Oil market highlights

Crude Oil Price Movements

The OPEC Reference Basket rose 42¢ to $43.10/b in August. ICE Brent ended up 62¢ at $47.16/b, while NYMEX WTI was unchanged at $44.80/b. The Brent/WTI spread widened further to $2.36/b in August. Crude price rose on signs of an improving supply/demand balance and US dollar weakness, although a surprise build in US crude stocks, increasing supplies and worries about Chinese demand pressured prices at the end of the month.

World Economy

World economic growth was revised down to 2.9% for 2016 and remains at 3.1% for 2017. Weak 1H16 growth caused a downward revision to the US growth forecast for 2016 to 1.5%, while the 2017 forecast remains at 2.1%. Growth in Japan was also revised down to 0.7% given weak 1H16 growth. Euro-zone growth remains unchanged at 1.5% for this year and 1.2% for 2017. Forecasts for China and India are also unchanged at 6.5% and 7.5% for 2016 and 6.1% and 7.2% for 2017. The figures for Brazil and Russia remain unchanged from the August *MOMR*, with growth forecast at 0.4% and 0.7% respectively for next year.

World Oil Demand

World oil demand growth in 2016 is now anticipated to increase by 1.23 mb/d after a marginal upward revision, mainly to reflect better-than-expected OECD data for the first half of the year. Oil demand in 2016 is expected to average 94.27 mb/d. In 2017, world oil demand is anticipated to rise by 1.15 mb/d, unchanged from the August *MOMR*, to average 95.42 mb/d. The main growth centres for next year continue to be India, China and the US.

World Oil Supply

Non-OPEC oil supply in 2016 is now expected to contract by 0.61 mb/d, following an upward revision of 0.18 mb/d from the August *MOMR* to average 56.32 mb/d. This has been mainly due to a lower-than-expected decline in US tight oil and a better-than-expected performance in Norway, as well as the early start-up of Kashagan field in Kazakhstan. In 2017, non-OPEC supply was revised up by 0.35 mb/d to show growth of 0.20 mb/d to average of 56.52 mb/d, mainly due to new production from Kashagan. OPEC NGLs are expected to average 6.43 mb/d in 2017, an increase of 0.15 mb/d over the current year. OPEC output, according to secondary sources, dropped by 23 tb/d in August to 33.24 mb/d.

Product Markets and Refining Operations

Product markets in the Atlantic Basin strengthened in August. Refining margins were supported by the positive performance at the top of the barrel due to strong gasoline demand and export opportunities to the EU, as well as concerns about weather disruptions from tropical storms and flooding in the US Gulf Coast. In Asia, margins showed a slight recovery on the back of firm demand and falling inventories ahead of autumn maintenance.

Tanker Market

Dirty tanker spot freight rates remained under pressure in August, with negative developments among all classes. VLCC, Suexmax and Aframax spot freight rates declined by 12%, 30% and 14% since July. The drop in rates was mainly driven by excess tonnage supply due to new deliveries at a time when cargo loading requirements remain limited.

Stock Movements

OECD total commercial stocks fell in July to stand at 3,091 mb, some 341 mb above the latest five-year average. Crude and product inventories showed surpluses of 200 mb and 141 mb, respectively. In terms of days of forward cover, OECD commercial stocks in July stood at 66.1 days, around 7 days higher than the seasonal average.

Balance of Supply and Demand

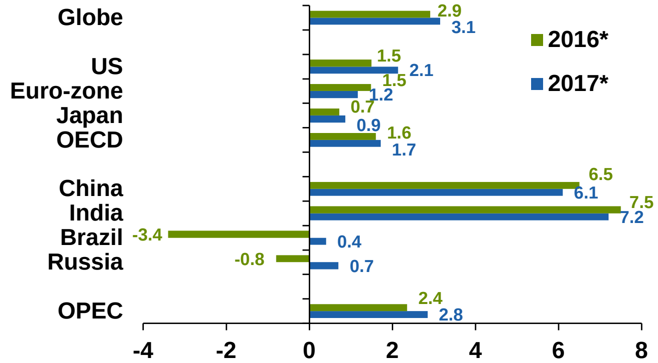
Demand for OPEC crude in 2016 is estimated to stand at 31.7 mb/d, some 1.7 mb/d over last year. In 2017, demand for OPEC crude is forecast at 32.5 mb/d, an increase of 0.8 mb/d over the current year.

Review of developments in the world economy

The trend of the past years' moderate global growth is likely to continue in both 2016 and 2017. World GDP growth now is forecast at 2.9% for 2016 and 3.1% for 2017 ***(Graph 1)***. After particularly low growth in the first half in the US and Japan, along with the continued contraction in Russia and Brazil, these economies are expected to pick up in the remainder of the year and to show higher growth in the coming year. The Euro-zone, the UK, China and, to some extent, India are forecast to show lower growth.

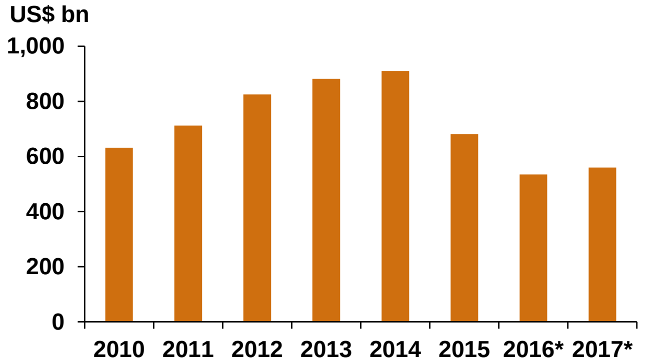
There are several key dynamics across the globe that are significant in the short-term. There is a considerable negative impact on global growth from the energy sector due to the sharp decline in investments, mainly in the oil and gas sector ***(Graph 2)*** as well as lower output values. So far this has not been entirely compensated by positive effects from consumption. Any stabilization in the crude oil market in coming months could provide positive support to overall economic activity. Furthermore, interest rates are already low in major economies and the effectiveness of further monetary stimulus has diminished, despite remaining crucial for some economies. Here, any decision from main central banks on monetary policies, particularly the US Fed, will continue to be influential. Moreover, in most key economies the space for fiscal stimulus seems to be limited given high debt levels. Finally, political developments are becoming increasingly relevant – ranging from elections in several countries to fiscal-policy decisions, as well as the implementation and possible impact of Brexit.

Graph 1: GDP growth, % (2011 ppp)



** Forecast.*
Source: OPEC Secretariat.

Graph 2: Global E&P investment in oil & gas sector



** Forecast.*
Source: Rystad Energy UCube.

Within the OECD group of countries, US growth is forecast to stand at only 1.5% in the current year impacted by the decline in the energy sector and other factors that are being considered to be temporary, while next year is forecast at 2.1%. Despite a considerable sovereign debt level, Japan has recently announced a fiscal stimulus plan; however, the impact will be felt only in the coming quarters, following very weak economic output in the 1H16. Still, this is only expected to lift growth to 0.7% this year and 0.9% in 2017. The rise in the value of the yen, persistent deflation, a tight labour market and lacklustre domestic aggregate demand will continue to drag growth. In the Euro-zone, the challenges are manifold. The weak banking sector – impacted by non-performing loans – in combination with political uncertainty, the consequences of Brexit, ongoing high unemployment and the lessening effect of the ECB's monetary stimulus will push growth down to 1.2% in the coming year, from 1.5% in 2016.

In the emerging economies, India and China continue to expand at a considerable rate of 7.5% and 6.5% respectively in 2016, a slightly higher rate than in the coming year, when growth is forecast at 7.2% and 6.1%. Domestic consumption, investment and governmental support have been key drivers in these two economies, factors that are forecast to continue supporting growth also in 2017. Both Russia and Brazil are forecast to remain in recession for a second consecutive year in 2016. In 2017, Russia is expected to recover with growth of 0.7%, while Brazil is forecast to grow by 0.4%, provided the political environment stabilizes allowing economic reforms to be implemented. Further improvements in commodity prices should also help to support global growth.

Despite moderate global economic growth, recent data shows better-than-expected oil demand in some of the main consuming countries. This, along with a potentially improving oil supply picture, would contribute to a reduction in the imbalance of market fundamentals in the coming months.

Crude Oil Price Movements

The OPEC Reference Basket recovered slightly in August at $43.10/b, up 42¢ for the month, and declined around 30% year-on-year.

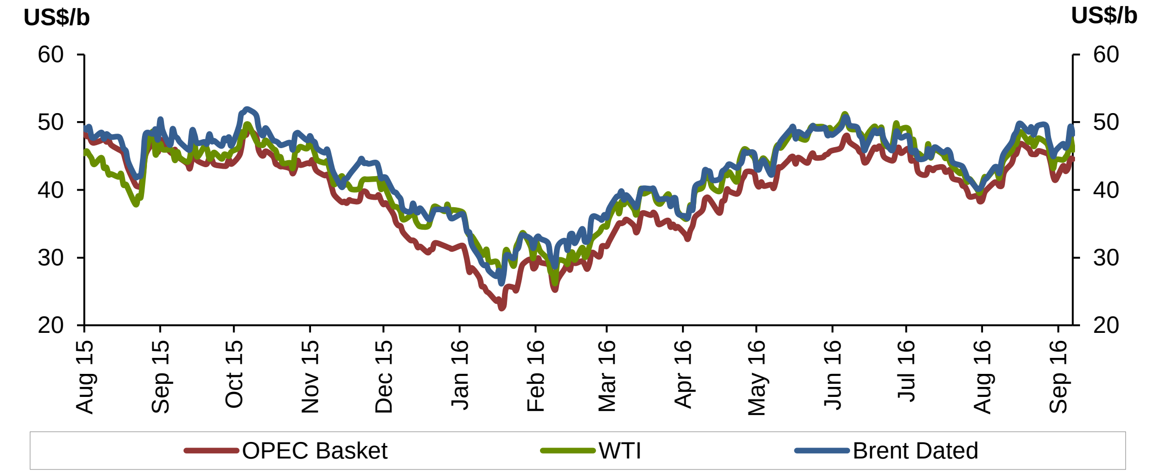
Month-on-month, crude futures prices were mixed in August as ICE Brent increased slightly, while NYMEX WTI remained unchanged. On both sides of the Atlantic, oil futures were supported over the month by near-term projections for a more balanced market, a weaker US dollar and draws in crude and gasoline stocks in the US, which helped to trigger a rally in oil prices. Signs of potential action by producers to curb excess supply and bullish speculative activities also supported the market. Late in the month, the rally snapped on rising global crude production, a surprise build in US crude stocks and worries about Chinese crude demand.

ICE Brent ended up 62¢ at $47.16/b, while it remained around 26% below on the year. NYMEX WTI was unchanged at $44.80/b, but slipped about 21% year-to-date (y-t-d). The Brent/WTI, or transatlantic spread, widened to $2.36/b in August, further discouraging US imports of West African crudes and other Brent-related grades, while also encouraging some exports of US crude.

OPEC Reference Basket

The **OPEC Reference Basket (ORB)** recovered slightly in August, supported by a brief rebound in the oil market, which was triggered by speculation that oil producers might agree to curb output at an upcoming September meeting in Algeria. Oil prices were also supported by forecasts that the oil market would tighten in 2H16, amid an expected healthy draw in global oil stocks and a more balanced market in the next few months, thereby helping to ease excess supply. The short-lived rally was further driven by short covering by speculators, including hedge funds and other money managers, who had amassed record short positions. In addition, a weak dollar provided support to oil. Nevertheless, the ORB value is still some 9% below its last peak in June, as full storage tanks and production that exceeds consumption weigh on markets. Poor refining margins, despite relatively cheap crude feedstock prices, also pressured the oil market as refiners continued to pump more fuel than the market could absorb, resulting in overflowing storage tanks around the world.

Graph 1.1: Crude oil price movement, 2015-2016



Sources: Argus Media, OPEC Secretariat and Platts.

Table 1.1: OPEC Reference Basket and selected crudes, US$/b

			Change		*Year-to-date*	
	Jul 16	**Aug 16**	***Aug/Jul***	***%***	**2015**	**2016**
Basket	**42.68**	**43.10**	**0.42**	**1.0**	**53.81**	**37.99**
Arab Light	43.14	43.47	0.33	0.8	54.19	38.23
Basrah Light	41.37	42.01	0.64	1.5	52.17	36.66
Bonny Light	45.30	46.35	1.05	2.3	56.98	41.37
Es Sider	44.00	44.85	0.85	1.9	55.29	40.30
Girassol	45.09	46.06	0.97	2.2	57.13	41.16
Iran Heavy	41.59	42.17	0.58	1.4	53.29	36.60
Kuwait Export	41.37	41.88	0.51	1.2	52.59	36.35
Qatar Marine	43.53	43.44	-0.09	-0.2	55.17	38.70
Merey	36.71	36.46	-0.25	-0.7	46.02	30.46
Minas	41.84	41.26	-0.58	-1.4	54.04	39.73
Murban	46.54	46.25	-0.29	-0.6	57.93	42.33
Oriente	40.72	40.84	0.12	0.3	48.79	35.52
Rabi Light	44.03	44.90	0.87	2.0	57.16	40.31
Sahara Blend	45.30	46.35	1.05	2.3	56.53	41.99
Other Crudes						
Brent	45.00	45.85	0.85	1.9	56.36	41.30
Dubai	42.64	43.58	0.94	2.2	55.53	38.56
Isthmus	45.07	44.22	-0.85	-1.9	54.82	39.38
LLS	46.65	46.33	-0.32	-0.7	56.16	42.67
Mars	41.44	41.71	0.27	0.7	52.38	37.59
Urals	43.76	44.06	0.30	0.7	56.08	39.69
WTI	44.90	44.75	-0.15	-0.3	51.68	40.87
Differentials						
Brent/WTI	0.10	1.10	1.00	-	4.67	0.44
Brent/LLS	-1.65	-0.48	1.17	-	0.19	-1.37
Brent/Dubai	2.36	2.27	-0.09	-	0.82	2.74

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

On a monthly basis, the ORB value edged up 42¢ to $43.10/b, on average, up 1%. Compared to the previous year, the ORB value is still $15.96, or 29.7%, lower at $37.82/b.

The movements in the ORB component values were mixed over the month following the turbulence in regional price differentials, though the majority followed the slight rising trend in oil benchmarks. While crude oil benchmarks Dated Brent and Dubai spot prices improved by 85¢ and 94¢, respectively, WTI slipped a marginal 15¢, m-o-m.

Under supply pressure and fading demand from Chinese independent refiners, the Middle Eastern spot component grades Murban and Qatar Marine, fell 19¢, or 0.4%, to $44.88/b. Multi-destination grades Arab light, Basrah light, Iran Heavy and Kuwait Export increased 19¢, or 1.2%, to $42.28/b. For the Latin American ORB components, Venezuelan Merey was down again 25¢, or 0.7%, at $36.46/b, while Oriente improved 12¢, or 0.3%, to $40.84/b. Supported by improved oil price differentials due to a disruption in Nigerian supplies, West and Northern African light sweet Basket components Saharan Blend, Es Sider, Girassol, Bonny Light and Gabon’s Rabi edged up 96¢, or 2.1%, on average to $45.70/b. Indonesian Minas was down the most for the second month in a row at $41.26/b, a decline of 58¢ or 1.4%.

On 9 September, the ORB stood at $44.55/b, $1.45 above the August average.

The oil futures market

M-o-m, the two key oil futures performances were mixed in August as ICE Brent increased slightly, while NYMEX WTI was unchanged. On both sides of the Atlantic, oil futures were mainly supported over the month as speculation intensified over potential action by producers to curb excess crude supply.

The near-term projected balancing of the market, a weaker US dollar and short-lived draws in crude and gasoline stocks in the US have helped to ignite a momentary rally in oil prices. Several reporting agencies projected that the oil market should start to balance as early as 2H16. The rally was also driven by short covering by speculators, including hedge funds and other money managers, who had amassed record short positions. This rally in futures broke later in the month on rising international crude production, a surprise build in US crude stocks, worries about Chinese crude demand following record gasoline and diesel exports, and the rising US oil rig count. This has put back into focus excess supply that has pushed stockpiles to record highs around the world.

The strengthening dollar following a speech by US Federal Reserve Chair Janet Yellen, indicating the possibility of an interest hike in the near future, also weighed on crude futures. NYMEX WTI came under more pressure on significant crude stock builds, both at Cushing and in the US as a whole, over the month. ICE Brent ended August up 62¢, or 1.3%, at $47.16/b on a monthly average basis, while NYMEX WTI stayed unchanged at $44.80/b. Compared to the same period last year, y-t-d ICE Brent lost $15.14, or 26.3%, at $42.48/b, while NYMEX WTI declined $10.85, or 21%, to $40.84/b.

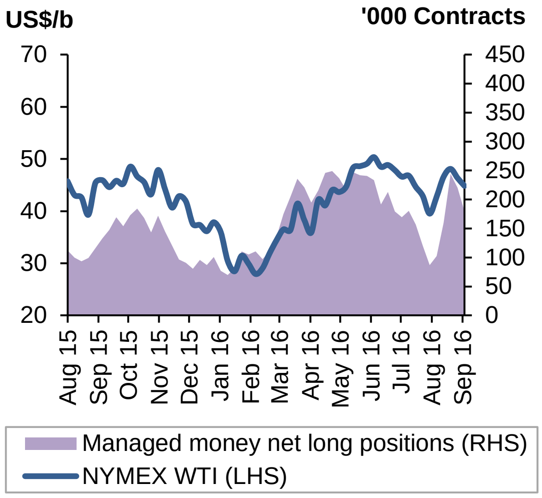
Crude oil futures prices improved in the second week of September. On 9 September, ICE Brent stood at $48.01/b and NYMEX WTI at $45.88/b.

Net long positions in managed money soared in August in crude futures and options on both the NYMEX and ICE. The increases in net length were largely the result of a massive decrease in shorts on the back of news that major oil producers would meet informally to discuss how to stabilize the market. Managed money short positions on the NYMEX were reduced by more than 84,000 positions, the greatest change in at least 10 years. The extent of short covering appears to have amplified the increases seen in the flat price over last week.

Relative to the end of the previous month, speculators increased net long positions in **ICE Brent futures and options** by 99,671 contracts, or 35%, to 388,207 lots, by the last week of August, exchange data from ICE showed. On the other hand, money managers almost doubled their net long **US crude futures and options positions**, increasing by a hefty 99,847 lots, or 83%, to 220,403 contracts, the US Commodity Futures Trading Commission (CFTC) reported.

