in May. **Retail sales** growth in value terms were once again an important support factor for Euro-zone growth, increasing by 3.3% y-o-y in July, after reaching 3.8% y-o-y in June. As these indicators remained at considerable levels over the past months and demonstrate a healthy dynamic, ongoing improvements in the underlying economy are forecast to be carried over into 2H17 and the coming year. However, it remains to be seen if the trend will stay as strong as in 1H17 or, as currently expected will slow down somewhat.

The latest **PMI** indicators confirmed ongoing expansion in the Euro-zone. The manufacturing PMI increased to 57.4 in August, matching June levels, which were the highest of the index since its initiation, and compare with 56.6 in July. The important PMI for the services sector, which constitutes the largest sector in the Euro-zone, retraced only slightly, remaining at a high level of 54.7 in August, after seeing 55.4 in July.

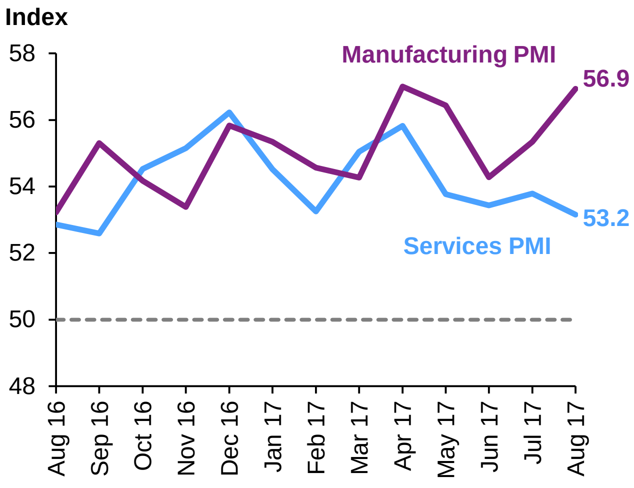
The underlying momentum has led to an upward revision in the 2017 GDP growth forecast for the Euro-zone, which now stands at 2.1%, compared with 2.0% in the previous month. The 2018 GDP growth forecast remained unchanged at 1.8%. Political uncertainties, Brexit procedures and the upcoming German elections, as well as monetary policies remain important factors to monitor.

UK

As **Brexit** negotiations continue, little progress has been made so far and the most sensible among all the numerous issues currently seems to be the break-up bill, which has been subject to negotiations lately. The UK reemphasised its case against the EU's Brexit bill of up to €100bn, while EU officials seem to consider this to be a conditio-sine-qua-non. Numerous important issues have not been touched yet, while already about a quarter of the negotiating time has elapsed since kicking-off the two year negotiation period in March. As some shift in the UK has become visible in the past weeks towards a soft exit over a hard-exit, the probability of a solution via, for example, the UK participating in the framework of the European Economic Area (EEA) or the European Free Trade Association (EFTA) is again a possibility. In this respect, the UK's chief negotiator did not rule out that Britain would continue paying into the EU's budget after Brexit in March 2019.

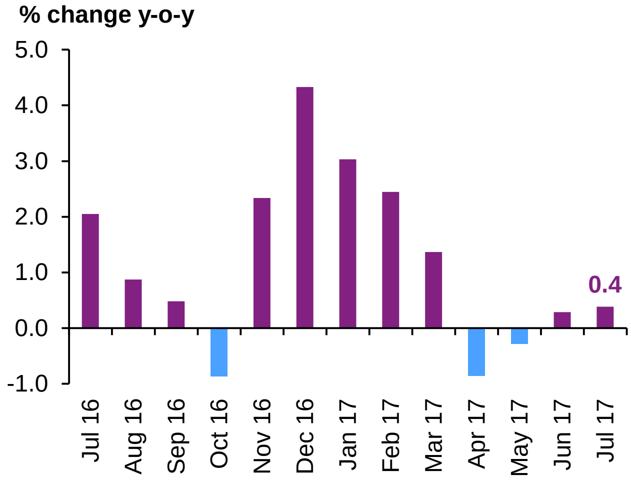
After GDP growth of 0.2% q-o-q seasonally adjusted (sa) in 1Q17, **GDP growth in 2Q17** was confirmed at 0.3% q-o-q sa. Interestingly, household expenditures retraced to only 0.1% q-o-q growth, the lowest level over the last two-and-a-half years. However, for the time being the unemployment rate remains very low at 4.4%, as shown in the latest available number from May. Positively, wage growth in May and June stood at 2.0% and 2.8% y-o-y, respectively. This compares to inflation numbers of 2.6% y-o-y in both May and June, i.e. approximately matching these levels. Rising inflation will remain a very sensitive issue for the Bank of England when considering changing its monetary policy stance in the next months. The **GfK consumer confidence index** improved slightly, but remained at a low level of -10 index points in August, compared with -12 in July. Given the low sterling pound value, exports compensated some domestic economic challenges, as exports increased by 9.6% y-o-y in July, after reaching 11.1% y-o-y in June. In connection to this more positive development, the **PMI** for manufacturing increased to 56.9 in August, after an already high level of 55.3 in July. The services sector PMI declined slightly, but remained high at 53.2 in August, after reaching 53.8 in July. With indicators supporting a gradual slowdown in the UK economy, the growth forecast remains unchanged at 1.5% for 2017. Growth in 2018 is forecast at 1.4%.

Graph 3 - 6: UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

Graph 3 - 7: UK industrial production



Sources: Office for National Statistics and Haver Analytics.

Non-OECD

BRICs

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2017-2018*

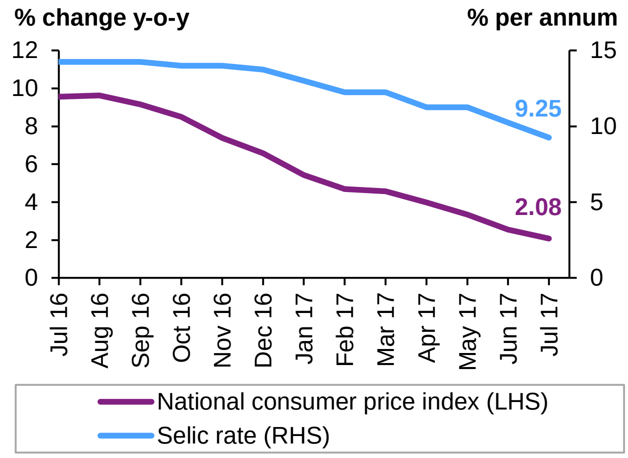
	GDP growth rate		Consumer price index, % change y-o-y		Current account balance, US$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Brazil	0.5	1.5	3.6	4.0	-12.5	-26.1	-7.9	-6.4	78.2	82.9
Russia	1.5	1.4	4.1	4.0	53.3	36.8	-2.2	-1.4	11.8	12.8
India	6.9	7.5	3.3	4.3	-21.2	-27.7	-3.2	-3.2	50.0	48.9
China	6.7	6.3	1.8	1.9	133.9	163.7	-3.9	-4.3	18.6	21.9

*Note: * 2017 and 2018 = Forecast.*
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

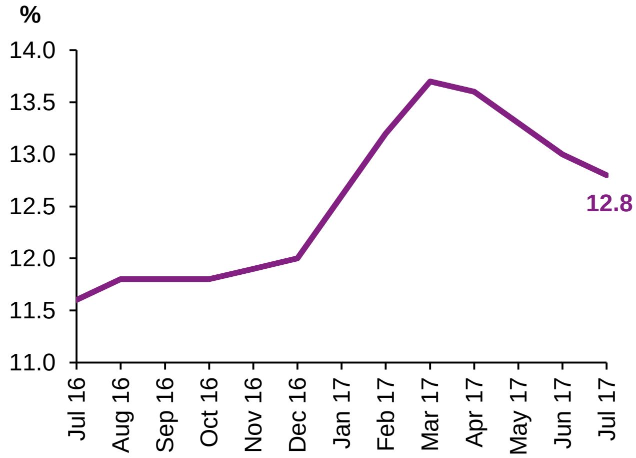
The economy of Brazil grew by 0.3% y-o-y in 2Q17, signalling its first expansion since 1Q14. This improvement came on the back of the first acceleration in private consumption in more than two years. It grew by 0.7% y-o-y in 2Q17 versus a 1.9% y-o-y contraction in the previous quarter. Trade was also growth-supportive in 2Q17 as exports increased by 2.5% and imports dropped by 3.3% y-o-y. However, contractions in government consumption and gross fixed capital formation (GFCF) mitigated the final growth figure. Government consumption declined by the highest rate since the onset of the recession, reflecting efforts to streamline public spending. It slid by 2.4% y-o-y in 2Q17 compared with 1.3% in 1Q17. The GFCF also declined by 6.5% y-o-y in 2Q17 from a contraction of 3.7% in the previous quarter. The **trade surplus** of Brazil widened in August to $5.6 billion, representing a 35.3% increase from a year earlier. **Exports** increased by 14.7% y-o-y, supported by manufactured products, which increased by 12.6%. Primary products also posted a high rate of growth of nearly 19%, whereas growth in semi-manufactured products slowed to 8.7% in August from more than 20% a month earlier. The trade surplus increased by more than 53% in 1H17, reaching $107.7 billion due to the record harvest of soy and higher prices of a number of main exports like iron ore, soy and oil. Exports to China, Brazil's top trading partner, increased by around 41% y-o-y in August. **Imports**, on the other hand, grew at a lower rate of 8.0% y-o-y in August.

Graph 3 - 8: Brazilian inflation vs. Interest rate



Sources: Banco Central do Brasil, Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

Graph 3 - 9: Brazilian unemployment rate

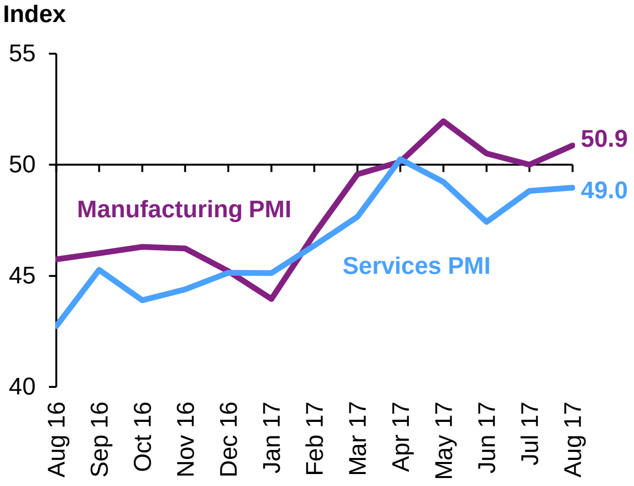


Sources: Instituto Brasileiro de Geografia e Estatística and Trading Economics.

Inflation continued its easing trend, reaching its lowest ever rate of 2.1% y-o-y in July. This represents a quick fall in inflation from June's 2.6%. To catch up with rapidly declining inflation, the central bank lowered its benchmark **interest rate** by a full 10 percentage points in July for the second month in a row, to stand at 9.25%. The **unemployment rate** posted its fourth back-to-back fall in July, registering 12.8% versus 13.0% in June.

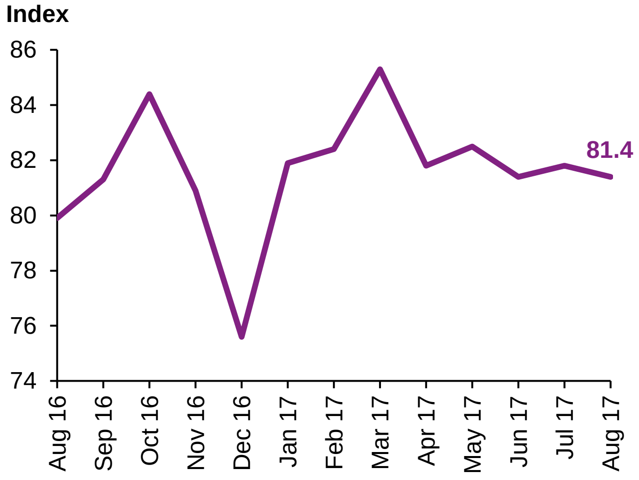
In August 2017, business conditions in the **manufacturing sector** continued to improve, posting solid factory orders, especially in new orders for export, which were at their highest level since April 2016. The IHS Markit Manufacturing PMI for the country rose to 50.9 in August, up from 50.0 in July. The services sector remained in contraction territory in August, though showing its best performance in three months. The IHS Markit Brazil Services JPMI Business Activity Index registered 49.0 in August, from 48.8 in July and 47.4 in June. The survey showed a marginal uptick in the inflow of new orders, together with an output decline which slowed over the past three months.

Graph 3 - 10: Brazilian manufacturing and services PMIs



Sources: IHS Markit and Haver Analytics.

Graph 3 - 11: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Household consumption is anticipated to continue improving next year due to low inflation and a reduced interest rate. While the GFCF deceleration highlighted a notable slowdown since 2Q16, the rate of contraction remained sizable with no obvious trend towards easing.

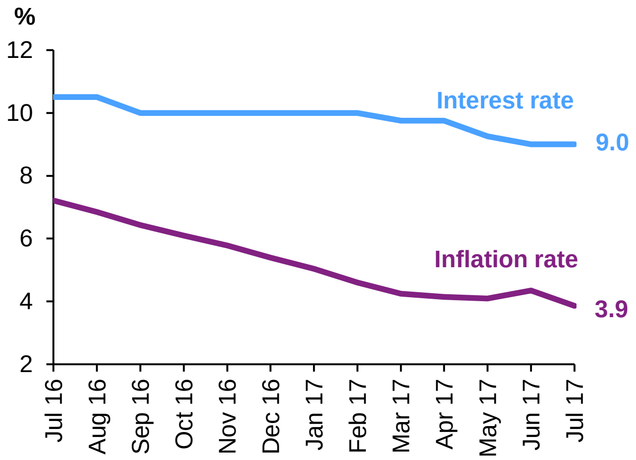
Brazil's GDP is expected to grow by 0.5% and 1.5% in 2017 and 2018, respectively.

Russia

Russia's GDP posted growth of 2.5% y-o-y in 2Q17, up from 0.5% in the previous quarter. This represents the fastest rate of growth since 3Q12, and it is the preliminary estimate of the Federal Statistics Office and no further details are available yet. **Household consumption** posted its first growth in 1Q17 after two consecutive years of contraction. It grew by 2.7% y-o-y in 1Q17, compared with a 3.2% y-o-y contraction in the previous quarter. The GFCF also increased in 1Q17 for the first time in nearly three years. It expanded by 2.3% y-o-y in 1Q17, from a 0.3% y-o-y drop in 4Q16.

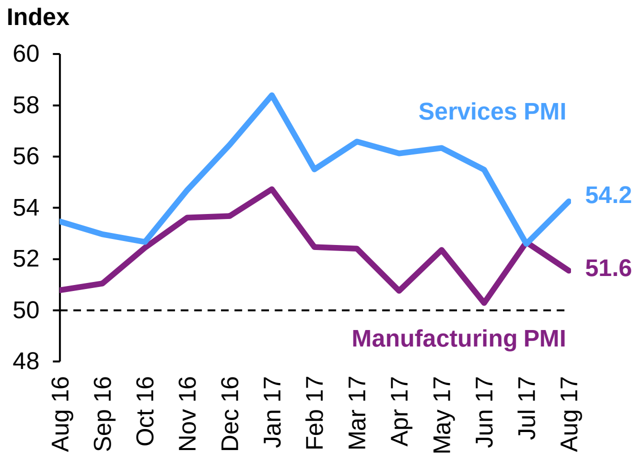
The **ruble** was largely stable on average in August, appreciating by only 0.1% m-o-m. **Inflation** eased in July to 3.9% y-o-y, from June's 4.4%. As the easing inflationary trend was interrupted in June, when it moved away from the central bank's target of 4.0%, the central bank kept its benchmark **interest rate** unchanged at 9.0% last month.

Graph 3 - 12: Russian inflation vs. Interest rate



Sources: Federal State Statistics Service, Central Bank of Russia and Haver Analytics.

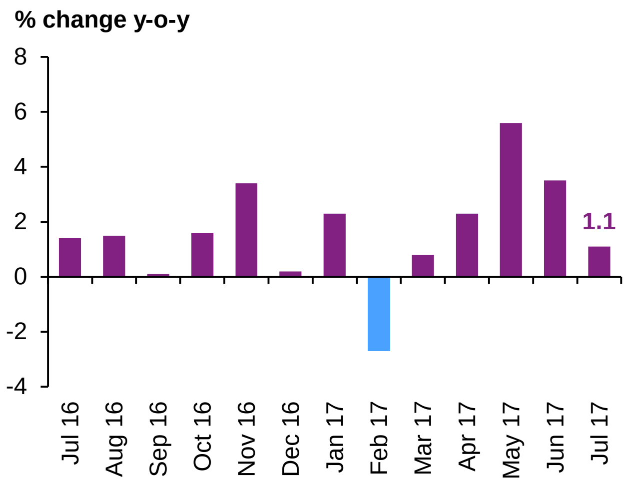
Graph 3 - 13: Russian PMIs



Sources: IHS Markit and Haver Analytics.

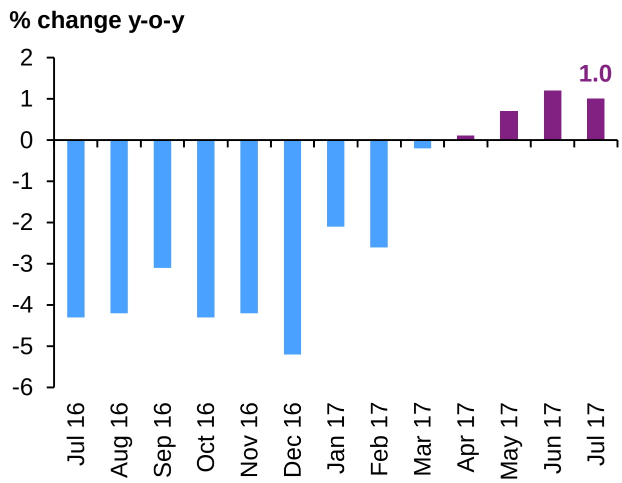
The IHS Markit Russia **manufacturing** PMI continued to show improvement in the sector's business conditions in August. However, growth in new orders and production were slower than in the previous month. As such, the index decreased to 51.6 in August, from 52.7 in July. The index survey showed the sixteenth consecutive month of increase in production, while the workforce showed some weakness. **Industrial production** rose for the fifth consecutive month, up by 1.1% y-o-y in July. The services activity PMI suggested solid growth in the **services sector** in August, highlighting the ninth consecutive month of improvement. The index stood at 54.2 in August, up from July's 52.6. The survey highlighted an acceleration in output together with a strong increase in new orders and muted price pressure. For the fourth month in a row, **retail sales** increased in July. The rate of increase was 1.0% y-o-y, which represents the second-fastest growth in retail sales since December 2014.

Graph 3 - 14: Russian industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 15: Russian retail sales



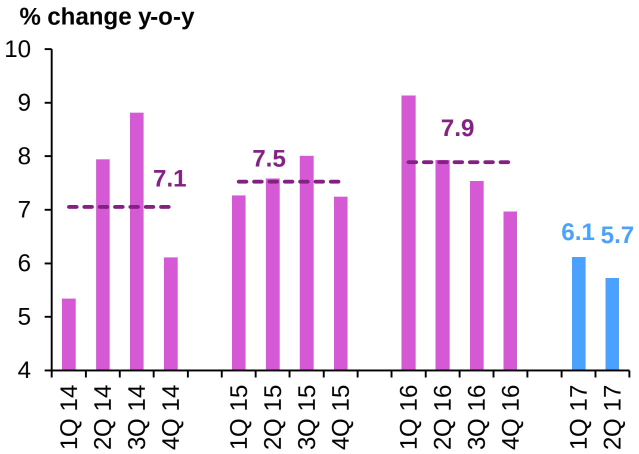
Sources: Federal State Statistics Service and Haver Analytics.

The **GDP of Russia** is anticipated to grow by 1.5% and 1.4% y-o-y in 2017 and 2018, respectively.

India

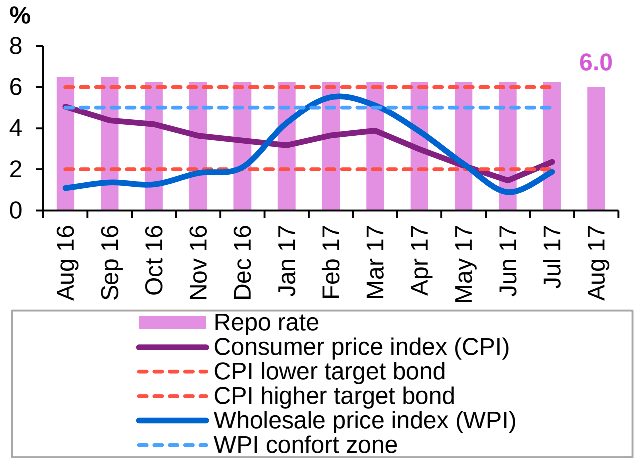
Indian GDP growth slipped to 5.7% y-o-y in 2Q17, which is below the 6.1% seen in 1Q17, although market expectations were for about 6.6% to 6.8%. It remains the weakest growth rate since 1Q14 due to a slowdown in consumer spending and exports. On the production side, manufacturing and agriculture eased. Figures for 2Q17 mark the third consecutive period of slowing growth as a result of the demonetisation programme started in November 2016, which removed about 90% of India's currency in circulation as well as the implementation of the **Goods and Services Tax** (GST) in July this year. Growth has been slowing for five quarters now, and the government's target of over 7% for 2017 suddenly appears unsound. It seems that a reason for the GDP growth weakness in 2Q17 is related to people's reaction against demonetisation and the GST implementation. However, the GST pushed the buying of gold up and manufacturing down. Manufacturing companies sent out their old stocks to market, holding back on production. This brought down manufacturing sector growth from 5.3% in 1Q17 to 1.2% in 2Q17. The reasons behind low GDP growth in 2Q17 include; the medium- and short-term shocks caused by demonetisation and the GST on private consumption; poor consumer demand and low capacity utilisation.

Graph 3 - 16: Indian GDP growth



Sources: National Informatics Centre (NIC) and Haver Analytics.

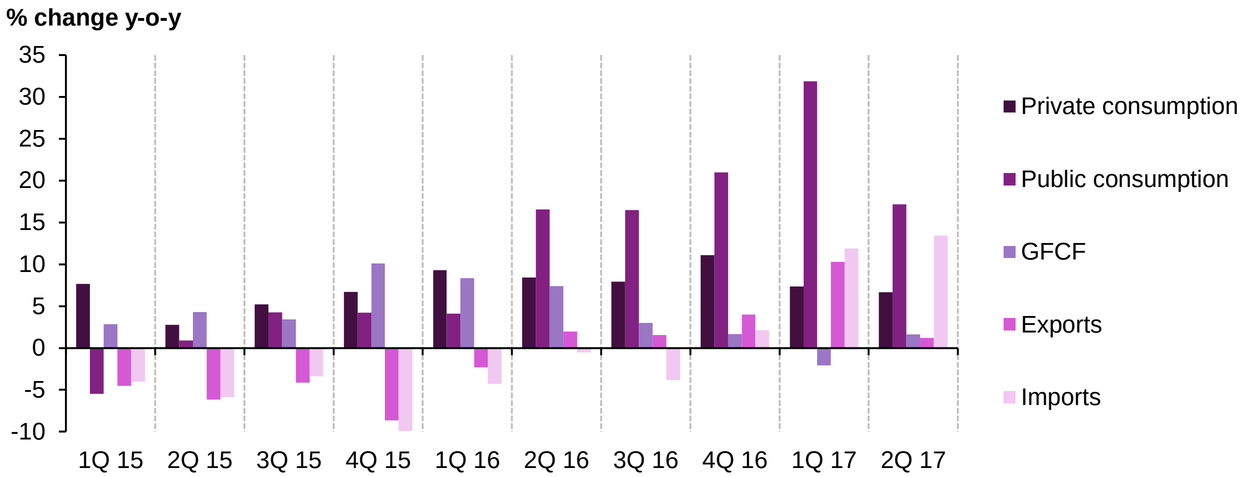
Graph 3 - 17: Indian inflation vs. repo rate



Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

The fact that **Gross Value Added** (GVA) (GDP minus product taxes) growth in 1Q17 was the same as in 4Q16 suggests that the waning demonetisation impact was offset by rising anxiety over the GST. It seems the decline in growth in 1Q17 is transitory and the economy will slowly move in an upward trajectory over the next few quarters as the impact of demonetisation and destocking fades and the positive efficiency gains from GST start kicking in. A normal monsoon, softer interest rates and inflation, and latent demand (demand postponed due to demonetisation) will also support consumption-led growth in the remaining quarters of this fiscal year. That said, the economy is likely to grow at a slower pace than 7.0% in fiscal 2017, and will be largely consumption driven. Other macro parameters such as inflation, the current account deficit and the fiscal deficit of the central Government will remain at comfortable levels. Stimulating the investment cycle and tackling bad debt will be the key challenges in the current fiscal year. Investment growth did pick up in 1Q17 of this fiscal year, from a 2.1% decline in the preceding quarter, but it still trails overall GDP growth. Two months ago, we saw gold (valuable) imports rise sharply. Household savings moving away from physical assets, especially real estate, may not suit the economy. The second largest job creator after agriculture is the real estate sector and construction growth has already tapered.

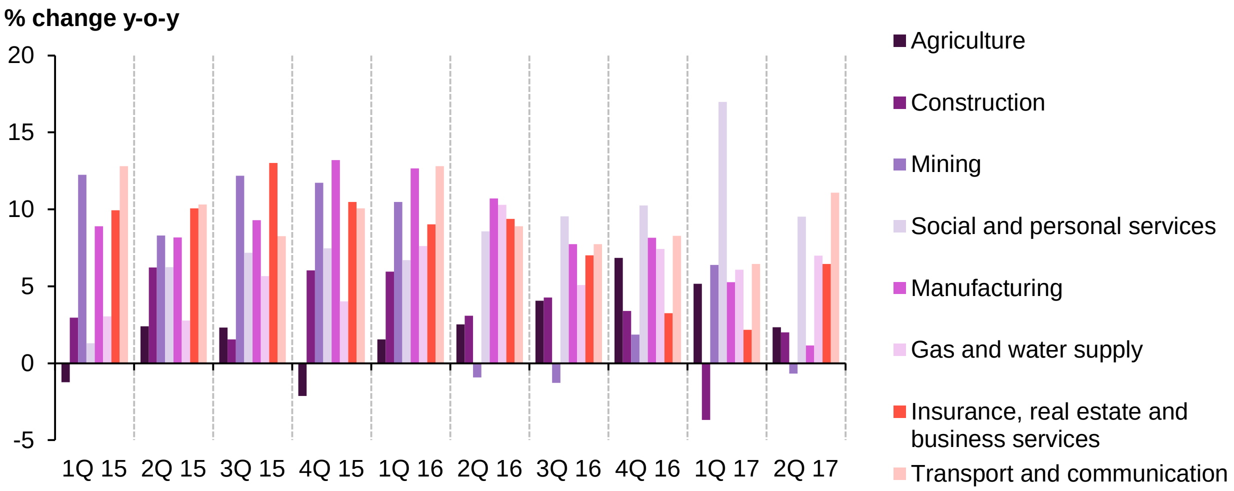
Graph 3 - 18: Indian GDP growth by demand side



Sources: Central Statistics Office and Haver Analytics.

India's CPI inflation accelerated to 2.4% y-o-y in July after bottoming out at 1.5% y-o-y in June. Food prices excluding beverages deflated, decreasing 0.3% y-o-y, but the fall in food prices was much smaller than in the previous month. The costs of housing, energy and clothing rose further and food prices fell at a softer pace. In tandem with retail inflation, WPI inflation accelerated to 1.9% y-o-y in July, up from 0.9% y-o-y in June. A surge in food prices offset a slowdown in the cost of manufactured products and fuel. On a monthly basis, wholesale prices increased by 1.1%, after declining by 0.1% a month earlier. Meanwhile, manufactured product inflation eased marginally to 2.2% y-o-y from 2.3% y-o-y in June. In the longer term, the bigger question is whether India has witnessed a structural change to lower inflation. The second edition of the Government's economic survey for the fiscal year 2016/17 (April–March) argues that India may be undergoing a paradigm shift to low inflation as price pressures arising from food and fuel are easing. Accordingly, it seems the supply-side bottlenecks and rapidly rising demand will put some upward pressure on prices in the years ahead.

Graph 3 - 19: Indian GDP growth by supply side



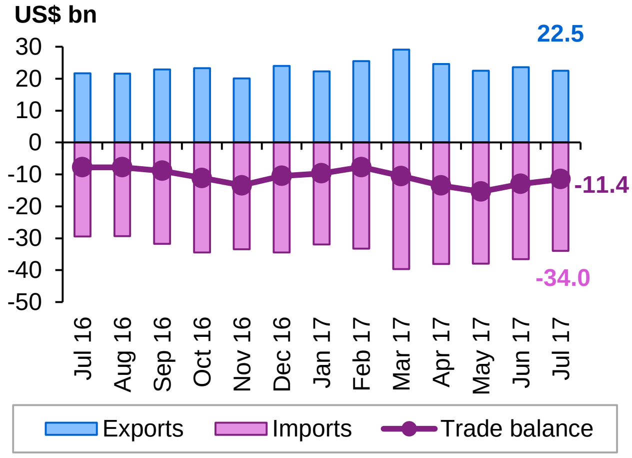
Sources: Central Statistics Office and Haver Analytics.

India's trade deficit widened sharply to \$11.45 billion in July 2017 from \$7.76 billion in the same month of the previous year and below market expectations of a \$12 billion gap. India's merchandise exports stood at \$22.5 billion in July, up 3.9% on a y-o-y basis. However, in sequential terms, merchandise exports declined by 4.3% from June. Merchandise imports stood at \$34 billion, down from \$36.5 billion in June. In annual terms, imports grew by 15.4%, down from the 19% y-o-y registered in June. Oil imports stood at \$7.8 billion, up 15% y-o-y. Meanwhile, gold imports nearly doubled y-o-y to \$ 2.1 billion in July from \$1.1 billion a year earlier. The merchandise trade deficit narrowed to \$11.4 billion from \$13 billion in June.

The trade deficit stood at \$79.6 billion for the first seven months of 2017, up sharply from \$45.7 billion during the same period a year ago. India has been recording sustained trade deficits since 1980, mainly due to the high growth of imports, particularly of crude oil, gold and silver. The new GST regime impacted India's merchandise exports. Although exports are technically excluded from the GST, many shipments have been held up due to the confusion related to customs procedures, the input tax credit mechanism and other related paperwork.

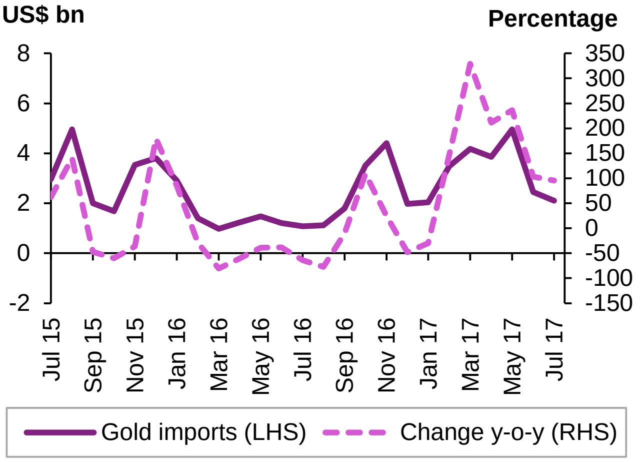
The appreciation of the Indian rupee vis-à-vis the US dollar is another deterrent to exports, making Indian goods more expensive abroad, particularly in the US, one of India's major export markets. A stronger currency and the GST-related disruptions would likely keep Indian exports subdued in coming months, but import growth should remain contained, given the muted outlook for global oil prices and the slowdown in domestic demand.

Graph 3 - 20: Indian trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3 - 21: Indian gold imports

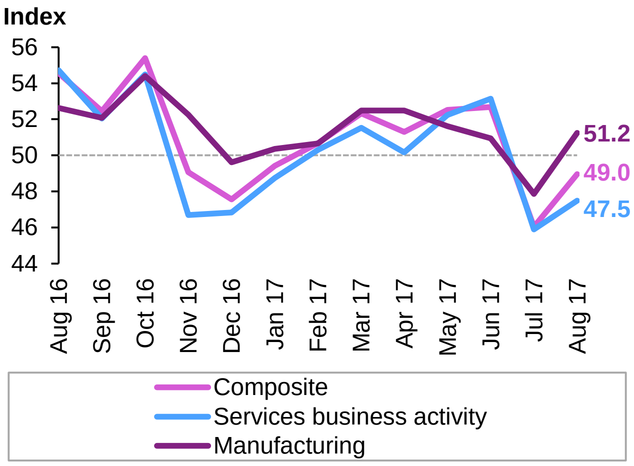


Sources: Ministry of Commerce and Industry and Haver Analytics.

India's **industrial output** shrunk for the first time in four years in June, down by 0.1% y-o-y following an upwardly revised 2.8% rise in the previous month. The slowdown is largely attributed to the disruption in the manufacturing sector amid the uncertainty over the GST. The high-base effect from last year when the IIP grew 8.0% y-o-y in June 2016 exacerbated the decline. The manufacturing sector contracted 0.4% y-o-y in June, while mining and electricity growth were also weak. On a use-based approach, all but the output of consumer non-durable goods and infrastructure and construction-related items declined in June, with consumer durable goods down by 2.1% y-o-y. Weaker industrial output in June was expected and contraction in the IIP will probably extend into July and possibly August, as producers and retailers adjust to the new pricing and filing requirement.

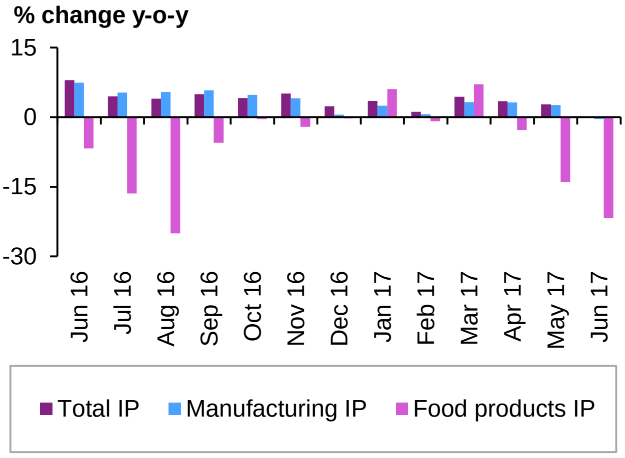
The **Nikkei Manufacturing PMI** in India unexpectedly jumped to 51.2 in August from 47.9 in the previous month, as disruptions stemming from confusion over a new national sales tax eased. The figure beat market estimates of 49.3, supported by a rebound in output and new orders while new export orders increased for the third consecutive month and employment expanded to the greatest extent since March 2013. Also, buying levels rose at their fastest pace since May. At the same time, worries about the possibility of unexpected policy decisions weighed on confidence from July's 11-month high. The Nikkei Services PMI in India came in at 47.5 in August from 45.9 a month earlier. It was the second straight month of contraction in service activity as the sector was impacted by the goods and services tax (GST) introduced in July.

Graph 3 - 22: Indian PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3 - 23: Indian industrial breakdown



Sources: Central Statistical Organisation of India and Haver Analytics.

The expectation for India's 2017 **GDP growth** was revised down to 6.9% from 7.0% in the previous month and the expectation for 2018 growth remains unchanged at 7.5%.

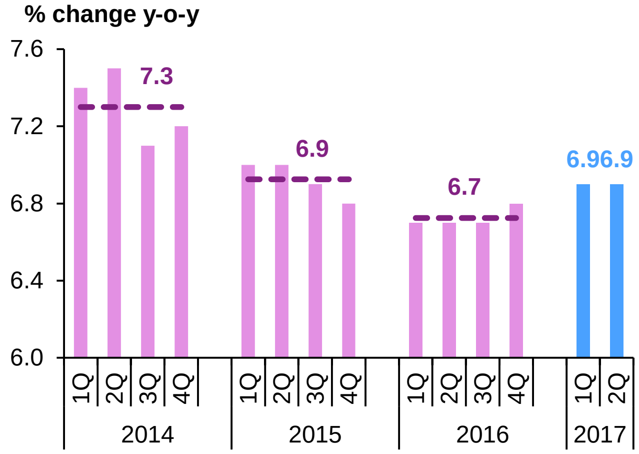
China

China's economy started 2H17 on a softer note compared with that seen in 1H17. Export growth weakened amid slower demand in Asia. Real estate activity slowed notably, housing sales were flat compared to last year while housing starts declined. Overall, industrial value added slowed to 6.4% in July, with the slowdown in the value added in manufacturing particularly pronounced. Meanwhile, private consumption remained healthy, with real retail sales up around 10% y-o-y and car sales growth accelerating further.

Private consumption remained healthy in July, with real retail sales up by 9.6% y-o-y (10% y-o-y in June) and car sales growth picking up further after the earlier slowdown.

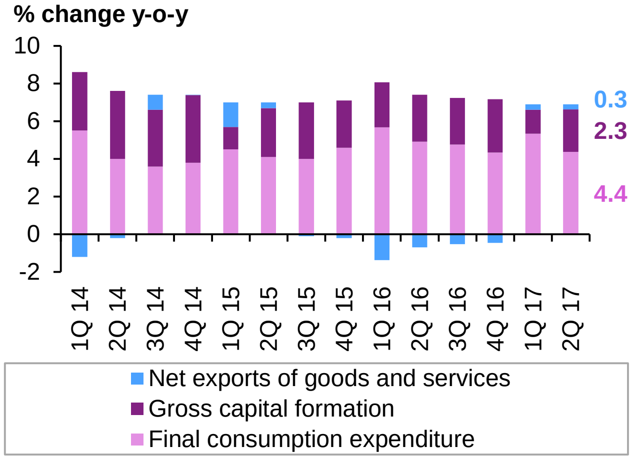
Real estate activity in the smaller cities remained flexible, fuelled by a still-accommodative housing policy. However, it appears that a less expansionary overall monetary policy stance will weigh on housing sales in 2H17.

Graph 3 - 24: Chinese GDP growth



Sources: China's National Bureau of Statistics and Haver Analytics.

Graph 3 - 25: Chinese GDP breakdown

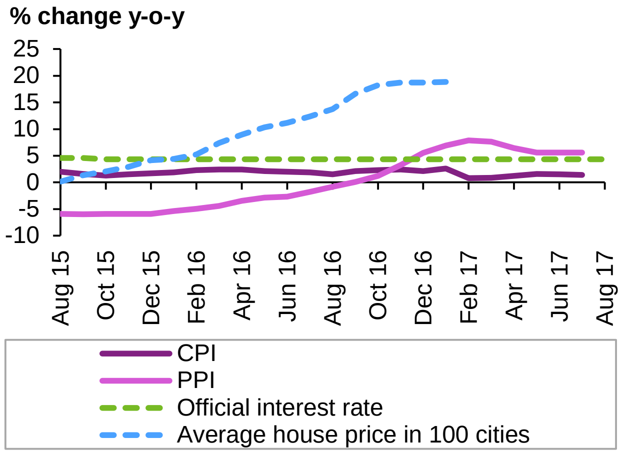


Sources: China National Bureau of Statistics and Haver Analytics.

CPI inflation eased slightly last month to 1.4% y-o-y in July of 2017, following a 1.5% rise in June. It was the lowest inflation rate since April, as the cost of non-food slowed and the cost of food continued to fall. On a monthly basis, consumer prices edged up by 0.1%, after declining 0.2% a month earlier and slightly below estimates of a 0.2% rise. Although PPI inflation held steady at 5.5%, trend-wise it eased notably from 7.4% in 1Q17 to 5.8% in 2Q17, and we expect it to continue to ease in 2H17 as the spill-over of price increases in the heavy industry into other sectors remains limited.

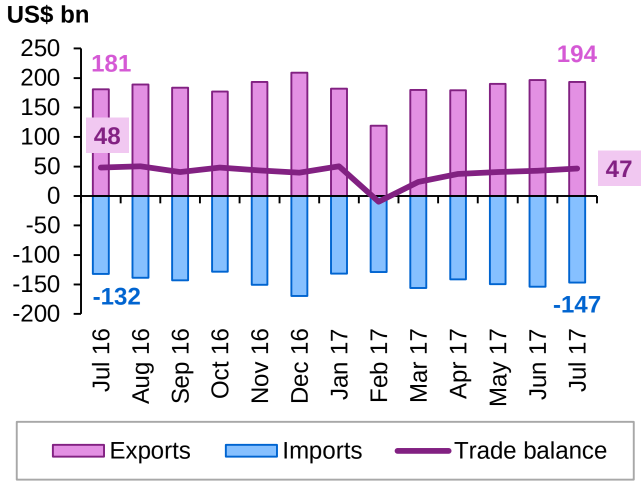
China's trade surplus fell to $46.74 billion in July of 2017 from $48.61 billion in the same month a year earlier, but remained above the market consensus of $46.08 billion. Exports rose by 7.2% from a year earlier to $193.6 billion, down from June's 11.3% growth, while imports rose 11% to $146.9 billion, down from the previous month's 17.2% gain. As to the export outlook, while global demand momentum has improved recently, China's export growth probably peaked in 3Q17, in real terms, and is likely to be more moderate in 2H17. Moreover, downside risks to exports remain, in particular in the area of US-China trade relations following strong growth in Chinese exports to the US (a full 11% increase y-o-y in 1H17 and remaining solid at 9% y-o-y last month). This, along with ongoing US-North Korea tensions, may trigger US trade protectionist measures against China. The slowdown in China's economy and imports will make things difficult for the global economy. Europe and the US will continue to grow but, going forward, growth in the developed world is unlikely to be strong enough to offset the cooling in China. Global trade growth peaked in 1Q17, when China's import growth was at its strongest, and will ease in the second half of this year.

Graph 3 - 26: Chinese CPI and PPI



Sources: China Index Academy, China National Bureau of Statistics, Soufan and Haver Analytics.

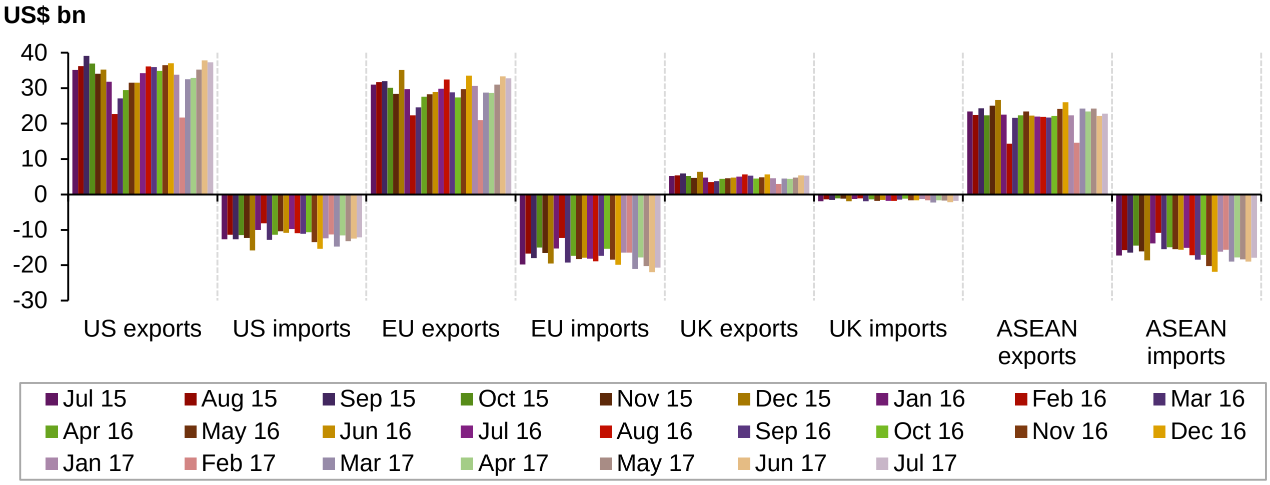
Graph 3 - 27: Chinese trade balance



Sources: China Customs and Haver Analytics.

Liquidity conditions in China will remain moderately tight in the coming quarters. The government's deleveraging campaign and regulatory crackdown on shadow banking appeared serious and has the support of China's top political leadership. The government has also indicated that it is comfortable with the current lower level of credit growth. As the economic growth slowdown has stabilised, the Chinese authorities should continue their efforts to mitigate financial-sector risk. Nevertheless, should the economy decelerate more sharply than expected, the Chinese government is likely to swing towards the growth support end of the policy balance and loosen monetary policy.

Graph 3 - 28: Chinese merchandise trade by selected countries, NSA

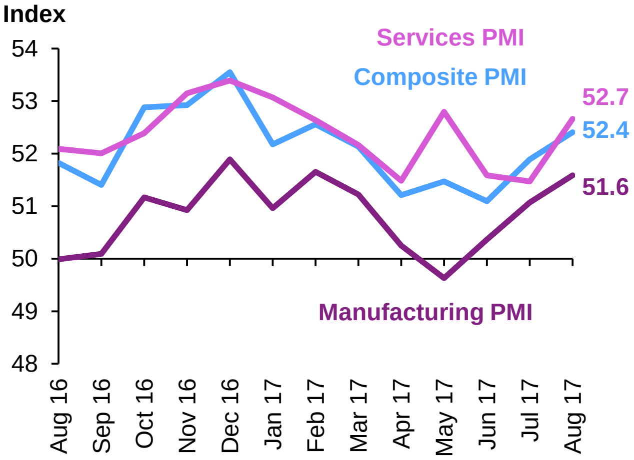


Sources: China Customs, Haver Analytics and OPEC Secretariat.

Profits of industrial enterprises in China rose by 21.2% y-o-y in 1Q17, compared with an increase of 22% in the first six months of the year.

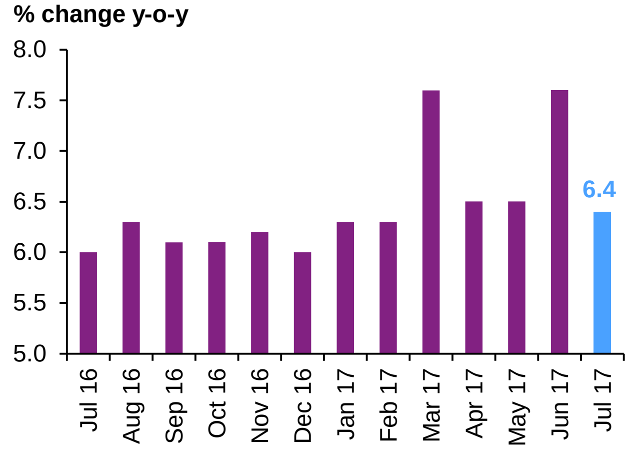
The **Caixin Manufacturing PMI** in China rose to 51.6 in August from 51.1 in July and beat the market consensus of 50.9. It was the third straight month of expansion in manufacturing activity and the fastest since February, as new orders surged to an over 3-year high and new export orders increased by the greatest extent since early 2010. Also, business confidence hit a 5-month high and companies expanded their production of schedules. The official non-Manufacturing PMI in China fell to 53.4 in August 2017 from 54.5 in July. It was the weakest reading since May 2016, as new orders' growth slowed (50.9 from 51.1 in the prior month) while new export orders contracted (49.0 from 52.1) and employment (49.5 from 49.5) declined for the eighth straight month. Also, orders in hand (44.0 from 43.9) continued to drop amid softening suppliers' delivery time (51.1 from 51.7). At the same time, business sentiment remained strong (61.0 from 61.1) and selling prices (51.5 from 50.9) increased for the second month in a row. The **Caixin China Services PMI** rose to 52.7 in August of 2017 from 51.5 in July, beating the market consensus of 51.8. It was the fastest rise in services activity since May, as new orders increased solidly, employment increased by the highest level in four months and business confidence strengthened.

Graph 3 - 29: Chinese PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3 - 30: Chinese industrial production



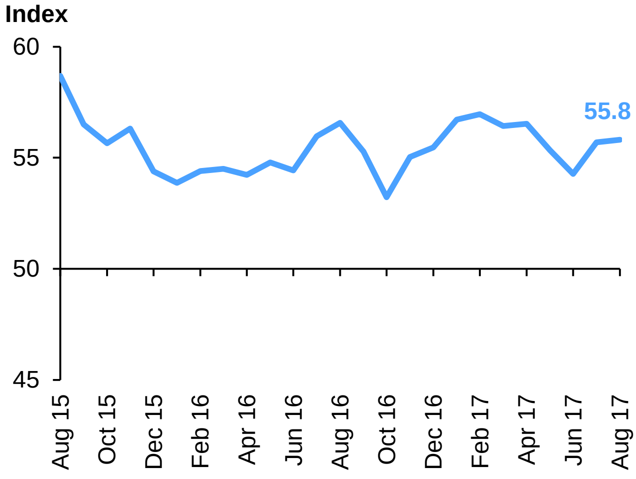
Sources: China National Bureau of Statistics and Haver Analytics.

China's GDP growth expectation remains unchanged at 6.7% in 2017 and 6.3% for 2018.

OPEC Member Countries

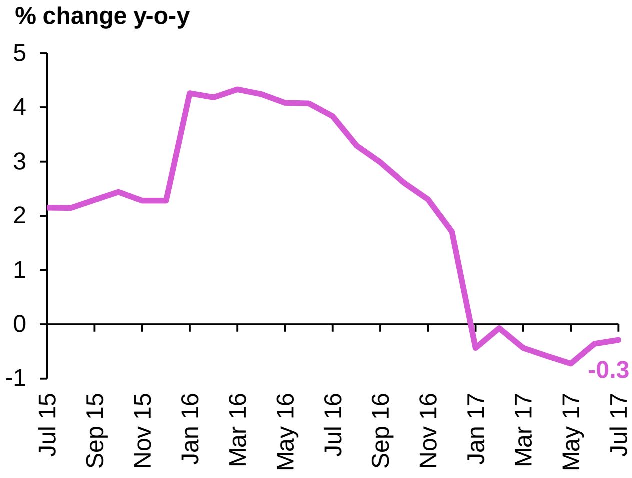
Inflation in **Saudi Arabia** posted -0.3% y-o-y in July, maintaining its notable easing since the beginning of the year due to the baseline effect, which could be a supporting factor for private consumption. The non-oil private sector grew at a solid pace in August. The Emirates NBD Saudi Arabia PMI for August registered 55.8, up from 55.7, suggesting continued solid improvement in the business conditions of the non-oil private sector. The index survey showed a sharp rise in output and new orders accompanied by a record increase in inventories. The survey showed that private sector firms faced further capacity pressure for the tenth consecutive month in August, which led to payroll rise. The increase in salaries together with the rise in prices of purchased input have raised the cost burden, which eventually transferred to consumers. Yet, price increase was negligible. The index average of 1H17 stood at 56.0, highlighting a higher growth rate compared with the first six months of 2016. Further increase of demand have encouraged optimistic expectations over the coming 12 months outlook by the country's non-oil private firms

Graph 3 - 31: Saudi Arabia manufacturing PMIs



Sources: Emirates NBD, IHS Markit and Haver Analytics.

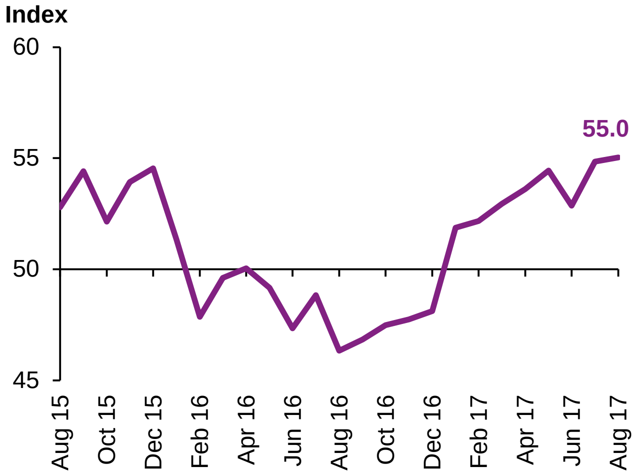
Graph 3 - 32: Saudi Arabia inflation



Sources: General Authority for Statistics and Haver Analytics.

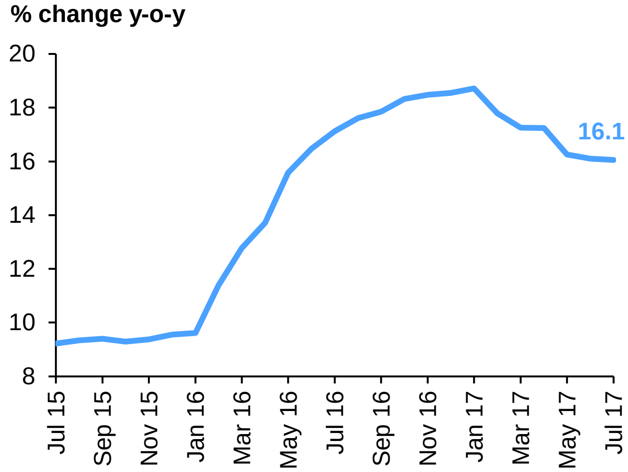
After five quarters of recession, the economy of **Nigeria** registered 0.6% y-o-y growth in 2Q17, from a contraction of 0.5% y-o-y in the previous quarter, according to the National Bureau of Statistics. Inflation is on an easing trend since the beginning of the year, posting 16.1% y-o-y in July vs 18.7% in January. The naira was largely stable after depreciating by 50% in June–August 2016. It appreciated slightly by 0.1% m-o-m in August. In another positive note, the country's private sector registered its fastest pace of growth in 26 months in August as suggested by the Stanbic IBTC Bank Nigeria PMI. The index jumped to 55.0 in August, from 54.8 in July and 52.9 in June because of the fast pace of expansion in both output and new orders. Despite the pace of acceleration in new business somewhat eased last month, growth achieved could still be deemed as strong. The survey also suggested a contraction in new export orders for the second consecutive month in August and most of the demand came from the domestic market.

Graph 3 - 33: Nigeria manufacturing PMIs



Sources: IHS Markit, Stanbic IBTC Bank and Haver Analytics.

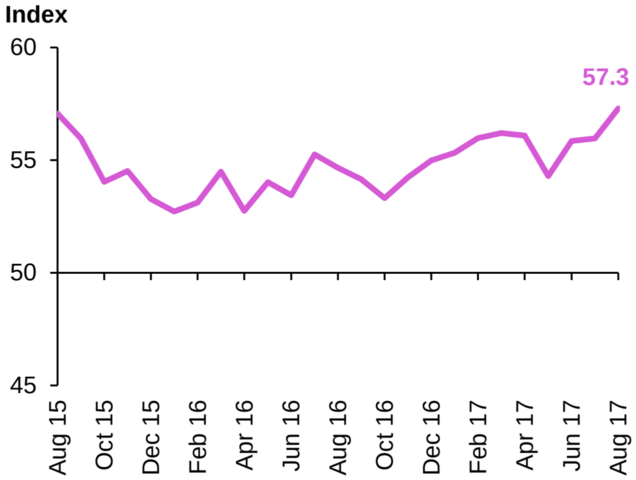
Graph 3 - 34: Nigeria inflation



Sources: National Bureau of Statistics and Haver Analytics.

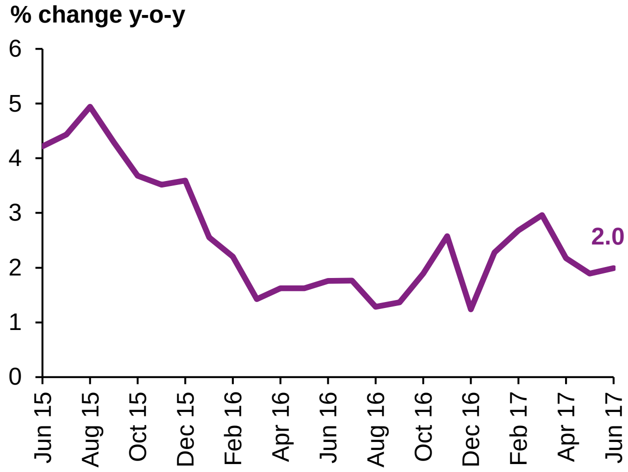
Inflation in the **United Arab Emirates** (UAE) eased from nearly 3.0% y-o-y in March to 2.0% y-o-y in June. The ease in prices of housing, water, electricity and gas was behind the fall in the overall index. The subcategory of housing, water, electricity and gas showed notable decline from 1.5% y-o-y in May, to 1.0% y-o-y in June. In addition, prices of the recreational, cultural goods and services was in the negative territory since December 2016. It declined by 7.8% y-o-y in June, following the 5.4% y-o-y drop a month earlier. Most of other categories of consumer prices were largely stable in June. Expansion in the country's non-oil private sector rose in August to its quickest pace since February 2015, according to the Emirates NBD UAE PMI. The index stood at 57.3 in August, up from 56.0 in July on a large expansion in new orders. The survey also showed that new export orders increased for the first time in three months, with other GCC countries are perceived as major international markets. The current expansionary trend in new orders was reflected into slightly higher employment. The firms' upbeat sentiment towards short-term outlook have led to large increase in their inventories by fastest rate in history of the survey, preparing for episodes of greater output.

Graph 3 - 35: UAE manufacturing PMIs



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Graph 3 - 36: UAE inflation



Sources: General Authority for Statistics and Haver Analytics.

Other Asia

In **Indonesia**, the GDP registered growth of 5.0% y-o-y in 2Q17, similar to 1Q17. Growth in household consumption expenditures was unchanged from first quarter at nearly 5.0%. However, general government consumption expenditures dropped by 1.9% y-o-y in 2Q17, compared with 2.7% growth in the previous quarter. The GFCF, on the other hand, accelerated to 5.4% y-o-y growth in 2Q17, up from 4.8% in 1Q17. Trade was also supportive of growth as net exports of goods and services climbed by more than 36% y-o-y in 2Q17. While exports increased by 3.4% y-o-y in 2Q17, imports posted a slow increase of only 0.6% y-o-y. Consumer price inflation posted a 3.8% y-o-y increase in August, down from the previous month and the lowest in five months. The Bank of Indonesia interest rate was unchanged in July at 6.5%.

In **Thailand**, the GDP registered its fastest growth in 2Q17 since 1Q13, growing by 3.7% y-o-y, up from 3.3% in the previous quarter. Despite a slowdown in the private consumption expenditure pace of growth, greater government consumption expenditures and trade led to higher GDP growth in 2Q17. Government consumption accelerated from 0.3% y-o-y in 1Q17 to 2.7% in 2Q17. Exports posted their fastest growth since 4Q12, up by 6.0%, whereas imports increased by 8.2% y-o-y in 2Q17. Consumer prices increased by 0.3% y-o-y in August from July's 0.2%.

At the time of writing, the UN is in the process of considering further sanctions on **North Korea**. However, barring a dramatic escalation in tensions, the sanctions being considered are not expected to have a significant impact on the global economy in 2017 and 2018, due to the country's negligible share in the world economy

Africa

Two large African economies posted encouraging GDP growth in 2Q17. In **Nigeria**, the GDP saw 0.6% y-o-y growth in 2Q17, following five quarters of recession, according to the National Bureau of Statistics.

In **South Africa**, the GDP grew at its fastest pace since 3Q15 in 2Q17. Growth stood at 0.8% y-o-y, up from 0.2% in the previous quarter. Private consumption increased by a notably faster pace of 1.7% y-o-y to reach its highest point since 4Q15. Public consumption slightly increased by 0.1% y-o-y in 2Q17 vs a 0.3% contraction posted the previous quarter. The GFCF, on the other hand, remained in contraction territory in 2Q17. Trade was not supportive of growth in 2Q17, as exports declined by 0.6% y-o-y from growth of 0.7% in 1Q17, while imports increased by 4.7% y-o-y in 2Q17, up from 0.6% in the previous quarter.

In **Egypt**, the pound slightly appreciated by 0.9% m-o-m in August against the dollar after accumulating depreciation of nearly 95% from November 2016 through to April 2017. Inflation continued posting readings north of 30% for the sixth consecutive month in July and is expected to rise further in the coming months due to a recent reduction in subsidies for some fuel/energy items and public services. The country's non-oil private sector markedly improved in August as suggested by its respective PMI due to an increase in new orders from abroad and the weakest decline in output. The index registered 48.9 in August, up from July's 48.6.

Latin America

In **Chile**, the GDP expanded by 0.9% y-o-y in 2Q17, up from 0.1% in 1Q17. While government consumption showed slower growth at a rate of 2.7% y-o-y in 2Q17, private consumption growth picked up to 2.6% in 2Q17 vs 1.8% in the previous quarter. The contribution of GFCF to growth continued to be negative in 2Q17 for the fourth consecutive quarter. The GFCF contracted by 4.1% y-o-y in 2Q17 vs a 2.4% contraction in 1Q17. Trade also did not provide support for higher GDP growth in 2Q17, with exports of goods and services dropping by 3.5% y-o-y and imports of goods and services increasing by 7.0%. In 1Q17, the GDP of Chile grew at its slowest pace since 3Q09 during the global financial crisis. The economy posted growth of just 0.1% y-o-y in 1Q17 due to a decline in private consumption and GFCF.

Transition region

In **Hungary**, the 1Q17 GDP posted relatively strong growth, though less than the previous quarter. GDP grew by 3.2% y-o-y in 2Q17 vs 4.2% in 1Q17. Private consumption continued to increase in 2Q17 as public expenditures kept declining. Public expenditures dropped by 2.3% y-o-y in 2Q17, whereas private consumption grew by 4.6% y-o-y over the same period. The GFCF continued to be an influential factor behind GDP growth, increasing by 21.2% y-o-y in 2Q17. Both exports and imports of goods and services inched up in 2Q17 by 3.5% and 5.1% y-o-y, respectively. In 1Q17, Hungary's GDP showed its highest growth since 2Q14, thanks to a sharp increase in investment and balanced changes in trade. The GDP grew by 4.2% y-o-y in 1Q17. The Hungarian forint appreciated for the fourth month in a row in August, by 3.4% m-o-m versus the dollar, appreciating more than 11% since May 2017.

World Oil Demand

In 2017, world oil demand growth was revised higher by around 50 tb/d, primarily as a result of better–than-expected performance from OECD America and Europe in 2Q17. Hence, world oil demand growth is now pegged at 1.42 mb/d, with total global consumption at 96.77 mb/d.

World oil demand growth for 2018 was also revised up by around 70 tb/d from the previous month's report; it is now anticipated to be 1.35 mb/d, with total global consumption of around 98.12 mb/d.

World oil demand in 2017 and 2018

Table 4 - 1: World oil demand in 2017*, mb/d

							Change 2017/16	
	2016	1Q17	2Q17	3Q17	4Q17	2017	Growth	%
Americas	24.67	24.52	24.86	25.28	24.96	24.91	0.23	0.94
of which US	*19.94*	*19.84*	*20.14*	*20.43*	*20.21*	*20.16*	*0.22*	*1.11*
Europe	14.05	13.82	14.14	14.54	14.28	14.20	0.15	1.08
Asia Pacific	8.12	8.60	7.69	7.81	8.34	8.11	-0.01	-0.11
Total OECD	**46.84**	**46.94**	**46.69**	**47.63**	**47.59**	**47.21**	**0.37**	**0.80**
Other Asia	12.85	12.87	13.30	12.97	13.47	13.15	0.30	2.32
of which India	*4.39*	*4.43*	*4.42*	*4.29*	*4.81*	*4.49*	*0.10*	*2.31*
Latin America	6.47	6.27	6.51	6.82	6.46	6.52	0.05	0.72
Middle East	7.97	8.11	7.91	8.45	7.85	8.08	0.11	1.36
Africa	4.10	4.23	4.19	4.14	4.26	4.20	0.11	2.64
Total DCs	**31.39**	**31.47**	**31.90**	**32.38**	**32.04**	**31.95**	**0.56**	**1.79**
FSU	4.62	4.54	4.39	4.76	5.08	4.69	0.07	1.52
Other Europe	0.70	0.71	0.67	0.70	0.79	0.72	0.02	3.15
China	11.80	11.88	12.40	12.10	12.41	12.20	0.39	3.34
Total "Other regions"	**17.12**	**17.12**	**17.46**	**17.56**	**18.28**	**17.61**	**0.49**	**2.84**
Total world	**95.35**	**95.54**	**96.05**	**97.57**	**97.91**	**96.77**	**1.42**	**1.49**
Previous estimate	95.12	95.39	95.65	97.28	97.63	96.49	1.37	1.44
Revision	0.23	0.15	0.39	0.29	0.28	0.28	0.05	0.05

*Note: * 2017 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Historical oil demand has been revised upward for 2015 and 2016 by approximately 0.3 mb/d to reflect latest annual Chinese data and following comprehensive review and analysis of available information. Upward revisions reflect particularly higher Chinese demand for the lighter part of the barrel, LPG and gasoline, as well as partly residual fuel oil; these upward revisions have been however partly offset by lower adjustments in the demand for middle distillates, gas diesel oil and jet kerosene.

OECD

Based on the latest available data, **OECD oil demand** growth was revised upward for the second consecutive month by 60 tb/d to average 0.37 mb/d. Oil demand has been quite robust in 2Q17, particularly in the Americas and Europe.

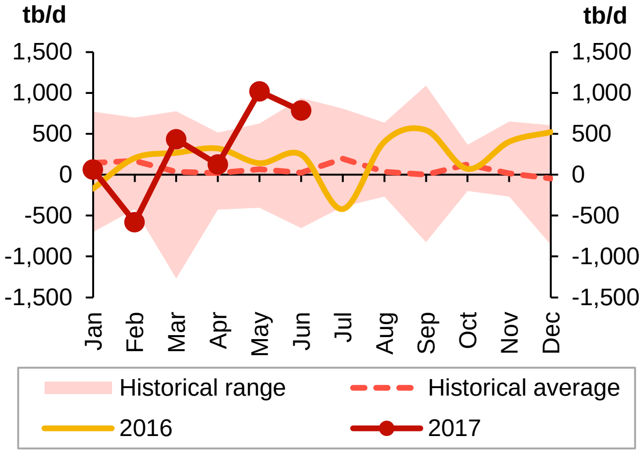
OECD America's oil demand data implied further firm developments during the month of June, with gains in transportation and industrial fuels and particularly strong gains in gasoline, jet fuel, gas diesel oil and LPG. Despite this upward trend in 2Q17 (by 100 tb/d), expectations for 3Q17 have been lowered (by 40 tb/d) as momentum in transportation fuels is expected to somewhat weaken as a result of the catastrophic effects of Hurricane Harvey in the month of August. The historical baseline for 2016 was also adjusted lower (by 70 tb/d for the full year) to account for the most up-to-date data and assessments.

OECD Europe oil demand data continued to outperform initial projections. Improving economic conditions across the region, along with positive vehicle sales and a low oil price environment, are in line with upward adjustments of 100 tb/d and 40 tb/d in 2Q17 and 3Q17, respectively. For 2018, oil demand growth projections were adjusted higher (by 30 tb/d for the full year) from last month's report, in line with the steady economic outlook for Europe.

Expectations for the OECD Asia Pacific region remained unchanged from last month's report. The flourishing petrochemical industry in South Korea was roughly offset by declining oil demand in Japan. Oil demand growth for 2018 was revised slightly upwards by 10 tb/d as a result of midly improved expectations in the region's economy.

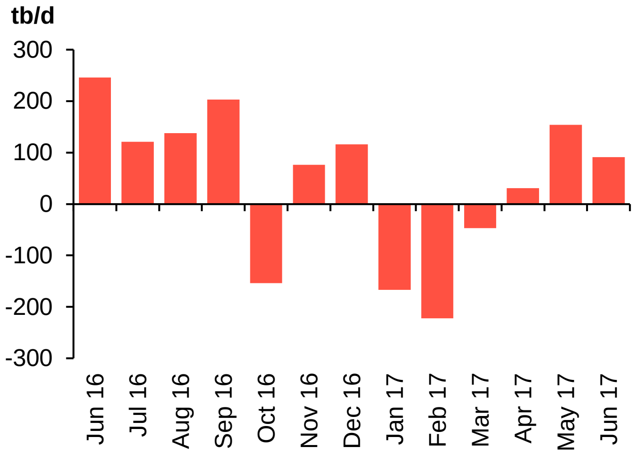
OECD Americas

Graph 4 - 1: OECD Americas oil demand, y-o-y change



Sources: National, Joint Organisations Data Initiative and OPEC Secretariat.

Graph 4 - 2: US gasoline demand, y-o-y change



Source: US Energy Information Administration.

US

The latest available **US** monthly data for June calls for a strong increase in oil demand of around 0.7 mb/d y-o-y, continuing the recently observed steep growth in oil demand and in line with a number of key indicators – the country's robust economic growth, industrial activity and the low oil price environment. Gains in oil demand for another month came mainly from the transportation and industrial sectors. Demand for LPG was seen as growing y-o-y, notably for the petrochemical and to a minor extent the transportation sectors. June distillate demand increased sharply by more than 0.34 mb/d y-o-y, with the bulk of gains registered in the industrial sector. Growth in jet kerosene was also solid, as expected at the beginning of the traditional holiday season and in line with increased air travel. June gasoline requirements continued to grow for the third consecutive month, despite declining vehicle sales by 1.5% year-to-April as compared to same period last year and a high baseline for the same month in 2016. Moreover, June residual fuel oil requirements remained roughly flat y-o-y.

With data available for eight months of 2017 – monthly data until June and preliminary weekly data for July and August – US oil demand is seen to grow strongly by around 0.5 mb/d. However, the full impact of Hurricane Harvey is not yet reflected in the preliminary data. The bulk of growth originated in the lighter and middle parts of the barrel; LPG and distillates, gas diesel oil and jet kerosene and gasoline demand to date are continuing to see minor growth. US oil demand for the remainder of 2017 and 2018 is expected to be determined by developments in distillate and gasoline usage in the road transportation sector and hence indirectly by fuel price levels and the general economic activities, which most likely will support demand for industrial and construction fuels. Therefore, the overall implied risks for the future development of US oil demand are balanced. Upside risks originate in projected economic growth and oil usage in the transportation and industrial sectors, while fuel substitution and vehicle efficiencies represent major downside risks.

Mexican oil demand remained negative for another month in July, declining by 2.7% y-o-y. Shrinking demand for the majority of petroleum product categories has been only partly offset by rising residual fuel oil requirements. The risks for 2017 and 2018 Mexican oil demand are skewed to the downside and relate to the development of the country's overall economy.

In **Canada**, June came up strongly, increasing y-o-y for the second consecutive month. Demand for the main petroleum products registered gains, particularly for residual fuel oil, gasoline and gas diesel oil. The overall increase was partly offset by slightly declining naphtha demand. In 2018, Canadian oil demand is projected to remain roughly at 2017 levels, showing only marginal increases with balanced risks.

In 2017, **OECD Americas' oil demand** is expected to grow by 0.23 mb/d compared with 2016. In 2018, OECD Americas' oil demand is projected to increase by 0.19 mb/d compared with 2017.

Table 4 - 2: US oil demand, tb/d

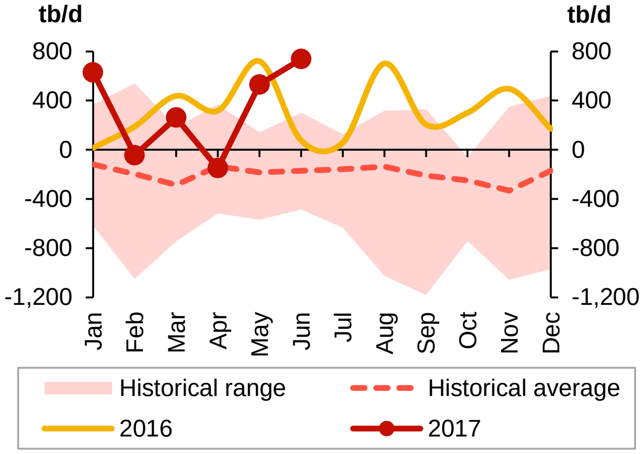
			Change 2017/2016	
	Jun 17	Jun 16	tb/d	%
LPG	2,439	2,269	170	7.5
Naphtha	247	218	29	13.3
Gasoline	9,766	9,675	91	0.9
Jet/kerosene	1,764	1,733	31	1.8
Diesel oil	3,969	3,830	139	3.6
Fuel oil	418	338	80	23.7
Other products	2,182	2,013	170	8.4
Total	**20,785**	**20,076**	**710**	**3.5**

Sources: US Energy Information Administration and OPEC Secretariat.

OECD Europe

Following strong growth for the whole of 2015 and 2016, **European oil demand** continued to surprise with a strong performance in the first half of 2017 – most data covers up to June 2017 – with some preliminary indications for July. Solid gains were seen on top of high historical baseline volumes during 2015 and 2016 and are the result of an improving economy and consequently rising oil usage in the transportation and industrial sectors, as well as colder temperatures than the historical norm during the first quarter of 2017. The bulk of gains were seen in middle distillates, diesel oil, jet kerosene and naphtha; gains were partly offset by shrinking residual fuel oil and demand.

Graph 4 - 3: OECD Europe oil demand, y-o-y change



Sources: National, Joint Organisations Data Initiative and OPEC Secretariat.

Graph 4 - 4: UK diesel oil demand, y-o-y change

Sources: Joint Organisations Data Initiative, UK Department of Energy Climate and Change and OPEC Secretariat.

A large majority of countries in the region showed strongly increasing oil demand year-to-date compared with the same period in 2016. Gains in road transportation fuels are also a reflection of the positive momentum in auto sales, which seem to be gaining after a long period of decline. General expectations for the region's oil demand growth for the remainder of 2017 and 2018 are positive, though more conservative than those experienced during the first half of the year, mainly due to risks that traditionally relate to the region's oil demand structure, such as high taxation polices for oil use and fuel substitution.

Table 4 - 3: Europe Big 4* oil demand, tb/d

			Change 2017/2016	
	Jul 17	Jul 16	tb/d	%
LPG	420	434	-14	-3.2
Naphtha	688	730	-42	-5.8
Gasoline	1,137	1,129	8	0.7
Jet/kerosene	842	828	14	1.7
Diesel oil	3,208	3,147	61	1.9
Fuel oil	228	222	6	2.8
Other products	650	707	-57	-8.0
Total	**7,174**	**7,197**	**-23**	**-0.3**

*Note: * Germany, France, Italy and the UK.*
Sources: JODI, UK Department of Energy and Climate Change, Unione Petrolifera and OPEC Secretariat.