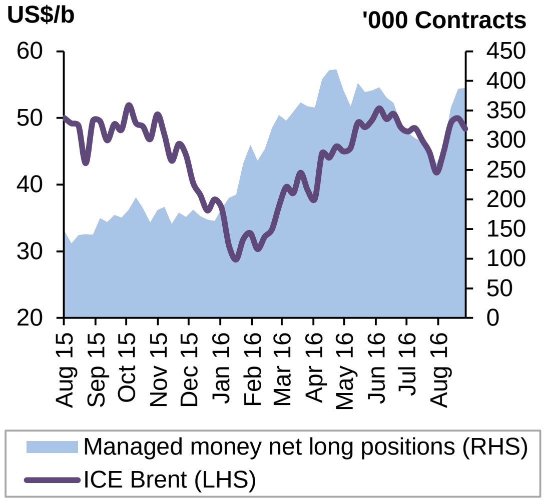
Meanwhile, the **total futures and options open interest volume** at the two exchanges increased from 2.8%, or 146,997 contracts at the end of July to 5.4 million contracts at the end of August.

Graph 1.2: NYMEX WTI price vs. Speculative activity, 2015-2016



Sources: CFTC and CME Group.

Graph 1.3: ICE Brent price vs. Speculative activity, 2015-2016



Source: IntercontinentalExchange.

During August, the **daily average traded volume** for NYMEX WTI contracts increased by 60,123 lots, up 6.4%, to 1,002,196 contracts, while that of ICE Brent was 55,090 contracts lower, down 7.2%, at 710,523 lots. The daily aggregate traded volume for both crude oil futures markets increased by 5,033 contracts to about 1.71 million futures lots, equivalent to around 1.7 billion barrels per day. The total traded volume at both exchanges was higher in August by 23.05 mn and 16.34 mn contracts in NYMEX WTI and ICE Brent, respectively, as there were three additional trading days compared to July.

The futures market structure

Heightened supply, in addition to extremely poor crack margins heading into peak refinery turnarounds, kept all three markets in contango. But the slight improvement in oil fundamentals, an indication that the persistent oversupply may fade sooner than expected, was being reflected in an easing or flattening in the contango structure.

The **Brent market structure** continued to be influenced by an overhang of unsold North Sea light sweet cargoes and worsening refining margins. However, upcoming maintenance of a major North Sea oilfield in September and supply disruptions in West African (WAF) production capped the Brent contango from slipping down. The Buzzard oilfield, the largest contributor to the Forties crude oil stream, is to undergo two weeks of maintenance in September.

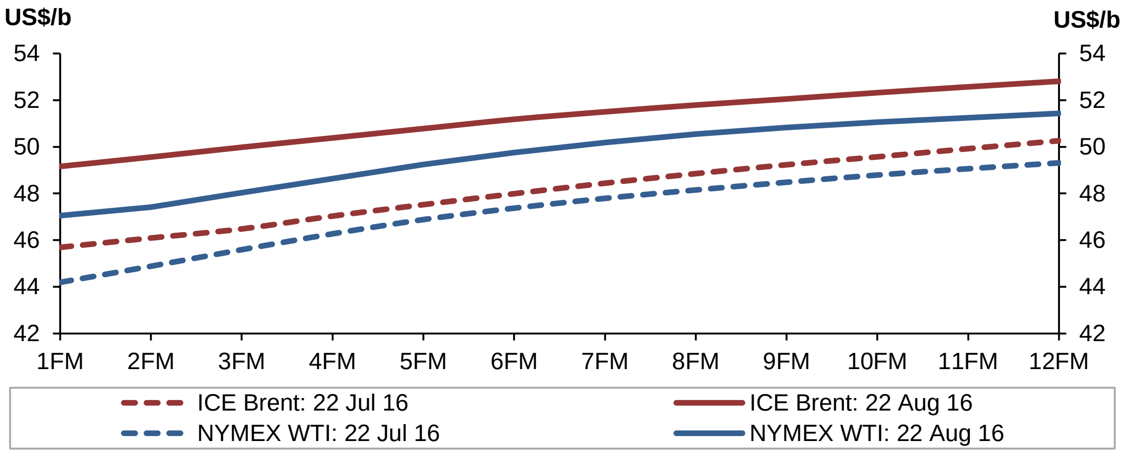
Despite lower refinery planned and unplanned runs and sustained crude oil stock builds throughout August, the **WTI contango level** also remained almost the same as in July.

The **Dubai market structure** stayed in contango after flipping back to it in the previous month, but improved slightly.

In the WTI market, the 72¢/b front month discount to the second month eased to 69¢/b, while that of Dubai also eased from a 72¢/b premium to minus 42¢/b. The Brent market structure narrowed from a 55¢/b contango to 30¢/b.

The **Brent/WTI or transatlantic spread** widened further in Brent's favour during August, theoretically discouraging US imports of WAF crudes and other Brent-related grades, while stimulating exports of US crude. This wider spread between WTI and Brent, coupled with low freight rates, has improved arbitrage economics for cargoes out of the US to Europe, with delivered prices for US crudes into Europe having declined markedly versus Brent-linked alternatives. The relative weakness in WTI is attributed to significant crude stock builds both at Cushing and in the US as a whole over the month. Meanwhile, Brent continued to draw support from ongoing supply disruptions in light sweet crudes, particularly from Africa, lower floating storage volumes in the North Sea as well as scheduled field maintenance in the North Sea, despite weaker refinery demand and an overhang of unsold cargoes.

Graph 1.4: NYMEX WTI and ICE Brent forward curves



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

The prompt-month ICE Brent/WTI spread averaged \$1.74/b in July, widening to \$2.36/b in August.

Table 1.2: NYMEX WTI and ICE Brent forward curves, US\$/b

NYMEX WTI	1FM	2FM	3FM	6FM	12FM	12FM-1FM
22 Jul 16	44.19	44.88	45.59	47.37	49.31	5.12
22 Aug 16	47.05	47.41	48.03	49.75	51.43	4.38
Change	**2.86**	**2.53**	**2.44**	**2.38**	**2.12**	**-0.74**

ICE Brent	1FM	2FM	3FM	6FM	12FM	12FM-1FM
22 Jul 16	45.69	46.09	46.48	47.99	50.26	4.57
22 Aug 16	49.16	49.56	49.98	51.18	52.81	3.65
Change	**3.47**	**3.47**	**3.50**	**3.19**	**2.55**	**-0.92**

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

The light sweet/medium sour crude spread

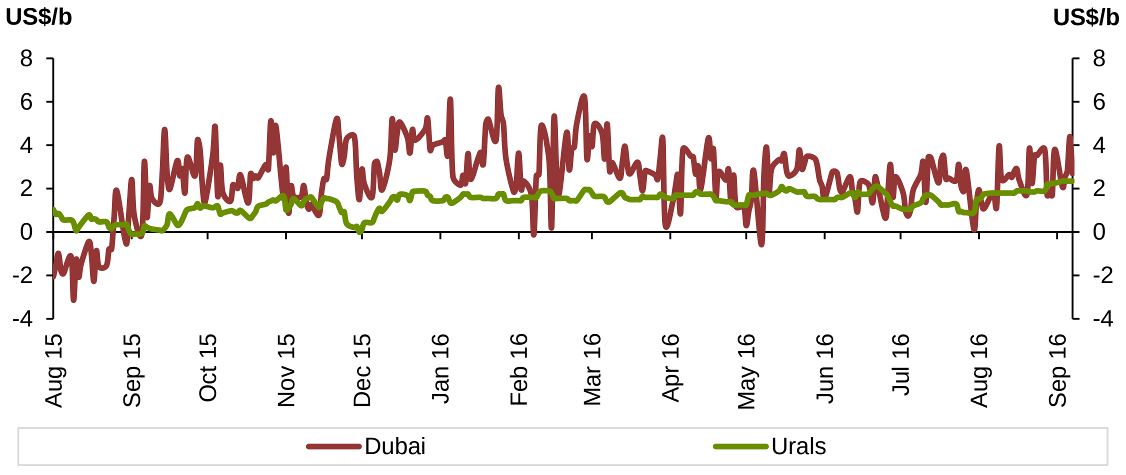
The **sweet/sour differentials** narrowed further in the US Gulf Coast (USGC), while in Asia and Europe, they widened.

In **Europe**, the Urals medium sour crude discount to light sweet North Sea Brent increased in August, reversing two consecutive months of a narrowing trend. The Dated Brent-Med Urals spread widened to about $1.80/b from $1.25/b in July. Throughout the month, the Urals-Med differentials set fresh multi-year lows for this time of year as the regional sour crude complex passes through its peak seasonal phase with discounts still wide. Seasonally higher refinery runs in Russia and Europe, as well as narrower light/heavy product spreads, have failed to translate meaningfully through to Urals differentials. The relative weakness of the market is also underlined by the fact that buying interest for Urals, especially in the Med, has retreated steadily even as Middle Eastern producers have increased prices for the European market. On the other hand, the North Sea market tightened as the amount of crude being held in floating storage fell.

In **Asia**, after reversing course in the previous month, the light sweet Tapis premium over medium sour Dubai increased more this month, rising by around 30¢ to $4.60/b. The relatively relentless narrowing Brent/Dubai spread continued to support demand for Brent-priced Asia Pacific light sweet crudes. Asia Pacific crude premiums also have risen on the back of firmer demand from regional refiners and expectations of tighter sweet crude supplies caused by Nigerian production outages. Meanwhile, Middle East sour crudes were faced with supply pressure and lower spot demand.

In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars slipped again in August to $4.60/b, down 60¢. Mars Sour crude was supported by a brief need for additional sour barrels for blending in the USGC. Its value improved despite lower demand due to a 60% decrease in refinery production capacity at ExxonMobil's refinery in Baton Rouge, Louisiana, as a result of flooding and the glitches at Motiva Enterprise's 235,000 b/d refinery in Convent, Louisiana, due to a fire.

Graph 1.5: Brent Dated vs. Sour grades (Urals and Dubai) spread, 2015-2016



Sources: Argus Media, OPEC Secretariat and Platts.

Commodity Markets

Average commodity prices were mixed in August. Increases in energy commodities were led by higher oil and coal prices. Among non-energy commodities, declines in the agriculture group were led by lower food prices on the expectation of plentiful grain supplies, while base metals showed mixed price developments during the month. Average gold prices remained stable as the probability of a rate hike in the US did not change significantly during the month.

Trends in selected commodity markets

Continuing favourable weather for crop developments in the US has continued to support expectations of plentiful grain supplies, which has pressured food prices during the month. Meanwhile, readings of industrial output in largest metal consumer China showing a slight slowdown to 6.0% y-o-y expansion in July from 6.2% y-o-y in June- according to the National Bureau of Statistics – diminished support for base metals. Gold prices remained relatively stable during the month as market expectations for an increase in interest rates was relatively stable during the month.

Agricultural prices declined on top of expectations of record grains production. Favourable weather for crop developments, as reported by the US Department of Agriculture (USDA), translated into even higher output forecasts for maize, soybeans and wheat. Moreover, the USDA also increased its projections for wheat output in Russia, Kazakhstan and Ukraine, which compensated for the expected large reduction in EU output, thereby pushing wheat prices to 10-year lows. Meanwhile, palm oil prices rebounded as the Malaysian Palm Oil Board reported increases of 21% in exports for the month of July, which decreased overall inventory levels.

Metals prices were mixed with declines in copper and lead, while other base metals advanced. In spite of the slight slowdown in industrial production in China, support was still provided by continuing strength in the Chinese housing market as shown by advances in the prices of newly constructed residential buildings which increased in 51 of the largest 70 cities in July, though at a slower pace than in the previous month when prices increased in 55 of those cities, according to the National Bureau of Statistics. Nonetheless, copper was under pressure due to an average m-o-m jump of around 40% in inventories on the London Metal Exchange. Meanwhile, iron ore increased by 7%, supported by larger Chinese imports – 9.3% higher than a year ago in the first eight months of 2016, according to the General Administration of Customs. Global steel output rose by 1.4% in July and steel output in the world’s largest producer, China, increased by 2.6% in the same period, according to the World Steel Association.

Energy prices increased on average in August due to advances in average crude oil and coal prices. However, natural gas prices declined during the month in Europe and were marginally down in the US. In Europe, prices generally decreased on persistent oversupply. Total inventories in EU member states were around 83% at the end of the month, versus around 74% during the previous month, according to the new methodology of reporting inventories provided by Gas Infrastructure Europe. Meanwhile, in the US, energy prices were stable. Higher power demand this summer due to warmer-than-average temperatures and low prices have continued to translate into smaller-than-average additions to underground storage – and a reduction in the stock overhang, though some moderation in temperatures during the month weighed on prices.

Table 2.1: Commodity price data

Commodity	Unit	*Monthly averages* Jun 16	Jul 16	Aug 16	*% Change* Aug/Jul	*Year-to-date* 2015	2016
World Bank commodity price indices (2010 = 100)							
Energy		59.4	56.6	57.6	1.8	69.6	51.3
Coal, Australia	$/mt	53.2	62.3	67.4	8.2	59.8	54.7
Crude oil, average	$/bbl	47.7	44.1	44.9	1.7	54.5	40.2
Natural gas, US	$/mmbtu	2.6	2.8	2.8	-0.1	2.8	2.2
Non-energy		82.6	82.2	81.8	-0.5	84.7	79.4
Agriculture		93.9	92.0	91.1	-0.9	91.0	88.8
Food		98.9	95.9	94.7	-1.2	93.1	91.9
Soybean meal	$/mt	467.0	441.0	404.0	-8.4	409.6	385.6
Soybean oil	$/mt	798.0	788.0	811.8	3.0	765.9	778.8
Soybeans	$/mt	457.0	432.0	414.3	-4.1	400.1	403.7
Grains		90.3	83.6	78.9	-5.7	91.3	84.9
Maize	$/mt	179.9	161.8	150.6	-6.9	171.2	163.2
Wheat, US, HRW	$/mt	173.0	151.6	149.8	-1.2	217.8	175.6
Sugar, world	$/kg	0.4	0.4	0.4	2.7	0.3	0.4
Base Metal		66.0	69.1	69.0	-0.2	77.4	65.9
Aluminum	$/mt	1,593.5	1,629.1	1,641.4	0.8	1,738.1	1,566.1
Copper	$/mt	4,642.0	4,864.9	4,758.6	-2.2	5,781.7	4,732.1
Iron ore, cfr spot	$/dmtu	52.0	57.0	61.0	7.0	59.0	53.9
Lead	$/mt	1,712.8	1,834.8	1,832.6	-0.1	1,840.6	1,754.3
Nickel	$/mt	8,928.4	10,262.9	10,365.9	1.0	13,018.1	9,077.4
Tin	$/mt	16,966.7	17,826.2	18,405.4	3.2	16,514.3	16,656.7
Zinc	$/mt	2,026.2	2,183.3	2,277.3	4.3	2,078.1	1,905.4
Precious Metals		99.3	105.9	105.8	-0.1	92.8	97.3
Gold	$/toz	1,276.4	1,336.7	1,340.2	0.3	1,185.2	1,249.9
Silver	$/toz	17.3	19.99	19.59	-2.0	16.2	16.9

Source: World Bank, Commodity price data.

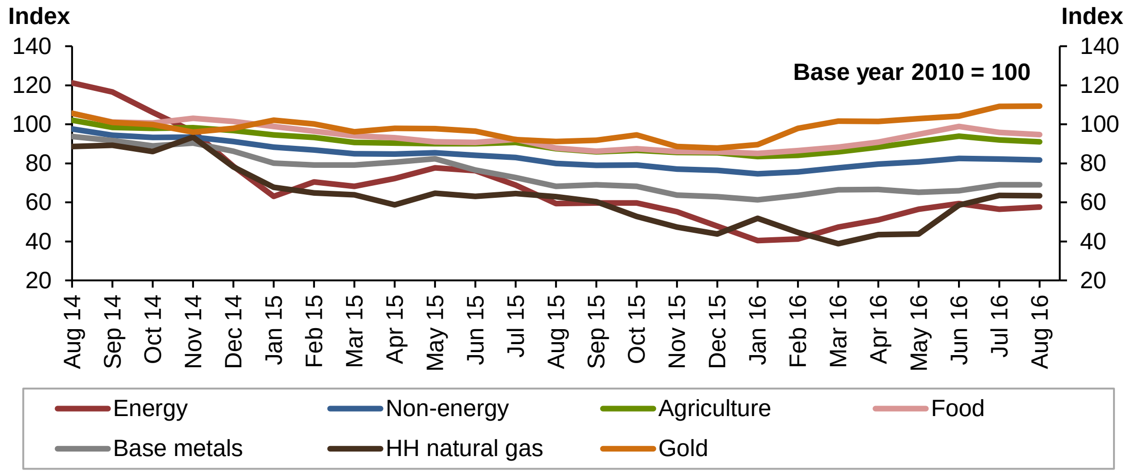
Average **energy prices** in August increased by 1.8% m-o-m, led by a 1.7% increase in average crude oil prices. Natural gas prices decreased in the US slightly by 0.1% m-o-m, while average prices in Europe decreased by 0.9%.

Agricultural prices decreased by 0.9%, mainly due to a 1.2% decline in average food prices and a 1.1% decline in beverage prices, while raw material prices were mainly unchanged. Maize and soybean meal led the decrease in food prices, with the two products down by 6.9% and 8.4%, respectively.

Average **base metal prices** decreased by 0.2%, mainly due to a 2.2% decrease in copper prices. Prices of aluminium, nickel and zinc advanced by 0.8%, 1.0% and 4.3%, respectively. Average iron ore prices advanced by 7.0% and are 49% above December 2005 levels.

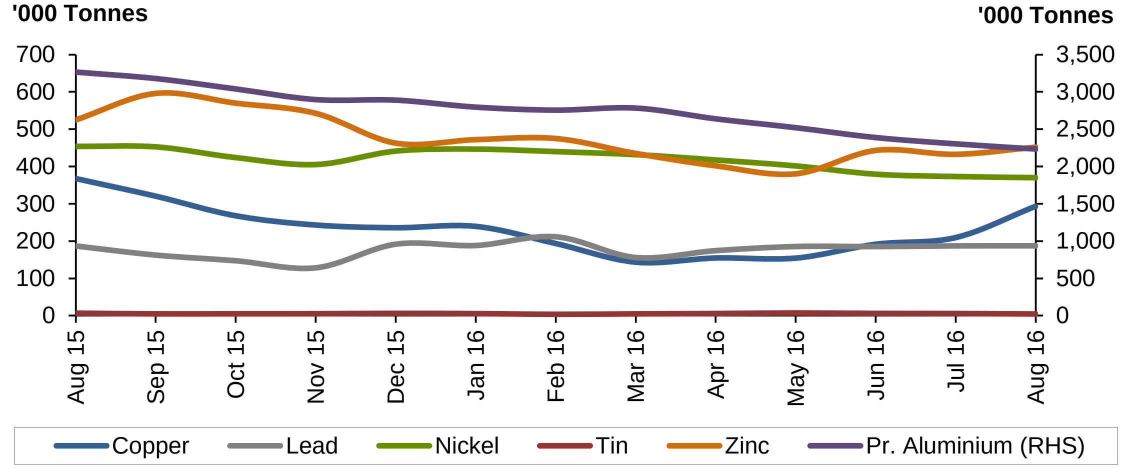
In the group of **precious metals**, gold prices advanced slightly by 0.3% as the outlook for interest rates was stable in the US, while silver prices declined by 2%.