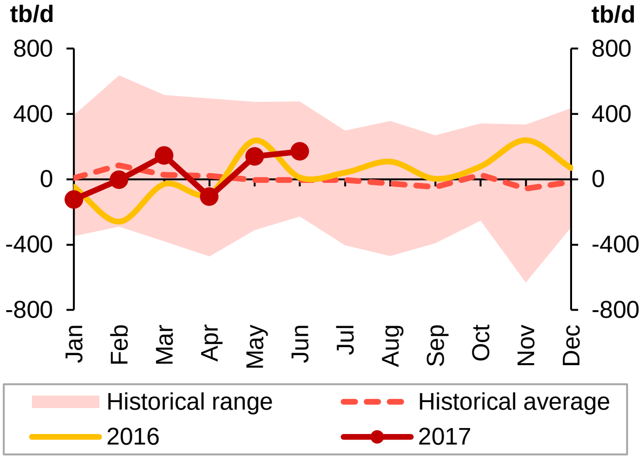
OECD Europe oil demand is projected to grow by 0.15 mb/d in 2017, while 2018 oil demand will grow slightly by 0.07 mb/d compared with 2017.

OECD Asia Pacific

Japan

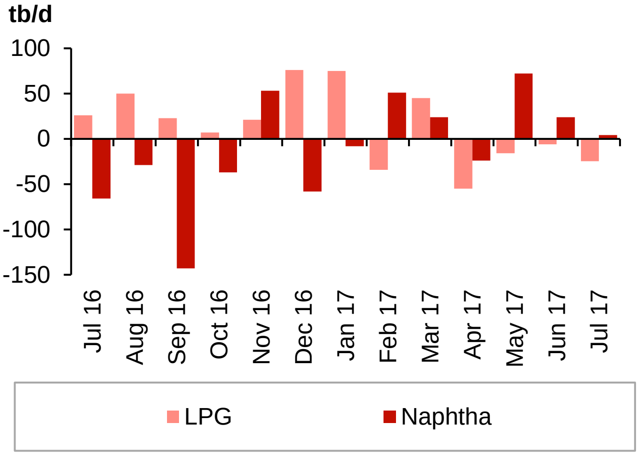
Preliminary data implies that **Japanese oil demand** shrank again in July y-o-y by a slight 0.05 mb/d following continuing declines for all months in the first half of the year. Despite overall declines, however, the performance of some petroleum products remained positive. Jet/kerosene, fuel oil and diesel requirements saw y-o-y gains as a result of their usage in the petrochemical, industrial and transportation sectors. For gasoline, demand remained stagnant y-o-y, while requirements for direct use crude saw substantial losses compared with the same month in 2016 as a result of continuing fuel substitution by other primary energy commodities.

Graph 4 - 5: OECD Asia Pacific oil demand, y-o-y change



Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

Graph 4 - 6: Japanese LPG and naphtha demand, y-o-y change



Sources: Ministry of Economy Trade and Industry of Japan, Joint Organisations Data Initiative and OPEC Secretariat.

The Japanese oil demand outlook for 2017 and 2018 remains unchanged from last month's forecasts, with risks continuing to be skewed towards the downside mainly due to weaker economic forecasts, increasing efficiencies in the road transportation sector, as well as fuel substitution. Projections for 2018 assume a firm likelihood that an additional number of nuclear plants will restart operation.

Table 4 - 4: Japanese domestic sales, tb/d

			Change 2017/2016	
	Jul 17	Jul 16	tb/d	%
LPG	401	426	-25	-5.8
Naphtha	702	698	4	0.6
Gasoline	949	948	1	0.1
Jet/kerosene	342	310	32	10.3
Diesel oil	773	740	33	4.5
Fuel oil	341	331	10	3.1
Other products	303	405	-102	-25.3
Total	**3,812**	**3,858**	**-46**	**-1.2**

Sources: JODI, Ministry of Energy and Trade and Industry of Japan and OPEC Secretariat.

South Korea

Positive indications for oil demand in the region originate mostly in **South Korea**, along with smaller additional volumes for Australia, New Zealand and some other countries. The latest available Korean data for June indicates an increase of 0.06 mb/d over the same month last year, with demand for the majority of main petroleum product categories on the rise, particularly naphtha, diesel oil and gasoline. The outlook for South Korean oil demand in 2017 and 2018 remains positive, with risks slightly skewed to the upside compared with last month's projections.

OECD Asia Pacific oil demand is projected to dip slightly by 0.01 mb/d in 2017, while a similar drop will also take place in 2018.

Non-OECD

Based on the latest available data, **oil demand growth in non-OECD regions** was adjusted marginally lower by around 7 tb/d in 2017, despite some upward revisions in the region (China by 33 tb/d on average for 2017).

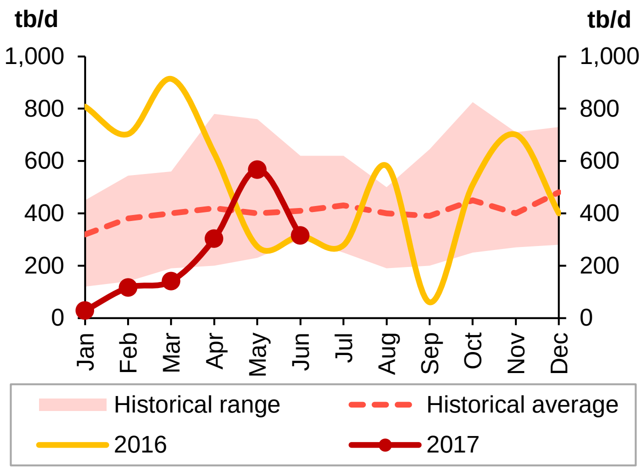
In **Other Asia**, oil demand growth was adjusted lower (by 0.10 mb/d in 1Q17 and 30 tb/d in 3Q17), mainly reflecting slower-than-expected oil demand developments following the demonetization policy in India.

Latin American growth was also revised slightly lower (by 7 tb/d in 2Q17) due to slower economic momentum denting oil demand.

In **China**, upward revisions (by 20 tb/d in 2Q17, 70 tb/d in 3Q17 and 40 tb/d in 4Q17) stemmed from better-than-expected demand in the petrochemical and transportation sectors of the country. The historical baseline for 2016 was also adjusted higher (by +0.28 mb/d for the full year) to account for the most up-to-date data. For 2018, oil demand growth was adjusted higher (by 35 tb/d for the full year) from the previous month's projection, mainly to reflect the expected firm expansions in the petrochemical and transportation sectors.

Other Asia

Graph 4 - 7: Other Asia oil demand, y-o-y change



Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

Graph 4 - 8: Indian gasoline demand, y-o-y change

Sources: OPEC Secretariat, and Petroleum Planning and Analysis Cell of India.

India

India's oil demand continued to increase at a slower pace than in 2Q17. July registered an increase of around 43 tb/d, or 1.1%, y-o-y, with total product demand slightly above 4 mb/d. Looking at mixed product performance, weakness in 'other product' categories negatively affected the overall oil demand growth picture as the Goods and Services Tax (GST) caused uncertainties in the manufacturing sector lowering demand for petcoke and lubricants, while demand growth for diesel, gasoline and LPG rose at various magnitudes.

Diesel oil demand recorded the greatest growth in July, when products registered an increase of about 0.13 tb/d, or 9%, y-o-y leading to total consumption of 1.64 mb/d. Improved overall economic activity, ongoing infrastructure projects, especially road construction, as well as the economic viability of public transport and diesel-driven vehicles as a result of lower fuel costs have positively affected diesel oil consumption. Gasoline consumption increased by 61 tb/d, equating to 12% y-o-y in July. The increase in gasoline demand growth is largely attributed to the ongoing increase in domestic passenger vehicles sales, which expanded by around 15% y-o-y in July. Growth in two-wheeler sales was also higher at 14% y-o-y; 61% of India's gasoline consumption is attributed to two-wheeler growth. LPG grew solidly for the seventh consecutive month, higher by 75 tb/d, or 13%, y-o-y, with total consumption at around 0.7 mb/d. LPG demand continues to be led by the residential sector, as ongoing projects to provide more LPG connections to households are commissioned.

A decrease in fuel oil consumption of 31 tb/d, or around 10% y-o-y, is a result of declining consumption in the steel and agriculture sectors, as well as substitution programmes favouring natural gas.

Table 4 - 5: Indian oil demand by main products, tb/d

	Jul 17	Jul 16	Change 2017/2016 tb/d	%
LPG	672	597	75	12.5
Naphtha	249	340	-91	-26.8
Gasoline	582	521	61	11.7
Jet/kerosene	232	263	-31	-11.9
Diesel oil	1,636	1,508	128	8.5
Fuel oil	279	310	-31	-10.1
Other products	358	426	-68	-15.9
Total	**4,009**	**3,966**	**43**	**1.1**

Sources: JODI, Petroleum Planning and Analysis Cell of India and OPEC Secretariat.

Indonesia

In **Indonesia**, the latest June 2017 data shows yet another increase of around 2% y-o-y. Additionally, y-t-d data up to June shows a rise of 30 tb/d, or 2%, y-o-y, indicating firm demand growth in the county. In June, products showed mixed performance, while demand for some transportation fuels (gasoline and diesel oil) increased and LPG, jet/kerosene and ‘other products’ categories declined.

Thailand

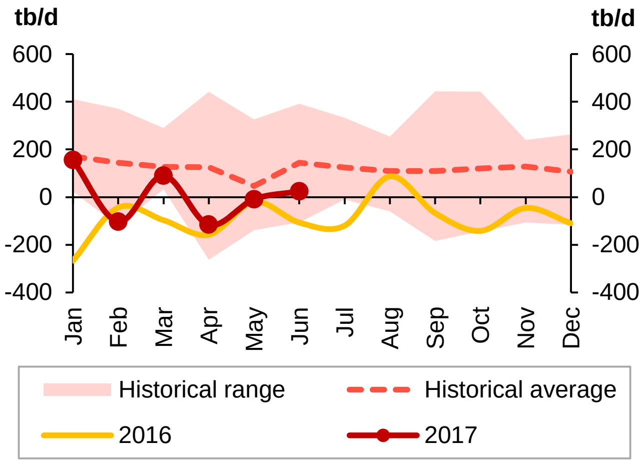
In **Thailand**, oil demand in June was also in positive territory, with growth of around 4% y-o-y, led by LPG, which rose more than 20% y-o-y, as demand for the petrochemical sector picked up. In addition, some support came from transportation fuels, particularly gasoline, which increased by around 9% y-o-y.

The demand expectations for Other Asia 2017 are now slightly below those of the previous month’s report as a result of weaker-than-expected oil demand growth from India in 1Q17. For 2018, oil demand growth in the region remains as highlighted in the previous month’s report, which indicates steady economic conditions. India is anticipated to be the major contributor to growth in the Other Asia category. Middle distillates, followed by gasoline, are the leading products for oil demand growth in 2018.

Other Asia’s oil demand is anticipated to grow by 0.33 mb/d y-o-y in 2017, while in 2018, it is projected to rise by 0.33 mb/d.

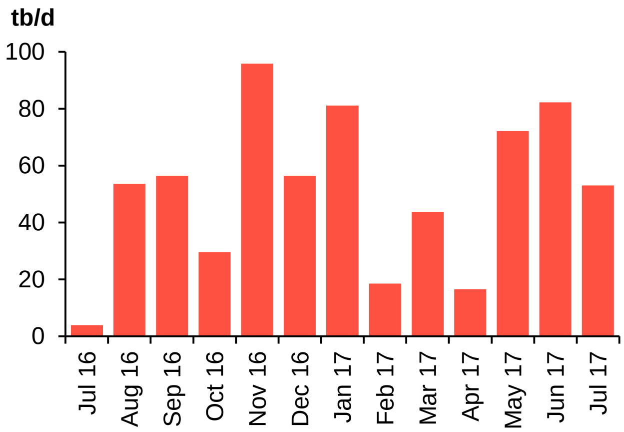
Latin America

Graph 4 - 9: Latin America oil demand, y-o-y change



Sources: Joint Organisations Data Initiative, national and OPEC Secretariat.

Graph 4 - 10: Brazilian gasoline demand, y-o-y change



Sources: Agencia Nacional do Petroleo, Gas e Biocombustiveis of Brazil, Joint Organisations Data Initiative and OPEC Secretariat.

Brazil

In **Brazil**, oil demand grew during July, edging up by 35 tb/d, or 1.4%, compared with the same period in 2016. Increase in oil demand growth was led by gasoline, which rose by around 53 tb/d, or 8%, y-o-y. Demand was stimulated by cheaper gasoline prices compared with ethanol, encouraging drivers to use gasoline in their flex-fuel engine vehicles. On the other hand, ethanol demand has been declining since the beginning of 2016, as curtailed production led to higher ethanol prices, hence limiting demand. Ethanol demand declined by around 57 tb/d in July, while diesel demand increased in the same month by around 25 tb/d, or around 3% y-o-y. This increase is the result of a slow improvement in the overall economy, as improvement in various sectors such as transportation, agriculture, construction and industry all contributed positively. Fuel oil demand increased marginally by around 2 tb/d y-o-y to satisfy additional demand in the power sector.

Table 4 - 6: Brazilian oil demand*, tb/d

			Change 2017/2016	
	Jul 17	Jul 16	tb/d	%
LPG	242	236	6	2.7
Naphtha	144	143	1	0.7
Gasoline	752	699	53	7.6
Jet/kerosene	120	119	1	1.1
Diesel oil	978	953	25	2.6
Fuel oil	91	85	6	6.9
Other products	330	387	-57	-14.6
Total	**2,657**	**2,622**	**35**	**1.4**

*Note: * = Inland deliveries.*

Sources: JODI, Agencia Nacional do Petroleo, Gas Natural e Biocombustiveis and OPEC Secretariat.

Argentina

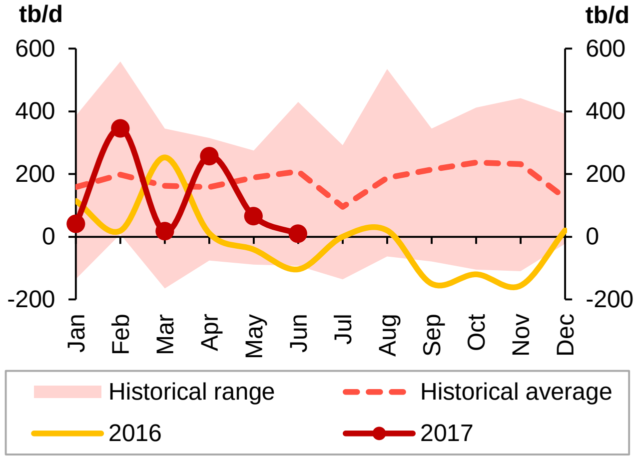
In **Argentina**, the latest available data for the month of June shows declining oil demand requirements; oil demand edged down by 26 tb/d, or by 3%, y-o-y. While transportation fuels have recorded some gains led by jet/kero and gasoline, those were outweighed by declines in petrochemical feedstock and power generation fuels, namely LPG, diesel oil and fuel oil.

Going forward, **2017 and 2018 projections** for oil demand growth in **Latin America** are similar to last month's projections, and account for general improvement in the overall regional economy. Brazil is projected to by the main contributor to growth, led by transportation fuels.

Latin American oil demand is expected to rise by 50 tb/d in 2017 and gain some momentum in 2018, increasing by around 90 tb/d.

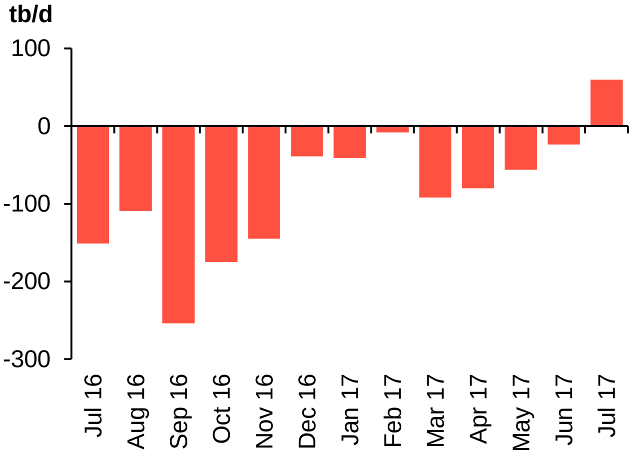
Middle East

Graph 4 - 11: Middle East oil demand, y-o-y change



Sources: Joint Organisations Data Initiative, national, direct communication and OPEC Secretariat.

Graph 4 - 12: Saudi Arabian direct crude burning, y-o-y change



Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

Saudi Arabia

In **Saudi Arabia**, oil demand returned to positive growth after two consecutive months of decline, rising for the third time only in 2017 by 0.14 mb/d to 2.8 mb/d in July, which equates to 5.4% y-o-y. Fuel oil demand growth led the overall increase along with steady rises in transportation fuels gasoline and jet fuel, as well as direct crude burning for the purpose of power generation. Those increases outweighed declines in diesel oil, the ‘other products’ category and LPG. Demand for fuel oil was in line with seasonal trends, boosted by an increase in capacity for oil-fired power generation plants as the country plans to expand the power generation sector. High temperatures coincided with Eid holidays, which also provided support. Direct crude oil for the purpose of power generation was also higher y-o-y as a result, adding 60 tb/d or 9% y-o-y. Gasoline and jet fuel both rose, by 9% and 13% y-o-y respectively, in line with an uptick in summer driving and school holiday seasons. Diesel oil demand, on the other hand, dipped by as much as 0.13 mb/d, or 17%, y-o-y. The overall slowdown in economic activities in addition to the replacement of diesel oil in the power generation sector in the southern and western regions resulted in lower demand in the country. Diesel oil demand peaked in September 2015 when total consumption reached around 1.0 mb/d. Total consumption for diesel oil stood at 0.63 mb/d in July 2017.

Iraq

July oil demand growth in **Iraq** was broadly flat, with total product consumption back below the 0.7 mb/d mark at 0.67 mb/d. This data represents the slowest pace of growth so far in 2017. Product categories saw mixed performance, while demand for transportation fuels – jet fuel, gasoline and diesel oil, along with fuel oil – increased over the course of the month. Direct crude for power generation and naphtha lost ground, dragging overall consumption lower.

Oil demand growth in the Middle East in 2017 is foreseen to rise over 2016 levels, as economic momentum gains pace y-o-y, while for 2018 the level of oil demand growth is anticipated to moderate slightly from 2017 levels. Oil demand in Saudi Arabia is expected to fluctuate during the reminder of the current year as a result of consumer reactions to economic reform policies in the country. Demand from Iraq is projected to contribute positively to oil demand growth in the region, along with IR Iran, the UAE and Kuwait, which will provide support to a lesser extent.

Middle East oil demand for 2017 is projected to increase by 0.11 mb/d, while oil demand in 2018 is anticipated to rise by 0.10 mb/d.

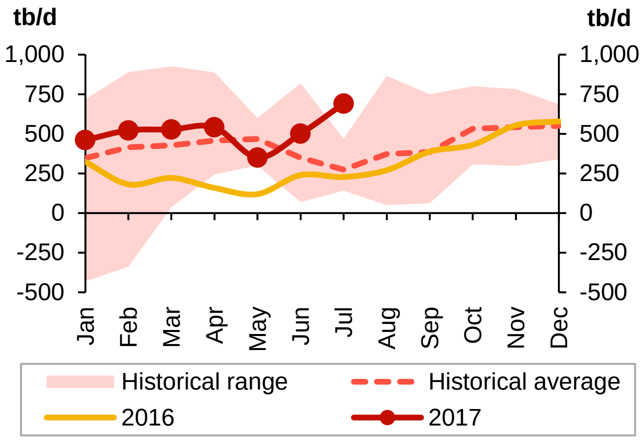
China

In July, **Chinese oil demand** continued to grow at a very healthy pace, rising by around 0.69 mb/d or around 6% y-o-y. Total oil demand reached 11.67 mb/d during the month. Year-to-date data indicates average growth of 0.55 mb/d, more than doubling the growth recorded during the same period in 2016 of 0.21 mb/d y-o-y.

The current solid pace in Chinese oil demand comes primarily from increasing LPG as a petrochemical feedstock as well as fuel oil, jet/kerosene and gasoline, with gains of more than 20%, 16%, 13% and 4% y-o-y, respectively. LPG demand rose by a massive 0.3 mb/d y-o-y with total consumption reaching 1.78 mb/d as ongoing demand from the petrochemical sector provided strong support. Healthy demand growth for LPG is anticipated to continue until the end of the year, despite a possible seasonal slowdown towards the end of 3Q17. Fuel oil consumption rose by 69 tb/d from July 2016 levels. This is largely attributed to stronger-than-expected economic growth leading to higher demand in the petrochemical and power sectors.

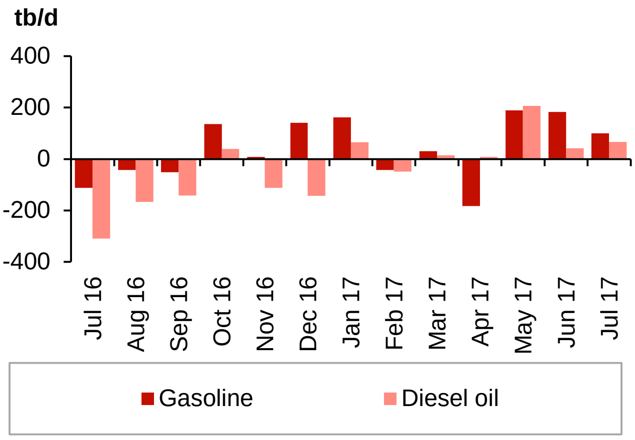
Gasoline demand was higher by around 0.10 mb/d y-o-y, once more motivated by robust sport utility vehicle (SUV) sales and warm weather. Vehicle sales rose during the month of July, adding around 4% y-o-y with total sales reaching 1.7 million units. SUV sales also rose substantially, adding around 17% compared with one year ago. On a cumulative basis, with data up to July, the sale of passenger cars reached 12.9 million units, up by 2% from the same period in 2016. Jet/kerosene demand rose by 87 tb/d y-o-y continuing its solid performance in 2017 as domestic air traffic improved over the summer holiday travelling season, with a similar trend anticipated in August.

Graph 4 - 13: Chinese apparent oil demand, y-o-y change



Sources: Argus Global Markets, China OGP (Xinhua News Agency), Facts Global Energy, JODI, National Bureau of Statistics of China and OPEC Secretariat.

Graph 4 - 14: Chinese diesel oil and gasoline demand, y-o-y change



Sources: Facts Global Energy, China OGP (Xinhua News Agency), Argus Global Markets, JODI, National Bureau of Statistics, China and OPEC Secretariat.

Projections for 2017 oil demand development in China improved from last month's report due to solid performance in 1H17. In 2018, projections based on transportation and industrial fuels are to rise next year, though slightly lower GDP growth is expected compared with 2017 at 6.3%. Ongoing fuel quality programmes target fewer emissions and the continuation of fuel substitution with natural gas.

Chinese oil demand for 2017 is projected to rise by a firm 0.39 mb/d, while 2018 demand growth is estimated to be 0.35 mb/d.

Table 4 - 7: World oil demand in 2018*, mb/d

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17 Growth	%
Americas	24.91	24.69	25.04	25.47	25.17	25.10	0.19	0.76
of which US	*20.16*	*19.97*	*20.34*	*20.65*	*20.38*	*20.34*	*0.18*	*0.88*
Europe	14.20	13.92	14.20	14.61	14.34	14.27	0.07	0.50
Asia Pacific	8.11	8.59	7.68	7.77	8.33	8.09	-0.01	-0.18
Total OECD	**47.21**	**47.20**	**46.92**	**47.86**	**47.84**	**47.46**	**0.25**	**0.52**
Other Asia	13.15	13.19	13.65	13.31	13.80	13.49	0.33	2.55
of which India	*4.49*	*4.63*	*4.64*	*4.38*	*4.94*	*4.65*	*0.16*	*3.53*
Latin America	6.52	6.36	6.59	6.91	6.55	6.60	0.09	1.30
Middle East	8.08	8.20	7.99	8.56	7.95	8.17	0.10	1.18
Africa	4.20	4.35	4.30	4.25	4.38	4.32	0.12	2.76
Total DCs	**31.95**	**32.09**	**32.53**	**33.02**	**32.68**	**32.58**	**0.63**	**1.97**
FSU	4.69	4.64	4.49	4.86	5.19	4.79	0.10	2.13
Other Europe	0.72	0.73	0.69	0.73	0.82	0.74	0.03	3.48
China	12.20	12.22	12.75	12.45	12.76	12.55	0.35	2.87
Total "Other regions"	**17.61**	**17.58**	**17.93**	**18.04**	**18.77**	**18.08**	**0.48**	**2.70**
Total world	**96.77**	**96.87**	**97.39**	**98.91**	**99.30**	**98.12**	**1.35**	**1.40**
Previous estimate	96.49	96.63	96.93	98.55	98.96	97.77	1.28	1.32
Revision	0.28	0.24	0.46	0.37	0.34	0.35	0.07	0.07

*Note: * 2018 = Forecast.*

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Electric vehicles – recent developments

In absolute numbers, the ratio of electric vehicles (EVs) in 2016 globally is still very small, with a share of 0.9% in the US, while in Europe EVs made up a total of around 1.5% of all new passenger car registrations over the same period. Germany actually saw a decline in purely electric vehicle registrations in 2016 from a year earlier, to average a share of 0.7% of total new car sales. New car registrations in Europe for 2016 have shown that diesel is still the most popular fuel among buyers of new cars, accounting for 49.9% of the EU-15 market and gasoline's market share grew to 45.8% from 43.5% a year earlier. In Asia, China showed an impressive 500,000 new EV registrations in 2016. However, this still only amounts to 1.8% of total new vehicle registrations.

Given the very low share of total passenger cars, worldwide sales of EVs were up by 42% in the year to June 2017, according to data from www.insideevs.com, with sales of plug-in EVs rising by 102,106 units in June, the second-highest monthly volume on record. In the US, plug-in sales surged by 44.8% in the 12 months to June 2017 from a mere 4.4% in the same period a year earlier. The Tesla Model S, retained the top spot for seven months to the end of July, while sales of the Chevrolet Bolt EV have been steadily increasing. China remains the largest market for EVs globally, with an increase of 42% in the sale of plug-in passenger cars in the first half of 2017 over the same period a year earlier. According to EV volumes, "new energy" passenger car sales are growing 20 times faster than the Chinese car market as a whole, to reach 2.5% of total new sales.

From the point of view of the industry, several global automakers have recently announced that they will intensify the development of hybrid and electric vehicles in an effort to further reduce carbon emissions. In the summer of 2017, BMW announced that in 2019 it will begin producing a version of its popular Mini that will run solely on battery power. This was followed by a startling declaration by Swedish automaker Volvo, owned by Chinese automotive giant Geely, to introduce five all-electric car models between 2019 and 2021 and build the rest of its hereto solely gasoline and diesel-driven cars with hybrid engines. In addition, Ford Motor signed a memorandum of understanding with China's Anhui Zotye Automobile in August 2017 to explore the establishment of a joint venture for the development, production, marketing and servicing of a new line of all-electric passenger vehicles in China. VW has also announced that it plans to invest $10 billion over the next five years in electric vehicles. However, the company also plans to spend $22 billion over the same time period to develop more efficient internal combustion engines (ICE).

Furthermore, San Francisco transportation company Uber has just announced the creation of a "clean air fund" in the amount of GBP150 million for the city of London in order to support its drivers to switch to hybrid and electric vehicles in an effort to phase out diesel cars from its ride-hailing service. Uber aims to be hybrid or electric by 2019 and fully electric by 2025 in the UK capital. Uber currently has a fleet of 40,000 cars and 3 million users in London.

In the second week of September China's Vice Minister of Industry announced that the country was looking to ban the production and sale of diesel and gasoline cars and vans. There was no mention of a date for the ban to come into force, but he said that the "relevant research" was being undertaken. China produced some 28 million cars last year, almost a third of the global total. This follows earlier statements by government officials in the UK and France to ban new gasoline and diesel cars in their countries by 2040, as part of efforts to reduce pollution and carbon emissions.

Meanwhile, on the other side of the Atlantic, the US President's budget proposal for 2018 called for slashing funding to the Environmental Protection Agency's budget by 31%, or $ 2.6 billion, and the discontinuation of the Clean Power Plan (CPP), which is instrumental for the US to live up to its carbon emission reduction promises under the Paris Agreement. In addition, the current renegotiation talks on the NAFTA Agreement include returning a minimum percentage of American automobiles to be produced in the US as the automobile sector accounts for the largest share of the US trade deficit with Mexico. Whether the US is likely to join the other nations in their drive towards electric vehicles remains to be seen.

World Oil Supply

Preliminary data indicates that world oil supply was down by 0.41 mb/d m-o-m in August to average 96.75 mb/d, higher by 1.66 mb/d, y-o-y.

Non-OPEC oil supply in August declined by 0.32 mb/d m-o-m to average 57.68 mb/d. Non-OPEC supply is projected to grow by 0.78 mb/d y-o-y in 2017, which is unchanged from last month's prediction due to the offsetting of the upward revision in the FSU by the downward revision in OECD Americas, to average 57.80 mb/d. The main changes for the month is a result of an increase in expected oil production growth in Kazakhstan by 0.04 mb/d in 2017 and lower growth in the US oil supply by 0.07 mb/d in 2017. The non-OPEC oil supply forecast in 2018 was revised down by 0.10 mb/d due to the downward revisions in Kazakhstan and Russia. Hence, non-OPEC supply to average 58.80 mb/d with a growth of 1.00 mb/d for 2018 is anticipated.

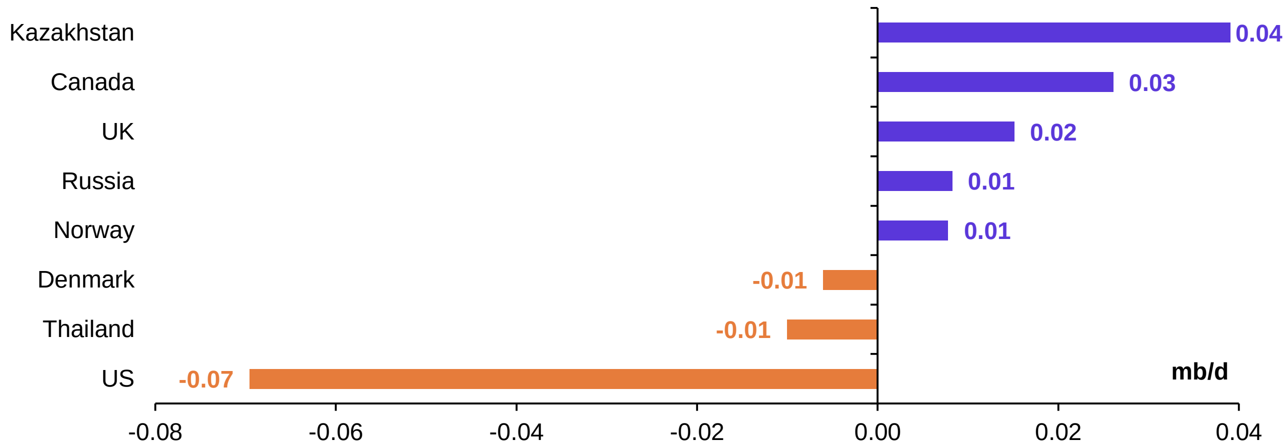
OPEC NGLs and non-conventional liquids production averaged 6.31 mb/d in 2017, an increase of 0.17 mb/d, y-o-y. In 2018, production is forecast to grow by 0.18 mb/d to average 6.49 mb/d.

In August 2017, OPEC crude oil production decreased by 79 tb/d, according to secondary sources, to average 32.76 mb/d.

Non-OPEC oil supply highlights in 2017

Non-OPEC oil supply in August declined by 0.32 mb/d m-o-m to 57.68 mb/d, according to the preliminary data as US oil production from the Gulf of Mexico (GoM) and parts of Eagle Ford was partially disrupted by Hurricane Harvey and lower output was seen coming from the North Sea and Kazakhstan following seasonal maintenance. Meanwhile, production in Canada, other OECD Europe and Brazil increased.

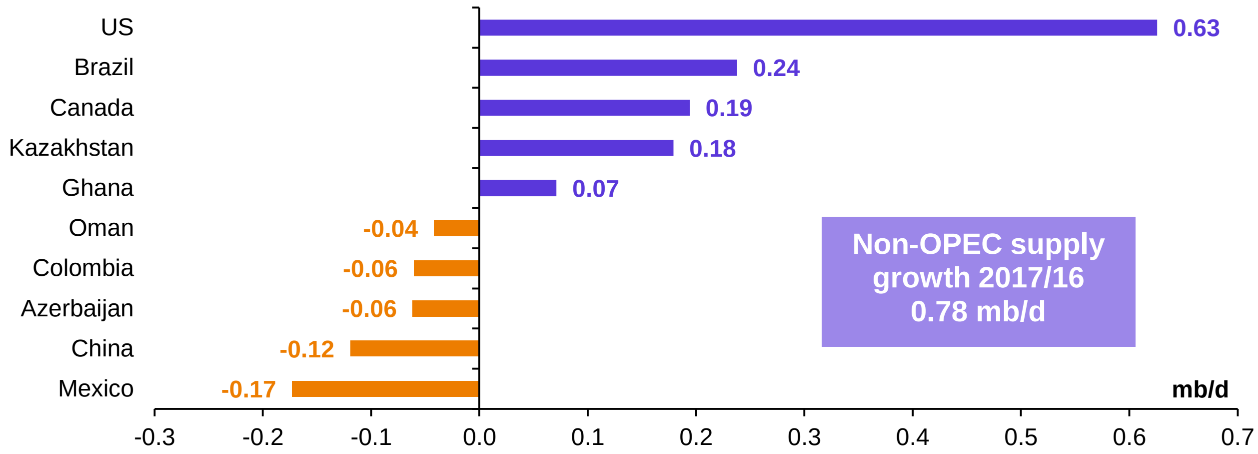
Graph 5 - 1: Revisions in annual changes of 2017* for selected countries



*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

The forecast for non-OPEC supply growth for 2017 remains unchanged from the previous MOMR at 0.78 mb/d, but absolute supply has been revised up by 0.03 mb/d to 57.80 mb/d, partially due to changes following the latest information including the upward adjustment in 2Q17 and the upward revision in 2H17 due to the new assessment of production in Kazakhstan. It is expected that US oil supply will account for the biggest share of non-OPEC supply growth for 2017 at 0.63 mb/d and the remaining comes mainly from Brazil, Canada and Kazakhstan, while Mexico, China and Colombia are the main countries showing a contraction. Graph 5 - 2: Annual supply changes for selected countries in 2017*

Graph 5 - 3: Annual supply changes for selected countries in 2017*



*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

Table 5 - 1: Non-OPEC oil supply in 2017*, mb/d

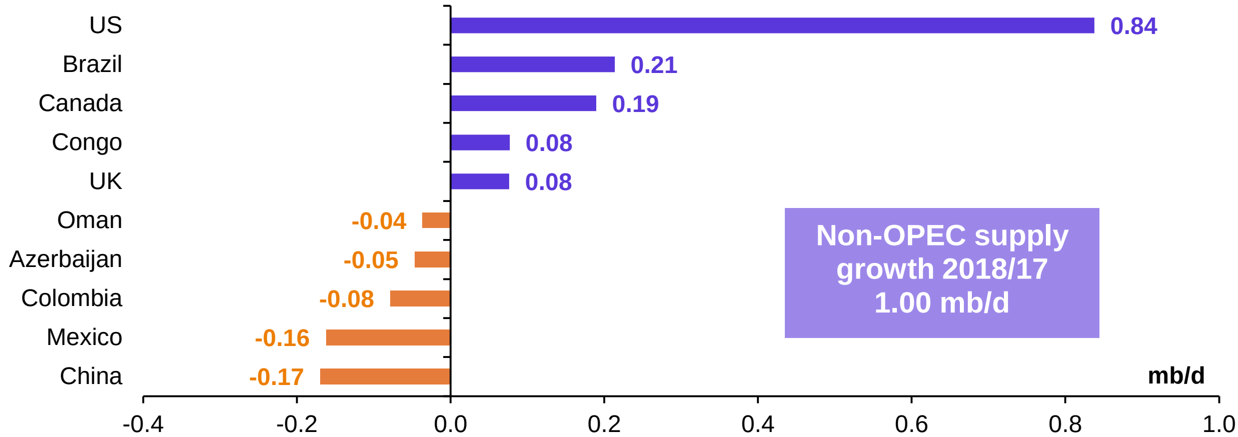
	2016	1Q17	2Q17	3Q17	4Q17	2017	Change 2017/16 Growth	%
Americas	20.61	21.10	20.93	21.35	21.62	21.25	0.65	3.14
of which US	*13.63*	*13.81*	*14.10*	*14.40*	*14.70*	*14.26*	*0.63*	*4.59*
Europe	3.81	3.94	3.81	3.65	3.87	3.82	0.01	0.26
Asia Pacific	0.42	0.39	0.39	0.44	0.41	0.41	-0.02	-3.80
Total OECD	**24.83**	**25.43**	**25.14**	**25.43**	**25.90**	**25.48**	**0.64**	**2.58**
Other Asia	3.72	3.72	3.63	3.66	3.65	3.67	-0.05	-1.41
Latin America	5.10	5.20	5.20	5.27	5.36	5.26	0.15	3.01
Middle East	1.28	1.24	1.24	1.22	1.22	1.23	-0.05	-3.90
Africa	1.81	1.81	1.83	1.87	1.89	1.85	0.04	2.35
Total DCs	**11.91**	**11.96**	**11.90**	**12.02**	**12.12**	**12.00**	**0.09**	**0.79**
FSU	13.86	14.13	14.17	13.83	13.93	14.01	0.15	1.09
of which Russia	*11.08*	*11.25*	*11.26*	*10.98*	*10.98*	*11.12*	*0.03*	*0.30*
Other Europe	0.13	0.12	0.12	0.13	0.13	0.13	0.00	-1.30
China	4.10	4.02	4.02	3.92	3.94	3.98	-0.12	-2.91
Total "Other regions"	**18.09**	**18.27**	**18.32**	**17.88**	**18.00**	**18.12**	**0.03**	**0.17**
Total non-OPEC production	**54.83**	**55.67**	**55.35**	**55.32**	**56.02**	**55.59**	**0.77**	**1.40**
Processing gains	2.19	2.21	2.21	2.21	2.21	2.21	0.01	0.50
Total non-OPEC supply	**57.02**	**57.87**	**57.56**	**57.53**	**58.23**	**57.80**	**0.78**	**1.36**
Previous estimate	56.99	57.89	57.49	57.49	58.19	57.77	0.78	1.36
Revision	0.03	-0.02	0.07	0.04	0.04	0.03	0.00	0.00

*Note: * 2017 = Forecast.*
Source: OPEC Secretariat.

Non-OPEC oil supply highlights in 2018

Non-OPEC supply growth in 2018 is expected at 1.00 mb/d, following a downward revision of 0.10 mb/d to average of 58.80 mb/d. This is mainly due to the downward revisions in the Russian and Kazakh oil supply forecasts. The US, Brazil, Canada, UK and Congo are expected to be the key countries driving growth next year, as opposed to China, Mexico, Colombia, Azerbaijan and Oman, which are expected to see a further decline in oil supply.

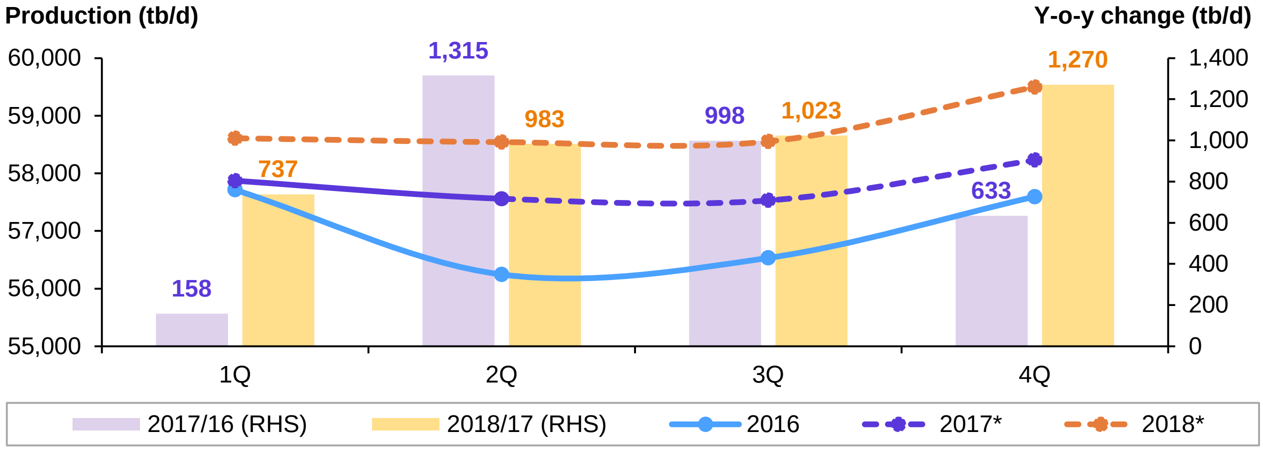
Graph 5 - 4: Annual supply changes for selected countries in 2018*



*Note: * 2018 = Forecast.*
Source: OPEC Secretariat.

Supply from **Russia** is now seen growing by 0.03 mb/d to average 10.98 mb/d in 2017, followed by growth of 0.06 mb/d in 2018.

Graph 5 - 5: Non-OPEC liquids supply quarterly forecast in 2016-2018



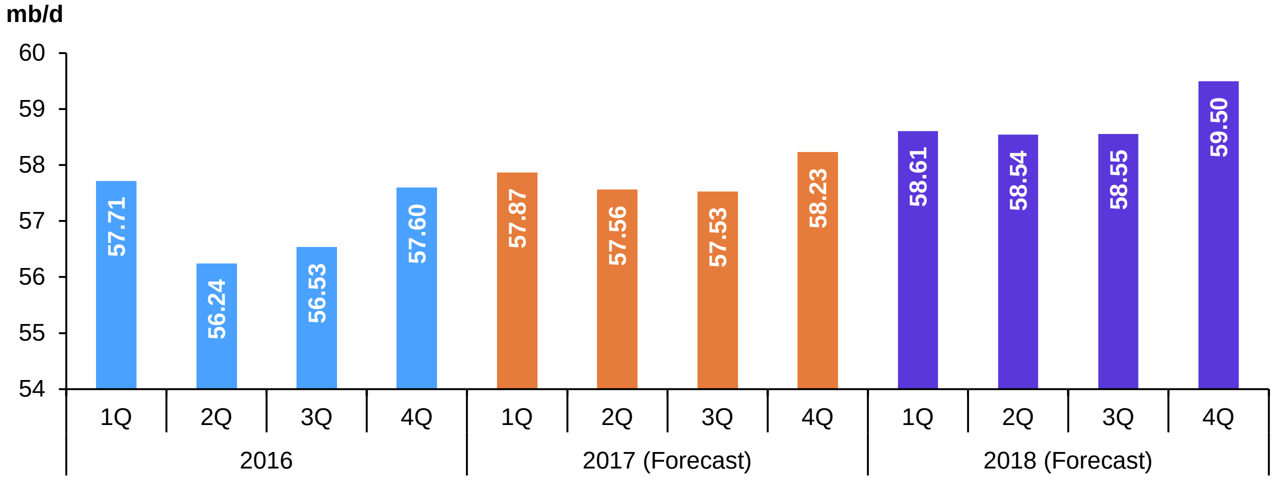
*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 4 highlights actual non-OPEC quarterly oil supply in 2016 and the forecast for 2017 and 2018. The quarterly distribution for non-OPEC supply in 2017 indicates the regular seasonal pattern due to maintenance work, particularly in offshore areas, but with higher production levels compared to the same quarters in 2016. It is forecast that 4Q17 will be the highest quarter for oil supply compared to other quarters. For 2018, due to the increase in US shale production, higher growth is expected, as well as a higher quarterly distribution throughout the year.

The main factors for higher growth expectations in 2017 compared to last year are the current improving price environment more suitable for the shale producers, start-up of giant projects such as Kashagan, the increasing number of active rigs in North America and the proportionally remarkable investment in upstream projects. Nevertheless, non-OPEC supply is predicted to show mild growth of 0.16 mb/d in 2H17 compare to

1H17. This market development suggests that more possibilities being ready for market rebalancing in the 1H18.

Graph 5 - 6: Non-OPEC oil supply in 2016-2018



Source: OPEC Secretariat.

The main factors for higher growth expectations in 2017, as opposed to last year, are the currently improving price environment, which is more suitable for the shale producers, the start-up of giant projects such as Kashagan, the increasing number of active rigs in North America and the proportionally remarkable investment in upstream projects. Nevertheless, non-OPEC supply is predicted to show mild growth of 0.16 mb/d in 2H17 compared to 1H17. This market development suggests the possibility of more market rebalancing in 1H18.

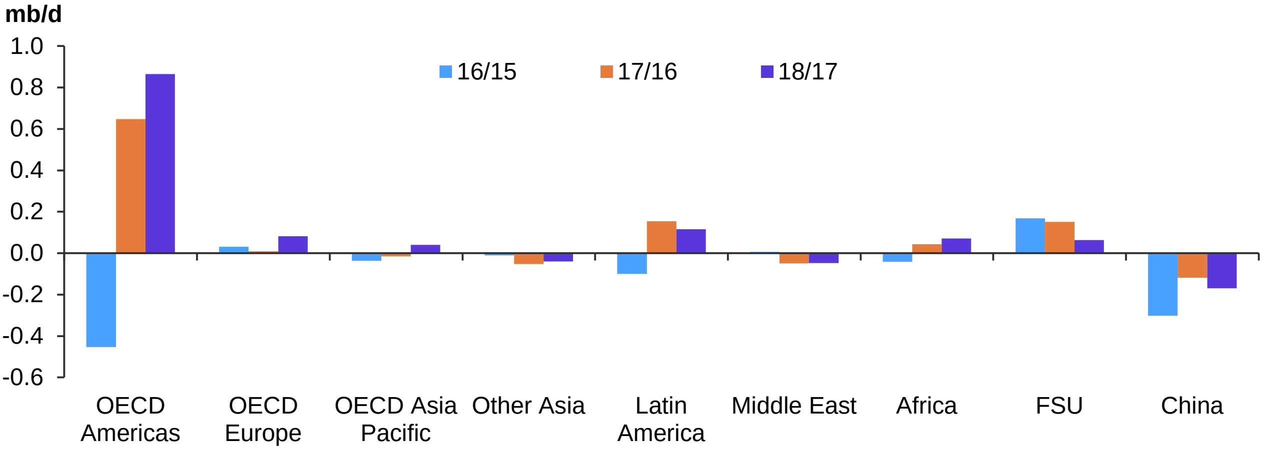
Table 5 - 2: Non-OPEC oil supply in 2018*, mb/d

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17 Growth	%
Americas	21.25	21.93	21.94	22.13	22.47	22.12	0.87	4.07
of which US	*14.26*	*14.94*	*14.99*	*15.10*	*15.34*	*15.09*	*0.84*	*5.88*
Europe	3.82	3.94	3.83	3.76	4.05	3.90	0.08	2.13
Asia Pacific	0.41	0.42	0.45	0.46	0.45	0.45	0.04	9.79
Total OECD	**25.48**	**26.30**	**26.22**	**26.35**	**26.97**	**26.46**	**0.99**	**3.87**
Other Asia	3.67	3.64	3.64	3.62	3.60	3.63	-0.04	-1.08
Latin America	5.26	5.37	5.35	5.36	5.41	5.37	0.11	2.19
Middle East	1.23	1.20	1.19	1.18	1.16	1.18	-0.05	-3.90
Africa	1.85	1.91	1.92	1.92	1.93	1.92	0.07	3.82
Total DCs	**12.00**	**12.12**	**12.10**	**12.07**	**12.10**	**12.10**	**0.10**	**0.82**
FSU	14.01	13.93	14.05	14.00	14.31	14.08	0.06	0.46
of which Russia	*11.12*	*10.98*	*11.13*	*11.21*	*11.39*	*11.18*	*0.06*	*0.56*
Other Europe	0.13	0.13	0.13	0.13	0.12	0.13	0.00	-2.37
China	3.98	3.90	3.81	3.76	3.76	3.81	-0.17	-4.26
Total "Other regions"	**18.12**	**17.96**	**17.99**	**17.89**	**18.19**	**18.01**	**-0.11**	**-0.60**
Total non-OPEC production	**55.59**	**56.38**	**56.31**	**56.32**	**57.26**	**56.57**	**0.98**	**1.76**
Processing gains	2.21	2.23	2.23	2.23	2.23	2.23	0.03	1.32
Total non-OPEC supply	**57.80**	**58.61**	**58.54**	**58.55**	**59.50**	**58.80**	**1.00**	**1.74**
Previous estimate	57.77	58.48	58.61	58.75	59.62	58.87	1.10	0.00
Revision	0.03	0.13	-0.07	-0.20	-0.12	-0.06	-0.10	1.74

*Note: * 2018 = Forecast.*
Source: OPEC Secretariat.

The quarterly oil supply forecast in 2017 and 2018 (***Graph 5 – 5*** and ***Table 5 - 2***) indicates a yearly higher oil output level from 2016-2018, due to higher investment. This leads to higher production and annual growth in non-OPEC supply in 2017 and the next year. Nevertheless, the forecast for non-OPEC supply in 2018 is associated with a high level of uncertainty as well as possibility.

Graph 5 - 7: Regional non-OPEC supply growth, y-o-y change



Note: 2017 and 2018 = Forecast.
Source: OPEC Secretariat.

The expected growth in 2017 in all non-OPEC regions except China, Other Asia and the Middle East will continue next year, led by OECD Americas with 0.87 mb/d, Latin America with 0.11 mb/d, OECD Europe with 0.08 mb/d, Africa with 0.07 mb/d, the FSU with 0.06 mb/d and OECD Asia Pacific with 0.04 mb/d. However, declines are anticipated in 2018 in China, the Middle East and Other Asia of 0.17 mb/d, 0.05 mb/d and 0.04 mb/d, respectively.

Table 5 - 3: Non-OPEC supply forecast comparison in 2017* and 2018*, mb/d

Region	2017	Change 2017/16	2018	Change 2018/17
OECD Americas	21.25	0.65	22.12	0.87
OECD Europe	3.82	0.01	3.90	0.08
OECD Asia Pacific	0.41	-0.02	0.45	0.04
Total OECD	**25.48**	**0.64**	**26.46**	**0.99**
Other Asia	3.67	-0.05	3.63	-0.04
Latin America	5.26	0.15	5.37	0.11
Middle East	1.23	-0.05	1.18	-0.05
Africa	1.85	0.04	1.92	0.07
Total DCs	**12.00**	**0.09**	**12.10**	**0.10**
FSU	14.01	0.15	14.08	0.06
Other Europe	0.13	0.00	0.13	0.00
China	3.98	-0.12	3.81	-0.17
Non-OPEC production	55.59	0.77	56.57	0.98
Processing gains	2.21	0.01	2.23	0.03
Non-OPEC supply	**57.80**	**0.78**	**58.80**	**1.00**

*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

OECD

OECD liquids production in 2017 was revised down by 31 tb/d, mainly due to a downward revision in OECD Americas, which is now expected to increase by 0.64 mb/d to average 25.48 mb/d in 2017. For 2018, OECD supply is forecast to average 26.46 mb/d, representing a growth of 0.99 mb/d, mainly from OECD Americas.

OECD Americas

OECD Americas' oil supply in 2017 is predicted to average 21.25 mb/d. This represents an increase of 0.65 mb/d y-o-y. The oil supply forecast was revised down by 48 tb/d this month owing to the downward adjustment of historical data in 2Q17 and the downward revision in 3Q and 4Q forecast for 2017. Oil supply in the US and Canada will grow while a contraction is expected in Mexico. In 2018, supply in the OECD Americas is expected to grow by 0.87 mb/d to average 22.12 mb/d. The US and Canadian oil supply is expected to grow, while a continuation of annual decline in Mexico is anticipated for next year.

US

According to the US Energy Information Administration (EIA), monthly crude oil production averaged 9.10 mb/d in June 2017, representing a decline of 73 tb/d over May, while US NGLs were up by 31 tb/d to average 3.75 mb/d, mainly from unconventional sources. Oil production increased in Texas (+13 tb/d) and Oklahoma (+15 tb/d), whereas output in Alaska (-45 tb/d), the Gulf of Mexico (-23 tb/d), New Mexico (-22 tb/d), and North Dakota (-8 tb/d) declined. US total liquid supply, excluding processing gains, decreased in June by 0.05 mb/d m-o-m to average 14.12 mb/d, which is a growth of 0.60 mb/d for the year to date.

US crude oil production q-o-q increased by 110 tb/d in 2Q17, while it rose by 207 tb/d in 1Q17 from 4Q16. It is expected that US crude oil production will grow by 0.42 mb/d y-o-y to average 9.28 mb/d, while US NGLs output is expected to grow by 0.21 mb/d. It is anticipated that US liquid supply in 2017 and 2018 will increase by 0.63 mb/d and 0.84 mb/d to average 14.26 mb/d and 15.09 mb/d, respectively.

Table 5 - 4: US liquids production breakdown

	2015	2016	*Change 2016/15*	2017*	*Change 2017/16*	2018*	*Change 2018/17*
Tight crude	4,582	4,245	-336	4,745	500	5,365	620
Gulf of Mexico crude	1,515	1,598	83	1,670	72	1,745	75
Conventional crude oil	3,312	3,010	-302	2,855	-155	2,715	-140
Unconventional NGLs	2,347	2,562	215	2,700	138	2,910	210
Conventional NGLs	995	947	-48	1,014	67	1,067	53
Biofuels + Other liquids	1,283	1,268	-15	1,272	4	1,292	20
US total supply	**14,034**	**13,630**	**-404**	**14,256**	**626**	**15,094**	**838**

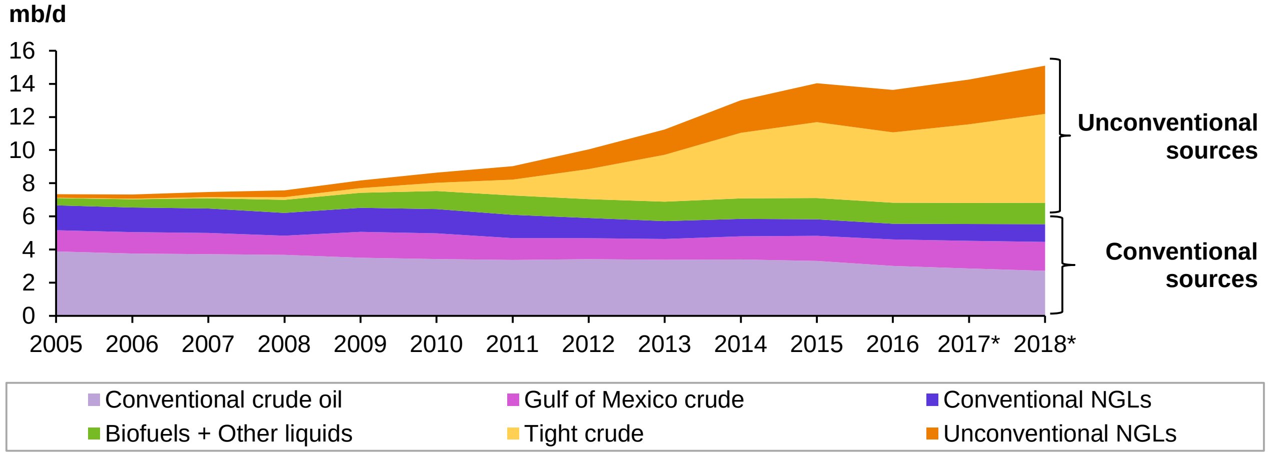
*Note: * 2017 and 2018 = Forecast.*

Sources: Energy Information Administration, Rystad Energy and OPEC Secretariat.

Storms, heavy rains and catastrophic floods caused by Hurricane Harvey have affected Texas and the Louisiana Gulf Coast which is home to about half of US refining capacity, pipelines and crude oil production sites. In terms of crude oil production disruption, around 18% of the GoM's production, the equivalent of 0.32 mb/d of crude oil output was shut down, while the disrupted volume amounted to about 0.40 mb/d at the beginning of storm. The extent of damages caused to offshore platforms, onshore oil production infrastructures and sites are unknown yet. At the beginning of September, about 9% of oil production, which equates to 153 tb/d and 13% of natural gas production remain shut in the Gulf of Mexico, according to the Bureau of Safety and Environmental Enforcement. Moreover, 75 production platforms remain inaccessible to staff, which represents 10.18% of the 737 manned platforms in the Gulf of Mexico. There is no official estimate of the damages caused by the significant flooding on the wells in the eastern part of the Eagle Ford play in Texas, although it is purported that at least 0.3 mb/d (around a quarter) of output in Eagle Ford has been shut down.

US Lower-48 states onshore crude oil output declined from a peak of 7.63 mb/d in March 2015 to 6.51 mb/d in December 2016, but in 2017 it seen renewed momentum. In June 2017 it had grown by 475 tb/d over the December level to average 6.98 mb/d. It is expected that Lower-48 States onshore crude oil output in 2017 will grow by 465 tb/d y-o-y to average 7.10 mb/d. US tight oil production in June grew by 0.08 mb/d, m-o-m to average 4.67 mb/d. According to the EIA's official data, tight crude production peaked at its highest level of 4.70 mb/d in March 2015. Tight crude output from tight horizontal wells increased in the Permian by 0.04 mb/d to average 1.83 mb/d in June and preliminary 1.88 mb in July and by 0.03 mb/d in Eagle Ford to average 1.19 mb/d in June and preliminary 0.04 mb/d in July. Other regions were more or less stagnant or experienced minor declines.

Graph 5 - 8: US monthly liquids production breakdown



*Note: * 2017 and 2018 = Forecast.*
Sources: Energy Information Administration, Rystad Energy and OPEC Secretariat.

As of June 2017, tight crude continued to grow by 514 tb/d to average 4,674 tb/d and production in Texas, Oklahoma, Colorado and North Dakota grew from January, while US crude production has grown overall by only 0.33 mb/d. In actuality, US shale output is being offset by large declines in Alaska, the GOM and all other regions. US tight crude would have to exceed the level it had reached throughout the past 6 months. Yet, in the face of stagnating rig counts, declining non-shale productions and lower oil prices, expectations for the current year, y-o-y growth will not exceed for the whole year by more than 0.5 mb/d.

Table 5 - 5: US shale play's production growth forecast in 2017 and 2018

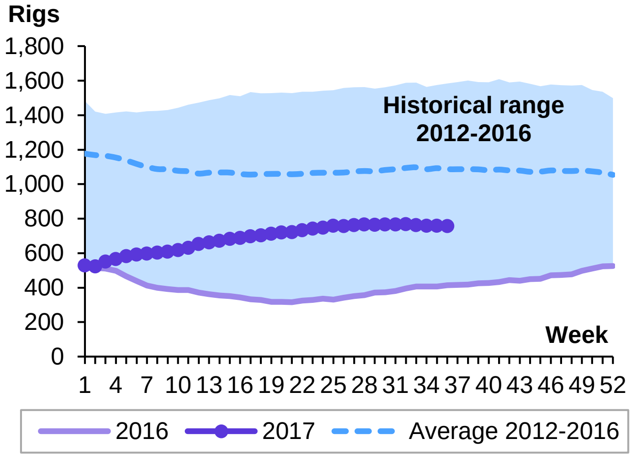
Shale play	2017*		2018*	
tb/d	Production	*Y-o-y change*	Production	*Y-o-y change*
Permian	1,872	*410*	2,322	*450*
Bakken shale	1,000	*-20*	1,024	*24*
Niobrara	318	*23*	353	*35*
Eagle Ford	1,213	*40*	1,293	*80*
Other plays	347	*47*	377	*30*
Total	**4,750**	***500***	**5,369**	***619***

*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

US oil rig count

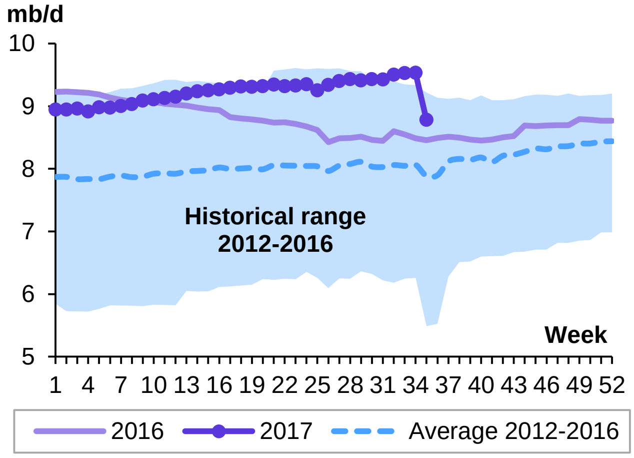
According to Baker Hughes' latest report for the week to 8 September 2017, the US drilling rig count has risen by 1 unit to 944 rigs (80.1% oil and 19.8% gas) w-o-w, while oil rig count declined by 3 units to 756 rigs while gas rig count increased by 4 units to 187 rigs. The US oil rig count was higher by 436 rigs y-o-y, an increase of 86%, and in terms of oil and gas split, increased by 83% to 756 rigs and 108% to 187 rigs, respectively. As a result, the US rig count increased by 540 units (+134%) from the bottom of the rig count on May 2016.

Graph 5 - 9: US weekly oil rig count



Sources: Baker Hughes, US Energy Information Administration and OPEC Secretariat.

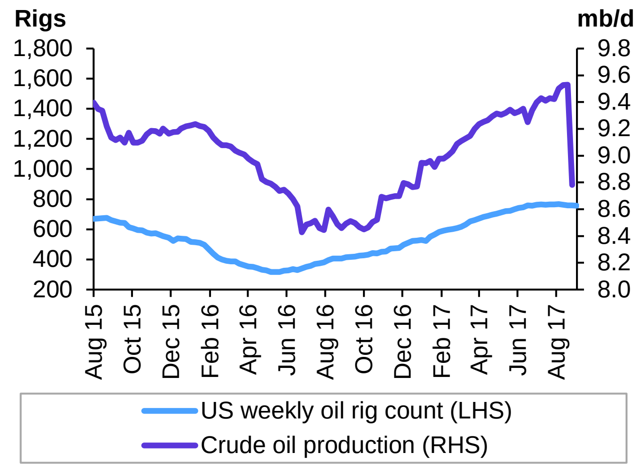
Graph 5 - 10: US weekly crude oil production



Sources: US Energy Information Administration and OPEC Secretariat.

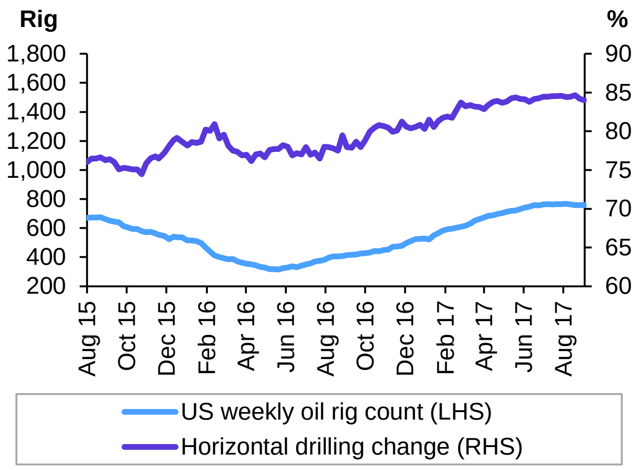
On a monthly basis, it was for the first time that the number of oil rigs decreased compares to the consecutive months of increasing from May 2016, as well as decreasing also in the total US rig count by 7 units to 947 rigs. The US oil rig count in August was down by 2 units m-o-m to average 763 rigs, while it was increased by 18 units a month earlier. In terms of oil rig count in the most prolific Basins, it is increased by 4 units m-o-m in Permian to average 378 oil rigs in August, added 4 units in Cana Woodford to 65 rigs and up by 1 oil unit in DJ-Niobrara to 30 rigs, while it was decreased in Eagle Ford, Williston and other Basins. Onshore rigs climbed by 441 units y-o-y to 923 rigs. 83.4% of the rigs in the first 8 months of the current year were active in horizontal drilling, although it declined by 6 units m-o-m to average 799 rigs in August. The number of oil rigs in GoM was declined by 5 units m-o-m to average 14 rigs owing to Hurricane Harvey.

Graph 5 - 11: US weekly oil rig count vs. Crude oil production



Sources: Baker Hughes and US Energy Information Administration.

Graph 5 - 12: US weekly oil rig count vs. Horizontal drilling change



Source: Baker Hughes.

Table 5 - 6: US rotary rig count on 8 September 2017

		8 Sep 17	Month ago	Year ago	Change M-o-m	Change Y-o-y	Change Y-o-y, %
Oil and gas split	**Oil**	756	765	414	-9	342	83%
	Gas	187	189	92	-2	95	103%
Location	**Onshore**	928	937	490	-9	438	89%
	Offshore	16	17	18	-1	-2	-11%
Basin	**Williston**	53	53	28	0	25	89%
	Eagle Ford	73	78	38	-5	35	92%
	Permian	382	379	200	3	182	91%
Drilling trajectory	**Directional**	76	74	48	2	28	58%
	Horizontal	793	807	396	-14	397	100%
	Vertical	75	73	64	2	11	17%
US total rig count		**944**	**954**	**508**	**-10**	**436**	**86%**

Sources: Baker Hughes and OPEC Secretariat.

North American oil & gas industry offer support for NAFTA ahead of renegotiation

The American Petroleum Institute (API), Canadian Association of Petroleum Producers (CAAP) and the Mexican Association of Hydrocarbon Companies (AMEXHI) released a joint paper in August, highlighting their policy positions on further strengthening the competitiveness of the North American energy industry under the North American Free Trade Agreement (NAFTA).

“The natural gas and oil industry across North America is united in our support for NAFTA and the significant consumer, economic and security benefits it generates,” said API President and CEO Jack Gerard. “As the energy flows between our countries continue to grow, it’s important to highlight the critical role NAFTA has played in facilitating cross-border trade and investment in energy.” He added that the energy trade alliance under NAFTA supports jobs and manufacturing in energy.

The US administration has called for renegotiating NAFTA, which entered into force in 1994, stepping back from an initial plan to terminate the agreement.

The paper notes the dramatic changes that have taken place in the North American energy industry since NAFTA entered into force in 1994. This includes the surge in US oil and gas production led by the shale industry, the opening up of Mexico’s energy sector to foreign and domestic private investment for the first time in over seventy-five years, and the developments in Canada’s energy infrastructure, oil sands sector, and liquefied natural gas (LNG) production.

The paper supports a number of specific policy positions, particularly preserving NAFTA’s elimination of tariffs in the trade of crude oil, natural gas, and refined products, as well as other goods supporting energy exploration.

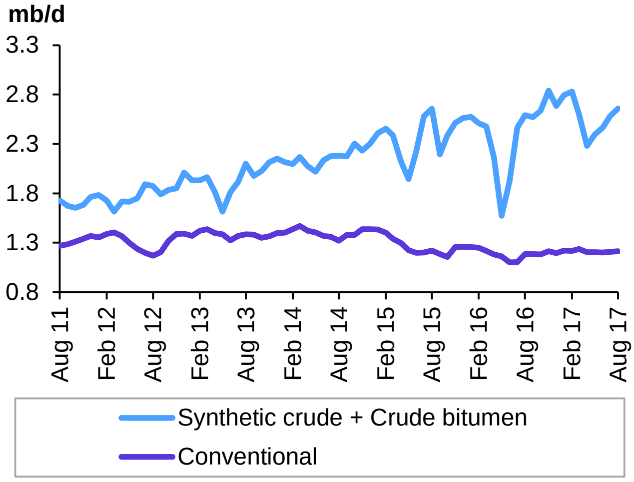
Other policy aims include preserving regulatory cooperation and allowing for fully liberalized trade across North America. It also highlights the support for preserving provisions for investment protections and dispute settlement, including rules that restrict expropriation of investments and provide for timely and adequate compensation when expropriation occurs.

On 5 September, trade representatives from the three countries completed the second round of NAFTA renegotiations, following five days of meetings in Mexico City, Mexico. According to an official joint statement, “the renegotiating process is expected to complete “towards the end of this year”.

Canada

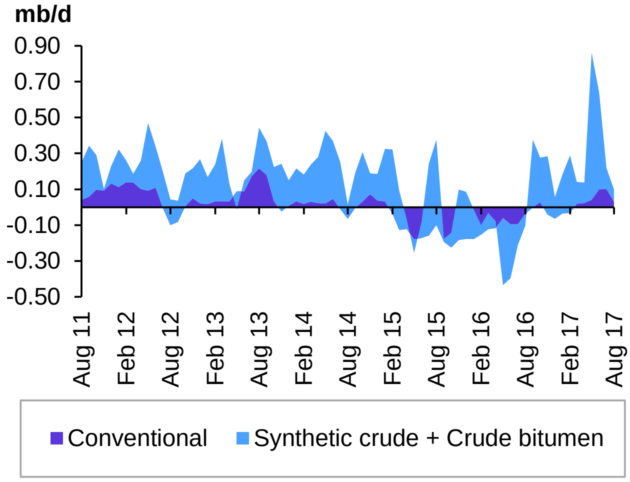
Canadian oil sands output dropped by 0.23 mb/d and 0.55 mb/d in March and April, respectively, compared with February following wildfires at Syncrude's Mildred Lake plant in mid-March. In May, production saw a slight rebound by 113 tb/d m-o-m to average 2.43 mb/d. Conventional crude oil was stagnant in April and May at 1.2 mb/d, 33 tb/d lower than in February, while NGLs production increased by 27 tb/d m-o-m to average 906 tb/d in July. As a result, Canada's oil supply in May rose by 0.14 mb/d m-o-m to average 4.54 mb/d. Preliminary output for 2Q17 indicated growth of 0.62 mb/d y-o-y, although most of this was due to low output after last year's wildfire disaster. August output is estimated at 4.77 mb/d, lower by 0.27 mb/d compared with February's peak level. The 350 tb/d Mildred Lake plant was expected to return to full production by August, although it is two months behind its original schedule; maintenance is planned for later in the year. Some upgraders underwent maintenance in 3Q17, such as Scotford in July, and Horizon starting in September.

Graph 5 - 13: Canada production by crude type



Source: OPEC Secretariat.

Graph 5 - 14: Canada production by crude type, y-o-y change

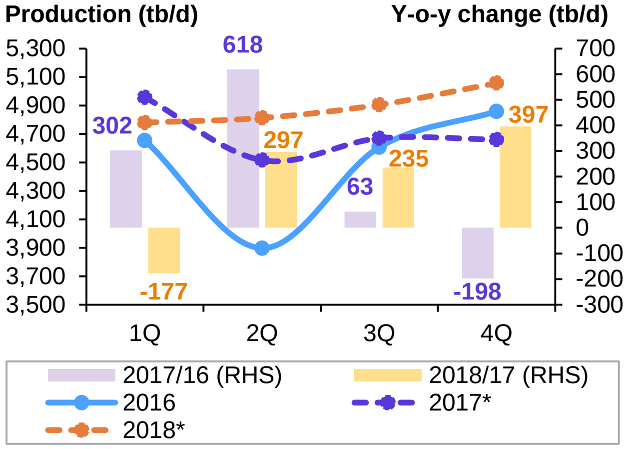


Source: OPEC Secretariat.

On the other hand, Chinese firm CNOOC announced that the Hangingstone project commenced production in early August. The project, located in Alberta, consists of steam-generating equipment, well pad facilities, 32 well pairs, water treatment services and bitumen flowlines. It is expected to reach a peak production rate of approximately 20 tb/d in 2018.

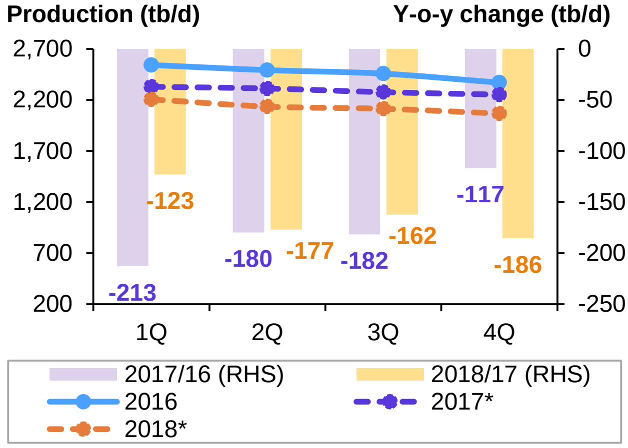
Total Canadian oil supplies are forecast to expand by 190 tb/d in both 2017 and 2018 to average 4.70 mb/d and 4.89 mb/d, respectively.

Graph 5 - 15: Canada liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 16: Mexico liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Mexico

Mexican oil production declined by 29 tb/d in July to average 2.28 mb/d, mainly owing to a decline in crude oil of 22 tb/d to below 2.0 mb/d for the first time in more than 20 years. July's output was lower by 0.17 mb/d y-o-y, with the majority of declines coming from small fields. The beginning of maintenance at the Ku-Maloob-Zaap (KMZ) field in late July also led to a higher drop in the month. The decline was expected to worsen when maintenance continued in August. Average crude oil production in 1H17 registered at 2,016 tb/d. In June and July, the bulk of the decline stemmed from the Maloob field, which dropped by 20 tb/d from a month earlier.

For 2017 as a whole, Mexican oil output is expected to decline by 0.17 mb/d, followed by a predicted 0.16 mb/d decline in 2018.