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** was relatively stable. The average price was down 1¢, or 0.1%, to $2.78 per million British thermal units (mmbtu) after trading at an average of $2.79/mmbtu the previous month.

The US Energy Information Administration (EIA) said utilities added 51 billion cubic feet (bcf) of **gas to storage** during the week ending 26 August. This was in above median analysts' expectations of an increase around 42 bcf. Total working gas in storage stood at 3,401 bcf, or 7.5%, higher than at the same time the previous year and 10.9% higher than the previous five-year average. The EIA noted that temperatures during the reported week were higher than normal throughout the Lower 48 States.

Investment flows into commodities

Open interest volume (OIV) decreased in July for select US commodity markets such as agriculture, crude oil, natural gas and copper, while it increased for precious metals and livestock. Meanwhile, as the monthly average speculative net length positions increased for crude oil and livestock, they declined for agriculture, copper and precious metals, and were mainly stable for natural gas.

Table 2.2: CFTC data on non-commercial positions, '000 contracts

	Open interest		*Net length*			
	Jul 16	Aug 16	Jul 16	% OIV	Aug 16	% OIV
Crude oil	1,721	1,802	134	8	138	8
Natural gas	1,012	1,054	-37	-4	-37	-4
Agriculture	4,915	4,941	395	8	282	6
Precious metals	836	780	346	41	327	42
Copper	174	187	14	8	-3	-2
Livestock	535	508	73	14	75	15
Total	**9,193**	**9,273**	**926**	**75**	**782**	**65**

Source: US Commodity Futures Trading Commission.

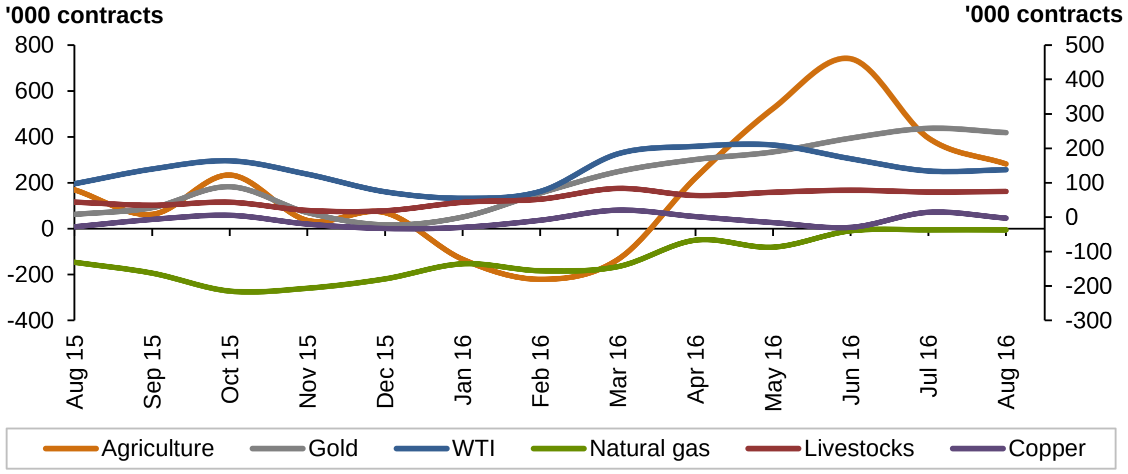
Agriculture's OIV decreased by 0.5% to 4,941,368 contracts in August. Meanwhile, money managers decreased their net long positions by 28.6% to 281,921 lots, largely because of increasing net length in corn for the second consecutive month.

Henry Hub's natural gas OIV increased by 4.1% m-o-m to 1,053,788 contracts in August. Money managers increased their net short positions slightly by 0.3% to reach 36,961 lots on moderating temperatures.

Copper's OIV increased by 7.6% m-o-m to 187,337 contracts in August. Money managers switched to a net short position of 2,825 lots from a net long position of 14,130 on slowing momentum in manufacturing in the US and China, while inventories also increased.

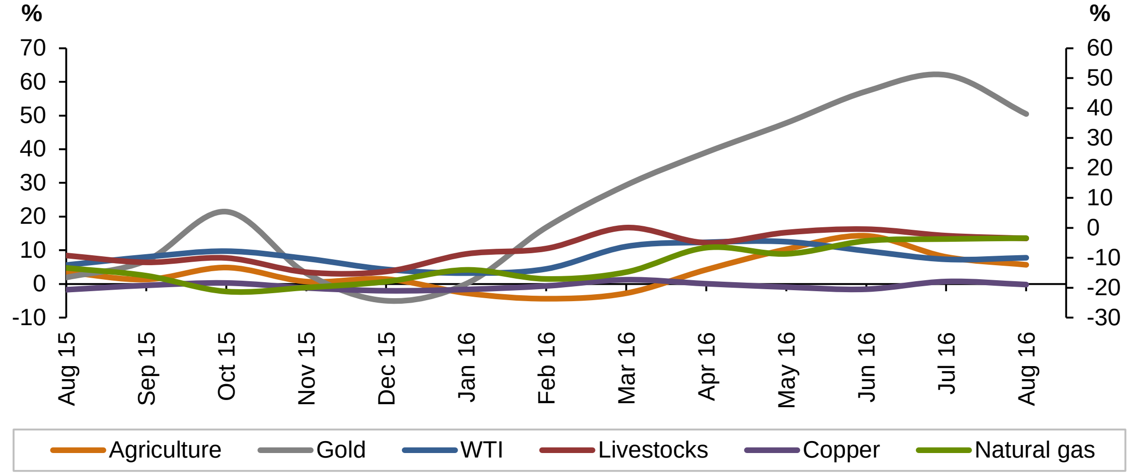
Precious metals' OIV decreased by 6.7% m-o-m to 779,649 contracts in August. Money managers decreased their net long positions by 5.6% to 326,948 lots.

Graph 2.3: Speculative activity in key commodities, net length



Source: US Commodity Futures Trading Commission.

Graph 2.4: Speculative activity in key commodities, as percentage of open interest



Source: US Commodity Futures Trading Commission.

World Economy

The 2016 global growth forecast has been revised down to 2.9%, mainly due to relatively weak 1H16 growth in the US and Japan. The global GDP growth forecast for 2017 remains at 3.1%. The current growth forecasts consider improving economic activity in the coming quarters in the US, Japan, Russia and Brazil. The Euro-zone, UK, China and to some extent India are forecast to show lower quarterly growth.

The 2016 growth forecast for the US has been revised down to 1.5%, following weak 1H16 growth, while 2017 growth remains unchanged at 2.1%. Given the slowing recovery in the labour market and weakening lead indicators, the trend in US growth will need close monitoring. Japan's 2016 figure has also been revised down to 0.7% from 0.9%, due to low growth in the first two quarters. The 2017 forecast remains at 0.9%. The Euro-zone growth forecasts are also unchanged. For the major emerging economies, the forecasts also remain the same as in the August *MOMR*.

Numerous uncertainties for global economic growth in the second half of 2016 and in the coming year remain. Among these uncertainties, policy issues across the globe – ranging from elections in several countries to fiscal policy decisions – bear considerable weight. Additionally, monetary policy decisions will require close monitoring in the near term. It is expected that the US Fed will further push back a decision on raising interest rates, while the central banks in Europe, the UK, Japan, and China will maintain their relatively more accommodative stance.

Table 3.1: Economic growth rate and revision, 2016-2017, %

	World	OECD	US	Japan	Euro-zone	China	India	Brazil	Russia
2016*	**2.9**	**1.6**	**1.5**	**0.7**	**1.5**	**6.5**	**7.5**	**-3.4**	**-0.8**
Change from previous month	-0.1	-0.1	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0
2017*	**3.1**	**1.7**	**2.1**	**0.9**	**1.2**	**6.1**	**7.2**	**0.4**	**0.7**
Change from previous month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*Note: * 2016 and 2017 = forecast.*
Source: OPEC Secretariat.

OECD

OECD Americas

US

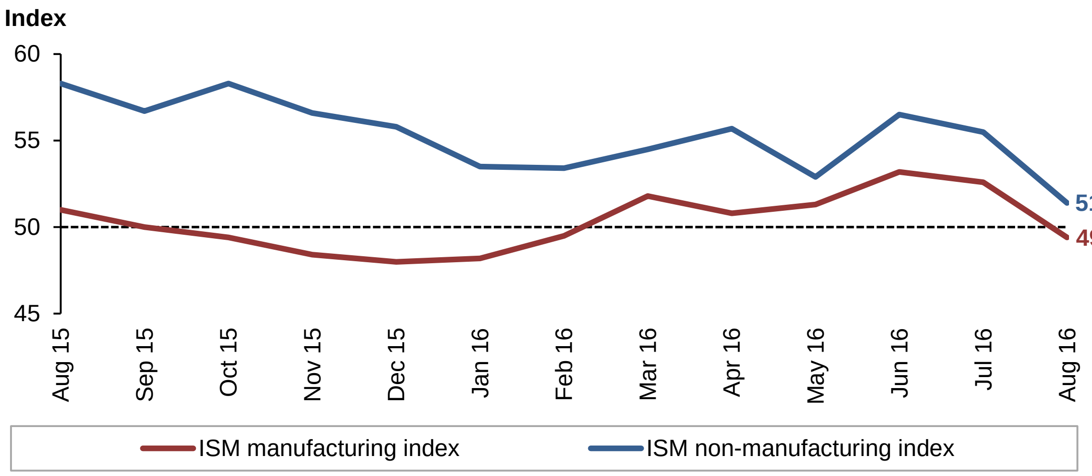
The second estimate of **2Q16 GDP** showed an even lower growth number than that provided in the first announcement. Growth stood at only 1.1% q-o-q seasonally adjusted annualized rate (SAAR), compared with an already low number of 1.2% in the first reading. This comes after 1Q16 figures show an already low SAAR of 0.8%. Positively, private household consumption continues to be strong at 4.4% q-o-q SAAR in 2Q16, but investments – and to a considerable extent the energy sector's capex cuts – led to a decline in investments by 9.7% q-o-q SAAR, pushing GDP growth down to its current low level. With oil prices having recovered recently, it remains to be seen how investments from the energy sector will perform in the near term. Considering that the latest ISM numbers also declined considerably, uncertainty about growth in 2H16 remains, though the current forecast anticipates a relatively strong recovery for the remainder of the year.

Given weak 1H16 growth, in combination with the again-slowing recovery in the labour market and weakening ISM index levels, the **US Federal Reserve** (Fed) will most likely not hike interest rates in the upcoming September meeting. While labour market development shows some strength, some indicators have weakened. The unemployment rate held steady at 4.9% in August, but non-farm payroll additions declined to 151.000 from an upwardly revised 275.000 in July. Average hourly earnings held almost steady at a rise of 2.4% y-o-y, compared with 2.7% the previous month.

Total **industrial production** is still weak and remains significantly impacted by challenges in the energy sector, but started to improve slightly on a monthly basis. Total industrial production declined by 0.5% in July, compared with -0.7% y-o-y in June. Mining, including oil sector-related output, fell considerably again, dropping by 10.2% y-o-y. Ongoing weakness is also reflected in manufacturing orders, which fell by 3.5% y-o-y, though this figure is better than the drop of 5.8% y-o-y seen in June. The trend in order growth in the energy sector remained significantly negative at -42.2% y-o-y, but this is a considerable monthly appreciation from a decline of -60.0% in June. It remains to be seen if the energy sector investments' decline has already bottomed out.

The positive momentum of private household consumption based on 2Q16 GDP numbers has not been reflected in the latest **retail sales** numbers from July**,** which rose by only 0.7% y-o-y, after a rise of 3.5% y-o-y in June. It remains to be seen whether this lower trend at the beginning of 3Q16 may point to weakening consumption. In a sign of recovery, the Conference Board's Consumer Confidence Index increased to 101.1, after having reached 96.7 in July.

Graph 3.1: Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

July's **Purchasing Manager's Index** (PMI) for the manufacturing sector, as provided by the Institute of Supply Management (ISM), declined below the growth-indicating level of 50 and reached 49.4 in August, considerably lower than the 52.6 in July. The very important services sector index also declined to a low level. It fell to 51.4 in August, compared with 55.5 in July. As these are significantly lower numbers, the magnitude of growth in 2H16 remains to be seen.

Given the very weak 1H16 dynamic, the 2016 **growth forecast** has been revised down to 1.5% from 1.7% in the previous MOMR. More data over the coming months will provide further insight to allow a more detailed review of the US economic situation. The 2017 growth forecast of 2.1% remains unchanged, depending on the economic plans of the incoming US Adminstration.

Canada

While GDP growth in 1Q16 has recovered to 2.5% q-o-q SAAR, the 2Q16 growth level was clearly negative at -1.6% y-o-y, reflecting the challenges in the oil sector and the weakening export situation for the Canadian economy. The situation in the oil market has also led to declining industrial production once again, which fell by 0.1% y-o-y in June. This is, however, a monthly appreciation, when compared with a decline of 2.2% in May. Output from the mining, oil and gas sectors has been again exceptionally weak, with a decline of 2.9% y-o-y, but better than the decline of 5.6% y-o-y in June. Moreover, Canadian exports declined again in July, falling by 7.0% y-o-y after a decline of 7.9% y-o-y in June. The PMI for manufacturing remained almost steady at a level of 51.1 in August, compared with 51.9 in July. By considering the ongoing weakness in the Canadian economy, the GDP growth forecast was revised down to 1.4% for 2016, from 1.5% in the previous month. The forecast for 2017 remains unchanged at 1.7%

OECD Asia Pacific

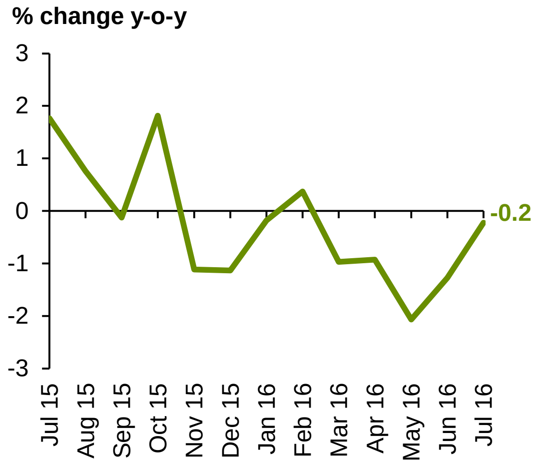
Japan

The latest announcement of the 2Q16 GDP pointed at continued challenges that the economy of Japan is facing. After relatively healthy growth of 2.0% SAAR in 1Q16, growth in 2Q16 backtracked and stood at only 0.2%. Thus the most recently announced stimulus of 7.5 trillion yen (around $73 billion) will turn out to be an important support for economic growth. It will most probably not be able to lift growth considerably, but at least support it at around its current level. In general, it remains to be seen to which extent this stimulus will be successful, as fiscal measures in the past, while having supported the economy, did not turn out to be as effective as initially envisaged. While this fiscal stimulus and the expected continuation of monetary stimulus are supporting growth expectations for 2016 and 2017, the economy continues on a **path of relatively low growth**, accompanied again by rising deflation. Also, the issue of potentially rising sovereign debt due to the new fiscal stimulus will need close monitoring, particularly as the latest postponement of a planned 2017 sales tax increase will not materialise. In addition to the current challenges, the yen remains strong, making it harder for Japanese companies to be competitive.

Inflation also fell further, while the Bank of Japan (BoJ) is still trying to achieve an inflation rate of 2%. After having turned slightly positive in February, it was in constant decline and now fell by 0.5% y-o-y in July. When excluding the two volatile groups of energy and food, the country’s core inflation figure stood at 0.3% y-o-y in July, also the lowest level in almost three years. Positively, and despite the deflationary trend, real income has risen by 1.4% y-o-y in July, continuing a supportive trend in income rise this year. This may be due to the ultra-low unemployment rate in an extremely tight labour market. In July, the unemployment rate stood at 3.0%, the lowest in more than 20 years.

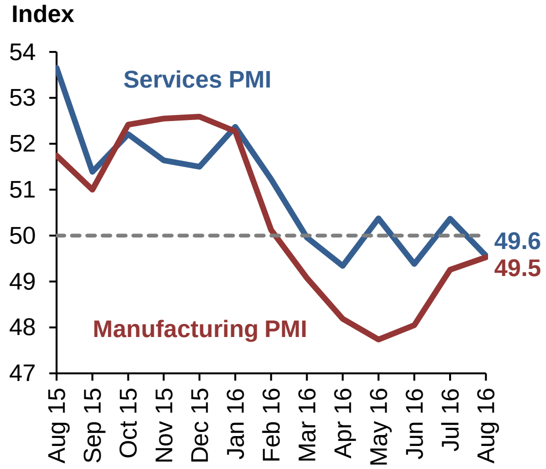
Japanese exports continued their declining trend of ten consecutive months. In July exports fell again, down by 14.0% y-o-y, significantly lower than the decline of 7.4% y-o-y in June. **Industrial production** also fell again, declining by 0.5% y-o-y in July, after reaching -1.4% y-o-y in June. This negative trend was also triggered by a continued decline in manufacturing orders, which dropped by 9.1% y-o-y in June, after falling by 13.2% y-o-y in May. The challenging environment has been reflected in **domestic demand.** Retail trade remained negative and again declined by 0.2% y-o-y in July, following a drop of 1.3% y-o-y in June.

Graph 3.2: Japanese retail trade



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

Graph 3.3: Japanese PMI indices



Sources: IHS Markit, Nikkei and Haver Analytics.

Albeit improving, ongoing weakness in the Japanese economy is also reflected in the **latest PMI numbers** provided by IHS Markit. Though the PMI for manufacturing improved slightly, it remains clearly below the growth-indicating level of 50. It reached 49.5 in August, after ending at 49.3 a month earlier. Negatively, the services sector PMI also fell below the growth-indicating level of 50, declining to 49.6 in August, after having turned positive only in July, when it reached 50.4.

After a solid 1Q16 GDP level, but weak growth in 2Q16, the **GDP growth forecast** for 2016 has been revised down to 0.7% from 0.9% the previous month. Numerous challenges remain and it remains to be seen to which extent the ongoing stimulus measures will be able to lift growth above current forecast levels.

South Korea

The situation in the South Korean economy seems to be mixed. South Korea continues to be impacted by a decline in exports, which fell by 3.2% y-o-y in August, albeit significantly better figures than in July, when exports declined by 10.9% y-o-y. Despite trading challenges, the economy continues enjoying good growth, as reflected in industrial output, which grew by 4.2% y-o-y in July, after already healthy expansion of 4.8% y-o-y a month earlier. However, the latest PMI numbers for the manufacturing sector in August indicate declining momentum in the manufacturing sector. The index stood below the growth-indicating level of 50, reaching 48.6 in August, a considerable decline from the previous month's 50.1. While near-term developments warrant close monitoring, the GDP growth forecasts this month remained unchanged at 2.6% for 2016 and 2.5% for 2017.

OECD Europe

Euro-zone

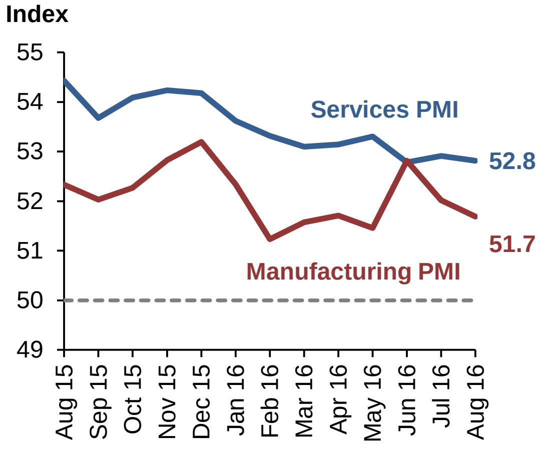
The Euro-zone continues to expand at a relatively healthy level, but many uncertainties remain. GDP growth in 2Q16 was confirmed – as expected – at 0.3% q-o-q, which is below stronger 1Q16 growth of 0.5% q-o-q. Beside the potential consequences of the UK's "leave" vote, the ongoing weakening situation in the Euro-zone's banking sector and, in relation to this, the still-weak sovereign debt situation in some of its member countries, are of great importance and will need close monitoring in the coming months. Political uncertainty has also risen after regional elections in Germany, a political deadlock in Spain and the upcoming referendum on the constitution in Italy. Moreover, the high unemployment rate remains an issue. Federal government elections in France and Germany will also be important in next year's political debate.

The latest **industrial production** numbers for June continued their recovering trend, growing by 0.4% y-o-y, the same level as in May. Manufacturing growth stood at 0.8% y-o-y, while mining and quarrying declined by 15.3% y-o-y in June. **Retail sales** performed better again in July with a growth rate of 1.7% y-o-y compared with 0.8% y-o-y in the previous month, probably partially supported by slight improvements in the labour market. Though the unemployment rate in the Euro-zone remained at 10.1%, the same level as in June, this constitutes the lowest rate since mid-2011.

Despite the latest rounds of ECB stimulus, **inflation** remained low, but positive. It rose by 0.2% y-o-y in August, unchanged from July. Positively, core inflation – the CPI excluding energy, tobacco and food – stood at 0.8% y-o-y, although this is slightly below the previous month's number of 0.9%. While slightly improving, the diminishing effectiveness of ECB stimulus seems to be mirrored again in credit supply figures. July's growth stood at only 0.5%, only slightly above the 0.4% y-o-y level from June. It will be important to see how the ECB decides to go forward over the coming months. Moreover, it will be important to monitor whether some fiscal stimulus will be enacted in the Euro-zone, as proposed by world leaders and finance ministers at the last G20 summit.

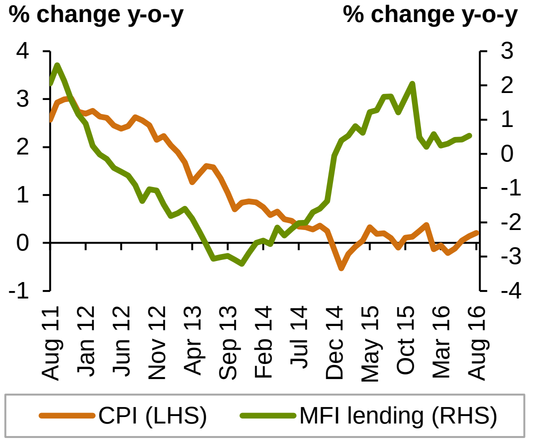
The latest **PMI indicators** are marginally below the previous month's numbers, but are generally holding up well. The manufacturing PMI for August stood at 51.7, compared with 52.0 in July. The important services PMI retraced to 52.8 from 52.9 a month earlier.

Graph 3.4: Euro-zone PMI indices



Sources: IHS Markit and Haver Analytics.

Graph 3.5: Euro-zone consumer price index and lending activity



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

While **recovery in the Euro-zone is ongoing**, multiple challenges remain. As most of these challenges were already considered, the GDP growth forecast remains unchanged. Growth is seen at 1.5% in 2016 and 1.2% in 2017.

UK

While uncertainties remain after the Brexit vote, the most recent data shows a relatively smooth continuation of the UK economy. Indicators point at a recovery in economic activity in the past weeks, but it remains to be seen how the situation will play out in the coming quarters. There is still no definite plan on how to enact the vote. While consumption is holding up well and no large negative impact from business has become visible in economic measures yet, it seems the real economy is starting to be impacted. The pound sterling remained weak, making vital imports more expensive and lifting inflation. The most recent action of the Bank of England (BoE) to lower its key interest rate from 0.5% to 0.25% has probably buffered some of the negative effects. The BoE also confirmed its view that negative effects will be felt in 2H16 and beyond. In the meantime, the PMI for manufacturing in August recovered considerably, shaking off some of the initial worries of Brexit. It rebounded considerably and moved back above the growth-indicating level of 50 to reach 53.3 in August, after hitting 48.2 in July. Importantly, the rebound of the services sector PMI was similar, as it rose to 52.9, compared with 47.4 in July. While the situation will need to be carefully monitored, potential negative effects are forecast to produce growth of only 0.4% in the coming year, considerably lower than growth in 2016, which is forecast at 1.5%; both are unchanged from the assessment of the previous month.

Emerging and Developing Economies

In **Brazil**, GDP contracted by 3.8% y-o-y in 2Q16, following a contraction of 5.4% in 1Q16. This brings first half deceleration to 4.6% y-o-y. Despite this switch into negative territory, the 2Q16 figure also represents an important affirmation of the slow move towards stabilization, as numbers show the slowest deceleration since 2Q15. GDP forecasts have not changed this month at -3.4% y-o-y in 2016 and 0.4% in 2017.

In **Russia**, GDP forecasts have not changed this month, holding at -0.8% and 0.7% for 2016 and 2017, respectively. However, a notable slowdown in the GDP's rate of contraction in 2Q16 with strong performance in the services sector, a relatively positive note in the manufacturing sector and easing inflation reasonably argue for an upward revision in the near future.

India's real GDP growth slowed beyond projections to 7.1% y-o-y in 2Q16 from 7.9% y-o-y in 1Q16. The slowdown was driven by weaker private consumption growth and a further slowdown in fixed investment. It seems mixed negative and positive factors will influence India's GDP growth rate in 2017. The trade deficit in India slightly narrowed, and for the first time in the past four months the manufacturing, mining and electricity sectors all recorded an acceleration in growth during June. Manufacturing PMI data show that the positive momentum seen at the beginning of 2H16 has carried over into August, with expansion rates for new work, buying levels and production accelerating further.

China's economic activity so far in 2H16 has been driven by strong housing market activity and investment by State Owned Enterprises (SOEs). These drivers are likely to perform well in the coming months. Investment growth will accelerate modestly in 2016 as a whole. China's central bank will likely keep monetary policy stable until the housing sector cools further around year-end. The latest data confirms expectations that risk remains tremendously on the downside for China. Growth over the last few years has become increasingly reliant on consumption and state investment. The manufacturing PMI fell to the no-change mark in August.

Table 3.2: Summary of macroeconomic performance of BRIC countries

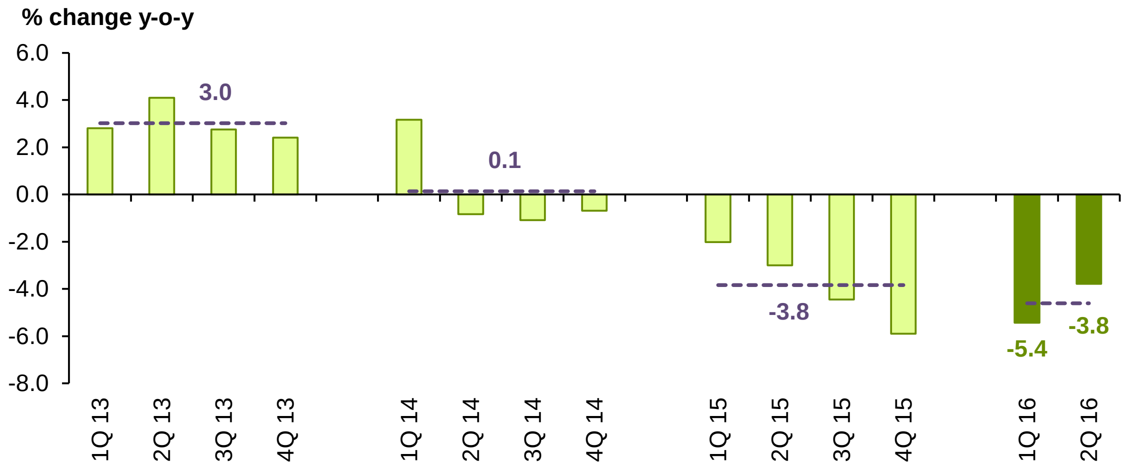
	GDP growth rate		Consumer price index, % change y-o-y		Current account balance, US$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Brazil	-3.4	0.4	8.4	5.5	-18.8	-22.2	-8.2	-6.1	75.4	80.6
Russia	-0.8	0.7	7.2	5.7	35.3	47.1	-4.1	-3.0	13.7	15.9
India	7.5	7.2	5.6	5.7	-19.6	-30.6	-3.8	-3.6	52.3	50.8
China	6.5	6.1	2.3	2.1	338.7	286.1	-3.8	-4.2	20.1	25.0

Note: 2016 and 2017 = forecast.
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

GDP contracted by 3.8% y-o-y in 2Q16, following a contraction of 5.4% in 1Q16. This brings 1H16 deceleration to 4.6% y-o-y. Despite falling into negative territory, the 2Q figure also represents an important affirmation of the slow move towards stabilization, as deceleration reached its slowest rate since 2Q15. Despite this, government spending shrank more in 2Q compared with the previous quarter, while the contraction in private consumption and Gross Fixed Capital Formation were notably less. The trade balance continued to favour growth.

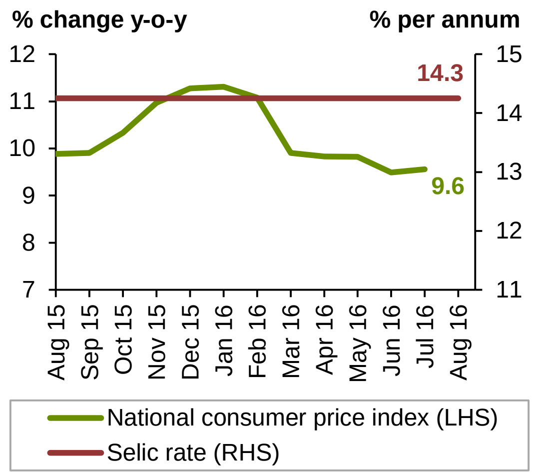
Graph 3.6: Brazilian GDP growth



Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

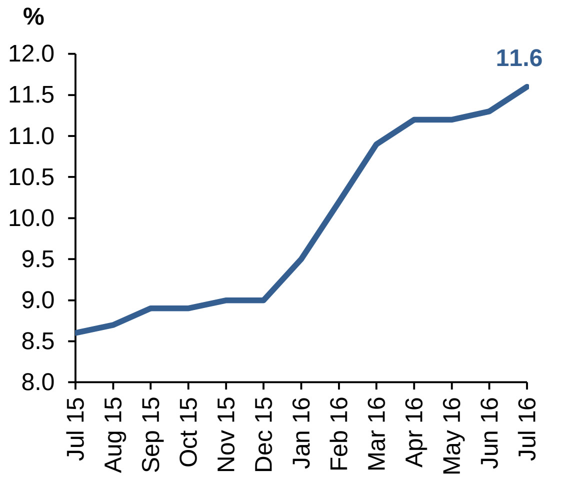
The **real** appreciated in August for the seventh consecutive month, rising by 2.0% m-o-m against the dollar. The central bank kept its benchmark **interest rate** unchanged for the 13th consecutive month at 14.25% in August, while **inflation** posted 9.6% in July, slightly higher than June's 9.5%. The three-month moving average **unemployment rate** increased to 11.6% in July, the highest rate on record since March 2012.

Graph 3.7: Brazilian inflation vs. Interest rate



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

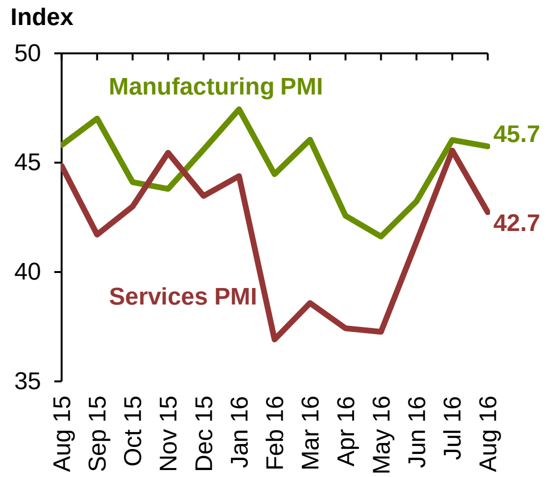
Graph 3.8: Brazilian unemployment rate



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

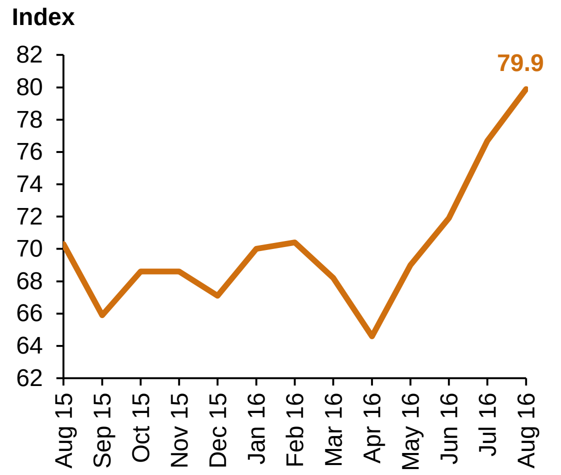
With the economic situation continuing to restrict demand, both the **services and manufacturing** sectors were in recession the previous month, according to their respective PMIs. The services sector reported a greater decline in activities due to a downturn in incoming new orders and job creation. The manufacturing sector witnessed a contraction in total new orders and a deceleration in production. However, brighter expectations for the economy among Brazilian consumers resulted from greater income purchasing power, leading to the fourth consecutive improvement in the **consumer confidence** index in August, which reached its highest level since January 2015.

Graph 3.9: Brazilian manufacturing and services PMIs



Sources: IHS Markit and Haver Analytics.

Graph 3.10: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

GDP forecasts have not changed this month at -3.4% y-o-y in 2016 and 0.4% in 2017.

Russia

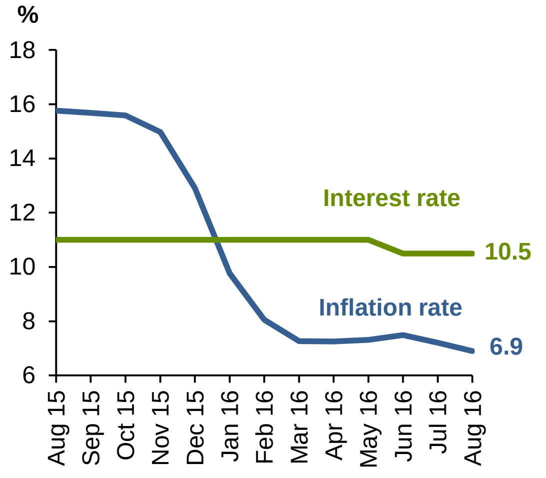
It has been confirmed that **GDP** declined by 0.6% y-o-y in 2Q16, after seeing a 1.2% drop in 1Q16. This represents the smallest contraction in the economy since it fell into recession in 1Q15. Although detailed data is not yet available, the Economy Ministry reported that "industrial production, transport and agriculture were the main factors behind the contraction slowdown".

Graph 3.11: Russian GDP growth

Sources: State Committee of the Russian Federation and Haver Analytics.

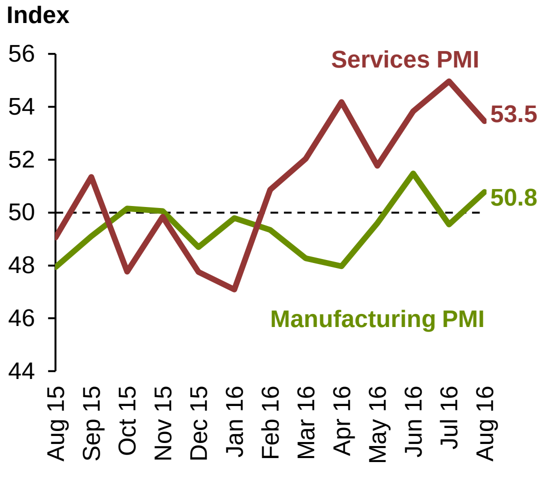
After appreciating more than 17% from March to July, the **ruble** depreciated by 1.1% m-o-m in August. **Inflation** continued its easing trend in August, registering its lowest point since February 2014 at 6.9% y-o-y. By leaving its benchmark **interest rate** at 10.5% in August, the central bank once again showed a cautious approach towards inflation, which severely hit household consumption the previous year.

Graph 3.12: Russian inflation vs. Interest rate



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

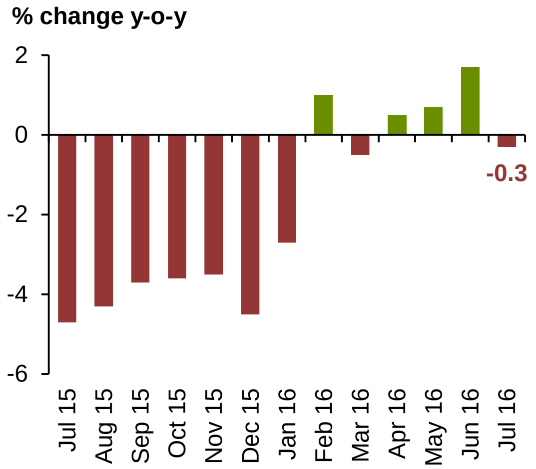
Graph 3.13: Russian PMIs



Sources: IHS Markit and Haver Analytics.