OECD Europe

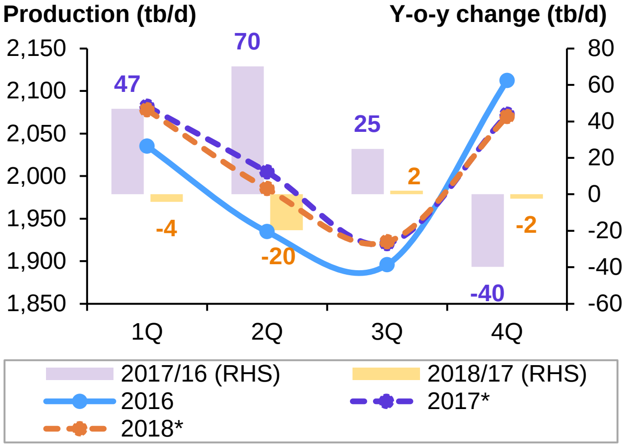
OECD Europe's oil supply rose by 0.11 mb/d m-o-m in July to 3.83 mb/d, though this was lower by 0.12 mb/d, y-o-y. Production in Norway and other OECD Europe, particularly Italy, rose when Eni restarted its southern Italian Val d'Agri oil field. The oil supply for 1H17 was up by 0.04 mb/d over 1H16 to reach 3.87 mb/d. Owing to seasonal maintenance at offshore platforms, output in the region was down by 0.13 mb/d in 2Q17, while in the same period of 2016 it was above that of the current year at 0.2 mb/d. The oil supply for 2H17 is expected to be lower by 0.11 mb/d over 1H17 due to less expected production in the UK and Norway. Crude and condensate output from the Denmark portion of the North Sea is also forecast to fall in 2017 and 2018, continuing a long-term trend. Production in Denmark is expected to drop by 0.01 mb/d in both 2017 and 2018. As a whole, minor growth of 10 tb/d is anticipated for the current year; the pace will increase next year at 0.08 mb/d.

Norway

Norway's preliminary production figures for July show an average daily production of 2.00 mb/d of oil, indicating an increase of 0.09 mb/d, m-o-m. In July, crude oil output was pegged at 1.62 mb/d – higher by 52 tb/d m-o-m, NGLs stood at 0.35 mb/d and condensate at 0.03 mb/d. The uptick in liquids, m-o-m, came after the output was curtailed in June due to maintenance at Gullfaks. The continuation of an unplanned outage at the Gjoa and Vega fields in the first week of the month partially offset the m-o-m gain. However, total oil output in July compared with the previous July was down by 0.13 mb/d. At the end of the month, Statoil and its partners started production at the Byrding field as planned. Recoverable volumes in Byrding – an oil and gas field north of the Troll field in the North Sea – are estimated to be 11 million barrels of oil equivalent. The field is expected to produce nearly 8 tb/d at its peak in 2017–18.

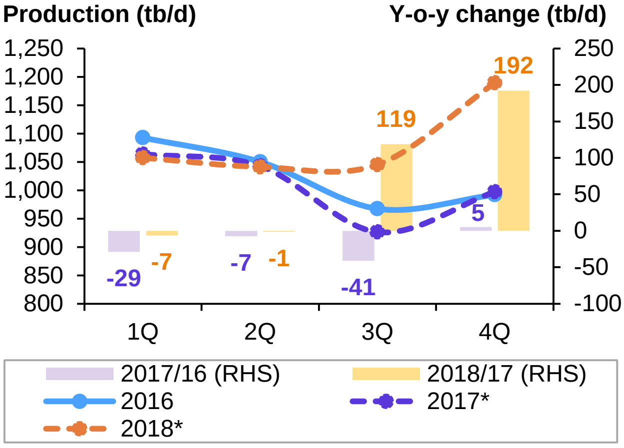
According to Norwegian Petroleum Directorate (NPD) data, oil production in July is about 7.0% below that of the same month last year and about 0.7% below the NPD's prognosis for July 2017. Oil production is about 1.2% above the prognosis so far this year and is expected to fall back again in August and even September as field maintenance rises, with work planned at the Gudrun, Skarv, Valhall and Vigdis fields, impacting an average of 0.05 mb/d of output across the month. In September this will continue at the Goliat field, impacting 0.1 mb/d. NGLs and condensate increased by 0.09 mb/d compared with June. Oil production in 1H17 grew by 0.06 mb/d compared with 1H16, but this is expected to decline in 2H17 by 0.04 mb/d vs 1H17. The oil supply forecast for 2017 was revised up by 0.01 mb/d to 2.02 mb/d, indicating annual growth of 0.03 mb/d, y-o-y. For 2018, a contraction of 0.01 mb/d is expected, to reach an average of 2.01 mb/d.

Graph 5 - 17: Norway liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 18: UK liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

UK

UK's oil output in July remained unchanged for the third consecutive month at 1.05 mb/d, down by 0.03 mb/d y-o-y. Output fell y-o-y by 0.02 mb/d in 1H17, despite the start-up of projects, including Ithaca's 30 tb/d, Greater Stella, Repsol-Sinopec's 40 tb/d Montrose, BP's 130 tb/d Schiehallion, and Enquest's 50 tb/d Kraken projects. Beginning of July, key fields were offline for work, including Forties and Britania for some time however production returned from maintenance from fields such as Alma, Galia, Forties, Beryl and J-Area. Peak UK field maintenance occurred in August when around 0.2 mb/d of production was taken offline.

UK's overall oil production in 2017 is predicted to decline by 20 tb/d y-o-y to average 1.01 mb/d, despite new volumes from the continued ramp up of previous projects such as Kraken, Monarb, Flyndre and Greater Stella. However, growth of 0.08 mb/d for an average oil supply of 1.08 mb/d is expected in 2018.

Developing Countries

The total oil production of developing countries (DCs) is estimated to grow by 0.09 mb/d y-o-y to average 12 mb/d in 2017, revised down by 0.02 mb/d in September compared with the previous assessment, owing to downward revisions in Africa and Other Asia, mainly due some upward and downward revisions to historical data in Malaysia, Asia others and South Africa. Preliminary supply data for July of 11.92 mb/d indicates a m-o-m decline of 0.09 mb/d, which is 0.03 mb/d lower than a year earlier, though higher output is expected to be seen in August m-o-m at 12.04 mb/d. Oil production is expected to increase in Latin America by 0.15 mb/d to average 5.26 mb/d in 2017, mainly in Brazil where it is expected to rise by 0.26 mb/d, while other countries in the region are anticipated to witness declines. Colombian oil production stood at 0.86 mb/d in July, unchanged from June and 13 tb/d higher than a year ago. Production in Colombia fell due to spending cuts from the largest upstream players as well as a number of outages. In Africa, a production increase of 0.04 mb/d – primarily from Ghana and Congo – is expected for 2017 to lead to an average of 1.85 mb/d. The oil supply from Other Asia and the Middle East declined by 0.05 mb/d and 0.05 mb/d in 2017 and 2018 respectively to average 3.67 mb/d and 1.23 mb/d, respectively.

In 2018, DC's supply is forecast to grow by 0.10 mb/d y-o-y to average 12.10 mb/d, unchanged from previous expected growth figures, but with a change in absolute supply of 12.10 mb/d, compared with the last *MOMR*. Oil production in Africa is expected to grow at a faster pace y-o-y (0.07 mb/d) to average 1.92 mb/d, while growth in Latin America will be slower (0.11 mb/d) to average 5.37 mb/d. The oil supply from Other Asia and the Middle East will decline in the next by 0.04 mb/d to 3.63 mb/d and by 0.05 mb/d to 1.18 mb/d, respectively.

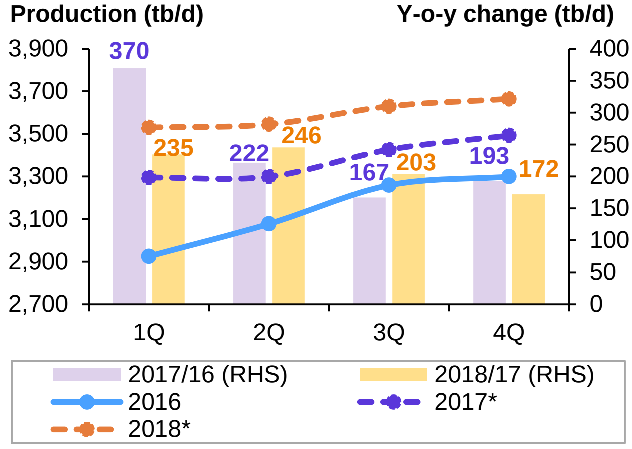
Latin America

Brazil

Brazilian liquids output declined by 0.07 mb/d m-o-m in July to 3.29 mb/d. In fact, a decline in crude output of 72 tb/d led to a lowering of crude supply to average 2.60 mb/d, weighed by maintenance at the Parque das Baleias complex. According to Petrobras preliminary data in August, liquids supply is expected to increase to average 3.38 mb/d. Higher output in 2H17 by 0.16 mb/d is expected compared with 1H17. Once again, growing production in the Santos Basin offset declines from the more mature Campos Basin fields, while production in the Campos Basin dropped by 50 tb/d m-o-m to 1.36 mb/d – a decline of 168 tb/d from the previous year. Petrobras discovered oil in the pre-salt layer of the Campos Basin in the middle of August, close to Marlim Sul field. This is the first commercial pre-salt oil find in the area. Onshore output also continued to decline, shrinking by 25 tb/d, or 17%, from one year ago. Production in the Santos Basin rose nearly 80 tb/d from a month earlier, to 1.14 mb/d in June – some 320 tb/d higher than a year earlier. Production from Lula, in particular, contributed to gains, adding 66 tb/d m-o-m to reach a new record high of 0.76 mb/d – 244 tb/d higher than a year ago. Output at Saphinoá also increased to near record highs at around 0.26 mb/d, 40 tb/d higher than a year earlier.

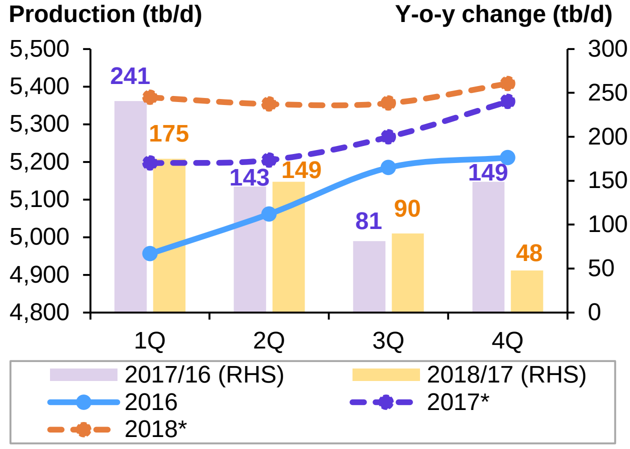
Brazil's oil supply is expected to grow by 0.24 mb/d y-o-y to average 3.38 mb/d and for 2018 growth of 0.21 mb/d with an average supply of 3.59 mb/d is predicted.

Graph 5 - 19: Brazil liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 20: Latin America liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Other Asia

The **liquids supply in the Other Asia** region is seen to contract by 0.05 mb/d in the current year to average 3.67 mb/d, revised down by 0.01 mb/d due to a base change following downward revisions in the historical production data of Malaysia as well as an upward revision in Other Asia due to India; the other countries in this region declined in 2017. Next year, the contraction will be 0.04 mb/d to average 3.63 mb/d and India is expected to grow more.

Malaysia

Crude oil production in Malaysia after maintenance curbed output over the preceding two months rebounded in June by 61 tb/d to 0.68 mb/d, while preliminary July data indicated a decline of around 0.04 mb/d. Average crude oil output registered 0.66 mb/d, unchanged compared with 1H16, but up by 0.01 mb/d compared with 2H16. Malaysian total liquids production in 1H17 registered 0.73 mb/d, 0.03 mb/d higher than October 2016 levels. Oil production in Malaysia increased when the Malikai project started up last December after the Declaration of Cooperation was signed with OPEC.

Indonesia

Production of crude oil in Indonesia is estimated to have averaged 0.71 mb/d in July, a 38 tb/d decline from a year ago. Average crude oil production was down by 22 tb/d in 1H17 compared with 2H16 and it is expected that total liquids output in 2017 will contract by 0.02 mb/d to average 0.91 mb/d. This will be added next year, leading to a contraction of 0.03 mb/d.

Africa

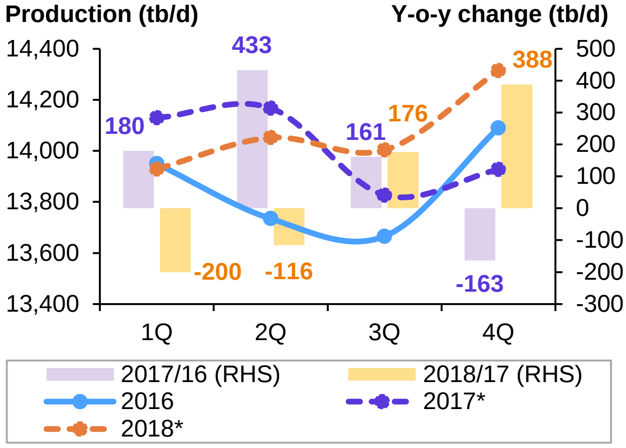
Africa's oil supply is projected to grow by 0.04 mb/d to average 1.85 mb/d in 2017, revised down by 0.01 mb/d due to a historical revision in production data from Africa other. It is expected that oil production in 2017 will grow in the Congo by 40 tb/d to average 0.35 mb/d, in Ghana by 70 tb/d to average 0.16 mb/d, and in Chad by 20 tb/d to average 0.13 mb/d. Production in Egypt, the Sudans, and Africa other is anticipated to decline in 2017, while oil output in South Africa is estimated to remain unchanged over a year earlier.

For 2018, the oil supply in African non-OPEC countries is expected to grow by 70 tb/d, with the rise coming mainly from Chad, Congo and Ghana to average 1.92 mb/d.

FSU

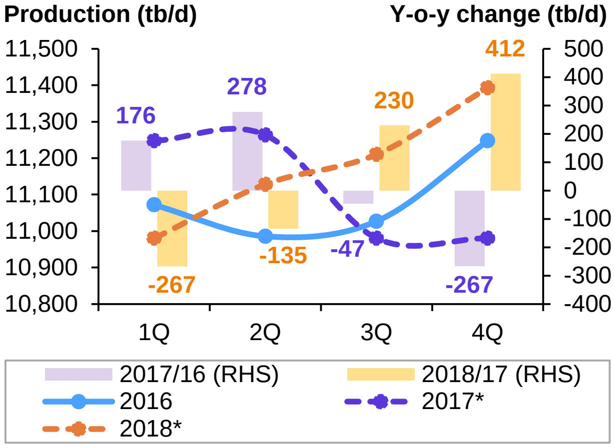
FSU's oil supply is estimated to grow by 0.15 mb/d in 2017 to average 14.01 mb/d, revised up by 50 tb/d from the August *MOMR*. An upward revision of 0.04 mb/d was seen in Kazakhstan's production growth in 2017 and a minor rise of 0.01 mb/d from Russia. Oil production in Azerbaijan is predicted to contract by 0.06 mb/d to average 0.79 mb/d in 2017, while the oil supply from other FSU countries will be stagnant at 0.37 mb/d. For 2018, FSU's oil supply was revised down by 0.10 mb/d due to lower expectations for growth in Russia and Kazakhstan of 0.06 mb/d each; other countries in the region will also decline.

Graph 5 - 21: FSU liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 22: Russia liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Russia

Preliminary **Russian crude oil and condensate supply** declined in August by 40 tb/d m-o-m according to the Ministry of Energy, while NGLs output was stagnant at 0.94 mb/d. July and August oil supplies were higher by 0.19 mb/d and 0.10 mb/d y-o-y, averaging 11.26 mb/d and 11.22 mb/d, respectively. With production ramping up in Novoportovskoye, Prirazlomnoye and Messoyakha fields, Gazpromneft's output in July was 0.02 mb/d, or 3%, higher, than in October and 0.09 mb/d above a year ago in July. Condensate output in Gasprom also rose through the start-up of the Vostochno-Messoyakhskoye field, although according to data from the Ministry of Energy, some major Russian oil companies cut output by roughly 3% since October. However, Russia's oil supply in 1Q17 and 2Q17 was registered at 11.25 mb/d and 11.26 mb/d, respectively.

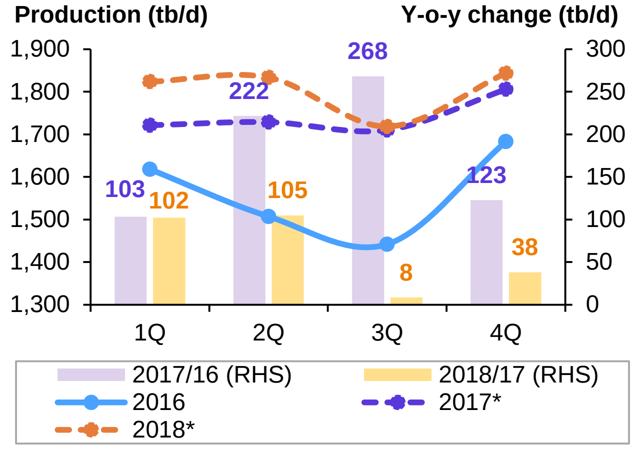
OPEC's forecast for Russia's quarterly oil supply has been kept at 10.98 mb/d for 3Q17, 4Q17 and 1Q18, assuming production of 300 tb/d below October levels, though the oil supply for 1Q17 and 2Q17 was revised up due to historical production data. As a result, growth of 0.03 mb/d is now expected, averaging 11.12 mb/d in 2017, unchanged from the previous month's assessment. Expectations for next year's supply growth have been revised down by 0.07 mb/d, leading to an increase of 0.06 mb/d in 2018.

Caspian

In **Azerbaijan**, according to data provided by the Ministry of Energy, oil production averaged 0.82 mb/d in July, almost the same as in June, but lower by 42 tb/d y-o-y. Of this, 0.74 mb/d was crude and 0.08 mb/d NGLs. Azerbaijan averaged an oil supply output of 803 tb/d in last seven months of 2017, 34 tb/d lower than last October. Oil output in 2Q17 was pegged at 0.81 mb/d, lower by 70 tb/d y-o-y. It is expected that the oil supply for 2017 and 2018 will decline by 0.06 mb/d and 0.05 mb/d y-o-y to average 0.79 mb/d and 0.74 mb/d, respectively.

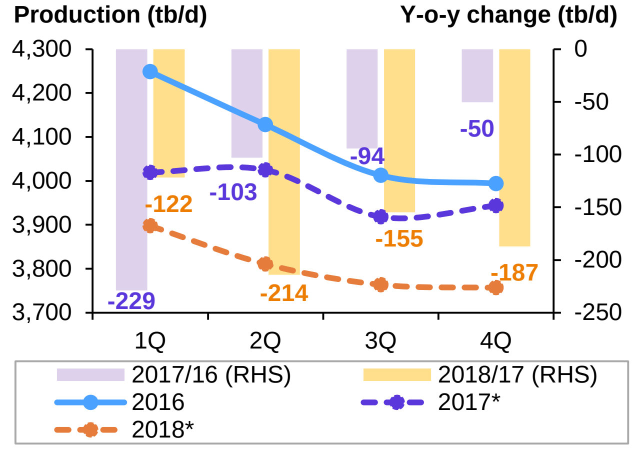
Kazakhstan's crude production was stagnant at 1.48 mb/d in July compared with June. NGLs output also remained steady at 0.27 mb/d in July, indicating a total liquids supply of around 1.74 mb/d. This is unchanged m-o-m but much higher at 0.18 mb/d y-o-y. Continuous gains from Kashagan field – which reached 0.2 mb/d in July according to statements from operator Eni – and a rebound in volumes from the Karachaganak condensate field – offset a drop in production from Tengiz. Kashagan operating consortium NCOC started gas injection into the reservoir in August, according to the Deputy Energy Minister of Kazakhstan, for the purpose of raising oil output to at least 0.3 mb/d by the end of 2017 and triggering the field's expansion to around 0.37 mb/d by the end of next year. Based on this plan, and despite keeping the quarterly production forecast unchanged at 1.68 mb/d, the forecast for Kazakhstan's oil production in 2017 was revised up to 1.74 mb/d. However, production in the next year is likely to be more uncertain, as peak output in Kashagan is now expected to shift to 2019. Thus, the 2018 supply forecast was revised down by 0.03 mb/d to average 1.80 mb/d, indicating growth of 0.06 mb/d y-o-y.

Graph 5 - 23: Kazakhstan liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 24: China liquids supply quarterly forecast, 2016-2018



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

China

China's oil supply declined by 0.04 mb/d in July to 3.97 mb/d, including 3.83 mb/d of crude oil, according to data released by the Chinese National Bureau of Statistics. Crude oil production declined in 1Q17 and 2Q17 by 0.24 mb/d and 0.13 mb/d y-o-y, while China's leading state companies PetroChina and Sinopec continued to restrain investment at the expense of crude production. For instance, PetroChina's upstream spending in 2Q17 was down by 72% to $5 billion compared with the same quarter one year earlier. Hence, crude oil production for the company declined by 33% to 1.7 mb/d in the same period. In general, upstream investments in oil and gas projects have not seen sustained improvement so far this year, according to the latest report issued in July by the Ministry of Land and Resources. In 2016, approximately $30 billion was spent for exploration and development of oil and gas in China. However, compared with average oil supply output declines of 0.30 mb/d, or 6.8%, last year, output in 1H17 stood at 4.02 mb/d, 4.1% below 1H16 levels, indicating that a recovery in oil prices could help oil output rise.

Chinese crude oil output is forecast to decline by roughly 0.12 mb/d in 2017 and 0.13 mb/d in 2018.

OPEC NGLs and non-conventional oils

The forecast for **OPEC NGLs and non-conventional liquids** in 2017 was left unchanged, averaging 6.31 mb/d and representing growth of 0.17 mb/d. This follows last month's upward revision of 90 tb/d following Equatorial Guinea joining OPEC. In 2018, due to a number of planned projects, growth of 0.18 mb/d y-o-y is anticipated, with average output of 6.49 mb/d. These projects are expected to be mainly in IR Iran and Saudi Arabia.

Table 5 - 7: OPEC NGLs + non-conventional oils, 2015-2018*, mb/d

	2015	2016	Change 16/15	1Q17	2Q17	3Q17	4Q17	2017	Change 17/16	2018	Change 18/17
Total OPEC	**6.04**	**6.14**	0.10	6.20	6.26	6.35	6.42	**6.31**	0.17	**6.49**	0.18

*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, total **OPEC-14 crude oil production** averaged 32.76 mb/d in August, a decrease of 79 tb/d over the previous month. Crude oil output increased in Nigeria, while production showed declines in Libya, Gabon, Venezuela and Iraq.

Table 5 - 8: OPEC crude oil production based on *secondary sources*, tb/d

	2015	2016	4Q16	1Q17	2Q17	Jun 17	Jul 17	Aug 17	Aug/Jul
Algeria	1,107	1,090	1,091	1,052	1,055	1,060	1,061	1,065	*4.1*
Angola	1,755	1,725	1,623	1,632	1,649	1,666	1,638	1,646	*8.3*
Ecuador	543	546	542	530	528	529	537	537	*-0.3*
Equatorial Guinea	185	164	162	147	140	140	148	148	*0.6*
Gabon	225	220	211	200	202	198	206	173	*-32.3*
Iran, I.R.	2,836	3,518	3,741	3,796	3,793	3,817	3,830	3,828	*-2.3*
Iraq	3,961	4,390	4,604	4,449	4,454	4,498	4,471	4,448	*-23.1*
Kuwait	2,764	2,853	2,874	2,712	2,708	2,709	2,702	2,702	*0.1*
Libya	404	390	574	656	709	848	1,003	890	*-112.3*
Nigeria	1,839	1,557	1,553	1,511	1,616	1,710	1,723	1,861	*138.3*
Qatar	663	656	642	625	613	615	614	616	*2.3*
Saudi Arabia	10,142	10,406	10,541	9,884	9,953	10,035	10,032	10,022	*-10.3*
UAE	2,906	2,975	3,079	2,935	2,910	2,917	2,921	2,901	*-20.2*
Venezuela	2,375	2,159	2,057	2,002	1,962	1,955	1,950	1,918	*-31.9*
Total OPEC	**31,704**	**32,650**	**33,295**	**32,131**	**32,295**	**32,697**	**32,834**	**32,755**	***-79.1***

Note: Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Table 5 - 9: OPEC crude oil production based on *direct communication*, tb/d

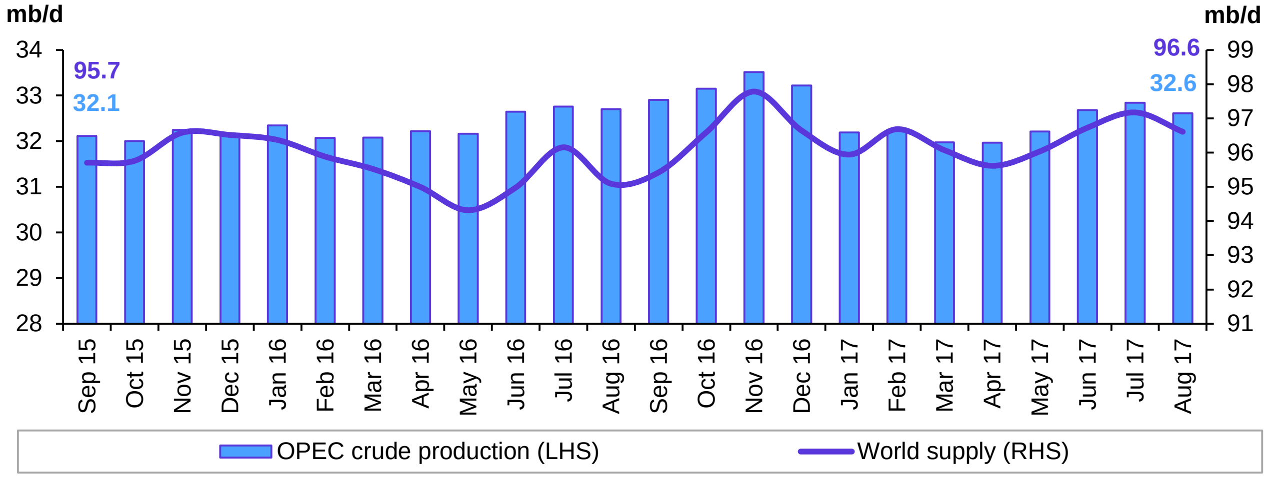
	2015	2016	4Q16	1Q17	2Q17	Jun 17	Jul 17	Aug 17	Aug/Jul
Algeria	1,157	1,146	1,168	1,087	1,072	1,071	1,065	1,067	*2.0*
Angola	1,767	1,722	1,610	1,638	1,635	1,662	1,668	1,680	*12.0*
Ecuador	543	549	543	533	..	..	..	..	..
Equatorial Guinea	..	..	..	..	..	..	..	..	..
Gabon	..	..	..	..	..	..	..	..	..
Iran, I.R.	3,152	3,651	3,993	3,894	3,878	3,880	3,900	3,845	*-55.0*
Iraq	3,504	4,648	4,802	4,589	4,549	4,550	4,400	4,380	*-20.0*
Kuwait	2,859	2,954	2,915	2,705	2,710	2,705	2,700	2,700	*0.0*
Libya	..	..	..	..	..	..	..	..	..
Nigeria	1,748	1,427	1,401	1,388	1,485	1,557	1,562	1,742	*179.9*
Qatar	656	652	632	595	608	611	611	..	..
Saudi Arabia	10,193	10,460	10,602	9,882	9,965	10,070	10,010	9,951	*-58.8*
UAE	2,989	3,088	3,201	3,010	2,984	2,984	2,977	2,969	*-8.0*
Venezuela	2,654	2,373	2,265	2,261	2,149	2,156	2,117	2,100	*-17.0*
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**

Note: Totals may not add up due to independent rounding.
.. Not available.
Source: OPEC Secretariat.

World oil supply

Preliminary data indicate that the **global oil supply** decreased by 0.41 mb/d to average 96.75 mb/d in August 2017 compared with the previous month. Preliminary August supply data show a decrease in non-OPEC supply (including OPEC NGLs) by 0.33 mb/d to average 64.00 mb/d. This was mainly driven by Africa other, Brunei, Canada, Colombia, Congo, Ghana, Norway, OPEC NGLs and the US, which partially offset m-o-m declines in Azerbaijan, China, Mexico and the UK. OPEC crude oil production also declined by 0.08 mb/d in August, leading to a decrease in global oil output. The share of OPEC crude oil in total global production fell slightly by 0.1 pp to total 33.9% in August, compared with 33.8% in the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 25: OPEC and world oil supply



Source: OPEC Secretariat.

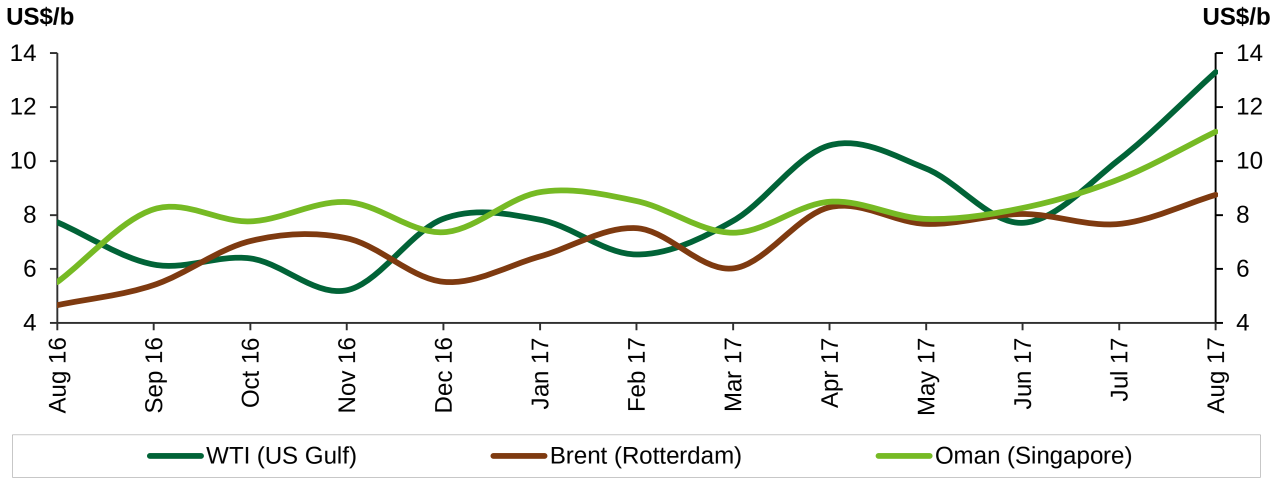
Product Markets and Refinery Operations

Refinery margins in the Atlantic Basin strengthened in August. In the US, margins rose amid a product supply shortage in the wake of Hurricane Harvey, coupled with already firm domestic demand promoting higher product crack spreads. In Europe and Asia, product markets increased as supply outages in the US encouraged higher arbitrage volumes and healthy seasonal demand provided further support to refinery margins.

Refinery margins

US product crack spreads surged in the month of August amid refinery outages as Hurricane Harvey hit the Texas shore, halting US Gulf Coast (USGC) refinery operations. The gasoline crack spread rose as a result, while being fundamentally supported by robust domestic demand. Total product demand continued to increase to reach around 9.7 mb/d in August, based on preliminary weekly data. Middle distillate demand also strengthened, supporting rising margins in the wake of Hurricane Harvey, with the jet/kero crack spread gaining a firm $5/b m-o-m, additionally supported by firm domestic demand. US Gulf refinery margins for WTI crude gained more than $3.2/b versus the previous month's levels to average around $13.3/b during August, with refinery utilization rates reaching as high as 95.2% .

Graph 6 - 1: Refinery margins



Sources: Argus Media and OPEC Secretariat.

Product crack spreads in **Europe** displayed a rise in August, excluding fuel oil, which declined. Product crack spreads were affected by supply outages on the USGC and increasing arbitrage opportunities to the US and Latin America, particularly for middle distillates. The refinery margin for Brent crude in Northwest Europe (NWE) showed an increase of $1.1/b versus the previous month to average $8.8/b.

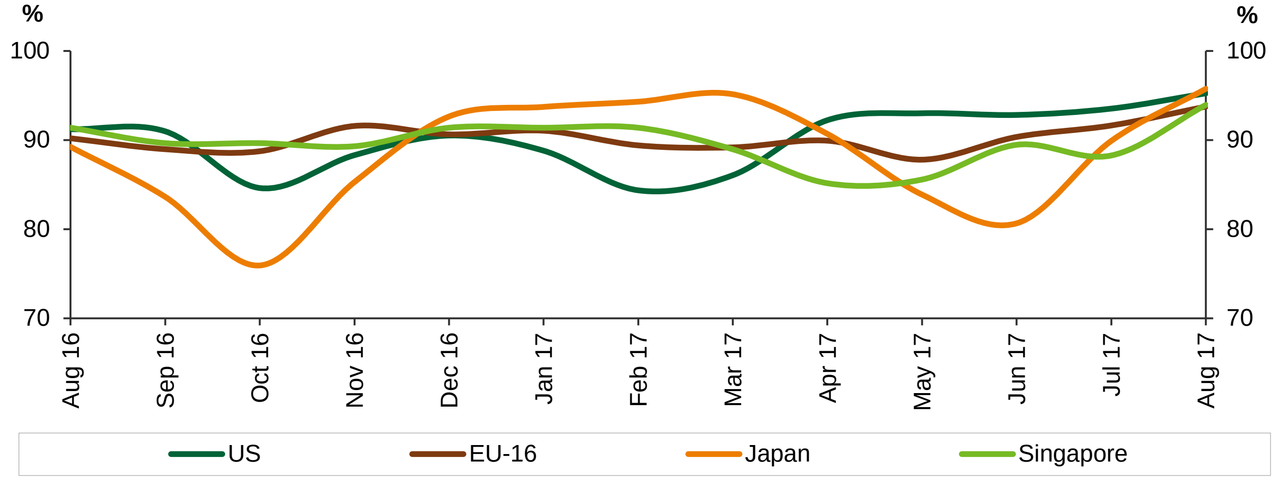
Asian product crack spreads exhibited improvements across all product categories with the exception of fuel oil. Strong seasonal demand and a reduction in stock levels continued to lend support to refinery margins, which increased for Oman by $1.8 to $11.1/b in August compared with a month earlier.

Refinery operations

Refinery utilization in the **US** recorded historical levels in August, despite plummeting towards the end of the month as Hurricane Harvey started to make landfall, shutting down considerable refining capacity and pipelines on the US Gulf Coast. Refinery utilization averaged around 95.2%, equivalent to 17.58 mb/d, which was around 0.32 mb/d higher than a month earlier. On a y-o-y basis, refinery throughput rose by 0.89 mb/d. During the last week of August, large capacity reductions were witnessed due to Tropical Storm Harvey. Some estimations indicate as much as 4 mb/d of refining capacity was either completely or partially shut-in as a result of the storm. ExxonMobil- Baytown and Beaumont refineries (with total capacity exceeding 0.9 mb/d) were reported to be fully shut. Shell, Deer Park refinery (0.3 mb/d refining capacity), Valero, Corpus Christi (0.3 mb/d of refining capacity), Phillips 66 and Sweeny (0.24 mb/d refining capacity) are examples of other refineries which completely shut down facilities. Meanwhile, Motive, Port Arthur, (0.6 mb/d of refining capacity), Lyondell, Houston (0.6 mb/d of refining capacity) and Flint Hills, Corpus Christi (0.23 mb/d of refining capacity) were reported to have partially shut operations.

Based on preliminary estimates for **European** refineries, average runs recorded around 93.8% of capacity in August, supported by healthy refining margins. This corresponds to a throughput of 10.9 mb/d, which was 0.25 mb/d higher than in the previous month. Runs were higher in France by 40 tb/d m-o-m and in Italy by 55 tb/d m-o-m, while in Germany they were down by 52 tb/d m-o-m. The current calculations for refinery turnaround in August indicate similar offline capacity to July levels of around 0.45 mb/d of closed capacity. This is foreseen to rise to 0.73 mb/d in September. So far, 3Q17 planned turnarounds are expected to average 0.54 mb/d, lower by 0.24 mb/d from 2Q17 amid healthy refinery margins in the region.

Graph 6 - 2: Refinery utilisation rates



Sources: Argus Media and OPEC Secretariat.

In **Asia**, refinery utilization rates increased for the second consecutive month, particularly in Japan as refinery turnarounds abated. Japan's refinery throughputs averaged 95.8% of capacity, 6 pp higher than the previous month, and refinery runs in Singapore increased to 93.9%, up 6 percentage points (pp) compared with the previous month. Additionally, refinery runs in China and India increased by 0.16 mb/d and 29 tb/d, respectively, in line with seasonal patterns.

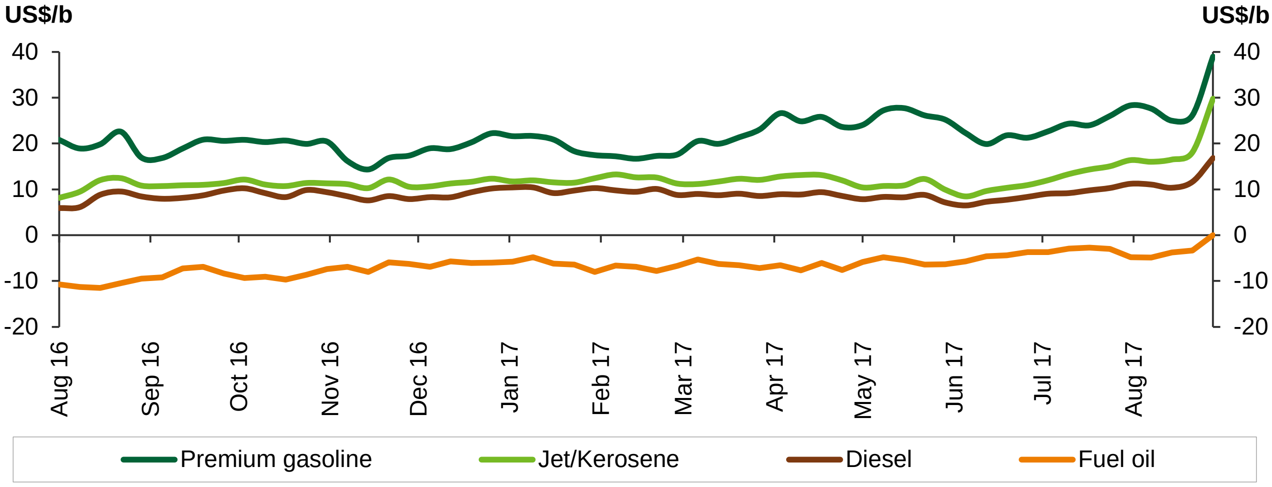
Product markets

US market

Product markets in the **US** displayed a solid performance in August, with all product cracks recording healthy gains m-o-m, apart from fuel oil.

The **gasoline 93 unleaded** crack spread against WTI gained more than $3.8/b compared with the previous month's level to average $28.4/b in August. Hurricane Harvey hit the USGC during the last week of August and its impact on gasoline prices over the monthly average was considerable. The gasoline crack spread had actually been declining in the middle of August before skyrocketing during and after Hurricane Harvey at the end of August. Based on initial weekly data, demand for gasoline was at 9.7 mb/d in August, indicating very healthy demand during the summer driving season. This is approximately 54 tb/d higher than the month of August 2016.

Graph 6 - 3: US Gulf crack spread vs. WTI



Sources: Argus Media and OPEC Secretariat.

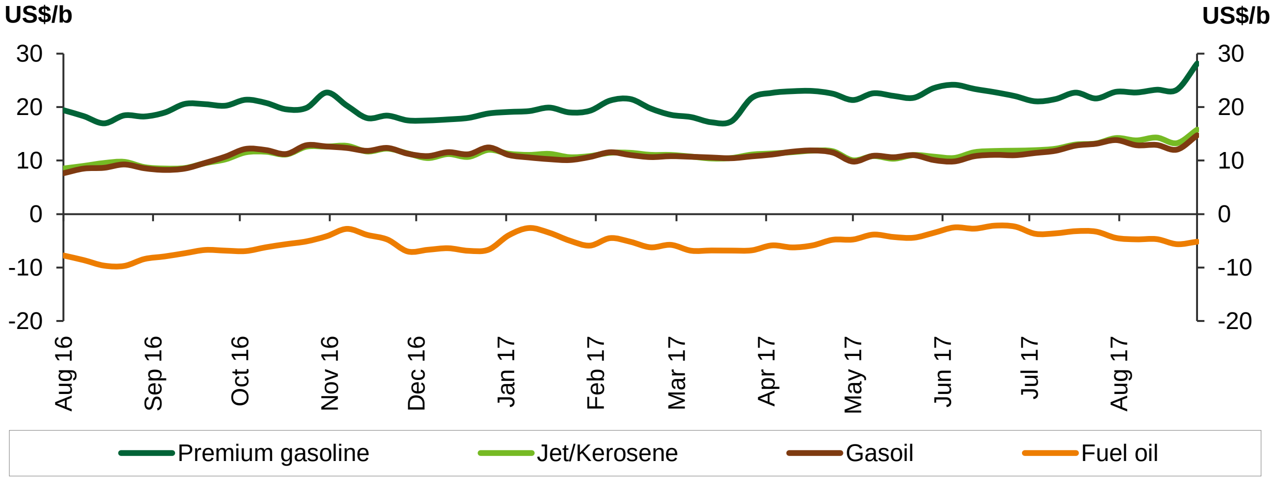
For middle distillates, the US Gulf Coast **gasoil** crack averaged around $12.0/b, adding more than $2.3/b from the previous month**.** The **jet/kerosene** crack spread also rose sharply, adding close to $5/b to reach $18.9/b from the previous months' levels. **Middle distillate** demand, including jet/kerosene, stood at around 6.0 mb/d based on weekly data in August, higher than in July and around 0.7 mb/d higher than the same month a year earlier. As such, the cracked spread rallied on rising demand and outages curtailed product supply.

At the **bottom of the barrel,** the USGC high sulphur **fuel oil crack** declined by $0.4/b to average around minus $3.5/b in August. The fuel oil market declined on easing demand, which fell by around 74 tb/d m-o-m based on weekly data.

European market

Product markets in **Europe** exhibited a positive performance in August, with all product cracks registering gains m-o-m, with the exception of fuel oil.

Graph 6 - 4: Rotterdam crack spread vs. Brent



Sources: Argus Media and OPEC Secretariat.

The light-distillate **naphtha** crack against Brent increased by $0.6/b, reaching minus $0.7/b. A rise in the naphtha crack spread in August was underpinned by the strength of reforming spreads and open arbitrage opportunities from Europe to Latin America, as a result of shortages caused by Hurricane Harvey in the Gulf of Mexico. The upward path in naphtha crack performance was also encouraged by outages at the 0.4 mb/d Shell Pernis refinery towards the end of July.

The **gasoline 98 RON** crack spread against Brent railed in August, gaining $1.7/b from the previous month to average around $23.5/b. The main supporter for **gasoline** crack spreads in Europe originated from the arbitrage volumes heading to the US Atlantic Coast as Tropical Storm Harvey shut-in substantial refining capacity, reducing the supply of gasoline. Latin America was another destination for European gasoline. Arbitrage volumes increased during the month of August, as the supply to Latin America from the US abated due to shortages.

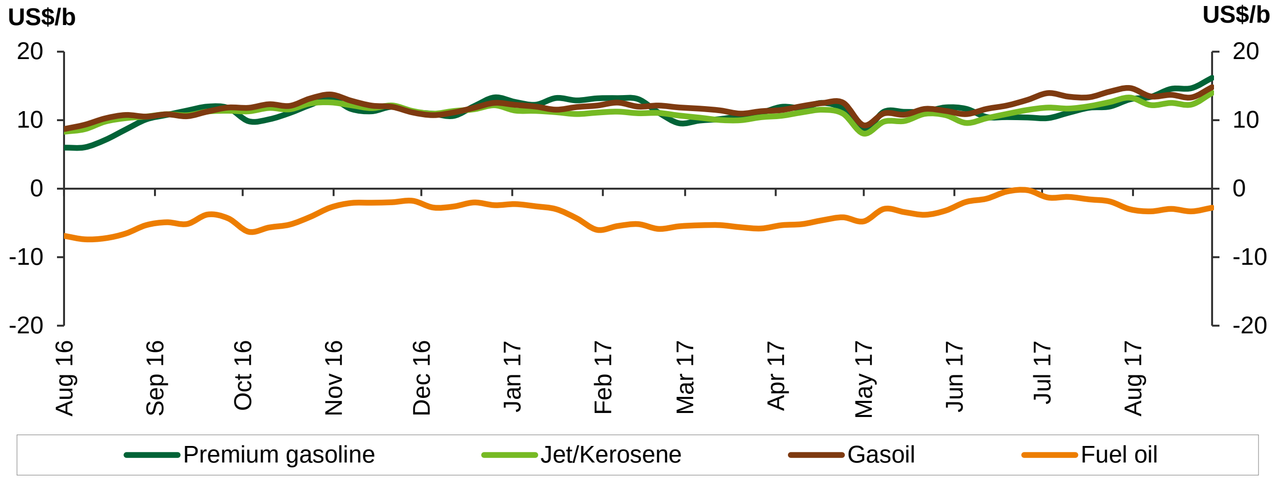
The European **gasoil 10 ppm** crack spread against Brent crude at Rotterdam averaged around $13.0/b in August, adding more than $0.7 compared with the previous month's level. Lower diesel flows from the USGC and healthy domestic demand supported the crack spread during the month. The European **jet/kero** crack spread against Brent crude at Rotterdam averaged around $14.1/b in August, adding more than $1.4/b compared with the previous month's level on continuing solid demand and tighter overall supply.

At the **bottom of the barrel**, the NWE **fuel oil crack for 1% sulfur** shed some $1.5/b compared with the previous month to average around minus $5.0/b in August. The decline is a result of seasonally slower domestic demand and weaker export volumes to Asia.

Asian market

The Asian market continued its upward trend in August, and was also affected by disruption of supply from the USGC, resulting in growth in all product crack spreads, with the exception of fuel oil, which declined sharply.

Graph 6 - 5: Singapore crack spread vs. Oman



Sources: Argus Media and OPEC Secretariat.

The Singapore **naphtha** crack inched up compared with July levels to gain around $1.92/b over the month, moving the crack spread into positive territory for the first time since February 2017. The crack spread against Oman crude in Singapore averaged $0.21/b in August. Product fundamentals were solid in August, with strong gasoline prices supporting reforming spreads and healthy petrochemical demand in the region. Additionally, scheduled refinery maintenance will affect 0.3 mb/d from MRPL, India's Mangalore refinery, which is a key naphtha exporting refinery in the region. Formosa Petrochemical's planned shutdown of its 2 million tons yearly (mty) is projected to last until the end of September, pressuring the crack spread going forward.

The Asian **gasoline 95 RON** crack spread against Oman crude in Singapore averaged $17.1/b in August, up by a healthy $3.0/b compared with the previous month's level. The **gasoline** market continued to strengthen during August, supported by healthy overall demand in the region and exacerbated by refinery outages on the USGC, which opened up arbitrage opportunities to the US. Additionally, fire at Petrochina's 0.4 mb/d Dalian refinery further tightened supply in the region, thus supporting the crack spread.

At the **middle of the barrel**, the **gasoil 50ppm** crack spread witnessed some gains, adding around $0.1/b compared with July to reach $13.9/b in August. In the first half of August, the product exhibited a downward trend on the back of a heavy monsoon season in India, halting diesel requirements and unworkable arbitrage to Europe. However, towards the end of the month, the gasoil crack spread received support from supply outages on the US Gulf Coast as product prices increased. The **jet/kero** crack spread also experienced upward momentum in tandem with gasoil, increasing by $0.6/b compared with July to reach $12.74/b in August, supported by high global demand and outages from the US Gulf Coast.

At the **bottom of the barrel**, the Asian **fuel oil 180 cst** crack spread in Singapore against Oman averaged about minus $3.2/b in August, shedding around $1.7/b of its previous month's value. The fuel oil market weakened as stocks in Singapore rose on the back of rising volumes from the US prior to Hurricane Harvey and power sector demand from South Korea and Japan waned.

US relaxes restrictions to meet fuel needs following hurricane disruptions

The US administration relaxed shipping and product specification restrictions to meet fuel needs following disruptions caused by hurricanes amid concerns about shortfalls in motor fuels.

On 8 September, US Department of Homeland Security (DHS) issued a waiver of the federal Jones Act, which requires all vessels transporting goods between US ports to be US-built, US-owned, US-flagged and serviced by US crews. The waiver – which covers a seven day period – seeks to facilitate the distribution of refined petroleum products – namely, gasoline, diesel and jet fuel – from New York, Pennsylvania, Texas and Louisiana to South Caroline, Georgia and Puerto Rico.

The head of the DHS called the move "a precautionary measure to ensure we have enough fuel to support lifesaving efforts, respond to the storm, and restore critical services and critical infrastructure operations in the wake of this potentially devastating storm." The order was issued ahead of the expected landfall of Hurricane Irma and in response to the disruption of product flows following Hurricane Harvey.

The last Jones Act waiver was issued in December 2012, for petroleum products to be delivered for relief assistance in the aftermath of Hurricane Sandy.

Separately, the US Environment Protection Agency (EPA) issued waivers allowing the sale of reformulated gasoline without additive to reduce pollution during the summer in all east coast states located in PADD 1, all mid-western states located in PADD 2, and all Gulf Coast states located in PADD 3. The move allows refiners and blenders to make an earlier shift to producing and selling more volatile but less expensive to produce "winter-grade" of gasoline.

Colonial Pipeline filed an emergency petition seeking permission from Federal Energy Regulatory Commission (FERC) to transport 'transitionary' gasoline – a grade between summer and winter requirements – from Texas to the US Northeast. This follows a similar request by refinery Valero Energy Corp, which said the waiver would allow Gulf Coast refiners to resume shipments without "undue and unreasonable" hindrances.

Table 6 - 1: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Jun 17	Jul 17	Aug 17	Change Aug/Jul	Jun 17	Jul 17	Aug 17	Change Aug/Jul
US	**17.13**	**17.26**	**17.58**	**0.32**	**92.82**	**93.53**	**95.24**	**1.72**
Euro-16	**10.47**	**10.62**	**10.87***	**0.25**	**90.35**	**91.63**	**93.75***	**2.12**
France	1.13	1.15	1.19*	0.04	90.71	92.47	95.56*	3.09
Germany	1.73	1.91	1.85*	-0.05	78.98	87.16	84.76*	-2.40
Italy	1.33	1.32	1.37*	0.06	64.81	64.47	67.14*	2.67
UK	1.08	1.06	1.04*	-0.02	83.18	81.41	79.84*	-1.57
Japan	**2.84**	**3.16**	**3.37**	**0.21**	**80.65**	**89.90**	**95.75**	**5.85**

*Note: * OPEC Secretariat's estimate.*

Sources: Argus Media, EIA, Euroilstock, IEA, METI, OPEC Secretariat and Petroleum Association of Japan.

Table 6 - 2: Refinery crude throughput, mb/d

	2014	2015	2016	3Q16	4Q16	1Q17	2Q17	3Q17 **
Total OECD	**36.95**	**38.00**	**38.01**	**38.77**	**38.04**	**38.27**	**38.40**	**38.57**
OECD America	**19.00**	**19.19**	**19.21**	**19.65**	**18.82**	**19.05**	**19.43**	**19.77**
of which US	15.82	16.11	16.24	16.68	16.07	15.95	17.11	17.42
OECD Europe	**11.43**	**12.11**	**11.91**	**12.20**	**12.23**	**11.88**	**11.75**	**12.06**
of which:								
France	1.12	1.17	1.14	1.19	1.24	1.05	1.11	1.17
Germany	1.86	1.91	1.90	1.94	1.91	1.82	1.77	1.88
Italy	1.20	1.35	1.30	1.36	1.32	1.34	1.28	1.35
UK	1.14	1.14	1.09	1.12	1.09	1.04	1.06	1.04
OECD Asia Pacific	**6.51**	**6.70**	**6.88**	**6.93**	**6.99**	**7.33**	**7.22**	**6.74**
of which Japan	3.13	3.14	3.15	3.24	3.23	3.49	2.99	3.27
Total Non-OECD	**41.68**	**42.70**	**43.93**	**42.16**	**41.74**	**41.82**	**42.32**	**43.00**
of which:								
China	10.16	11.00	11.55	10.59	11.16	11.22	11.00	10.80
Middle East	6.90	7.27	7.92	7.43	7.20	7.40	7.47	7.45
Russia	5.92	5.79	5.72	5.67	5.78	5.64	5.46	5.70
Latin America	5.07	5.00	4.67	4.54	4.63	4.60	4.61	3.95
India	4.48	4.56	4.93	4.88	4.97	5.01	4.89	4.84
Africa	2.30	2.16	2.14	2.06	2.16	2.25	2.28	2.03
Total world	**78.62**	**80.70**	**81.94**	**80.93**	**79.78**	**80.08**	**80.71**	**81.57**

*Note: * Data includes Mexico and Chile.*

*** OPEC Secretariat's estimate.*

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 6 - 3: Refined product prices, US$/b

		Jul 17	Aug 17	Change Aug/Jul	Year-to-date 2016	Year-to-date 2017
US Gulf (Cargoes FOB):						
Naphtha*		48.76	52.38	3.62	43.02	52.04
Premium gasoline	*(unleaded 93)*	71.23	76.43	5.20	61.08	72.40
Regular gasoline	*(unleaded 87)*	66.31	71.29	4.98	55.28	66.73
Jet/Kerosene		60.60	66.96	6.36	49.55	62.19
Gasoil	*(0.2% S)*	56.37	60.04	3.67	46.67	58.73
Fuel oil	*(3.0% S)*	44.47	45.75	1.28	28.17	44.66
Rotterdam (Barges FoB):						
Naphtha		47.29	51.00	3.71	40.01	50.44
Premium gasoline	*(unleaded 98)*	70.31	75.17	4.86	61.28	72.83
Jet/Kerosene		61.17	65.71	4.54	50.35	63.03
Gasoil/Diesel	*(10 ppm)*	60.90	64.70	3.80	49.92	62.66
Fuel oil	*(1.0% S)*	45.03	46.64	1.61	29.84	46.75
Fuel oil	*(3.5% S)*	42.23	44.06	1.83	25.57	41.80
Mediterranean (Cargoes FOB):						
Naphtha		46.31	50.46	4.15	39.02	49.57
Premium gasoline**		61.17	66.85	5.68	53.86	64.67
Jet/Kerosene		60.30	64.36	4.06	48.68	61.62
Diesel		62.06	65.54	3.48	51.13	63.79
Fuel oil	*(1.0% S)*	45.35	46.70	1.35	30.16	47.70
Fuel oil	*(3.5% S)*	43.60	44.94	1.34	28.24	43.92
Singapore (Cargoes FOB):						
Naphtha		45.92	50.58	4.66	40.49	50.70
Premium gasoline	*(unleaded 95)*	61.76	67.51	5.75	53.26	65.60
Regular gasoline	*(unleaded 92)*	59.02	64.70	5.68	50.35	62.98
Jet/Kerosene		59.77	63.11	3.34	49.65	62.25
Gasoil/Diesel	*(50 ppm)*	61.44	64.24	2.80	49.60	63.38
Fuel oil	*(180 cst 2.0% S)*	46.12	47.21	1.09	31.17	47.55
Fuel oil	*(380 cst 3.5% S)*	45.58	47.08	1.50	30.76	46.97

*Note: * Barges.*

*** Cost, insurance and freight (CIF).*

Sources: Argus Media and OPEC Secretariat.

Tanker Market

Dirty tanker market sentiment weakened in August, as average spot freight rates declined on most reported routes. On average, dirty tanker freight rates were down by 4% from the month before. Earnings for dirty tankers reached the lowest level seen since the beginning of the year. Among other factors, the drop in dirty spot freight rates was influenced by high vessel availability, as new deliveries were reportedly added to the fleet, putting pressure on the already oversupplied tonnage market.

Average clean tanker spot freight rates also developed negatively in August despite enhanced rates registered in East of Suez. In the West of Suez, Medium-range (MR) tanker freight rates almost doubled in the US following Hurricane Harvey. However, the gains were shortly lived as the market found its balance. Average MR tanker freight rates declined on all reported routes in the West with no exception. Generally, the clean tanker market was quiet in August, showing no significant demand.

Spot fixtures

Global fixtures rose by 1.1% in August, compared with the previous month. OPEC spot fixtures declined by 0.37 mb/d, or 3%, averaging 11.86 mb/d, according to preliminary data. The drop in fixtures was registered mainly in the East. Fixtures on Middle East-to-East destinations were lower, as were fixtures outside of the Middle East, which averaged 3.87 mb/d in August, down by 0.19 mb/d from one month earlier. Compared with the same period a year earlier, all fixtures were higher in August.

Table 7 - 1: Spot fixtures, mb/d

	Jun 17	Jul 17	Aug 17	Change Aug 17/Jul 17
All areas	**17.99**	**17.07**	**17.25**	**0.18**
OPEC	13.16	12.23	11.86	-0.37
Middle East/East	6.01	6.23	5.58	-0.65
Middle East/West	3.31	1.94	2.42	0.47
Outside Middle East	3.84	4.06	3.87	-0.19

Sources: Oil Movements and OPEC Secretariat.

Sailings and arrivals

Preliminary data showed that **OPEC sailings** declined by 0.5% in August, averaging 24 mb/d, though remaining 0.32 mb/d, or 1.4%, higher than the same month a year before.

Table 7 - 2: Tanker sailings and arrivals, mb/d

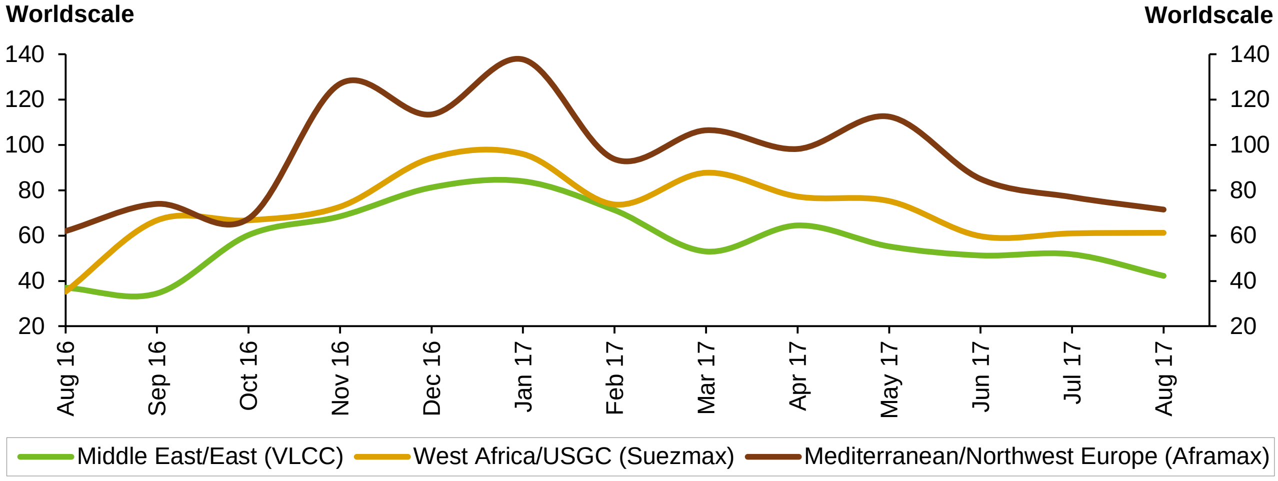
	Jun 17	Jul 17	Aug 17	Change Aug 17/Jul 17
Sailings				
OPEC	24.41	24.12	24.00	-0.12
Middle East	17.62	17.66	17.22	-0.44
Arrivals				
North America	10.72	10.20	9.77	-0.43
Europe	12.00	12.04	12.51	0.47
Far East	8.74	8.83	8.82	-0.01
West Asia	4.49	4.67	4.64	-0.04

Sources: Oil Movements and OPEC Secretariat.

Arrivals in Europe were up from the previous month, while in the Far East, West Asia and North America, arrivals declined by 0.01 mb/d, 0.04 mb/d and 0.43 mb/d, respectively, to average 8.82 mb/d, 4.64 mb/d and 9.77 mb/d.

Dirty tanker freight rates

Graph 7 - 1: Crude oil spot tanker freight rates, monthly average



Sources: Argus and Platts.

VLCC

Following the typical trend in the summer months, **VLCCs** lacked tonnage demand in general, which prolonged the tonnage list and thus kept spot freight rates under constant pressure as they had been in previous months. VLCC spot fright rates were softer in August on several routes as competition between ship owners put further pressure on rates and prevented them from achieving any gains, even during days of relatively enhanced activity.

In August, VLCC daily earnings dropped to the lowest level this year so far and low freight rates discouraged ship owners from getting involved in longer-haul voyages. Thus, VLCC freight rates on key trading routes Middle East-to-East and Middle East-to-West fell, with spot freight rates decreasing by 18% and 6%, respectively, from the previous month to stand at WS42 and WS24 points. Similarly, spot freight rates on the West Africa-to-East route declined by 10% to average WS49 points.

Table 7 - 3: Dirty VLCC spot tanker freight rates, Worldscale

	Size *1,000 DWT*	Jun 17	Jul 17	Aug 17	*Change* Aug 17/Jul 17
Middle East/East	230-280	51	52	42	-10
Middle East/West	270-285	26	26	24	-2
West Africa/East	260	56	54	49	-6

Sources: Argus Media and OPEC Secretariat.

Suezmax

Suezmax was the only class in the dirty tanker segment which showed a rate increase from the previous month as a result of higher volumes of fixtures to eastern destinations, which led to tighter ship availability. Suezmax freight rates saw minor gains on average in August, despite new deliveries adding to the already oversupplied tonnage market. Freight rates for tankers operating on the West Africa-to-USGC route remained unchanged from the previous month to average WS61 points. Similarly in the West, freight rates on the Northwest Europe (NWE)-to-USGC route stood at WS55 points.

Table 7 - 4: Dirty Suezmax spot tanker freight rates, Worldscale

	Size 1,000 DWT	Jun 17	Jul 17	Aug 17	Change Aug 17/Jul 17
West Africa/US Gulf Coast	130-135	60	61	61	0
Northwest Europe/US Gulf Coast	130-135	57	55	55	0

Sources: Argus Media and OPEC Secretariat.

Aframax

Aframax spot freight rates declined across all reported routes in August, suffering from the same general negative trend dominating the tanker market during the summer months when markets in several regions remained depressed despite weather delays and some replacements and the market remained under the influence of slow activity and a prolonged tonnage list. As a result, freight rates for tankers trading on both the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes declined by 7% each to stand at WS78 and WS72 points in August, respectively, compared with the previous month.

The Aframax market in the Caribbean was generally quiet and lacking cargoes, as was seen with other routes. Average Aframax freight rates dropped in August, despite an increase in rates which were driven by operation disruption following the Harvey Hurricane in the US. Average monthly freight rates for tankers operating on the Caribbean-to-US East Coast (USEC) route rose by 10% over the previous month to average WS100 points. In contrast, average freight rates for tankers trading on the Indonesia-to-East route dropped by 3% to average WS84 points.

Table 7 - 5: Dirty Aframax spot tanker freight rates, Worldscale

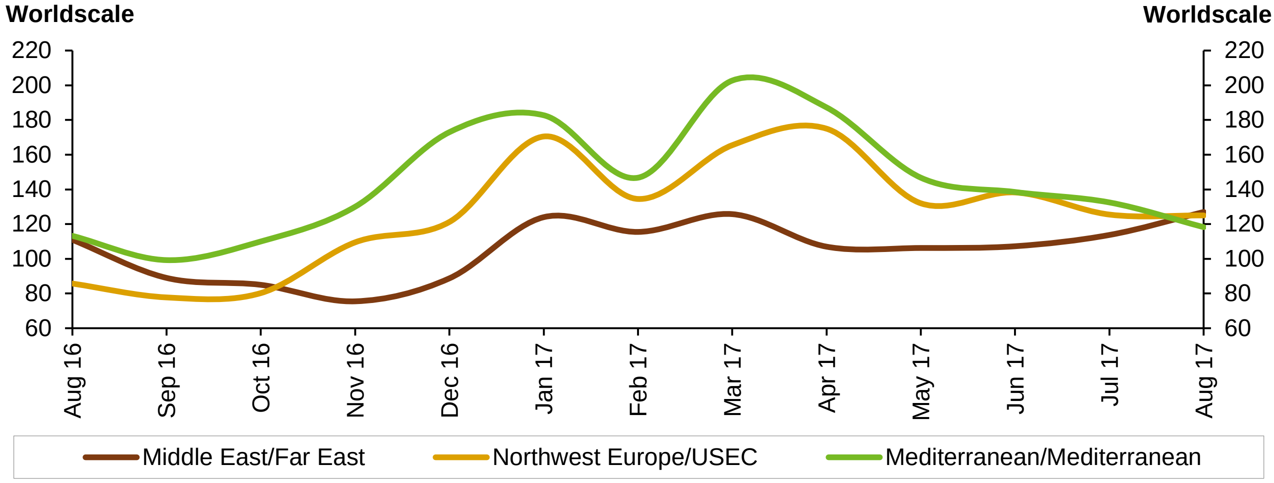
	Size 1,000 DWT	Jun 17	Jul 17	Aug 17	Change Aug 17/Jul 17
Indonesia/East	80-85	93	87	84	-3
Caribbean/US East Coast	80-85	93	92	100	9
Mediterranean/Mediterranean	80-85	91	84	78	-6
Mediterranean/Northwest Europe	80-85	85	77	72	-6

Sources: Argus Media and OPEC Secretariat.

Clean tanker freight rates

Clean tanker market sentiment mostly came under pressure in August despite a strengthening trend in the East of Suez, nevertheless weak rates in the West of Suez drove average clean tanker rates down by 1%.

Graph 7 - 2: Products spot tanker freight rates, monthly average



Sources: Argus Media and OPEC Secretariat.

The clean tanker market was quiet and sentiment stayed weak. Rates often remained flat, despite firmer sentiment in the **East of Suez**, which was initially detected for LR ships for which freight rates edged up on several trading routes before MR vessels followed suit.

MR tanker rates registered on the Middle East-to-East route showed an increase of 12% from a month ago to average WS127 points.

Rates for tankers operating on the Singapore-to-East route increased by 5% from July to WS155 points.

In the **West of Suez**, rates have been experiencing a downward trend in different classes. Spot freight rates were mostly flat on the back of ample tonnage supply. Freight rates on the NWE-to-USEC remained marginally unchanged. Temporary MR freight rates more than doubled as affected by the hurricane in the US, however the escalating trend faded quickly as rates went down showing no effect on the freight rates monthly average. Sport freight rates registered for tankers trading on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes declined by 11% each, to stand at WS118 points and WS127 points respectively.

Table 7 - 6: Clean spot tanker freight rates, Worldscale

	Size 1,000 DWT	Jun 17	Jul 17	Aug 17	Change Aug 17/Jul 17
East of Suez					
Middle East/East	30-35	107	114	127	13
Singapore/East	30-35	138	147	155	8
West of Suez					
Northwest Europe/US East Coast	33-37	138	126	125	-1
Mediterranean/Mediterranean	30-35	139	133	118	-14
Mediterranean/Northwest Europe	30-35	149	143	127	-15

Sources: Argus Media and OPEC Secretariat.

Oil Trade

In August, preliminary data shows that US crude oil imports increased slightly by 22 tb/d from the previous month to average 8 mb/d. Although preliminary, the data shows that US crude imports in the week of 1 September 2017 reached 7.1 mb/d, down by almost 822 tb/d from the previous week. On an annual basis, this reflects a drop of 39 tb/d, or 1%, from a year earlier.

US product imports rose by 191 tb/d, or 10%, to average 2.2 mb/d m-o-m, while y-o-y, they went down by 126 tb/d, or 6%. They dropped significantly in the week of 1 September, although the data remains preliminary.

Japan's crude oil imports increased in July by 542 tb/d to average 3.5 mb/d. On an annual basis, crude imports rose in July by 7% as refinery throughput increased by almost 320 tb/d in the same month. In a contrary pattern, Japan's product imports went down in July by 13 tb/d to average 532 tb/d, however annually, they were lower by 18 tb/d, or 3%. The monthly drop came mainly as a result of lower imports of gasoline, fuel oil and jet fuel.

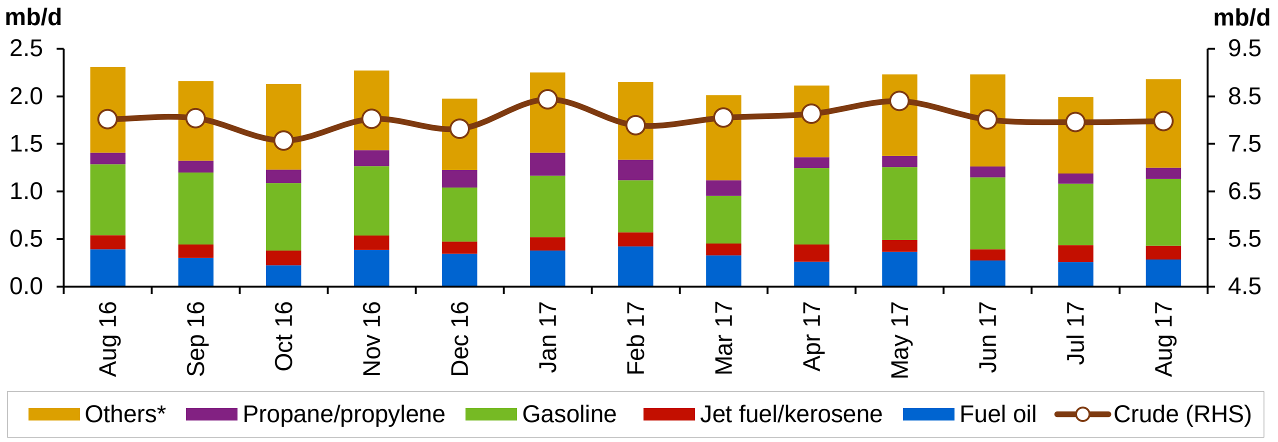
China's crude oil imports dropped in July by 608 tb/d, or 7%, from the previous month to average 8.2 mb/d. Crude imports in the previous month had reached the second highest level on record. Despite of the monthly drop, China's crude imports remained at a high level, showing, in an annual comparison, an increase by 866 tb/d, or 12 %. In July, India's crude imports averaged 4.1 mb/d, which is 222 tb/d, or 5%, lower than the level seen last month. At the same time, India's refinery throughput went down slightly from one month before. On an annual basis, it increased slightly by 24 tb/d, or 1%. Product imports went up in July by 84 tb/d, or 10%, from a month ago to average 909 tb/d, while y-o-y, they rose by 114 tb/d, or 14%, with support continuing to come from strong demand in the country.

US

In August, preliminary data showed that **US crude oil imports** increased slightly by 22 tb/d from the previous month to average 8 mb/d. Preliminary data shows that US crude imports in the week of 1 September 2017 averaged 7.1 mb/d, down by almost 822 tb/d from the previous week. On an annual basis, this reflects a drop of 39 tb/d, or 1%, from a year earlier.

US product imports rose by 191 tb/d, or 10%, to average 2.2 mb/d m-o-m, while y-o-y, they went down by 126 tb/d, or 6%. They dropped significantly in the week of 1 September, although data remained preliminary.

Graph 8 - 1: US imports of crude and petroleum products

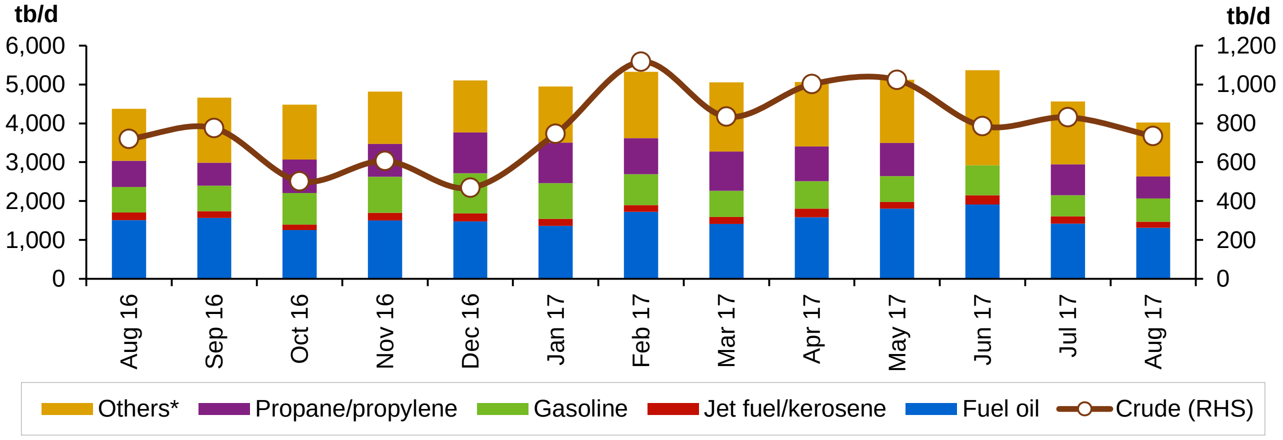


*Note: *Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.*
Sources: US Energy Information Administration and OPEC Secretatiat.

US product exports in August registered a drop of 540 tb/d, or 12%, to average 4 mb/d. On an annual basis, the figures reflected a drop of 357 tb/d, or 8%. The latest weekly data shows that US product imports were slashed to more than half.

As a result, **US total net imports** rose in August to average 5.4 mb/d, or 18%, higher than the previous month and 3% up from last year's level.

Graph 8 - 2: US exports of crude and petroleum products



*Note: *Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.*
Sources: US Energy Information Administration and OPEC Secretatiat.

In June, **Canada** remained the **top supplier** as seen before, accounting for 41% of total US crude imports, though with lesser volumes, by 299 tb/d, from one month before. Canada has held the top supplier position to the US since March 2006. Saudi Arabia came in as the second top supplier to the US, holding a share of 13% of total crude imports. Saudi Arabia's crude exports to the US dropped from a month earlier by 78 tb/d. Mexico came in as the third top supplier to the US in June, and its volumes were generally stable from the previous month.

Total crude imports from OPEC Member Countries went down in June from the previous month by 100 tb/d, or 3%, to average 3.3 mb/d. Crude imports from OPEC Member Countries accounted for 41% of total US crude imports. On the other hand, US product imports from OPEC Member Countries were less from a month earlier to stand at 218 tb/d, representing a share of 10% of total products imported by the US, however, on an annual basis, they remained 8% above the volumes seen in the same month last year. As for the product supplier share, Canada and Russia maintained their positions as first and second suppliers to the US with a share of 23% and 19%, respectively. Volume-wise, imports from Canada decreased from last month by 20 tb/d, while imports from Russia rose by 108 tb/d m-o-m.