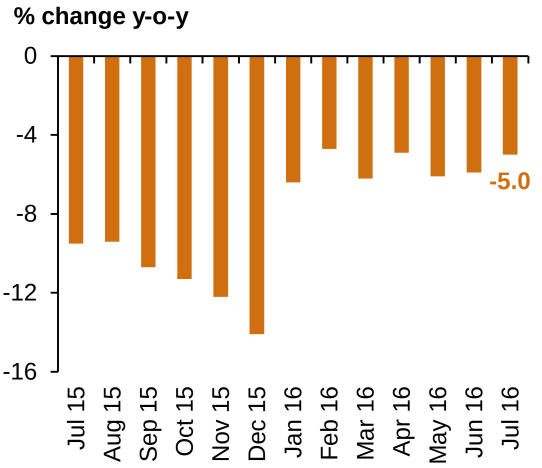
The **manufacturing sector** was back in growth territory in August thanks to a reported slight increase in production. The IHS Markit manufacturing PMI registered an uptick to 50.8 the previous month, up from 49.6 in July, while industrial production saw a fractional fall of 0.3% y-o-y. **Industrial production** increased by 0.1% y-o-y from January to July 2016 vs. a 3.0% decline over the same period of 2015. The **services sector** continued growing for the seventh month in a row in August according to its PMI reading, which posted 53.5. The survey showed the quickest addition to waiting orders since January 2004. Improvements in the manufacturing and services sector reflected notably slower deceleration in **retail sales**, which continued improving in July compared with the previous year.

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.

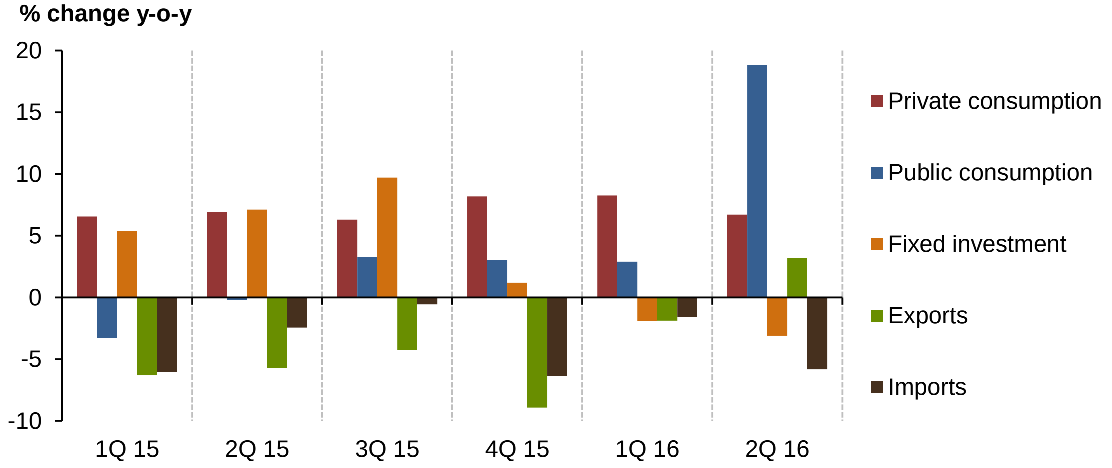
GDP forecasts did not change this month at -0.8% and 0.7% for 2016 and 2017, respectively. However, a notable slowdown in the GDP's rate of contraction in 2Q16 with strong performance in the services sector, a relatively positive note in the manufacturing sector and easing inflation reasonably argue for a potential upward revision in the near future.

India

India's **real GDP growth** slowed beyond projections to 7.1% y-o-y in 2Q16 from 7.9% y-o-y in 1Q16. The slowdown was driven by weaker private consumption growth and a further slowdown in fixed investment. India's performance remains better than that of other emerging economies, including China. However, slowing growth momentum during the first fiscal quarter set the tone for the rest of the fiscal year, making the government's official growth target of 8% difficult to attain. Following two quarters of above-8% growth, real private consumption growth slowed to 6.7% y-o-y during 2Q16. Industrial production data still pointed to muted non-durable goods output, which is a good indicator of rural demand. Additionally, consumer price inflation picked up during the quarter, while wages remained fairly flat, limiting the real purchasing power of both rural and urban consumers.

The impact of slower private consumption was somewhat offset by a pickup in government spending amid seasonal deployment of funds for infrastructure and other development projects. The investment side saw more negative news. A contraction in real fixed investment seen during 1Q16 expanded further into 2Q16, deepening to 3.1% y-o-y. As a result, the share of investment in GDP has fallen below 30% in real terms. The two main factors currently holding investment back are weak capacity utilisation and a near-full stop in bank lending to the industrial sector. Improving real net exports provide the only positive data, up 3.2% y-o-y, following five consecutive quarters of contraction.

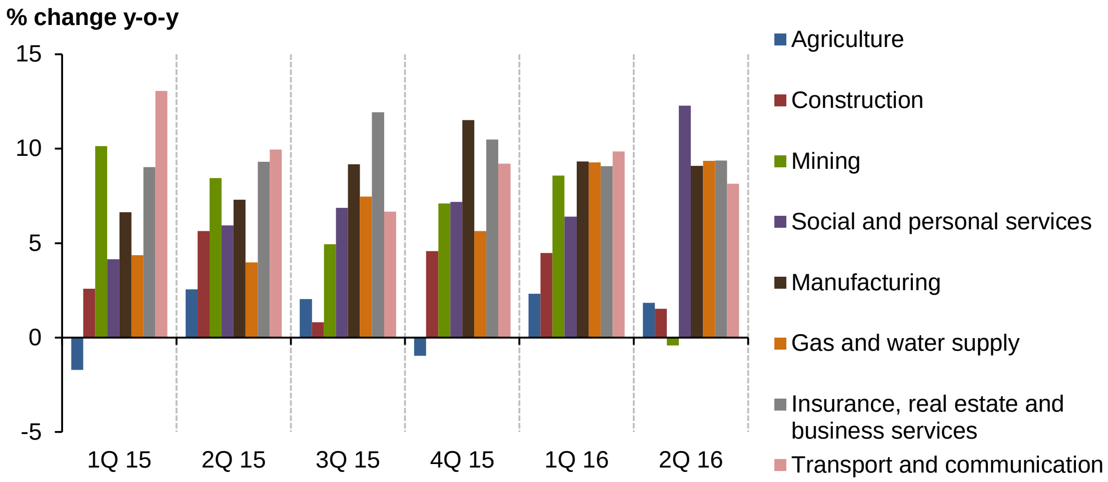
Graph 3.16: Indian GDP growth at market prices



Sources: Central Statistics Office and Haver Analytics.

On the supply side, real GDP expanded by 7.3% y-o-y during the June quarter, slowing from 7.4% reported the previous quarter. As before, services, manufacturing, and electricity were engines of growth, according to GDP data. Meanwhile, the most noticeable developments were a sharp slowdown in construction growth and a drop in the mining sector, the first in more than three years. Meanwhile, the manufacturing sector recorded over 9% growth for the fourth consecutive quarter, in sharp contrast to monthly manufacturing-related data.

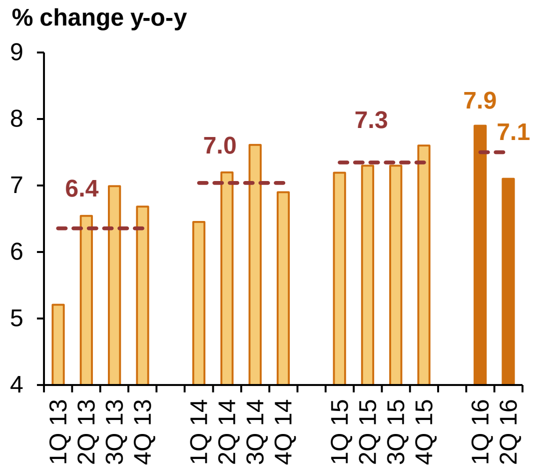
Graph 3.17: Indian GDP growth by supply side



Sources: Central Statistics Office and Haver Analytics.

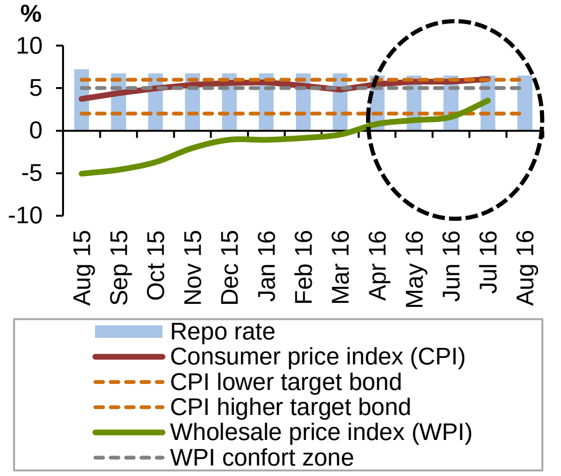
Inflation will remain sensitive to changes in food prices, which have a weight of 45.9% on the consumer price index. Owing to some improvements in food-supply management, upside risks to inflation from food price spikes have generally decreased. The CPI elevated to just above the RBI's inflation target band (6.04% y-o-y) in July. Also, the WPI will increase to 3.3% y-o-y in July compared with 1.62% y-o-y in June and will gradually close to the WPI comfort zone. India's sluggish and uneven industrial growth posed an important risk to the economy and for the above-mentioned reasons, monetary policy has been on "pause".

Graph 3.18: Indian GDP growth



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

Graph 3.19: Indian inflation vs. Repo rate

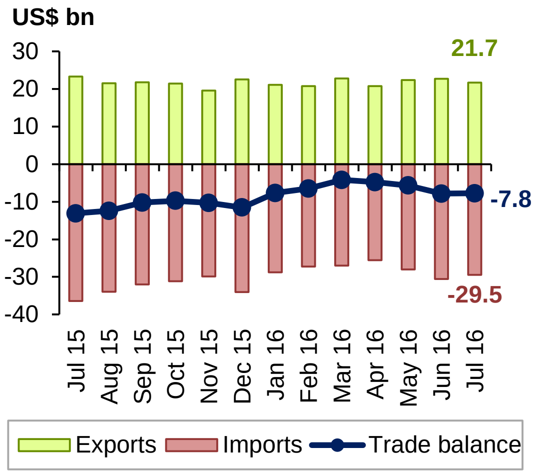


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Over the past year, the RBI has stepped up pressure on big corporate debtors to pay up, despite the absence of an effective national bankruptcy law. The RBI announced an initiative to open India's domestic corporate bond market to direct participation by **foreign portfolio investors** (FPI) in the final week of August, seeking to enhance liquidity and increase the depth of the country's corporate debt market. In addition, by increasing the limit on currency hedges to US$30 mn from US$20 mn, the RBI gave investors greater scope to obtain currency protection when this is desired. However, although the move opens access, there are still potential constraints to growth in future portfolio inflows.

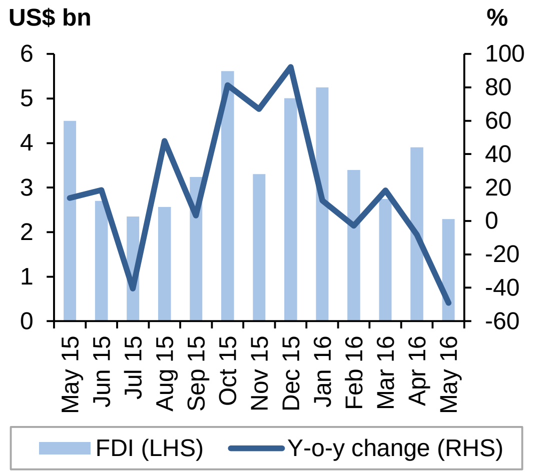
The **trade** deficit in India slightly narrowed to US$ 7.8 bn in July from US$13.09 bn a year earlier. Merchandise **exports** contracted by 6.8% y-o-y in July to US$21.7 bn after rising in June for the first time in 19 months. Exports to the US fell by 6.6% y-o-y, to Japan by 1.8% y-o-y, and to China by 5.5% y-o-y. Exports to the EU increased by 1.4% y-o-y in May. Merchandise **imports** dropped by 19.0% y-o-y in July to US$29.5 bn.

Graph 3.20: Indian net exports



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3.21: Indian foreign direct investment (FDI)

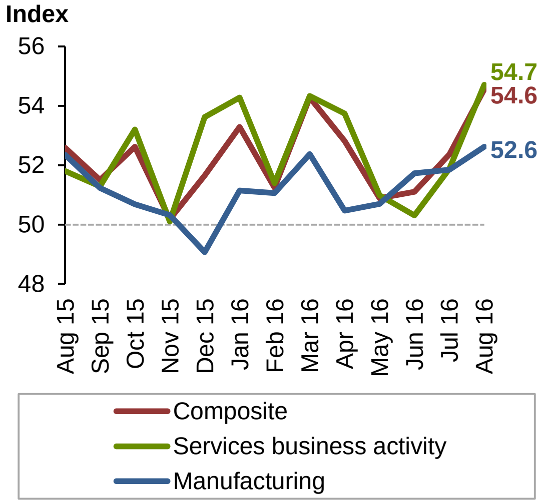


Sources: Reserve Bank of India and Haver Analytics.

As a positive sign, **industrial production** (IP) in India increased by 2.1% y-o-y in June, beating the market consensus of 1.5%, following a downward revision to the 1.1% rise of the previous month.

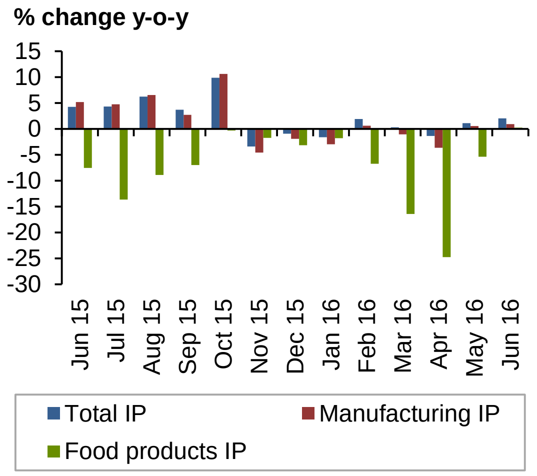
Climbing from 51.8 in July to a 13-month high of 52.6 in August, the **manufacturing PMI** — a composite single-figure indicator of manufacturing performance — showed solid improvement in the sector. Manufacturing PMI data shows that the positive momentum seen in July has been carried over into August, with expansion rates for new work, buying levels and production accelerating further.

Graph 3.22: Indian PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3.23: Indian industrial production breakdown



Sources: Central Statistical Organisation of India and Haver Analytics.

The **GDP growth** expectation for 2016 and 2017 remained unchanged this month at 7.5% and 7.2%. Mixed negative and positive factors will influence India's GDP growth rate in 2017. Negatively, high inflation and expectations for oil and commodity prices in the coming months create a downside recovery risk. Positively, the current account balance deficit is likely to remain low, government debt has seen strong nominal growth versus the debt ratio and manageability of external debt will support economic growth in 2017.

China

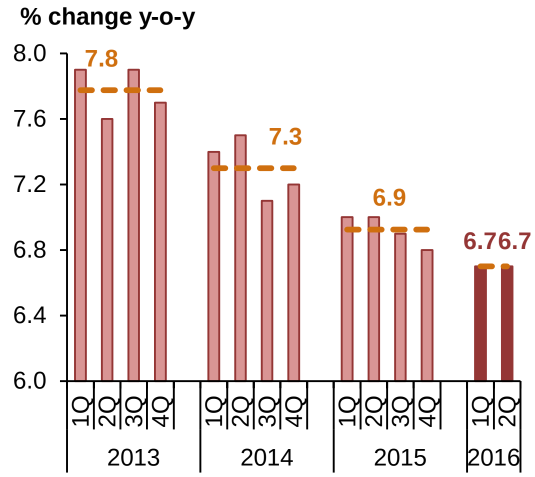
China's **economic activity** so far in 2H16 has been driven by strong housing market activity and investment by State Owned Enterprises (SOEs); it seems these drivers will perform strongly in the coming months. Investment growth will accelerate modestly in 2016 as a whole. Private consumption growth is set to slow, but should remain relatively robust. Investment momentum declined sharply in July, with overall fixed asset investment (FAI) growth falling from 8.3% y-o-y in Q2 to 3.9%, the lowest rate since 1999. Chinese foreign direct investment (FDI) growth slowed to 0.6% in July, down from 1.5% a month earlier, and 5.6% in 2015. Consumption remained relatively robust, although momentum is softening due to slower wage growth. Migrant wage growth eased to 6.7% y-o-y in Q2. China launched seven new inland free trade zones (FTZs) to reduce investment deceleration, wholly in line with prior policy signals. Despite the Chinese government's efforts to support GDP growth, some negative signs — such as the gap between rapid credit expansion and a slow GDP growth rate, as well as the apparent divergence between strongly slowing private investment and soaring public investment — have worried policymakers and investors.

In mid-August, China published key economic data for July, with deterioration across most measures indicating the third quarter started on weak footing. Nominal and real growth measures in industrial output, fixed-asset investment and retail sales weakened in July. Investment in particular weakened to a five-year low in real terms and to a nearly 17-year low in nominal terms.

Plans to cut excess capacity in sectors such as coal mining and steel remain cautious in light of concerns about the labour market, but given the extent of structural overcapacity in these sectors, more forceful closures are needed.

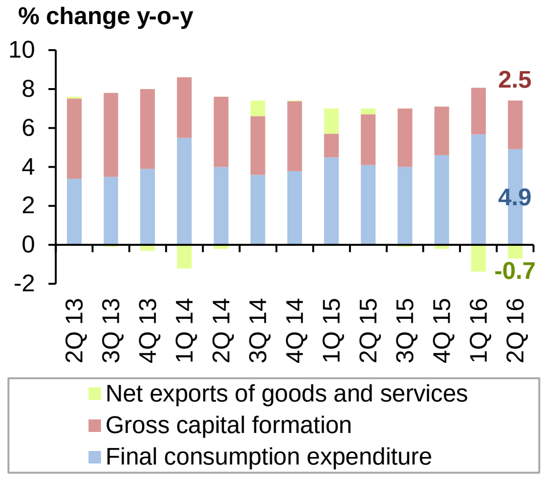
The country's central bank will likely keep **monetary policy** stable until the housing sector cools further around year-end. China's total social financing (TSF) only reached CN¥487 billion (US$73.29 bn) in July, the lowest level in two years. Over the past year, average monthly financing was CN¥1.34 trillion, which is itself lower than the annual average of prior years. Total social financing is expected to contract further in July, signaling downward momentum in 3Q16.It seems the yuan will weaken against the US dollar to 6.9 by the end of 2016 to offset strengthening of the US dollar amid higher US Federal Reserve interest rates.