Imports by region remained with no major changes. In June 2017, imports from major regions maintained the same order as previously, although they encountered mainly declines from one month before. The US' largest crude import volumes were sourced from North America, averaging 3.3 mb/d, followed by Latin America, which averaged 2 mb/d in June. The Middle East came in as the third region with an average of 1.8 mb/d. Imports from Africa and Asia rose from a month before.

Table 8 - 1: US crude and product net imports, tb/d

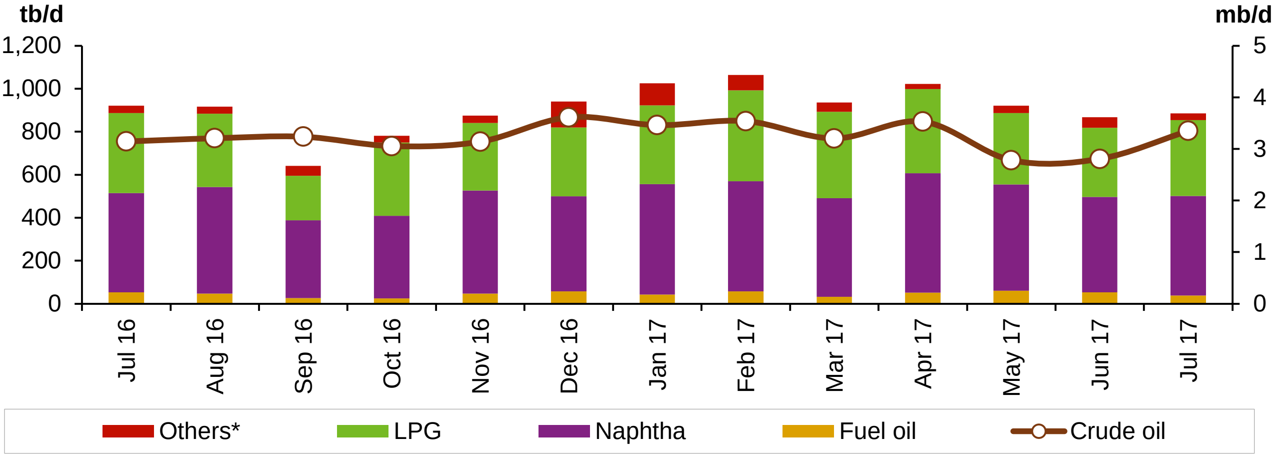
	Jun 17	Jul 17	Aug 17	*Change* Aug 17/Jul 17
Crude oil	7,224	7,124	7,243	119
Total products	-3,132	-2,569	-1,837	732
Total crude and products	**4,092**	**4,555**	**5,406**	**851**

Sources: US Energy Information Administration and OPEC Secretatiat.

Japan

Japan's crude oil imports increased in July by 542 tb/d to average 3.5 mb/d. On an annual basis, crude imports rose in July by 7%. Japan imported higher volumes in July as refinery throughput increased by almost 320 tb/d in the same month.

Graph 8 - 3: Japan's imports of crude and petroleum products



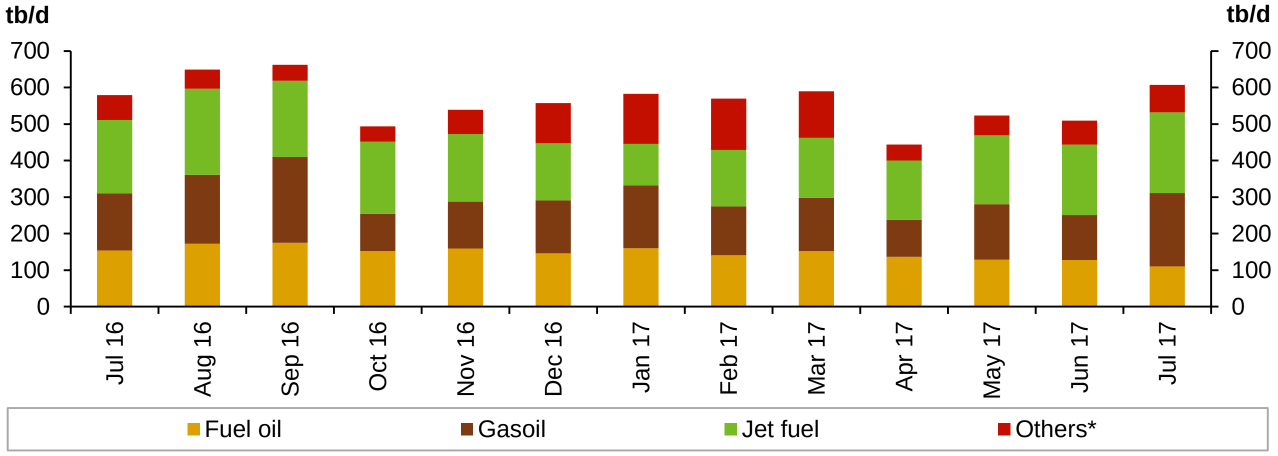
*Note: *Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

As for the **crude oil suppliers' shares**, Saudi Arabia, as in the previous month, came in as the top crude supplier to Japan, holding a share of 40% of total crude exports, up by 358 tb/d, or 37%, from last month. At the same time, these volumes were higher than the previous year by 277 tb/d, or 26%. UAE came in as the second largest supplier to Japan with a share of 21% of total crude imports. Qatar came in the third ranking, holding a share of 8%.

On the other hand, **Japan's product imports** dropped slightly in July by 13 tb/d to average 532 tb/d, annually, product imports were lower by 18 tb/d, or 3%. The monthly drop came mainly as a result of lower imports of gasoline, fuel oil and jet fuel. Japan's product sales in the country were down by 1.2% y-o-y.

Japan's product exports rose in July from the previous month by 98 tb/d to average 607 tb/d. Annually, they increased by 28 tb/d, or 19%.

Graph 8 - 4: Japan's exports of petroleum products



**Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Accordingly, **Japan's net imports** increased in July by 430 tb/d to average 3.3 mb/d, reflecting a monthly gain of 15% and an annual increase of 4%.

Table 8 - 2: Japan's crude and product net imports, tb/d

	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17
Crude oil	2,782	2,807	3,349	542
Total products	65	36	-75	-111
Total crude and products	**2,847**	**2,843**	**3,274**	**430**

Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

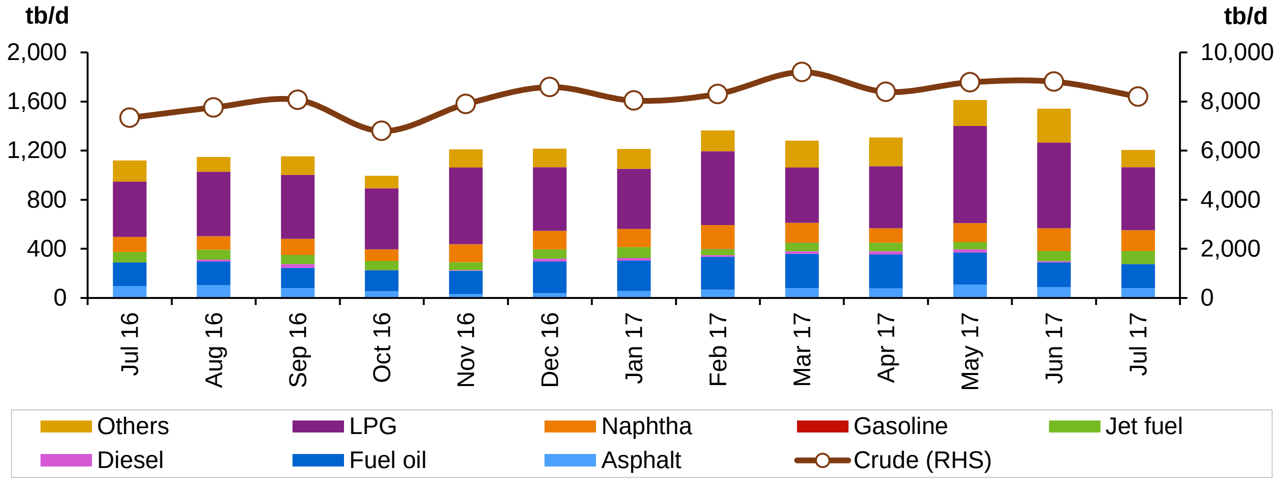
China

China's crude oil imports dropped in July by 608 tb/d, or 7%, from the previous month to average 8.2 mb/d, while crude imports in the previous month reached the second highest level on record. Despite the monthly decline, China's crude imports remained at high levels, showing an increase by 866 tb/d, or 12%, y-o-y. The monthly drop came in line with lower refinery throughput, which decreased from the previous month by almost 500 tb/d.

In terms of the **crude oil suppliers' shares**, Russia was the main supplier to China in July as its exports to China averaged 1.2 mb/d, although its volumes dropped by 99 tb/d from one month before, Saudi Arabia came in as the second top crude supplier to China for this month, holding a share of 12%, to average 942 tb/d, almost the same level as one month before.

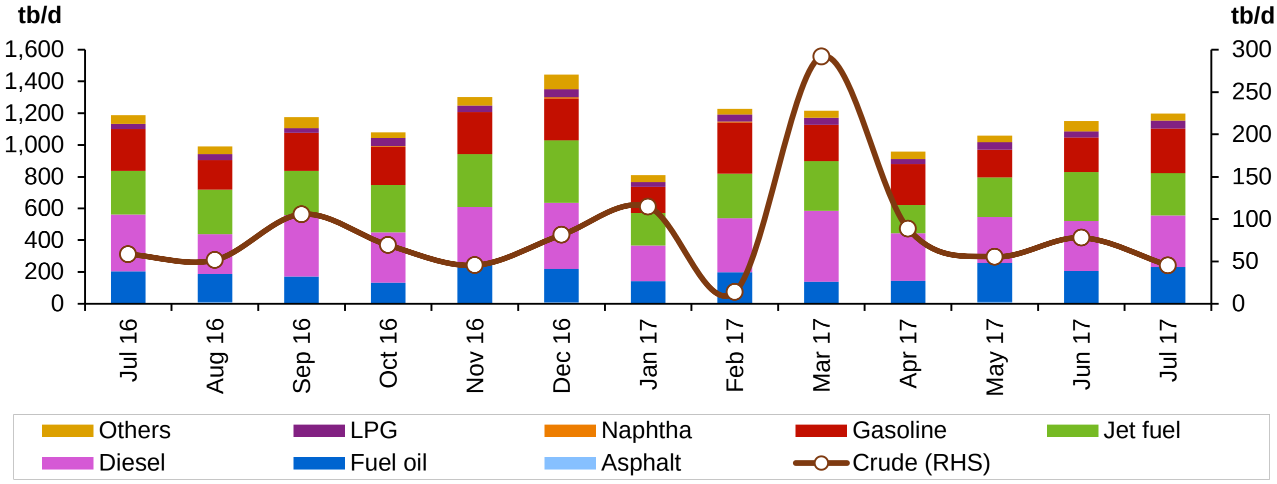
On the other hand, **China's product imports** decreased in July by 337 tb/d from the previous month, while they remained above the previous year by 86 tb/d to average 1.2 mb/d. The decline in product imports came as a result of lower imports of Petcoke and LPG.

Graph 8 - 5: China's imports of crude and petroleum products



Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

Graph 8 - 6: China's exports of crude and petroleum products



Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

As a result, **China's net oil imports** dropped by 959 tb/d, or 10%, from the previous month, while they remained 13% higher than a year earlier.

Table 8 - 3: China's crude and product net imports, tb/d

	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17
Crude oil	8,728	8,733	8,157	-576
Total products	554	391	8	-383
Total crude and products	**9,282**	**9,123**	**8,165**	**-959**

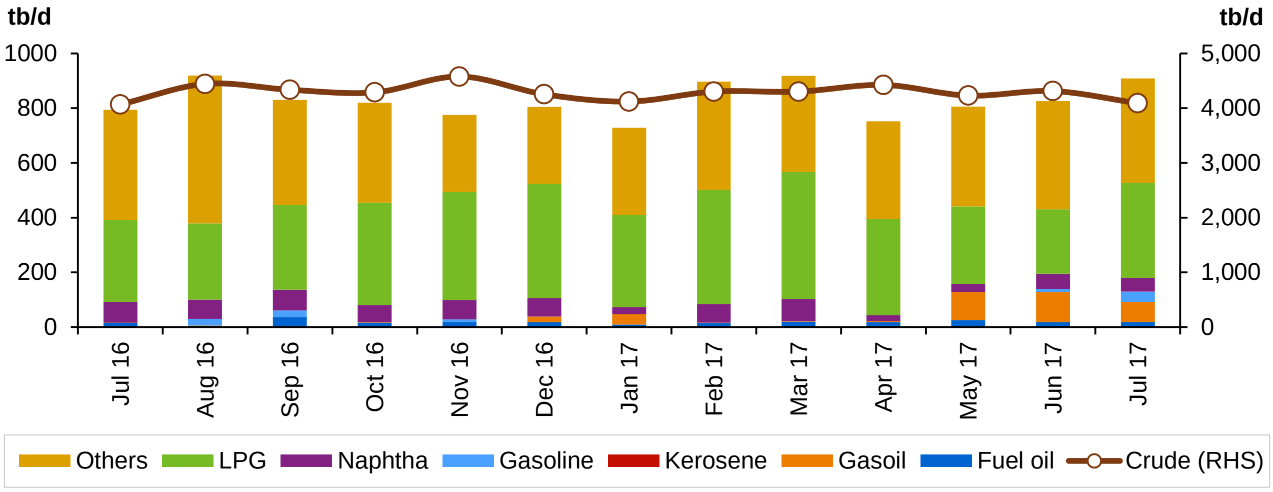
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

In July, **India's crude imports** averaged 4.1 mb/d, which is 222 tb/d, or 5%, lower than the level in previous month. India's refinery throughput went down slightly from one month before. On an annual basis, it increased slightly by 24 tb/d, or 1%.

Product imports went up in July by 84 tb/d, or 10%, from a month ago to average 909 tb/d y-o-y, reflecting a gain of 114 tb/d, or 14%, y-o-y. They remain supported by strong demand in the country. The monthly increase in product imports came mainly as a result of higher imports of LPG, while diesel imports went down from the previous month.

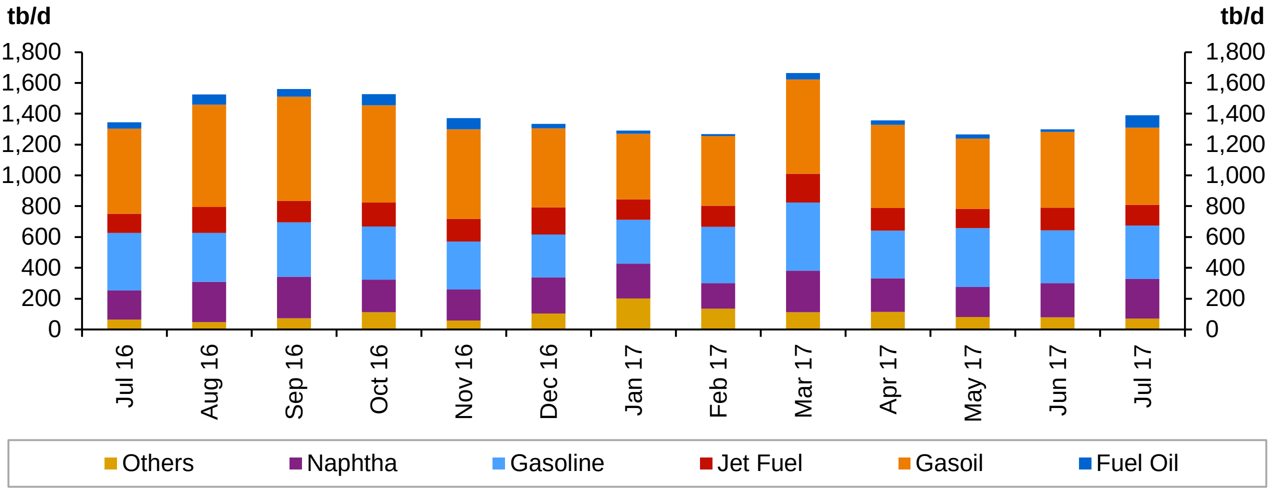
Graph 8 - 7: India's imports of crude and petroleum products



Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

India's product exports rose in July by 92 tb/d from the previous month to average 1.4 mb/d, the highest level since March 2017, while they increased by 45 tb/d, or 3%, from a year earlier. Monthly exports of almost all products increased.

Graph 8 - 8: India's exports of petroleum products



Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

Consequentially, **India's net imports** declined by 230 tb/d to average 3.6 mb/d, which is 6% lower than last month, while they remained 3% higher than a year ago.

Table 8 - 4: India's crude and product net imports, tb/d

	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17
Crude oil	4,227	4,311	4,089	-222
Total products	-461	-474	-482	-8
Total crude and products	**3,767**	**3,836**	**3,607**	**-230**

Note: India data table does not include information for crude import and product export by Reliance Industries.
Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

FSU

In July, **total crude oil exports** from the former Soviet Union (FSU) went down from the previous month, declining by 232 tb/d, to average 6.6 mb/d. Crude exports through Russian pipelines saw a minor drop as they declined by 62 tb/d, or 2%, to average 3.8 mb/d.

Total shipments from the **Druzhba pipeline** dropped by 44 tb/d, or 5%, to average 492 tb/d. Exports through Kozmino increased by 75 tb/d to average 671 tb/d in July.

Exports from the **Baltics** declined by 44 tb/d to average 1.3 mb/d in July.

Black Sea total exports went down by 56 tb/d, mainly as the Novorossiyk port terminal decreased its exports to average 575 tb/d. In the **Mediterranean Sea**, BTC supplies declined by 8 tb/d, or 1%, from the previous month to average 691 tb/d.

FSU total product exports went down in July from the previous month by 233 tb/d, or 7%, to average 2.9 mb/d. This decline came as a result of a drop in all exported products, with the exception of VGO, which increased from last month by 41 tb/d.

Table 8 - 5: Recent FSU exports of crude and petroleum products by sources, *tb/d*

			2016	1Q2017	2Q2017	Jun 17	Jul 17
Transneft system							
	Europe	**Black sea total**	**600**	**558**	**673**	**631**	**575**
		Novorossiysk port terminal - total	600	558	673	631	575
		of which: Russian oil	443	387	499	467	417
		Others	157	172	174	165	158
		Baltic sea total	**1,593**	**1,650**	**1,576**	**1,347**	**1,303**
		Primorsk port terminal - total	1,000	1,011	895	651	745
		of which: Russian oil	1,000	1,011	895	651	745
		Others	0	0	0	0	0
		Ust-Luga port terminal - total	593	639	681	695	557
		of which: Russian oil	388	464	514	528	395
		Others	205	175	166	168	163
		Druzhba pipeline total	**1,072**	**987**	**988**	**986**	**942**
		of which: Russian oil	1,040	954	956	954	909
		Others	32	32	32	32	32
	Asia	**Pacific ocean total**	**646**	**617**	**662**	**595**	**671**
		Kozmino port terminal - total	646	617	662	595	671
		China (via ESPO pipeline) total	**335**	**342**	**318**	**342**	**349**
		China Amur	335	342	318	342	349
	Total Russian crude exports		**4,246**	**4,153**	**4,217**	**3,901**	**3,839**
Lukoil system							
	Europe &	**Barents sea total**	**159**	**183**	**192**	**190**	**159**
	North America	Varandey offshore platform	159	183	192	190	159
	Europe	**Baltic sea total**	**15**	**14**	**13**	**13**	**13**
		Kalinigrad port terminal	15	14	13	13	13
Other routes							
	Asia	**Russian Far East total**	**360**	**381**	**369**	**361**	**374**
		Aniva bay port terminal	119	138	112	100	121
		De Kastri port terminal	241	243	257	261	253
		Central Asia total	**194**	**230**	**282**	**275**	**254**
		Kenkiyak-Alashankou	194	230	282	275	254
	Europe	**Black sea total**	**1,078**	**1,239**	**1,330**	**1,337**	**1,213**
		Novorossiysk port terminal (CPC)	957	1,144	1,241	1,237	1,141
		Supsa port terminal	79	74	81	90	64
		Batumi port terminal	42	21	8	10	9
		Kulevi port terminal	0	0	0	0	0
		Mediterranean sea total	**668**	**674**	**702**	**699**	**691**
		BTC	668	674	702	699	691
Russian rail							
		Russian rail	**34**	**44**	**35**	**39**	**39**
		of which: Russian oil	30	44	35	39	39
		Others	4	0	0	0	0
	Total FSU crude exports		**6,754**	**6,919**	**7,142**	**6,814**	**6,582**
Products							
		Gasoline	189	188	226	255	210
		Naphtha	509	594	533	539	469
		Jet	40	32	42	34	34
		Gasoil	971	1,188	1,018	1,041	905
		Fuel oil	1,044	1,162	1,057	1,004	981
		VGO	305	346	285	263	304
	Total FSU product exports		**3,058**	**3,510**	**3,161**	**3,136**	**2,903**
Total FSU oil exports			**9,812**	**10,429**	**10,302**	**9,950**	**9,485**

Sources: Argus Nefte Transport and Argus Global Markets.

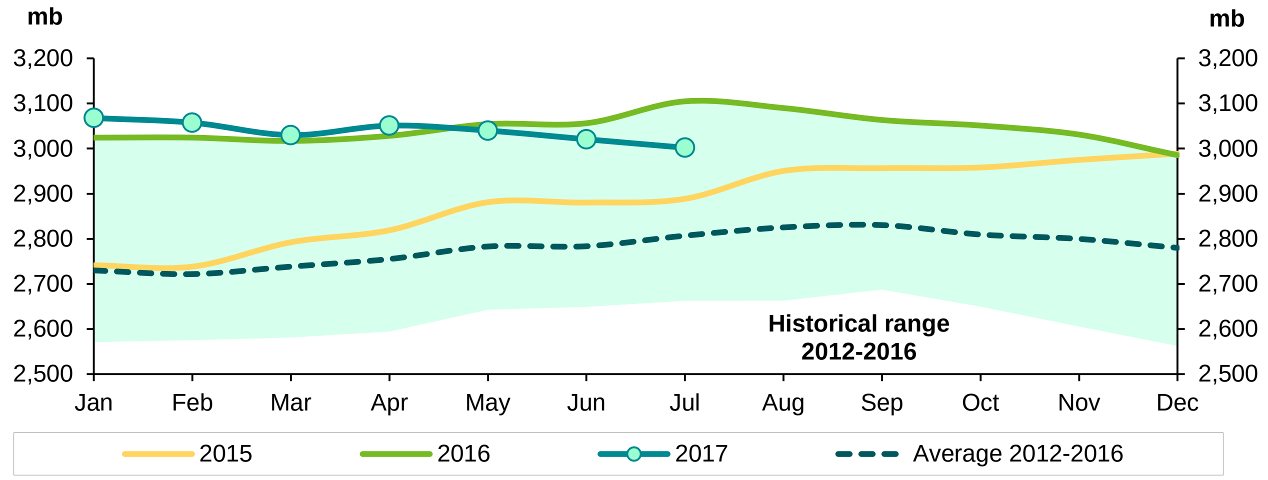
Stock Movements

OECD commercial oil stocks fell by 18.7 mb in July to stand at 3,002 mb, which is around 195 mb above the latest five-year average. Crude and products indicated surpluses of 123 mb and 72 mb above the seasonal norm, respectively. In terms of days of forward cover, OECD commercial stocks stood at 62.9 days in July, which is 2.7 days higher than the latest five-year average. Preliminary data for August shows that US total commercial oil stocks fell by 6 mb to stand at 1,310.4 mb, indicating a surplus of 127 mb above the latest five-year average. Within the components, crude fell by 19.5 mb, while products rose by 13.6 mb. The latest information for China showed that total commercial oil inventories decreased by 5.7 mb in July to stand at 380.6 mb. Within the components, crude stocks rose by 2.1 mb, while product stocks were 7.8 mb lower m-o-m.

OECD

Preliminary data for July shows that total **OECD commercial oil stocks** fell by 18.7 mb m-o-m to stand at 3,002 mb, which is a reduction for the third consecutive month and is around 103 mb lower than the same time one year ago, but 195 mb above the latest five-year average. Within the components, crude and products fell by 15.3 mb and 3.4 mb, m-o-m, respectively. OECD America witnessed stockdraws, while OECD Europe and OECD Asia Pacific saw builds.

Graph 9 - 1: OECD's commercial oil stocks



Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.

OECD commercial crude stocks fell by 15.3 mb m-o-m in July for the fourth consecutive month to stand at 1,494 mb, which is 36 mb below the same time a year ago and around 123 mb higher than the latest five-year average. While OECD Americas stocks witnessed a draw, OECD Europe and OECD Asia Pacific experienced stock builds in commercial crude.

OECD product inventories also fell by 3.4 mb m-o-m in July to stand at 1,508 mb, which is 67 mb below the same time a year ago, but 72 mb above the seasonal norm. OECD Americas witnessed stock draws, while OECD Europe and OECD Asia Pacific saw stock builds.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.4 days in July to stand at 62.9 days, which is 2.4 days less than the same period in 2016, but 2.7 days higher than the latest five-year average. Within the regions, OECD Americas had 3.5 more days of forward cover than the historical average to stand at 62.1 days in July. OECD Europe stood 2.9 days higher than the seasonal average to finish the month at 69.0 days, while OECD Asia Pacific indicated a deficit of 0.3 days lower than the seasonal norm, averaging 54.0 days in July.

OECD Americas

Total commercial stocks in OECD Americas fell by 28.2 mb in July for the sixth consecutive month to stand at 1,578 mb, which was 58 mb below a year ago, but 135 mb higher than the seasonal norm. Within the components, crude and products stocks fell by 21.0 mb and 7.2 mb, m-o-m, respectively.

At the end of July, **commercial crude oil stocks** in OECD Americas fell, ending the month at 812 mb, which was 29.5 mb below the same time one year ago and 96 mb above the latest five-year average.

The drop in commercial crude stocks was mainly driven by higher refinery runs combined with lower crude imports.

Commercial product stocks in OECD Americas also fell by 7.2 mb, m-o-m, in July, reversing the massive build of the last three months. At 766 mb, they were 28 mb less than the same time one year ago, but 39 mb higher than the seasonal norm. This drop was mainly driven by higher US consumption, especially gasoline demand during driving season.

OECD Europe

OECD Europe's **total commercial stocks** rose by 5.3 mb in July, ending the month at 1,003 mb, which was 25 mb lower than the same time a year ago and 68 mb above the latest five-year average. Crude and product stocks rose by 3.0 mb and 2.4 mb, m-o-m, respectively.

OECD Europe's **commercial crude stocks** rose in July to stand at 434 mb, which was 2.9 mb higher than a year earlier and 34 mb higher than the latest five-year average. This build could be attributed to higher domestic North Sea production as higher refinery throughput went down in July compared to June.

OECD Europe's **commercial product stocks** also rose by 2.4 mb to end July at 569 mb, which was 27 mb lower than the same time a year ago, but 34 mb higher than the seasonal norm. The build in product stocks could be attributed to lower demand in the European countries.

OECD Asia Pacific

OECD Asia Pacific's **total commercial oil stocks** rose by 4.1 mb in July to stand at 421 mb, which was 20.7 mb lower than a year ago and 8.4 mb lower than the five-year average. Within the components, crude and product stocks rose by 2.7 mb and 1.4 mb, m-o-m, respectively.

Crude inventories ended the month of July at 248 mb, which were 9.1 mb below a year ago and 7.5 mb below the seasonal norm.

OECD Asia Pacific's total **product inventories** ended July at 173 mb, standing 11.5 mb lower than the same time a year ago and 0.8 mb lower than the seasonal norm.

Table 9 - 1: OECD's commercial stocks, mb

	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17	Jul 16
Crude oil	1,535	1,510	1,494	-15.3	1,530
Products	1,505	1,511	1,508	-3.4	1,575
Total	**3,040**	**3,021**	**3,002**	**-18.7**	**3,105**
Days of forward cover	**63.9**	**63.2**	**62.9**	**-0.4**	**65.3**

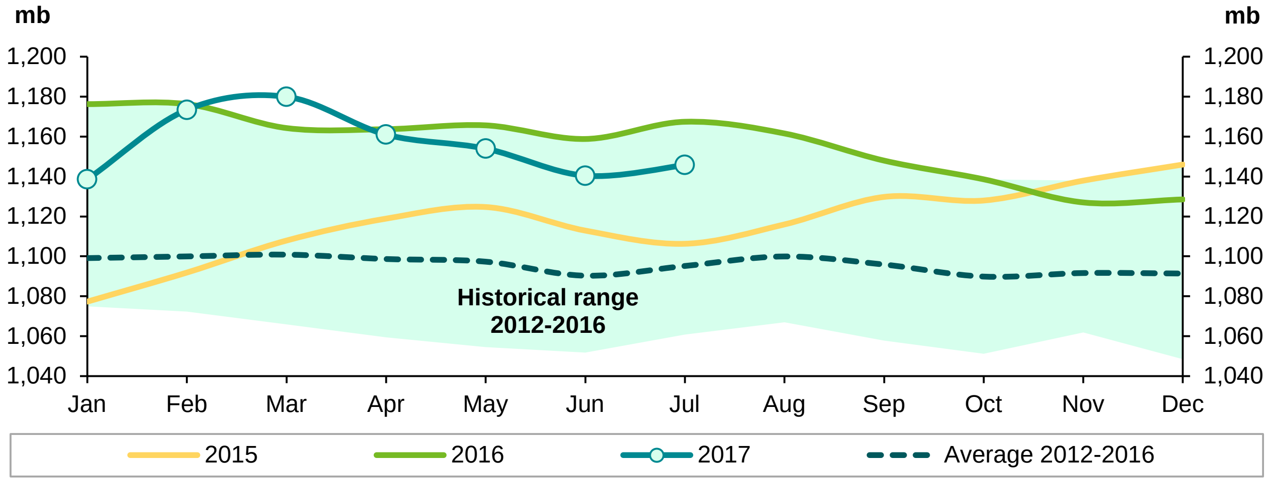
Note: Totals may not add up due to independent rounding.

Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.

EU plus Norway

Preliminary data for July shows that **total European stocks** rose by 5.3 mb, following a drop of 13.6 mb in June. At 1,146 mb, European stocks are 21.7 mb, or 1.9%, lower than the same time a year ago but 50.6 mb, or 4.6%, higher than the latest five-year average. Within the components, crude and product stocks went up by 3.0 mb and 2.4 mb, m-o-m, respectively.

Graph 9 - 2: EU-15 plus Norway's total oil stocks



Source: Euroilstock.

European **crude inventories** rose in July to stand at 490.1 mb, which is 1.9 mb, or 0.4%, lower than the same period a year ago. Compared to the seasonal average, they were 13.6 mb, or 2.9%, higher. The build in crude oil stocks came despite higher refinery throughput as European refiners were running at around 10.6 mb/d in July, which is about 200 tb/d higher than during June.

European **product stocks** also rose by 2.4 mb m-o-m, ending July at 655.7 mb, which was 19.8 mb, or 2.9%, lower than the same time a year ago and 37.0 mb, or 6.0%, above the seasonal norm. Within products, distillate and naphtha stocks saw builds, while residual fuel oil and gasoline inventories witnessed draws.

Distillate stocks rose also by 3.1 mb in July to end the month at 445.1 mb, indicating a decline of 10.8 mb, or 2.4%, from the same time a year ago, but 39.9 mb, or 9.8%, above the latest five-year average. The surplus was the narrowest since January. However, middle distillate inventories may fall in the coming month because of a shutdown at Shell's 420,000 b/d Pernis refinery, the major regional supplier of middle distillates.

In contrast, **gasoline stocks** fell by 1.5 mb in July, ending the month at 114.4 mb, which was 4.5 mb, or 3.8%, lower than the same time one year ago, and 5.6 mb, or 5.2%, higher than the seasonal norm. Higher demand combined with lower output was behind the drop in gasoline stocks.

Residual fuel oil stocks also fell slightly by 0.1 mb in July to stand at 69.0 mb, which was 8.1 mb, or 10.5%, less than the same month a year ago, and 10.4 mb, or 13.1%, lower than the latest five-year average.

Table 9 - 2: EU-15 plus Norway's total oil stocks, mb

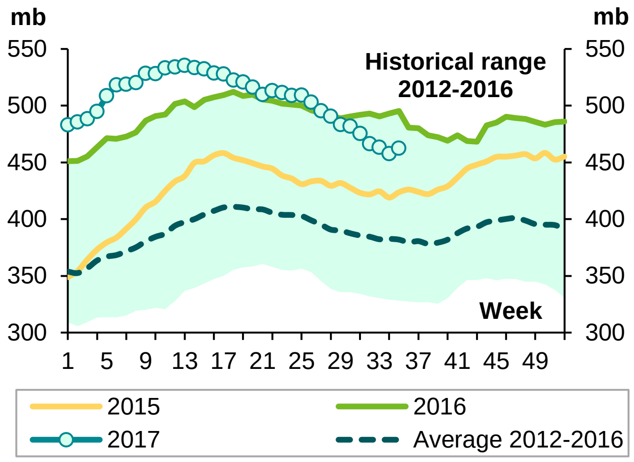
	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17	Jul 16
Crude oil	**490.3**	**487.1**	**490.1**	**3.0**	**491.9**
Gasoline	117.9	115.9	114.4	-1.5	119.0
Naphtha	25.5	26.4	27.3	0.9	23.7
Middle distillates	452.0	442.0	445.1	3.1	455.8
Fuel oils	68.3	69.0	69.0	-0.1	77.1
Total products	**663.7**	**653.4**	**655.7**	**2.4**	**675.5**
Total	**1,154.0**	**1,140.4**	**1,145.8**	**5.3**	**1,167.4**

Sources: Argus and Euroilstock.

US

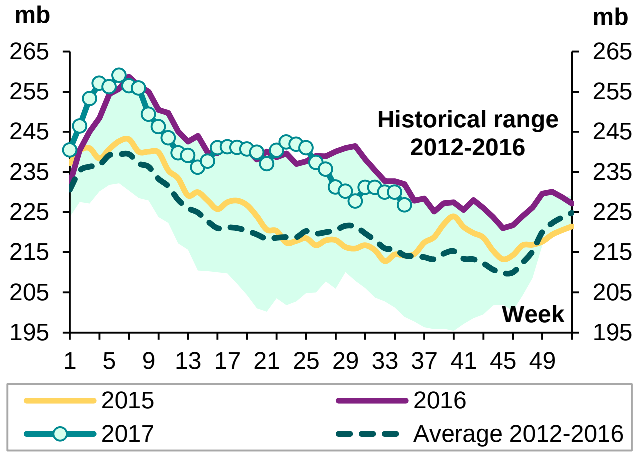
Preliminary data for August shows that **US total commercial oil stocks** fell by 6 mb, for the third consecutive month to stand at 1,310.4 mb. At this level, they were 57 mb, or 4.2%, lower than the same period a year ago, but 127 mb, or 10.8%, higher than the latest five-year average. Within the components, crude fell by 19.5 mb, while product stocks rose by 13.6 mb, m-o-m.

Graph 9 - 3: US weekly commercial crude oil inventories



Sources: US Energy Information Administration and OPEC Secretariat.

Graph 9 - 4: US weekly gasoline inventories



Sources: US Energy Information Administration and OPEC Secretariat.

Across the months of July and August, there were nine consecutive weeks of crude commercial oil stock draws in the US. This amounts to a total drawdown of over 51 mb, compared to the same period in 2016 when US crude oil stock levels were relatively flat, US commercial stocks rose in the week ending 1 September by 4.6 mb to stand at 462.4 mb. At this level, they were 21.3 mb, or 4.4%, below the level of last year at the same time, but still 79.5 mb, or 21%, above the latest five-year average.

The build in commercial crude stocks was driven by lower refinery crude runs as a result of Hurricane Harvey. Indeed, US crude oil refinery inputs averaged 14.5 mb/d during the week ending 1 September 2017, about 3.3 mb/d less than the previous week. Refineries operated at 79.7% compared to 96.6% last week. Crude oil imports fell by 820,000 b/d to average 7.1 mb/d and exports also was off by 750,000 b/d to just 150,000 b/d. Crude inventories in Cushing, Oklahoma rose by 0.8 mb w-o-w during the week ending 1 September, to stand at 58.0 mb.

In contrast, **total product stocks** rose by 13.6 mb in August m-o-m to stand at 848.1 mb. At this level, they were 36 mb, or 4.1%, down from the level seen at the same time in 2016, but 48 mb, or 6.0%, above the seasonal average. Within products, propylene and other unfinished products rose, while major products experienced stock draws.

Shuttering refinery units resulted in a drop of 3.2 mb and 1.4 mb w-o-w in **gasoline and distillates inventories.** At 226.7 mb, gasoline inventories stood at 3.2 mb or 1.4% below a year ago at the same time, while they remained 11 mb, or 5.1%, above the seasonal norm. During the week ending 1 September 2017, gasoline production decline by 1.1 mb/d, with the total of the decline located in PADD 3 as refiners near the GoM shut operations. Gasoline demand also fell by about 680,000 b/d to average 9.2 mb/d, reflecting slow economic activity.