Graph 3.24: Chinese GDP growth



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

Graph 3.25: Chinese GDP breakdown



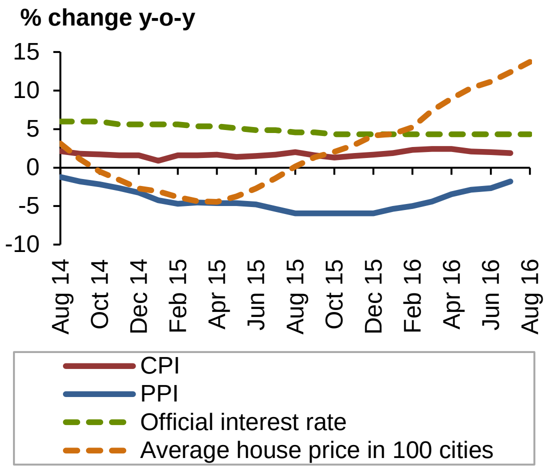
Sources: China National Bureau of Statistics and Haver Analytics.

The **inflation CPI** rose by 1.8% y-o-y in July, compared with a 1.9% rise in June and in line with market consensus. The producer price index (PPI) dropped by 1.7% y-o-y in July, less than a 2.6% decline in June and market expectations of a 2.0% fall. It was the smallest decrease since August 2014.

In terms of trade, Chinese **exports** contracted at a marginally lower pace in July. Non-cumulative exports shrank by 4.4% in dollar terms, compared with 4.9% a month prior. The pace of contraction moderated for exports to the United States, the European Union and ASEAN, but worsened for Hong Kong. Evidence of manufacturing export deflation continued; for example, integrated circuit volumes rose by 7%, while their value fell by 9.4%.

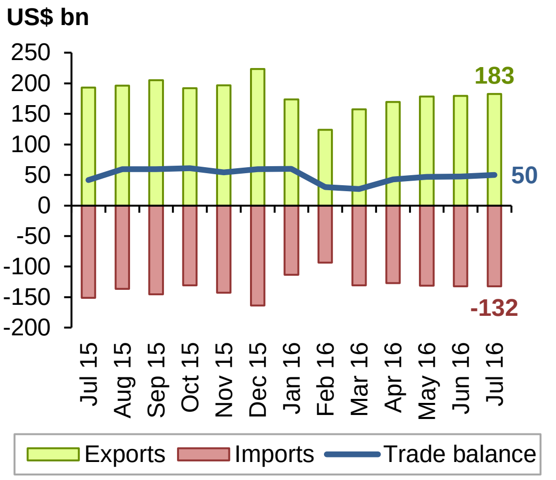
China's **imports** contracted at a faster pace in July. Non-cumulative imports contracted by 12.5% compared with 8.4% in June. Imports from the European Union, ASEAN, South Korea, and Japan contracted at a faster pace. China's trade balance rose to a six-month high, with a trade surplus standing at $52.3 billion compared with $47.9 billion in June or $41.9 billion one year prior. China's average monthly trade surplus was $49.5 billion in 2015. Most of the rise in trade surplus was captured by the machinery and high-tech manufacturing sectors, which increased by the largest increment since March 2016.

Graph 3.26: Chinese CPI vs. PPI



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

Graph 3.27: Chinese trade balance

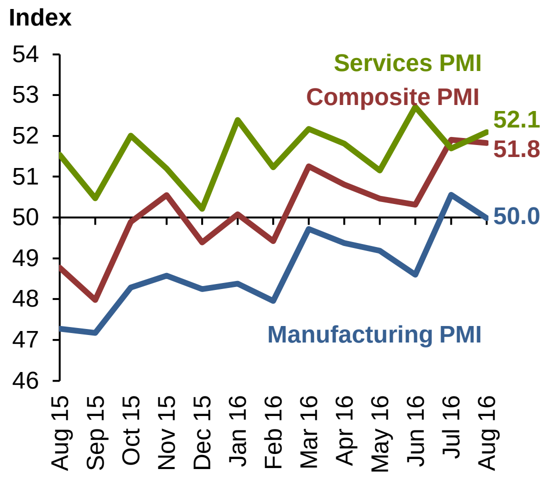


Sources: China Customs and Haver Analytics.

Operating conditions stagnated across China's manufacturing sector during August, after marginal improvement seen the previous month. Production and total new orders both rose at slower rates, while export sales continued to decline.

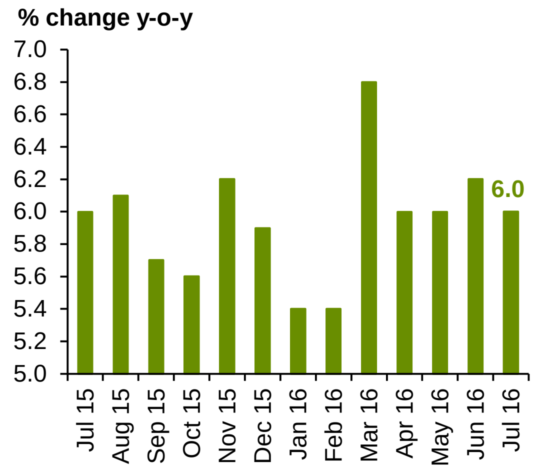
The manufacturing **PMI** fell from 50.6 in July to the no-change mark of 50.0 in August. This signalled stagnant operating conditions in the latest survey period, following an improvement in the health of the sector the previous month. The index readings for output, new orders and stocks of purchases all declined from the previous month, with the index for inventories of purchases falling back into contraction. The stagnation follows tentative signs of recovery in July, and may have been caused by a temporary tightening of proactive fiscal policies. Downward pressure on China's economy remains and government support to stabilize growth must continue.

Graph 3.28: Chinese PMIs



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3.29: Chinese industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

The latest data confirm expectations that risk remains overwhelmingly on the downside in China, but China's **GDP growth** expectations in 2016 were kept unchanged this month at 6.5%. The GDP growth expectation for 2017 is 6.1%.

OPEC Member Countries

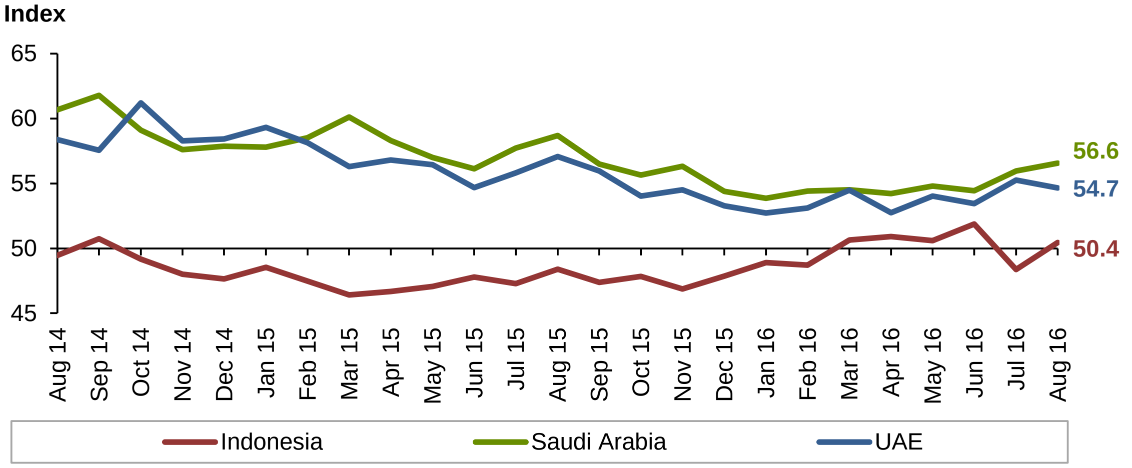
In **Saudi Arabia**, the non-oil private sector continued its growth momentum in August, with the Emirates NBD Saudi Arabia PMI survey revealing notable increases in output and new orders, while job creation and input inventories also accelerated. The index posted 56.6 the previous month, up from 56.0 in July. Consumer price inflation posted 3.8% y-o-y in July, down from 4.1% in June.

In **Indonesia**, the rupia slightly depreciated by 0.4% m-o-m in August, after appreciating 1.8% vs. the dollar a month earlier. Consumer prices grew by 2.8% y-o-y in August, compared with a 3.2% increase in July. The country's manufacturing sector moved back into growth one month ago, with the Nikkei Indonesia Manufacturing PMI at 50.4, up from July's 48.4. This improvement came on the back of an uptick in new orders that pushed up production.

In **IR Iran**, the Statistical Center of Iran reported that the GDP, excluding oil, posted 4.4% y-o-y growth in 1Q of the Iranian year. GDP growth in 1Q16 was reported at 3.7% y-o-y. Inflation during August stood at 9.4% y-o-y.

In the **United Arab Emirates**, the previous month witnessed a continuation of the country's robust performance in the non-oil private sector. The PMI posted 54.7 in August thanks to notable acceleration in output and new business, mainly from the domestic market. The survey also showed a slight increase in employment from the previous month.

Graph 3.30: PMIs of Indonesia, Saudi Arabia and UAE



Sources: Emirates NBD, IHS Markit, Nikkei, and Haver Analytics.

Other Asia

In the **Philippines**, GDP growth accelerated in 2Q16 by up to nearly 7% from 6.8% the previous quarter, representing the highest rate of growth since 2Q13. Both private and government consumption expenditures increased, by 7.3% and 13.5% in 2Q16, up from 7.0% and 11.8% in 1Q16, respectively. The Nikkei Philippines Manufacturing PMI showed a continuing upturn in the manufacturing sector in August thanks to increases in production and new business, together with a slower rate of growth in employment.

In **Thailand**, GDP grew by 3.5% in 2Q16, up from 3.2% the previous quarter, despite a sharp drop in government consumption from nearly 8% in 1Q16 to only 2.2% in 2Q16, while private consumption notably increased from 2.4% to 3.8% in same period. The country's manufacturing sector edged closer to growth the previous month, with the PMI at 49.8, up from 49.3 in July, due to a slight rise in production.

Africa

Inflation in **Egypt** posted 14.8% y-o-y in July while the central bank policy rate remained at 11.75% from June to August. Deceleration in the country's non-oil private sector deepened further the previous month, as suggested by the PMI, which fell to 47.0 from July's 48.9 due to shortages of material, cost increases and a sharp decline in employment.

In **South Africa**, the rand appreciated by 4.7% m-o-m in August, following a 4.3% appreciation one month earlier. It has appreciated by more than 17% since the beginning of the year. Inflation posted a 6.5% y-o-y increase in July, while the unemployment rate in 2Q16 was at 26.6%, little changed from the previous quarter's 26.7%.

Latin America

In **Argentina**, the peso slightly appreciated by 0.4% m-o-m in August, after depreciating by nearly 50% between December 2015 and July 2016.

In **Chile**, GDP growth in 2Q16 declined at its slowest pace since 3Q14 at 1.5% y-o-y, down from 2.2% in the previous quarter, despite a marked increase in government consumption. Private consumption growth was at 1.7% in 2Q16 vs 2.6% in 1Q16. Government consumption growth stood at 7.0%, up from 4.4%. One month ago, the central bank kept its benchmark interest rate on hold at 3.5%, citing a return of inflation to the bank's tolerance range.

Transition region

GDP growth in **Poland** increased to nearly 3% y-o-y in 2Q16, up from 2.5% in 1Q16, thanks to an increase in public consumption and exports. Public consumption registered a 4.0% y-o-y increase in 2Q16, up from 3.7% in the previous period, while exports rose by 12.5% vs 6.8% in the previous quarter. The country's manufacturing sector reported an improvement in operating conditions in August, with its respective PMI increasing to 51.5, up from July's 50.3, thanks to export acceleration and a production increase resumption, hence a higher rate of employment.

Oil prices, US dollar and inflation

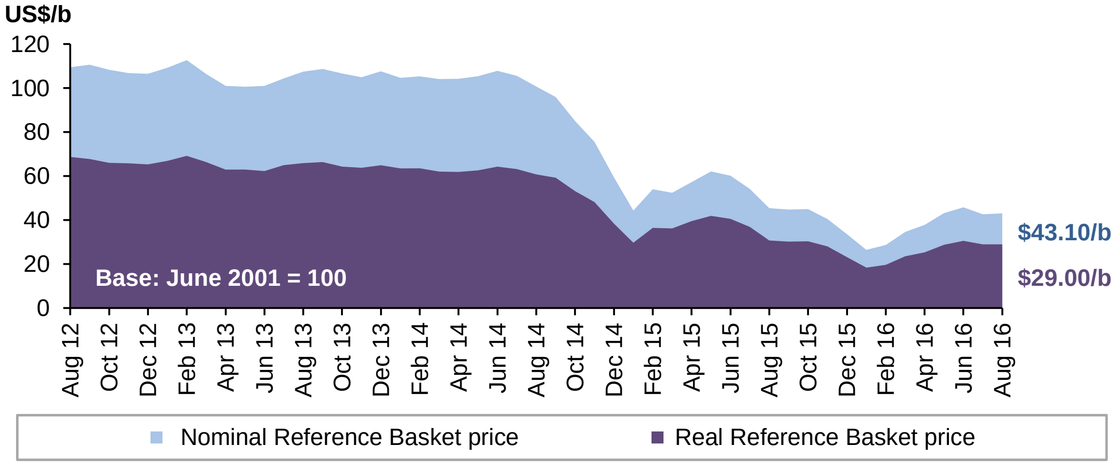
The US dollar generally weakened in August against major currencies. On average, it declined by 1.3% against the euro in August. It declined against the Swiss franc by 1.2% and it declined for the ninth consecutive month against the yen, down by 2.6%, and is down 17.4% since November 2015. On average, the US dollar gained just 0.3% against the pound sterling, which has recently reversed some of the losses experienced since the Brexit referendum, on better-than-anticipated economic data.

Compared with the Chinese yuan, the US dollar declined by 0.4% m-o-m on average in August, after having increased the previous three months. The US dollar declined against the Indian rupee by 0.4% m-o-m. Compared with the Brazilian real it fell by 2.0% m-o-m on average in July, and has fallen by 20.8% since January. Also, the US dollar strengthened against the Russian ruble by 1.1% m-o-m.

Considering weak GDP growth numbers in the US in the first half of 2016, the US Fed is likely to be prudent in regard to increasing interest rates until sufficient evidence of a rebound in economic activity in 2H16 is received. Meanwhile, solid growth data from the Euro-zone (EZ) in 1H16, limited immediate impact from Brexit and concerns about the effectiveness of additional monetary stimulus in the EZ and Japan, would likely make their central banks cautious when considering further monetary stimulus in the short term. This may keep the US dollar at around its current level on average in the coming months.

In nominal terms, the price of the OPEC Reference Basket (ORB) advanced by a monthly average of $0.42, or 1.0%, from $42.68/b in July to $43.10/b in August. In real terms, after accounting for inflation and currency fluctuations, the ORB declined marginally, to $29.00/b from $29.01/b (base June 2001=100). Over the same period, the US dollar declined by 0.9% against the import-weighted modified Geneva I + US dollar basket*, while inflation advanced by 0.1%.

Graph 3.31: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price*



Source: OPEC Secretariat.

* *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.*

World Oil Demand

World oil demand growth in 2016 was revised slightly higher by around 10 tb/d from the August *MOMR*, primarily as a result of better-than-expected performances by OECD Europe and Asia Pacific in 1H16. Hence, world oil demand growth is now pegged at 1.23 mb/d, with total global consumption at 94.27 mb/d.

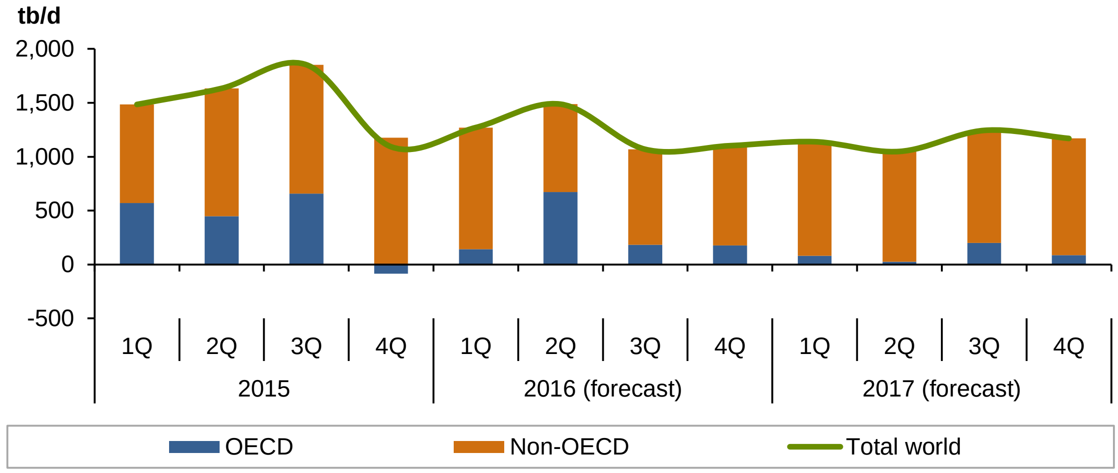
In 2017, world oil demand growth was kept relatively unchanged from the *August MOMR* at 1.15 mb/d, with total global consumption forecast at around 95.42 mb/d.

Table 4.1: World oil demand in 2016, mb/d

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	24.46	24.46	24.56	25.10	24.74	24.71	0.26	1.05
of which US	*19.70*	*19.79*	*19.86*	*20.25*	*19.91*	*19.96*	*0.25*	*1.28*
Europe	13.73	13.59	13.86	14.16	13.70	13.83	0.10	0.73
Asia Pacific	8.02	8.57	7.60	7.59	8.08	7.96	-0.06	-0.80
Total OECD	**46.21**	**46.61**	**46.01**	**46.85**	**46.52**	**46.50**	**0.29**	**0.63**
Other Asia	12.04	12.35	12.63	12.40	12.73	12.53	0.49	4.03
of which India	*4.05*	*4.49*	*4.25*	*4.11*	*4.44*	*4.33*	*0.27*	*6.78*
Latin America	6.56	6.19	6.49	6.82	6.47	6.49	-0.06	-0.99
Middle East	8.11	8.06	7.97	8.65	8.06	8.18	0.07	0.86
Africa	3.99	4.12	4.09	4.03	4.17	4.10	0.11	2.78
Total DCs	**30.71**	**30.73**	**31.18**	**31.90**	**31.42**	**31.31**	**0.60**	**1.96**
FSU	4.62	4.49	4.37	4.73	5.04	4.66	0.04	0.81
Other Europe	0.67	0.68	0.64	0.68	0.77	0.70	0.02	3.57
China	10.83	10.71	11.33	10.97	11.41	11.11	0.28	2.54
Total "Other regions"	**16.13**	**15.89**	**16.35**	**16.38**	**17.22**	**16.46**	**0.34**	**2.09**
Total world	**93.04**	**93.23**	**93.54**	**95.12**	**95.16**	**94.27**	**1.23**	**1.32**
Previous estimate	93.04	93.16	93.44	95.22	95.19	94.26	1.22	1.31
Revision	0.00	0.07	0.10	-0.10	-0.03	0.01	0.01	0.01

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

Graph 4.1: Quarterly world oil demand growth



Source: OPEC Secretariat.

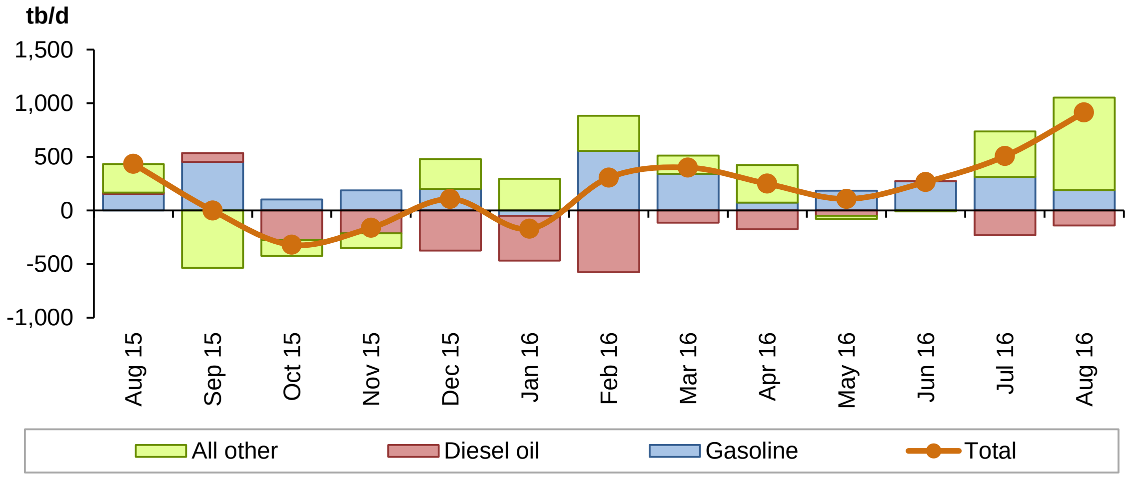
OECD Americas

The latest available monthly data implies solid **US oil demand** growth for June 2016, with y-o-y gains of about 0.27 mb/d, or 1.3%.

To an overwhelming extent, the growth share in June 2016 oil requirements can be attributed to **gasoline**, which continued to be supported by the low fuel price environment, and, in consequence, the bullish improvement in the sales of Sport Utility Vehicles (SUVs) and cross-over vehicles, as well as the high level of mileage traveled. The latter grew robustly by approximately 2.1% during 1H16, compared with the same period in 2015. Healthy gasoline demand is projected to remain the main driver behind US oil demand growth for the remainder of 2016 and 2017, in line with an expanding US vehicle market, particularly for larger vehicles. Consistent with a slightly growing economy and expanding aviation activities, steep increases were also observed in **jet/kerosene** demand. Coming out of a very low historical baseline level, **residual fuel oil** requirements increased sharply, while **propane/propylene** demand was down for another month, y-o-y.

US oil demand in 1H16 averages higher by around 0.2 mb/d compared with the same period the previous year. The main characteristics in the first six months of 2016 were growing gasoline, jet/kerosene and fuel oil demand, while diesel requirements decreased. **July 2016** figures, which are based on preliminary weekly data, show an increase of around 2.5% y-o-y, with gasoline and jet/kerosene requirements rising, but being partly offset by disappointing diesel demand. **August 2016** preliminary data indicates another solid month in US oil demand for the main products, with gasoline and jet/kerosene being the leading products in the main month of the summer holiday season. As a result of these factors, US oil demand is projected to remain strong throughout the remainder of 2016, with transportation fuels dominating the implied growth share.

Graph 4.2: US oil consumption, y-o-y changes



Source: US Energy Information Administration.

The US is projected to remain the main contributor to anticipated OECD oil demand growth during 2017.

Table 4.2: US oil demand, tb/d

	Average January - August		*Change 2016/15*	
	2016	2015	tb/d	%
Propane/propylene	1,090	1,129	-39	-3.4
Gasoline	9,376	9,144	232	2.5
Diesel oil	3,815	4,024	-208	-5.2
Jet/kerosene	1,602	1,527	75	4.9
Fuel oil	352	242	109	45.0
Other products	1,090	1,129	-39	-3.4
US 50	**19,729**	**19,429**	**300**	**1.5**
US territories	**397**	**374**	**23**	**6.1**
Total	**20,126**	**19,803**	**323**	**1.6**

Source: US Energy Information Administration.

In **Mexico**, July 2016 was marked by strongly decreasing oil demand, particularly affecting LPG, residual fuel oil and diesel, being only slightly offset by increasing jet/kerosene requirements. Consequently, Mexican oil demand in July 2016 dropped by a huge 10.4% y-o-y. 2016 oil demand growth is expected to remain in the negative y-o-y, while in 2017, it is projected to grow slightly, as a result of expected positive economic growth.

Canadian oil requirements fell y-o-y in June 2016, with all the main product categories, except naphtha and gasoline, being on the decline. The overall 2016 forecast for Canadian oil demand remained at the level of the previous month, leaving oil requirements slightly declining compared with 2015. Depending on the development of the overall economy, 2017 Canadian oil requirements are projected to slightly exceed those of 2016.

In 2016, **OECD Americas oil demand** is projected to grow by 0.26 mb/d compared with the previous year. For next year, it is forecast to increase by 0.20 mb/d.

OECD Europe

European oil demand continued to increase during 1H16. In relation to recent historical patterns, the rise was substantial, particularly during 2Q16, which also involved the impact of cold weather and some positive oil price-related effects. Undoubtedly, continuing economic concerns in some parts of the region continue to pose some uncertainty. Nevertheless, the expected oil demand in the region for 2016 and 2017 is being largely dominated by positive factors, which, in the first instance, concern road transportation fuels, similar to the US.

Data for the first seven months of 2016, including some preliminary information for July, showed a solidly increasing European Big 4 oil demand, with a rise of approximately 1.6% y-o-y, with road transportation fuels, notably diesel, accounting for the bulk of the increases. These developments are supported by the positive momentum in auto sales and the solid expansions in all major auto markets. The general expectations for the region's oil demand during 2016 and 2017 have certainly improved since last month's projections, but they are still coupled with uncertainties that depend on the region's economic developments. Moreover, high taxation polices related to oil consumption and fuel substitution still remain the main factors that could curb oil demand despite expectations of modest economic growth, while the low historical baseline and the low fuel price environment are the principal positive ones.

OECD Europe oil demand is projected to grow by 0.10 mb/d in 2016 for the second consecutive year. Oil demand in 2017 will slightly decline compared with 2016.

Table 4.3: Europe Big 4* oil demand, tb/d

	Jul 16	Jul 15	Change	Change, %
LPG	390	390	0	0.0
Naphtha	640	634	6	1.0
Gasoline	1,134	1,181	-47	-4.0
Jet/kerosene	800	777	23	3.0
Diesel oil	3,304	3,346	-42	-1.3
Fuel oil	256	283	-27	-9.4
Other products	622	675	-53	-7.9
Total	**7,146**	**7,285**	**-139**	**-1.9**

*Note: * Germany, France, Italy and the UK.*

Sources: JODI, OPEC Secretariat, UK Department of Energy and Climate Change and Unione Petrolifera.

OECD Asia Pacific

Japanese oil demand contracted by 0.11 mb/d in July 2016, which translates into a 3.0% decrease y-o-y, while total consumption reached 3.33 mb/d. Growth among the products was mixed, with diesel oil and fuel oil seeing some gains, while oil requirements in other product categories, particularly naphtha, gasoline, jet/kerosene and crude for direct burning, declined y-o-y.

Japanese direct oil usage is most likely expected to decline further in the remaining part of 2016, as a result of fuel substitution with natural gas and coal. Less promising are also August 2016 new auto sales, which show a minor y-o-y decrease. The outlook for overall 2016 Japanese oil demand remains low, with the risks being once more skewed towards the downside.

Cumulatively, with data up to July, Japanese oil demand shrunk by a substantial 0.18 mb/d, or around 4.7%, y-o-y with all products being in negative territory except jet/kerosene. The high level of substitution has impacted the consumption of direct crude burning and fuel oil negatively, both dropping by 44.9% and 11.2% y-o-y, respectively.

Oil demand projections for 2017 assume a higher likelihood that a number of additional nuclear plants will re-join operations.

Table 4.4: Japanese domestic sales, tb/d

	Jul 16	Jul 15	Change	Change, %
LPG	419	415	3	0.8
Naphtha	699	767	-67	-8.8
Gasoline	950	967	-17	-1.8
Jet/kerosene	172	185	-12	-12.1
Diesel oil	570	565	5	0.8
Fuel oil	411	382	29	7.6
Other products	49	61	-13	-20.6
Direct crude burning	55	88	-33	-37.1
Total	**3,325**	**3,429.8**	**-105**	**-3.1**

Source: Ministry of Economy Trade and Industry of Japan.

In **South Korea**, June 2016 came up bullish, increasing by approximately 6.2% y-o-y. Gains in the petrochemical industry, which called for increasing LPG requirements as well as diesel, gasoline and residual fuel oil, were partly offset by slightly shrinking requirements for naphtha. The outlook for South Korean oil demand during 2016 and 2017 remained healthy, unchanged compared with last month's projections.

OECD Asia Pacific oil consumption growth is projected to fall by 0.06 mb/d in 2016. For 2017, growth is expected to decline further by 0.08 mb/d y-o-y.

Other Asia

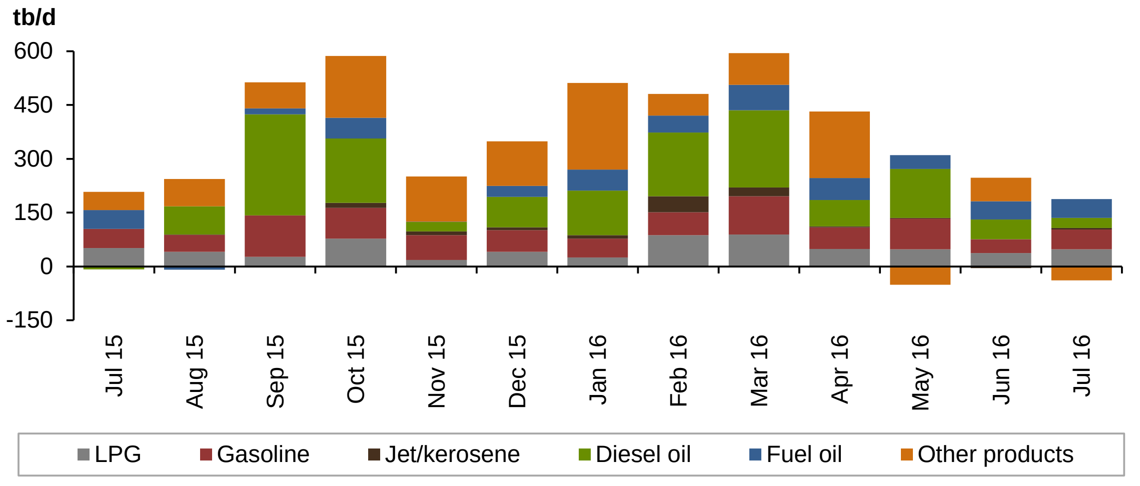
India's oil demand continued to increase, albeit at a slower pace than in previous months. The month of July registered an increase of around 0.15 mb/d, or 3.9%, y-o-y, with total product demand slightly below the 4 mb/d mark for the first time in 2016.

Product performances continue to impress, especially gasoline and fuel oil, which both increased by more than 50 tb/d, or 12% and 20%, respectively. The increase in gasoline demand growth is largely attributed to the continuous increase in domestic passenger car sales, which grew by around 10% y-o-y in July, the fastest rate of growth in seven months. SUV sales in July were also higher by more than 42% y-o-y. Growth in two-wheeler sales was around 14% y-o-y. The increase in fuel oil consumption growth can be linked to the manufacturing sector as steel and petrochemicals recorded increases in their fuel oil demand. Additionally, the manufacturing Purchasing Managers' Index (PMI) registered 51.8 points, which is above the threshold of 50 that separates expansion from contraction.

LPG grew firmly, adding some 48 tb/d, or 8.7%, y-o-y, with total consumption at around 0.6 mb/d. Demand continues to be supported by the residential sector as LPG is the main energy source for cooking, followed by commercial LPG in the transportation sector, which grew due to its economic advantage over other transportation fuels.

Diesel oil demand recorded the lowest growth levels in 2016 during the month of July when the product registered an increase of about 28 tb/d, or 2%, y-o-y and total consumption reached 1.51 mb/d. Heavy rains during the monsoon season resulted in less activity in the agriculture sector as demand for power generators decreased. Construction activities were also reduced, capping diesel oil requirements, in addition to a decline in transportation of goods between different states due to floods.

Graph 4.3: Changes in Indian oil demand, y-o-y



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

In **Indonesia**, the latest June 2016 data shows yet another increase of around 1% y-o-y. Additionally, y-t-d, with data up to June, a rise of 24 tb/d, or 1.6%, y-o-y indicates firm demand growth in the country. In June, products showed mixed performances, as transportation fuels (gasoline, jet/kerosene and diesel oil) increased and LPG, fuel oil and the "other products" category declined.

In **Thailand**, oil demand in June 2016 was also in positive territory with growth of around 2% y-o-y, led by petrochemical feedstocks and transportation fuels.

The picture for 2017 remains as highlighted in the previous month's report with a major assumption of better economic conditions than in 2016. 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 2017.

Other Asia's oil demand is anticipated to grow by 0.49 mb/d y-o-y in 2016, while in 2017, it is projected to rise by 0.37 mb/d.

Table 4.5: Indian oil demand by main products, tb/d

	Jul 16	Jul 15	Change	Change, %
LPG	597	549	48	8.7
Gasoline	521	466	55	11.8
Jet/kerosene	263	259	5	1.8
Diesel oil	1,508	1,480	28	1.9
Fuel oil	310	259	52	20.0
Other products	766	805	-39	-4.8
Total	**3,966**	**3,817**	**149**	**3.9**

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

Latin America

In July 2016, product demand eased further in **Brazil**, shedding more than 0.15 mb/d, or 6.2%, y-o-y, largely a reflection of the weak economic situation in the country. Cumulatively, with data up to July, oil demand shrank by around 0.13 mb/d, or 5.2%, y-o-y.

In July, all products showed declines, with the exception of gasoline. Gasoline requirements inched up by a mere 4 tb/d, or 0.6%, y-o-y, leading to total demand of 0.70 mb/d. The increase in gasoline consumption was at the expense of ethanol, which shed around 48 tb/d, or 15.3%, y-o-y. As previously reported, this is a price-related phenomenon as lower gasoline prices promote additional demand.

Diesel oil demand fell by 54 tb/d, or more than 5.4%, y-o-y, with total consumption below 1.0 mb/d as major macroeconomic indicators of the country showed continued declines. The PMI remained below the 50 point threshold and registered around 46 points, however, it increased from the level of 43 recorded in June.

On the positive side, the consumer confidence index improved during the month of July for the third successive month and recoded 76.7, up from 71.9 in June. Moreover, the Olympic Games are expected to lend some support to transportation and power generation fuels in August. Fuel oil demand also weakened in July as data showed a reduction of 32 tb/d, y-o-y, as fuel oil substitution with hydro and wind in the power generation sector continued to take place.

Table 4.6: Brazilian inland deliveries, tb/d

	Jul 16	Jul 15	Change	Change, %
LPG	236	247	-11	-4.6
Gasoline	699	695	4	0.6
Jet/kerosene	118	128	-10	-7.9
Diesel oil	953	1,007	-54	-5.4
Fuel oil	43	75	-32	-42.9
Alcohol	267	315	-48	-15.3
Total	**2,315**	**2,467**	**-152**	**-6.2**

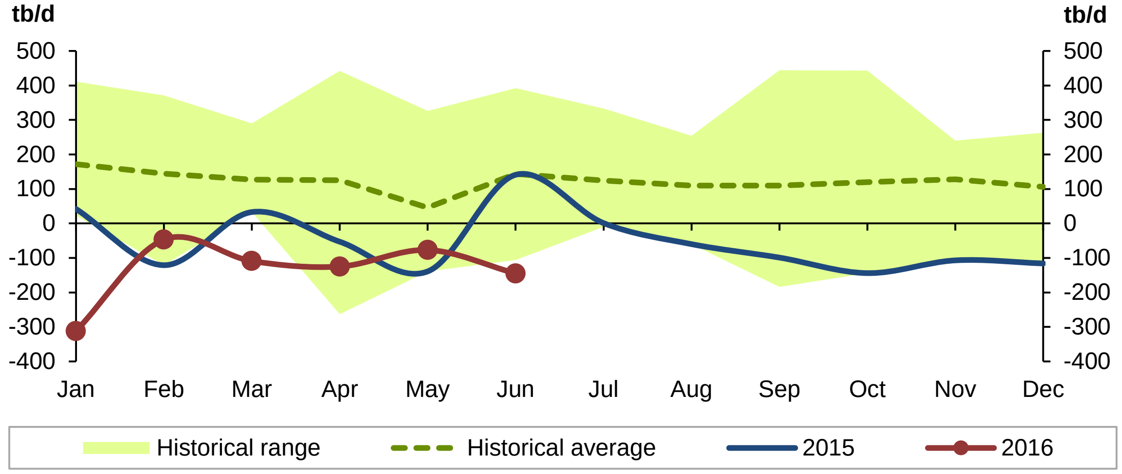
Source: Agência Nacional do Petróleo, Gás Natural e Biocombustíveis of Brazil.

In **Argentina**, the latest available data for the month of June 2016 showed flat development in oil demand growth data. While transportation fuels recorded some gains led by jet/kerosene, those gains were counterbalanced by declines in petrochemical feedstocks and power generation fuels, namely LPG and fuel oil.

In 2017, projections for oil demand growth in Latin America are similar to last month's projections, accounting for general improvement in the overall economy of the regions. Brazil is projected to be the main contributor to growth, with transportation fuels leading the way.