Distillate stocks stood at 147.8 mb at the end of August, indicating a deficit of 11.8 mb, or 7.4%, over the same period a year ago, and 8.4 mb, or 6.0%, above the latest five-year average. During the week ending 1 September 2017, distillate production fell by 560,000 b/d leading to the drop in distillate stocks w-o-w.

Residual fuel rose by 0.9 mb m-o-m to end August at 34.6 mb, while **jet fuel stocks** fell by 1.2 mb ending August at 39.1 mb. Both products stocks stood below last year at the same time and less than the five-year average.

The overall impact of Hurricane Harvey on the US market will be very difficult to assess and it will take weeks to analyse the full effects on crude oil production as well on crude and products net imports. One option could be postponing refinery maintenance, which will potentially boost crude runs in the upcoming months and would compensate for the loss.

Table 9 - 3: US onland commercial petroleum stocks, mb

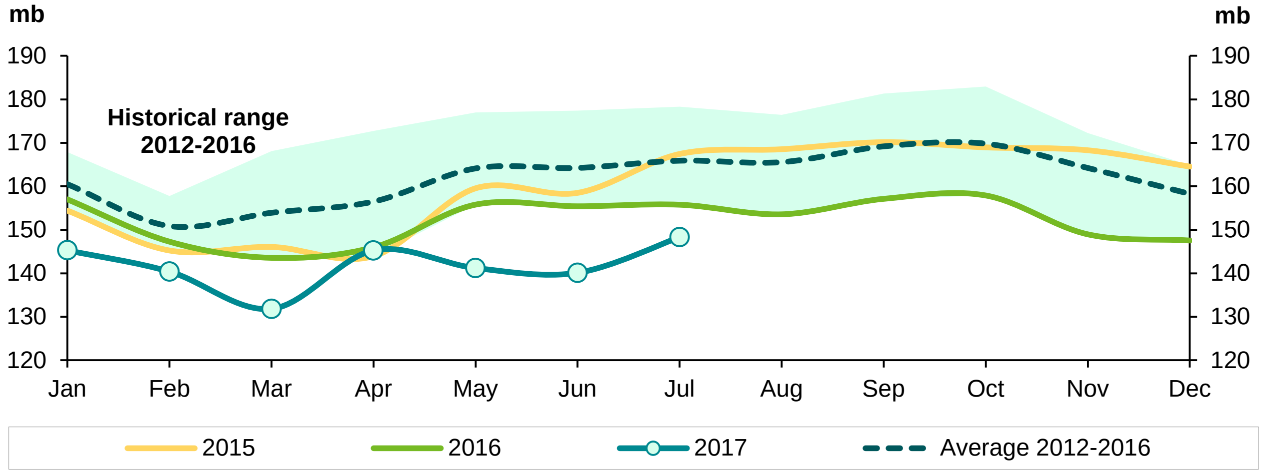
	Jun 17	Jul 17	Aug 17	Change Aug 17/Jul 17	Aug 16
Crude oil	**502.9**	**481.9**	**462.4**	**-19.5**	**483.6**
Gasoline	237.3	227.7	226.7	-0.9	229.9
Distillate fuel	150.4	149.4	147.8	-1.6	159.5
Residual fuel oil	36.7	33.7	34.6	0.9	39.6
Jet fuel	41.0	40.4	39.1	-1.2	42.7
Total	**1,338.8**	**1,316.4**	**1,310.4**	**-6.0**	**1,367.7**
SPR	**682.0**	**678.9**	**678.6**	**-0.3**	**695.1**

Sources: US Energy Information Administration and OPEC Secretariat.

Japan

In Japan, **total commercial oil stocks** rose by 8.2 mb in July, reversing the stock-draw of the last two months. At 148.3 mb, they were 7.4 mb, or 4.8%, less than the same time a year ago and 17.6 mb, or 10.6%, below the five-year average. Within the components, crude and products stocks rose by 5.5 mb and 2.8 mb, m-o-m, respectively.

Graph 9 - 5: Japan's commercial oil stocks



Source: Ministry of Economic, Trade and Industry of Japan.

Japanese **commercial crude oil stocks** rose in July to stand at 86.5 mb, which was 6.9 mb, or 7.4%, below the same period a year ago, and 12.9 mb, or 13.0%, below the seasonal norm. The build was driven by higher crude imports, which rose by 540,000 b/d, or 19.3%, to average 3.3 mb/d. However, higher crude throughput limited a further build in crude oil stocks. Crude runs rose by 340,000 b/d, or 12.1%, to stand at 3.2 mb/d.

Japan's **total product inventories also** rose by 2.8 mb m-o-m to stand at 61.8 mb in July, which was slightly less than the same month in the previous year, but 4.6 mb, or 7.0%, lower than the seasonal norm. Within products, gasoline stocks went down, while others products witnessed a stock-build.

Distillate stocks rose by 1.7 mb in July to stand at 27.2 mb, which was 2.3 mb, or 7.9%, below the same time one year ago, and 2.2 mb, or 7.6%, below the seasonal average. Within the distillate components, jet fuel and kerosene stocks rose by 1.4% and 16.7%, respectively, while gasoil fell by 1.1%, m-o-m.

Total residual fuel oil stocks also rose by 0.4 mb in July to stand at 13.9 mb, which was 0.8 mb, or 6.1% higher than the same period a year ago, but 1.1 mb, or 7.5%, below the latest five-year average. Within the fuel oil components, fuel oil A and fuel B.C rose by 2.8% and 3.4%, respectively. The build in both products was driven by higher output.

In contrast**, gasoline stocks** fell in July by 0.9 mb to stand at 10.4 mb, which was 0.1 mb, or 1.3%, higher than the same time a year ago, but 1.2 mb, or 10.3%, below the latest five-year average. The fall was driven by higher domestic sales, which rose by 13.0% from the previous month.

Table 9 - 4: Japan's commercial oil stocks*, mb

	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17	Jul 16
Crude oil	**81.6**	**81.1**	**86.5**	**5.5**	**93.4**
Gasoline	11.9	11.3	10.4	-0.9	10.6
Naphtha	9.0	8.7	10.3	1.6	9.1
Middle distillates	24.8	25.6	27.2	1.7	29.6
Residual fuel oil	14.0	13.5	13.9	0.4	13.1
Total products	**59.6**	**59.0**	**61.8**	**2.8**	**62.3**
Total**	**141.2**	**140.1**	**148.3**	**8.2**	**155.8**

*Note: * At the end of the month.*
*** Includes crude oil and main products only.*
Source: Ministry of Economy, Trade and Industry of Japan.

China

The latest information for China showed that **total commercial oil inventories** fell by 5.7 mb to settle at 380.6 mb, which is 0.5 mb lower than the previous year. Within the components, crude stocks rose by 2.1 mb, while product stocks were 7.8 mb lower m-o-m.

In July, **commercial crude stocks** rose by 2.1 mb, for the fourth consecutive month to stand at 233.8 mb, which is 14.7 mb above last year at the same time. This build was driven mainly by lower crude throughput, which declined by 1.3%; however, lower domestic crude imports limited further builds in crude oil stocks.

Total product stocks in China also shrank in July to stand at 146.7 mb, which is 15.2 mb below the same time a year ago. Within products, jet/kerosene witnessed builds, while gasoline and diesel inventories saw declines.

Gasoline stocks fell by 4.9 mb in July to stand at 64.8 mb, which is 3.8 mb lower than the same period a year ago.

Diesel inventories also fell by 3.9 mb in July to stand at 62.5 mb. At this level, diesel stocks are 11.1 mb below a year ago at the same time. The drop in both products was driven by lower gasoline output due to the decline in crude oil throughput.

In contrast, **kerosene stocks** rose in July by 0.9 mb to stand at 19.5 mb, which is 0.3 mb lower than the same time last year.

Table 9 - 5: China's commercial oil stocks, mb

	May 17	Jun 17	Jul 17	Change Jul 17/Jun 17	Jul 16
Crude oil	**222.3**	**231.7**	**233.8**	**2.1**	**219.1**
Gasoline	71.3	69.7	64.8	-4.9	68.6
Diesel	64.2	66.4	62.5	-3.9	73.6
Jet/Kerosene	18.7	18.6	19.5	0.9	19.8
Total products	**154.2**	**154.6**	**146.7**	**-7.8**	**161.9**
Total	**376.6**	**386.3**	**380.6**	**-5.7**	**381.1**

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

Singapore

At the end of July, **product stocks** in Singapore rose by 6.4 mb to stand at 49.9 mb, which is 5.3 mb, or 9.5%, below the same period a year ago. Within products, all products witnessed stock builds.

Middle distillate and light distillate stocks rose in July by 2.7 mb and 2.2 mb to stand at 13.2 mb and 13.2 mb, respectively. The stocks build in both products was driven by higher imports to the region. Both product stocks remained below the same time one year ago.

R**esidual fuel oil stocks** rose by 1.5 mb in July for the second consecutive month. At 23.5 mb, fuel oil stocks stood at 3.1 mb, or 11.8%, lower than the same period a year ago.

Amsterdam-Rotterdam-Antwerp (ARA)

Product stocks in ARA fell by 2.4 mb in July to end the month at 41.7 mb, which is 5.7 mb, or 12.1%, lower than at the same time a year ago. Within products, the picture was mixed, gasoline and fuel oil stocks went up, while gasoil and jet oil inventories saw a drop.

Gasoline and fuel oil rose by 0.3 mb and 0.4 mb in July to stand at 7.6 mb and 6.9 mb, respectively. Fuel oil stocks remained 1.5 mb, or 28%, above the same time a year ago, while gasoil stood at 2.9 mb, or 27%, below last year at the same time.

Gasoil and jet oil inventories fell by 1.1 mb and 0.6 mb in July to stand at 20.6 mb and 4.5 mb, respectively. Gasoil stocks stood at 3.4 mb, or 14%, below the same time a year ago, while jet oil stocks remained at 0.7 mb or 14% less than the same time a year ago.

Balance of Supply and Demand

Based on the current global oil supply/demand balance, OPEC crude in 2017 is estimated at 32.7 mb/d, around 0.5 mb/d higher than in 2016. Similarly, OPEC crude in 2018 is estimated at 32.8 mb/d, about 0.2 mb/d higher than in 2017.

Balance of supply and demand in 2017

Based on the current global oil supply/demand balance, **OPEC crude in 2017** was revised up by 0.2 mb/d from the previous report driven mainly by the upward revision in demand. Within the quarters, the second quarter was revised up by 0.3 mb/d, while the first, third and fourth quarters were revised up each by 0.2 mb/d. As a result, OPEC crude is estimated at 32.7 mb/d, representing an increase of 0.5 mb/d from the 2016 level. The first and the second quarters increased by 0.9 mb/d and 0.3 mb/d, respectively, while the third and fourth quarters are expected to grow by 0.3 mb/d and 0.4 mb/d, respectively.

Table 10 - 1: Supply/demand balance for 2017*, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017	*Change* 2017/16
(a) World oil demand	**95.35**	**95.54**	**96.05**	**97.57**	**97.91**	**96.77**	**1.42**
Non-OPEC supply	57.02	57.87	57.56	57.53	58.23	57.80	0.78
OPEC NGLs and non-conventionals	6.14	6.20	6.26	6.35	6.42	6.31	0.17
(b) Total non-OPEC supply and OPEC NGLs	**63.16**	**64.08**	**63.82**	**63.88**	**64.64**	**64.10**	**0.94**
Difference (a-b)	**32.19**	**31.46**	**32.23**	**33.70**	**33.27**	**32.67**	**0.48**
OPEC crude oil production	**32.65**	**32.13**	**32.29**				
Balance	**0.46**	**0.67**	**0.06**				

*Note: * 2017 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Balance of supply and demand in 2018

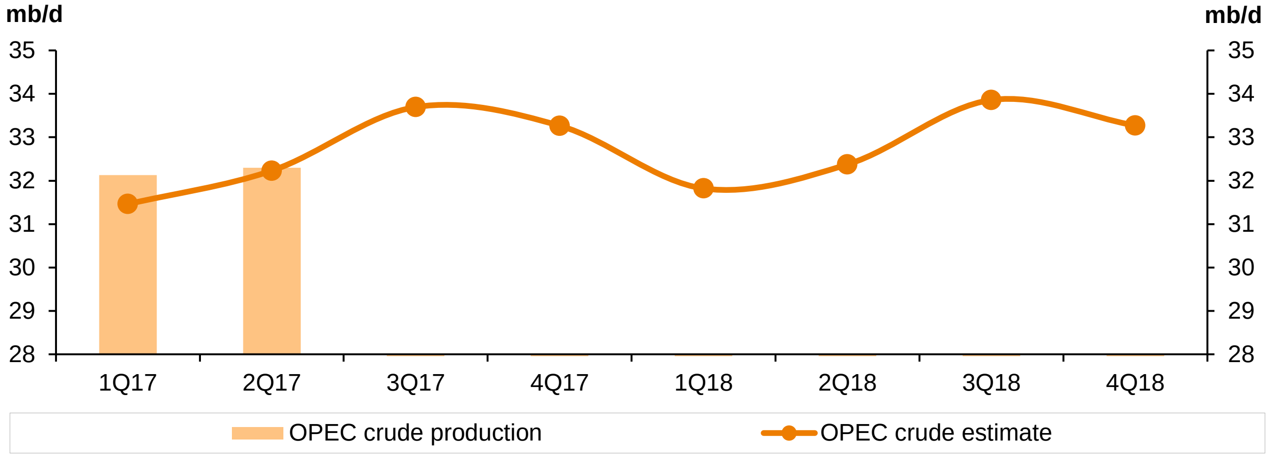
Similarly**, OPEC crude in 2018** was revised up by 0.4 mb/d from the previous month. Within the quarters, the first quarter was revised up by 0.1 mb/d, while the second, third and fourth quarters were revised up by 0.5 mb/d, 0.6 mb/d and 0.5 mb/d, respectively. OPEC crude is estimated at 32.8 mb/d, which is around 0.2 mb/d higher than the 2017 level. The first quarter is expected to increase by 0.4 mb/d, while the second and the third quarters are expected to increase by 0.1 mb/d and 0.2 mb/d, respectively. The fourth quarter is estimated to remain unchanged compared to the same quarter in 2017.

Table 10 - 2: Supply/demand balance for 2018*, mb/d

	2017	1Q18	2Q18	3Q18	4Q18	2018	Change 2018/17
(a) World oil demand	**96.77**	**96.87**	**97.39**	**98.91**	**99.30**	**98.12**	**1.35**
Non-OPEC supply	57.80	58.61	58.54	58.55	59.50	58.80	1.00
OPEC NGLs and non-conventionals	6.31	6.44	6.47	6.50	6.53	6.49	0.18
(b) Total non-OPEC supply and OPEC NGLs	**64.10**	**65.05**	**65.01**	**65.05**	**66.03**	**65.29**	**1.18**
Difference (a-b)	**32.67**	**31.82**	**32.37**	**33.86**	**33.27**	**32.83**	**0.17**

*Note: * 2018 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Graph 10 - 1: Balance of supply and demand, 2017-2018*



*Note: * 2017 and 2018 = Forecast.*
Source: OPEC Secretariat.

Appendix

Table 11 - 1: World oil demand and supply balance, mb/d

	2014	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
World demand													
OECD	45.8	46.4	46.8	46.9	46.7	47.6	47.6	47.2	47.2	46.9	47.9	47.8	47.5
Americas	24.2	24.6	24.7	24.5	24.9	25.3	25.0	24.9	24.7	25.0	25.5	25.2	25.1
Europe	13.5	13.8	14.0	13.8	14.1	14.5	14.3	14.2	13.9	14.2	14.6	14.3	14.3
Asia Pacific	8.1	8.1	8.1	8.6	7.7	7.8	8.3	8.1	8.6	7.7	7.8	8.3	8.1
DCs	30.1	30.8	31.4	31.5	31.9	32.4	32.0	32.0	32.1	32.5	33.0	32.7	32.6
FSU	4.7	4.6	4.6	4.5	4.4	4.8	5.1	4.7	4.6	4.5	4.9	5.2	4.8
Other Europe	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	10.8	11.5	11.8	11.9	12.4	12.1	12.4	12.2	12.2	12.8	12.4	12.8	12.5
(a) Total world demand	**92.0**	**94.0**	**95.4**	**95.5**	**96.0**	**97.6**	**97.9**	**96.8**	**96.9**	**97.4**	**98.9**	**99.3**	**98.1**
Non-OPEC supply													
OECD	24.3	25.3	24.8	25.4	25.1	25.4	25.9	25.5	26.3	26.2	26.4	27.0	26.5
Americas	20.1	21.1	20.6	21.1	20.9	21.3	21.6	21.3	21.9	21.9	22.1	22.5	22.1
Europe	3.6	3.8	3.8	3.9	3.8	3.6	3.9	3.8	3.9	3.8	3.8	4.0	3.9
Asia Pacific	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4
DCs	11.8	12.1	11.9	12.0	11.9	12.0	12.1	12.0	12.1	12.1	12.1	12.1	12.1
FSU	13.5	13.7	13.9	14.1	14.2	13.8	13.9	14.0	13.9	14.1	14.0	14.3	14.1
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.3	4.4	4.1	4.0	4.0	3.9	3.9	4.0	3.9	3.8	3.8	3.8	3.8
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Total non-OPEC supply	**56.2**	**57.7**	**57.0**	**57.9**	**57.6**	**57.5**	**58.2**	**57.8**	**58.6**	**58.5**	**58.6**	**59.5**	**58.8**
OPEC NGLs + non-conventional oils	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.3	6.4	6.5	6.5	6.5	6.5
(b) Total non-OPEC supply and OPEC NGLs	**62.1**	**63.8**	**63.2**	**64.1**	**63.8**	**63.9**	**64.6**	**64.1**	**65.1**	**65.0**	**65.1**	**66.0**	**65.3**
OPEC crude oil production (secondary sources)	30.5	31.7	32.6	32.1	32.3								
Total supply	92.6	95.5	95.8	96.2	96.1								
Balance (stock change and miscellaneous)	0.7	1.5	0.5	0.7	0.1								
OECD closing stock levels, *mb*													
Commercial	2,706	2,989	2,985	3,030	3,021								
SPR	1,582	1,588	1,600	1,600	1,587								
Total	**4,288**	**4,577**	**4,585**	**4,629**	**4,608**								
Oil-on-water	924	1,017	1,102	1,043	1,057								
Days of forward consumption in OECD, *days*													
Commercial onland stocks	58.3	63.8	63.2	64.9	63.4								
SPR	34.1	33.9	33.9	34.3	33.3								
Total	**92.3**	**97.7**	**97.1**	**99.2**	**96.7**								
Memo items													
(a) - (b)	**29.9**	**30.2**	**32.2**	**31.5**	**32.2**	**33.7**	**33.3**	**32.7**	**31.8**	**32.4**	**33.9**	**33.3**	**32.8**

Note: Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Table 11 - 2: World oil demand and supply balance, changes from last month's table*, mb/d

	2014	2015	2016	1Q17	2Q17	3Q17	4Q17	2017	1Q18	2Q18	3Q18	4Q18	2018
World demand													
OECD	-	-	-	-	-	-	0.1	-	0.1	-	0.1	0.1	0.1
Americas	-	-	-0.1	-	-0.2	-	-	-	-	-0.2	-	-	-
Europe	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-0.1	-	-	-	-	-0.1	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	0.3	0.3	0.3	0.5	0.3	0.2	0.3	0.3	0.5	0.4	0.3	0.4
(a) Total world demand	**-**	**0.3**	**0.2**	**0.2**	**0.4**	**0.3**	**0.3**	**0.3**	**0.2**	**0.5**	**0.4**	**0.3**	**0.4**
World demand growth	***-***	***0.3***	***-0.1***	***-0.1***	***0.2***	***-***	***0.1***	***0.1***	***0.1***	***0.1***	***0.1***	***0.1***	***0.1***
Non-OPEC supply													
OECD	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-0.1	-	-	-	-	-	-
Europe	-	-	-	-	-	0.1	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	0.1	-	0.1	-0.1	-0.2	-0.1	-0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	0.1	-	-	-	0.1	-0.1	-0.2	-0.1	-0.1
Total non-OPEC supply growth	-	-	-	-0.1	-	-	0.1	-	0.1	-0.1	-0.2	-0.2	-0.1
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	**-**	**-**	**-**	**-**	**0.1**	**-**	**-**	**-**	**0.1**	**-0.1**	**-0.2**	**-0.1**	**-0.1**
OPEC crude oil production (secondary sources)	**-**	**-**	**-**	**-**	**-**								
Total supply	-	-	-	-	0.1								
Balance (stock change and miscellaneous)	-	-0.3	-0.2	-0.2	-0.3								
OECD closing stock levels (mb)													
Commercial	2	3	1	1	-13								
SPR	2	2	2	2	-5								
Total	4	4	2	3	-18								
Oil-on-water	-	-	-	-	-								
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-								
SPR	-	-	-	-	-								
Total	**-**	**-**	**-**	**-**	**-**								
Memo items													
(a) - (b)	**-**	**0.3**	**0.2**	**0.2**	**0.3**	**0.2**	**0.2**	**0.2**	**0.1**	**0.5**	**0.6**	**0.5**	**0.4**

*Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 13 - 1 in the August 2017 issue.*
This table shows only where changes have occurred.

Source: OPEC Secretariat.

Table 11 - 3: OECD oil stocks and oil on water at the end of period

	2014	2015	2016	2Q15	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17
Closing stock levels, mb												
OECD onland commercial	**2,706**	**2,989**	**2,985**	**2,880**	**2,957**	**2,989**	**3,017**	**3,056**	**3,063**	**2,985**	**3,030**	**3,021**
Americas	1,414	1,561	1,600	1,508	1,542	1,561	1,589	1,609	1,617	1,600	1,608	1,606
Europe	887	993	971	943	970	993	1,007	1,010	996	971	1,019	998
Asia Pacific	405	435	415	430	445	435	421	438	450	415	404	417
OECD SPR	**1,582**	**1,588**	**1,600**	**1,587**	**1,581**	**1,588**	**1,595**	**1,592**	**1,596**	**1,600**	**1,600**	**1,587**
Americas	693	697	697	696	697	697	697	697	697	697	694	681
Europe	472	475	481	473	469	475	478	474	477	481	484	484
Asia Pacific	417	416	421	418	415	416	419	421	421	421	422	423
OECD total	**4,288**	**4,577**	**4,585**	**4,467**	**4,538**	**4,577**	**4,612**	**4,649**	**4,659**	**4,585**	**4,629**	**4,608**
Oil-on-water	**924**	**1,017**	**1,102**	**916**	**924**	**1,017**	**1,055**	**1,094**	**1,068**	**1,102**	**1,043**	**1,057**
Days of forward consumption in OECD, days												
OECD onland commercial	**58**	**64**	**63**	**61**	**63**	**64**	**65**	**64**	**64**	**63**	**65**	**63**
Americas	58	64	65	60	62	64	63	64	65	65	64	63
Europe	65	72	70	65	68	72	72	70	70	70	73	69
Asia Pacific	47	51	48	55	53	51	55	56	54	48	53	54
OECD SPR	**34**	**34**	**34**	**34**	**33**	**34**	**34**	**33**	**34**	**34**	**34**	**33**
Americas	28	28	28	28	28	28	28	28	28	28	27	27
Europe	35	34	35	33	33	34	34	33	34	35	34	33
Asia Pacific	49	48	49	53	50	48	55	54	51	49	55	55
OECD total	**92**	**98**	**97**	**95**	**96**	**98**	**99**	**98**	**98**	**97**	**99**	**96**

Sources: Argus Media, Euroilstock, IEA, JODI, METI, OPEC Secretariat and US Energy Information Administration.

Table 11 - 4: Non-OPEC supply and OPEC natural gas liquids, mb/d

	2014	2015	2016	3Q17	4Q17	2017	Change 17/16	1Q18	2Q18	3Q18	4Q18	2018	Change 18/17
US	13.0	14.0	13.6	14.4	14.7	14.3	0.6	14.9	15.0	15.1	15.3	15.1	0.8
Canada	4.3	4.4	4.5	4.7	4.7	4.7	0.2	4.8	4.8	4.9	5.1	4.9	0.2
Mexico	2.8	2.6	2.5	2.3	2.3	2.3	-0.2	2.2	2.1	2.1	2.1	2.1	-0.2
OECD Americas	**20.1**	**21.1**	**20.6**	**21.3**	**21.6**	**21.3**	**0.6**	**21.9**	**21.9**	**22.1**	**22.5**	**22.1**	**0.9**
Norway	1.9	1.9	2.0	1.9	2.1	2.0	0.0	2.1	2.0	1.9	2.1	2.0	0.0
UK	0.9	1.0	1.0	0.9	1.0	1.0	0.0	1.1	1.0	1.0	1.2	1.1	0.1
Denmark	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.6	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
OECD Europe	**3.6**	**3.8**	**3.8**	**3.6**	**3.9**	**3.8**	**0.0**	**3.9**	**3.8**	**3.8**	**4.0**	**3.9**	**0.1**
Australia	0.4	0.4	0.3	0.4	0.3	0.3	0.0	0.4	0.4	0.4	0.4	0.4	0.1
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**	**0.4**	**0.0**	**0.4**	**0.5**	**0.5**	**0.5**	**0.4**	**0.0**
Total OECD	**24.3**	**25.3**	**24.8**	**25.4**	**25.9**	**25.5**	**0.6**	**26.3**	**26.2**	**26.4**	**27.0**	**26.5**	**1.0**
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
India	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Indonesia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Thailand	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Vietnam	0.3	0.4	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.2	0.3	0.0
Asia others	0.2	0.3	0.2	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Asia	**3.6**	**3.7**	**3.7**	**3.7**	**3.7**	**3.7**	**-0.1**	**3.6**	**3.6**	**3.6**	**3.6**	**3.6**	**0.0**
Argentina	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Brazil	2.9	3.1	3.1	3.4	3.5	3.4	0.2	3.5	3.5	3.6	3.7	3.6	0.2
Colombia	1.0	1.0	0.9	0.8	0.8	0.8	-0.1	0.8	0.8	0.7	0.7	0.8	-0.1
Trinidad & Tobago	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
L. America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.2	0.2	0.2	0.2	0.0
Latin America	**5.0**	**5.2**	**5.1**	**5.3**	**5.4**	**5.3**	**0.2**	**5.4**	**5.4**	**5.4**	**5.4**	**5.4**	**0.1**
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	0.9	1.0	1.0	1.0	1.0	1.0	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	**1.3**	**1.3**	**1.3**	**1.2**	**1.2**	**1.2**	**0.0**	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**	**0.0**
Chad	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Congo	0.3	0.3	0.3	0.4	0.4	0.3	0.0	0.4	0.4	0.4	0.5	0.4	0.1
Egypt	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Ghana	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.0
South Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans*	0.3	0.3	0.3	0.3	0.2	0.3	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Africa other	0.2	0.2	0.2	0.1	0.1	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.0
Africa	**1.8**	**1.8**	**1.8**	**1.9**	**1.9**	**1.8**	**0.0**	**1.9**	**1.9**	**1.9**	**1.9**	**1.9**	**0.1**
Total DCs	**11.8**	**12.1**	**11.9**	**12.0**	**12.1**	**12.0**	**0.1**	**12.1**	**12.1**	**12.1**	**12.1**	**12.1**	**0.1**
FSU	**13.5**	**13.7**	**13.9**	**13.8**	**13.9**	**14.0**	**0.2**	**13.9**	**14.1**	**14.0**	**14.3**	**14.1**	**0.1**
Russia	10.7	10.8	11.1	11.0	11.0	11.1	0.0	11.0	11.1	11.2	11.4	11.2	0.1
Kazakhstan	1.6	1.6	1.6	1.7	1.8	1.7	0.2	1.8	1.8	1.7	1.8	1.8	0.1
Azerbaijan	0.9	0.9	0.8	0.8	0.8	0.8	-0.1	0.8	0.7	0.7	0.7	0.7	0.0
FSU others	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.3	0.3	0.4	0.0
Other Europe	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
China	**4.3**	**4.4**	**4.1**	**3.9**	**3.9**	**4.0**	**-0.1**	**3.9**	**3.8**	**3.8**	**3.8**	**3.8**	**-0.2**
Non-OPEC production	**54.0**	**55.6**	**54.8**	**55.3**	**56.0**	**55.6**	**0.8**	**56.4**	**56.3**	**56.3**	**57.3**	**56.6**	**1.0**
Processing gains	2.2	2.2	2.2	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2	2.2	0.0
Non-OPEC supply	**56.2**	**57.7**	**57.0**	**57.5**	**58.2**	**57.8**	**0.8**	**58.6**	**58.5**	**58.6**	**59.5**	**58.8**	**1.0**
OPEC NGL	5.7	5.8	5.9	6.1	6.1	6.1	0.2	6.2	6.2	6.2	6.3	6.2	0.2
OPEC Non-conventional	0.3	0.3	0.2	0.3	0.3	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
OPEC (NGL+NCF)	**5.9**	**6.0**	**6.1**	**6.3**	**6.4**	**6.3**	**0.2**	**6.4**	**6.5**	**6.5**	**6.5**	**6.5**	**0.2**
Non-OPEC & OPEC (NGL+NCF)	**62.1**	**63.8**	**63.2**	**63.9**	**64.6**	**64.1**	**0.9**	**65.1**	**65.0**	**65.1**	**66.0**	**65.3**	**1.2**

*Note: * OECD Americas includes Chile.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

	2014	2015	2016	Change 2016/15	3Q16	4Q16	1Q17	2Q17	Jul 17	Aug 17	Change Aug/Jul
US	1,862	977	509	*-468*	479	586	739	892	954	948	*-6*
Canada	380	192	131	*-61*	122	180	299	115	199	217	*18*
Mexico	86	52	26	*-26*	25	19	17	23	21	18	*-3*
OECD Americas	2,327	1,221	665	*-556*	626	785	1,054	1,030	1,174	1,183	*9*
Norway	17	17	17	*-1*	18	13	14	17	13	15	*2*
UK	16	14	9	*-5*	9	9	9	9	10	12	*2*
OECD Europe	145	117	96	*-21*	94	94	100	92	82	91	*9*
OECD Asia Pacific	26	17	7	*-11*	5	6	14	17	14	15	*1*
Total OECD	**2,499**	**1,355**	**768**	***-587***	**724**	**885**	**1,168**	**1,139**	**1,270**	**1,289**	***19***
Other Asia*	228	202	180	*-22*	185	181	184	182	181	180	*-1*
Latin America	172	145	68	*-77*	64	64	61	62	77	78	*1*
Middle East	108	102	88	*-14*	85	75	74	76	75	75	*0*
Africa	45	29	17	*-12*	14	16	15	17	18	17	*-1*
Total DCs	**553**	**478**	**353**	***-125***	**348**	**336**	**334**	**337**	**351**	**350**	***-1***
Non-OPEC rig count	**3,052**	**1,833**	**1,121**	***-712***	**1,072**	**1,222**	**1,502**	**1,477**	**1,621**	**1,639**	***18***
Algeria	48	51	54	*3*	55	53	51	56	58	55	*-3*
Angola	15	11	6	*-5*	4	3	3	3	2	2	*0*
Ecuador	24	12	4	*-8*	5	6	7	8	6	5	*-1*
Eqatorial Guinea**	1	1	1	*0*	1	1	1	1	1	1	*0*
Gabon	7	4	1	*-3*	0	0	0	1	1	1	*0*
Iran**	54	54	59	*5*	60	61	61	61	61	61	*0*
Iraq**	79	52	43	*-9*	39	41	41	49	53	53	*0*
Kuwait**	38	47	44	*-2*	47	46	55	55	55	52	*-3*
Libya**	10	3	1	*-2*	1	1	1	1	1	1	*0*
Nigeria	34	30	25	*-5*	24	23	27	28	28	27	*-1*
Qatar	10	8	8	*0*	7	10	11	11	10	10	*0*
Saudi Arabia	134	155	156	*1*	155	157	152	150	150	146	*-4*
UAE	34	42	51	*8*	51	52	50	51	53	54	*1*
Venezuela	116	110	100	*-10*	93	92	95	95	92	90	*-2*
OPEC rig count	**604**	**579**	**552**	***-27***	**543**	**547**	**554**	**568**	**571**	**558**	***-13***
World rig count* **	**3,656**	**2,412**	**1,673**	***-740***	**1,615**	**1,769**	**2,056**	**2,045**	**2,192**	**2,197**	***5***
of which:											
Oil	2,818	1,750	1,189	*-560*	1,153	1,253	1,464	1,503	1,622	1,620	*-2*
Gas	743	563	370	*-193*	343	400	477	441	474	478	*4*
Others	95	100	113	*14*	119	116	115	101	96	99	*3*

*Note: * Other Asia includes Indonesia.*
*** Estimated data when Baker Hughes Incorporated did not reported the data.*
**** Data excludes China and FSU.*
Totals may not add up due to independent rounding.

Sources: Baker Hughes Incorporated and OPEC Secretariat's estimates.

Glossary of Terms

Abbreviations

b	barrels
b/d	barrels per day
bp	basis points
bb	billion barrels
bcf	billion cubic feet
cu m	cubic metres
mb	million barrels
mb/d	million barrels per day
mmbtu	million British thermal units
mn	million
m-o-m	month-on-month
q-o-q	quarter-on-quarter
pp	percentage points
tb/d	thousand barrels per day
tcf	trillion cubic feet
y-o-y	year-on-year
y-t-d	year-to-date

Acronyms

ARA	Amsterdam-Rotterdam-Antwerp
BoE	Bank of England
BoJ	Bank of Japan
BOP	Balance of payments
BRIC	Brazil, Russia, India and China
CAPEX	capital expenditures
CFTC	Commodity Futures Trading Commission
CIF	cost, insurance and freight
CPI	consumer price index
DCs	developing countries
DUC	drilled, but uncompleted (oil well)
ECB	European Central Bank
EIA	US Energy Information Administration
Emirates NBD	Emirates National Bank of Dubai
EMs	emerging markets
EV	electric vehicle
FAI	fixed asset investment
FCC	fluid catalytic cracking
FDI	foreign direct investment
Fed	US Federal Reserve
FID	final investment decision
FOB	free on board
FPSO	floating production storage and offloading
FSU	Former Soviet Union
FX	Foreign Exchange
FY	fiscal year
GDP	gross domestic product
GFCF	gross fixed capital formation
GoM	Gulf of Mexico
GTLs	gas-to-liquids
HH	Henry Hub
HSFO	high-sulphur fuel oil
ICE	Intercontinental Exchange
IEA	International Energy Agency
IMF	International Monetary Fund
IOCs	international oil companies
ISM	Institute of Supply Management
LIBOR	London inter-bank offered rate
LLS	Light Louisiana Sweet
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LR	long-range (vessel)
LSFO	low-sulphur fuel oil
MCs	(OPEC) Member Countries
MED	Mediterranean
MENA	Middle East/North Africa
MOMR	(OPEC) Monthly Oil Market Report
MPV	multi-purpose vehicle
MR	medium-range or mid-range (vessel)

NBS	National Bureau of Statistics
NGLs	natural gas liquids
NPC	National People's Congress (China)
NWE	Northwest Europe
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OPEX	operational expenditures
OIV	total open interest volume
ORB	OPEC Reference Basket
PADD	Petroleum Administration for Defense Districts
PBoC	People's Bank of China
PMI	purchasing managers' index
PPI	producer price index
RBI	Reserve Bank of India
REER	real effective exchange rate
ROI	return on investment
SAAR	seasonally-adjusted annualized rate
SIAM	Society of Indian Automobile Manufacturers
SRFO	straight-run fuel oil
SUV	sports utility vehicle
ULCC	ultra-large crude carrier
ULSD	ultra-low sulphur diesel
USEC	US East Coast
USGC	US Gulf Coast
USWC	US West Coast
VGO	vacuum gasoil
VLCC	very large crude carriers
WPI	wholesale price index
WS	Worldscale
WTI	West Texas Intermediate
WTS	West Texas Sour

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Disclaimer

OPEC Basket average price *US$/b*

up 2.67 in August	August 2017	49.60
	July 2017	46.93
	Year-to-date	**49.73**

August OPEC crude production *mb/d, according to secondary sources*

down 0.08 in August	August 2017	32.76
	July 2017	32.83

Economic growth rate *per cent*

	World	OECD	US	Japan	Euro-zone	China	India
2017	3.5	2.2	2.1	1.4	2.1	6.7	6.9
2018	3.4	2.0	2.2	1.2	1.8	6.3	7.5

Supply and demand *mb/d*

2017		**17/16**	**2018**		**18/17**
World demand	96.8	1.4	World demand	98.1	1.4
Non-OPEC supply	57.8	0.8	Non-OPEC supply	58.8	1.0
OPEC NGLs	6.3	0.2	OPEC NGLs	6.5	0.2
Difference	**32.7**	**0.5**	**Difference**	**32.8**	**0.2**

OECD commercial stocks *mb*

	May 17	Jun 17	Jul 17	Jul 17/ Jun 17	Jul 16
Crude oil	1,535	1,510	1,494	–15.3	1,530
Products	1,505	1,511	1,508	–3.4	1,575
Total	**3,040**	**3,021**	**3,002**	**–18.7**	**3,105**
Days of forward cover	63.9	63.2	62.9	–0.4	65.3

Next report to be issued on 11 October 2017.