Latin American oil demand is expected to decrease by 0.06 mb/d in 2016, while in 2017, it is forecast to rise by around 0.07 mb/d.

Graph 4.4: Oil demand growth in Latin America, y-o-y



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

Middle East

In **Saudi Arabia**, despite increasing transportation fuel requirements, total product consumption declined in July for the fourth consecutive month. Oil demand contracted by 87 tb/d, with total product consumption at 2.66 mb/d.

Oil demand in Saudi Arabia follows a certain pattern, which tends to push oil demand higher in the summer due to additional air conditioning usage, however, the substitution with natural gas, particularly after the commencement of the Wasit gas plant, caused direct crude for burning to drop sharply by more than 0.15 mb/d, or about 17.8%, y-o-y, pressuring the overall consumption figures of the country. Total demand of direct crude for the purpose of burning was at 0.70 mb/d in July.

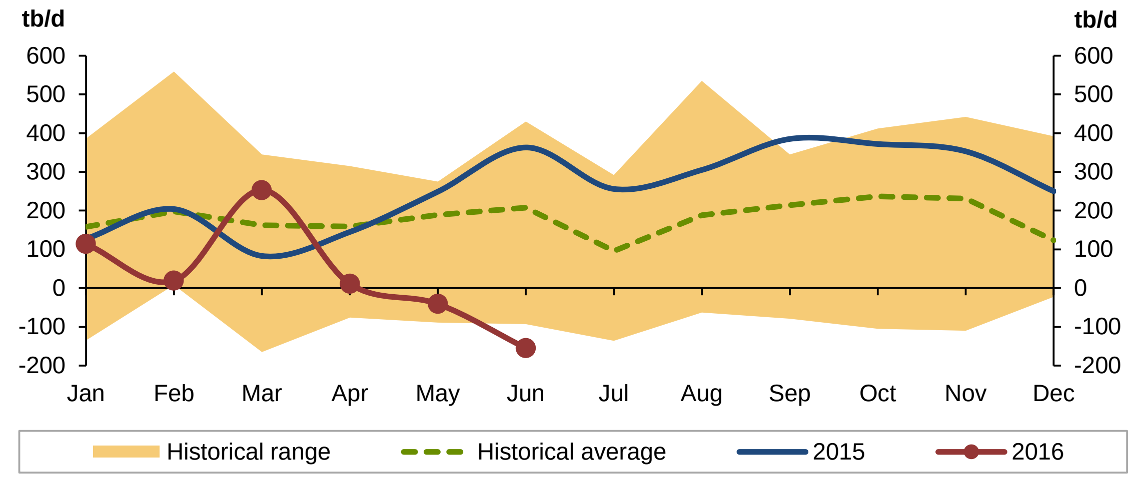
Transportation fuels, gasoline and jet/kerosene, registered positive growth as both products tend to increase during the summer season, which also coincided with end of the holy month of Ramadan and the Eid Al-Fitr holidays. Gasoline gained 6.4% over July 2015, while jet/kerosene remained broadly flat. On a cumulative basis, with data up to July, gasoline grew by around 15 tb/d, or 2.7%, y-o-y, slower than the rate of growth experienced in the same period in 2015, when gasoline added more than 6.0% y-o-y. This slowdown in gasoline demand growth momentum could be attributed to a reduction of subsidies, however, more information will need to be gathered to arrive at a more accurate and meaningful reading of data.

During the month of July 2016, diesel oil dropped by 14 tb/d, or around 1.8%, y-o-y, as construction activities and other outdoor work were reduced due to the end of the Ramadan holidays and high temperatures. Fuel oil increased by more than 90 tb/d, or 23%, y-o-y, primarily to meet additional power generation demand.

In **Iraq**, oil demand growth moved into negative territory in July, shedding around 16 tb/d from the levels seen in July 2015. Total product demand is now at around 0.67 mb/d, the highest total consumption level in 2016 as consumption for power generation fuels rose during the summer. The product categories had mixed performances with demand for fuel oil increasing, while diesel oil and the “other product” categories lost ground, dragging the overall consumption lower.

In 2017, oil demand growth is foreseen to rise over the levels see this year as economic momentum gains pace. Saudi Arabia is expected to be the oil demand growth driver in the region with transportation fuels and petrochemical feedstocks projected to be contributing to product growth. However, subsidy reductions, substitution towards natural gas and geopolitical concerns are expected to weigh on product demand growth in 2017.

Graph 4.5: Oil demand growth in the Middle East, y-o-y



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

For 2016, **Middle East oil demand** is projected to increase by 70 tb/d. In 2017, demand in the region is anticipated to grow by 0.18 mb/d.

China

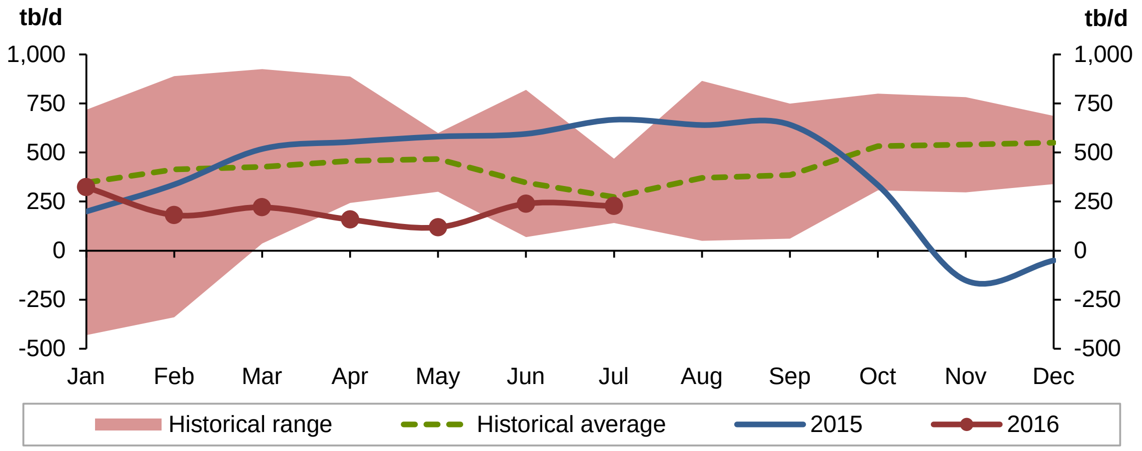
Chinese oil demand continued to grow in July, adding around 0.23 mb/d, or around 2%, y-o-y. Total oil demand reached 10.98 mb/d during the month. Y-t-d data indicates average growth at above 0.21 mb/d, representing firm growth supported by increasing demand for LPG as a petrochemical feedstock as well as for gasoline and jet/kerosene as transportation fuels.

In July 2016, oil demand growth increased across all products, with the exception of diesel oil. LPG, jet/kerosene and gasoline led those gains, rising by more than 12.5%, 5.9% and 4.4% y-o-y, respectively. Diesel oil consumption declined by around 0.11 mb/d, or 3.1%, y-o-y to average around 3.37 mb/d, as a result of the slower pace of growth in industrial and construction activities, due to the slowdown in real estate investment.

On the positive side, LPG demand hit total consumption levels of around 1.48 mb/d as expansions and ramping up of production in petrochemical units continued to provide support to growth.

Jet/kerosene total consumption is now set at 0.71 mb/d, an increase of 0.23 tb/d and the third-highest recorded level of consumption. This increase was a result of the summer holiday travelling season. Gasoline demand also increased by around 0.10 mb/d y-o-y as vehicle sales continued to rise. According to statistics and analysis of the China Association of Automobile Manufacturers (CAAM), in July, sales of passenger cars witnessed an increase y-o-y, rising to 1.85 million units, an increase of 23%. On a cumulative basis, with data up to July, sales of passenger cars reached 14.68 million units, up by 9.8% from the same period in 2015.

Graph 4.6: Changes in Chinese apparent oil demand, y-o-y changes



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

For 2017, projections for oil demand development in China are unchanged from last month's report and are based on demand for transportation and industrial fuels rising next year, slightly lower GDP growth, at 6.1% compared with 2016, a continuation of the fuel quality programmes targeting fewer emissions and a continuation of fuel substitution with natural gas and coal.

For 2016, **China's oil demand** is projected to rise by around 0.28 mb/d, while in 2017, it is forecast to reach, more or less, similar levels as in 2016, at 0.27 mb/d.

Table 4.7: World oil demand in 2017, mb/d

							Change 2017/16	
	2016	**1Q17**	**2Q17**	**3Q17**	**4Q17**	**2017**	**Growth**	**%**
Americas	24.71	24.67	24.72	25.35	24.91	24.91	0.20	0.80
of which US	*19.96*	*19.93*	*19.96*	*20.47*	*20.06*	*20.11*	*0.15*	*0.75*
Europe	13.83	13.54	13.82	14.15	13.70	13.81	-0.02	-0.15
Asia Pacific	7.96	8.48	7.50	7.54	8.00	7.88	-0.08	-0.97
Total OECD	**46.50**	**46.69**	**46.04**	**47.05**	**46.61**	**46.60**	**0.10**	**0.21**
Other Asia	12.53	12.68	13.02	12.78	13.10	12.90	0.37	2.93
of which India	*4.33*	*4.64*	*4.40*	*4.32*	*4.57*	*4.48*	*0.16*	*3.63*
Latin America	6.49	6.28	6.53	6.87	6.56	6.56	0.07	1.06
Middle East	8.18	8.25	8.15	8.80	8.24	8.36	0.18	2.18
Africa	4.10	4.23	4.19	4.14	4.29	4.21	0.11	2.63
Total DCs	**31.31**	**31.44**	**31.90**	**32.59**	**32.19**	**32.03**	**0.72**	**2.31**
FSU	4.66	4.55	4.41	4.78	5.09	4.71	0.05	1.08
Other Europe	0.70	0.70	0.65	0.69	0.79	0.71	0.01	1.71
China	11.11	10.99	11.59	11.26	11.65	11.37	0.27	2.41
Total "Other regions"	**16.46**	**16.24**	**16.66**	**16.73**	**17.53**	**16.79**	**0.33**	**2.00**
Total world	**94.27**	**94.37**	**94.59**	**96.37**	**96.33**	**95.42**	**1.15**	**1.22**
Previous estimate	94.26	94.30	94.49	96.47	96.36	95.41	1.15	1.22
Revision	0.01	0.07	0.10	-0.10	-0.03	0.01	0.00	0.00

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

World Oil Supply

World liquids supply in August 2016 decreased by 0.14 mb/d m-o-m to average 95.65 mb/d, but grew by 0.18 mb/d y-o-y. Non-OPEC supply including OPEC NGLs declined by 0.11 mb/d to average 62.41 mb/d, while OPEC crude oil production decreased by 23 tb/d to average 33.24 mb/d, according to secondary sources.

The non-OPEC oil supply forecast for 2016 has seen an upward adjustment of 0.18 mb/d since the August *MOMR* to now show a contraction of 0.61 mb/d with supply estimated to have averaged 56.32 mb/d. The revision was driven by due to a lower-than-expected decline in US tight oil and a better-than-expected performance in Norway, as well as the early start-up of Kashagan field in Kazakhstan. It is expected that there will be higher non-OPEC production in 2H16 compared to 1H16, stemming from oil sands production that was shut down due to wildfires in Canada, as well as a continued rise in US rig counts, the end of seasonal maintenance and the start-up of new projects.

For 2017, non-OPEC supply growth has also been revised up by 0.35 mb/d to now average 0.20 mb/d from the August *MOMR* to average 56.52 mb/d. This is mostly due to new production from Kashagan next year which is expected to ramp up to 0.37 mb/d.

Expectations for OPEC NGLs production remain unchanged, growing by 0.16 mb/d in 2016 and 0.15 mb/d in 2017.

Table 5.1: Non-OPEC oil supply in 2016, mb/d

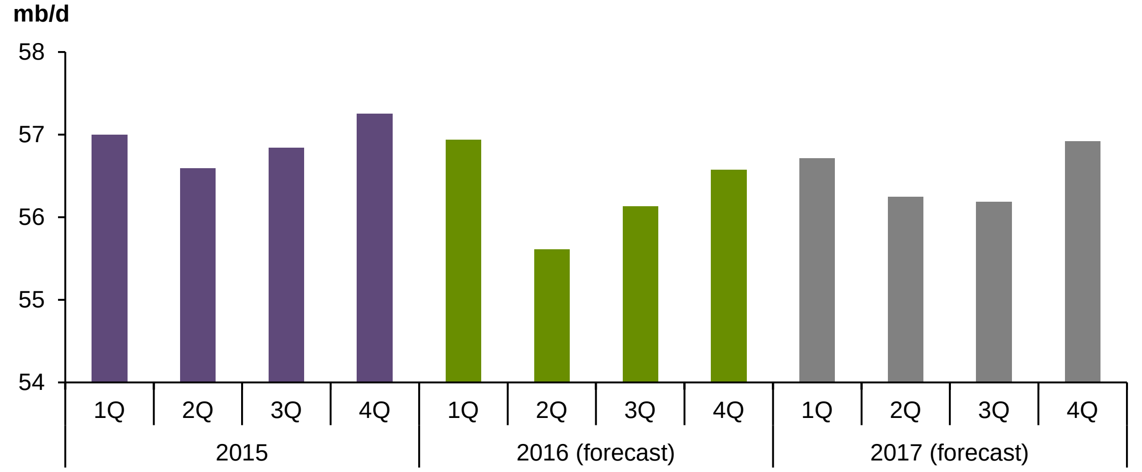
							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	21.00	21.00	20.17	20.56	20.51	20.56	-0.44	-2.10
of which US	*13.97*	*13.81*	*13.70*	*13.53*	*13.48*	*13.63*	*-0.34*	*-2.46*
Europe	3.76	3.90	3.74	3.78	3.91	3.83	0.08	2.02
Asia Pacific	0.46	0.44	0.42	0.42	0.42	0.42	-0.04	-7.97
Total OECD	**25.22**	**25.33**	**24.33**	**24.76**	**24.84**	**24.82**	**-0.40**	**-1.59**
Other Asia	2.72	2.76	2.68	2.71	2.76	2.73	0.01	0.21
Latin America	5.19	4.98	5.08	5.16	5.25	5.11	-0.07	-1.42
Middle East	1.27	1.27	1.28	1.30	1.28	1.28	0.01	0.66
Africa	2.14	2.11	2.08	2.14	2.16	2.12	-0.02	-0.74
Total DCs	**11.32**	**11.12**	**11.11**	**11.31**	**11.45**	**11.25**	**-0.08**	**-0.67**
FSU	13.69	13.95	13.75	13.69	13.85	13.81	0.12	0.84
of which Russia	*10.85*	*11.07*	*11.00*	*10.95*	*10.95*	*10.99*	*0.14*	*1.34*
Other Europe	0.14	0.13	0.13	0.13	0.15	0.14	0.00	-0.76
China	4.38	4.22	4.11	4.05	4.10	4.12	-0.26	-5.90
Total "Other regions"	**18.21**	**18.31**	**17.99**	**17.88**	**18.10**	**18.07**	**-0.14**	**-0.79**
Total non-OPEC production	**54.75**	**54.76**	**53.43**	**53.95**	**54.39**	**54.13**	**-0.62**	**-1.13**
Processing gains	2.17	2.19	2.19	2.19	2.19	2.19	0.01	0.60
Total non-OPEC supply	**56.92**	**56.94**	**55.61**	**56.13**	**56.57**	**56.32**	**-0.61**	**-1.07**
Previous estimate	56.91	56.92	55.57	55.84	56.17	56.13	-0.79	-1.39
Revision	0.01	0.02	0.04	0.29	0.40	0.19	0.18	0.32

Non-OPEC supply

Non-OPEC supply growth in 2016 has been revised up by 0.18 mb/d since the August *MOMR*. This has been driven by various upward revisions, namely 66 tb/d in US liquids supply; 14 tb/d for Canada; 70 tb/d for Norway, 57 tb/d for UK; 16 tb/d for Brazil; 15 tb/d for Yemen; 18 tb/d for Congo, and upward revisions of 17 tb/d, 25 tb/d and 16 tb/d in Russia, Kazakhstan and Azerbaijan, respectively. Part of these upward adjustments have been offset by downward revisions in China (66 tb/d), Colombia (28 tb/d) and other OECD Europe (27 tb/d).

Accordingly, the expected growth for 2017 has also been revised up by 0.35 mb/d to average 0.20 mb/d, mainly due to the early start-up of the Kashagan field in Kazakhstan – which has been confirmed by official sources, including the Kazakhstan Energy Minister – in late October 2016.

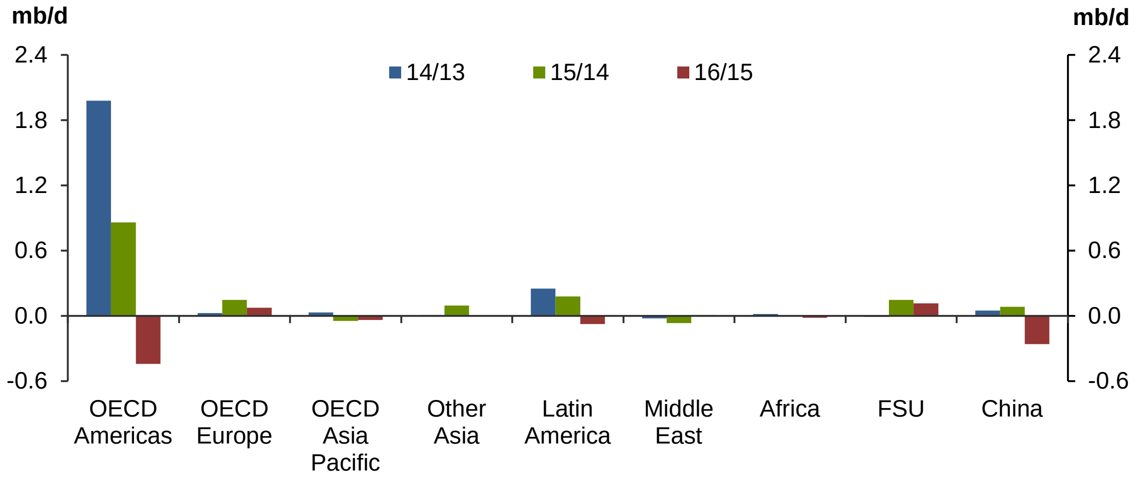
Graph 5.1: Non-OPEC quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Non-OPEC oil supply is now forecast to contract by 0.61 mb/d in 2016 to average 56.32 mb/d. Non-OPEC supply in 2017 has therefore been revised up by 0.35 mb/d to average 56.52 mb/d, indicating growth of 0.2 mb/d next year.

Graph 5.2: Regional non-OPEC supply growth, y-o-y

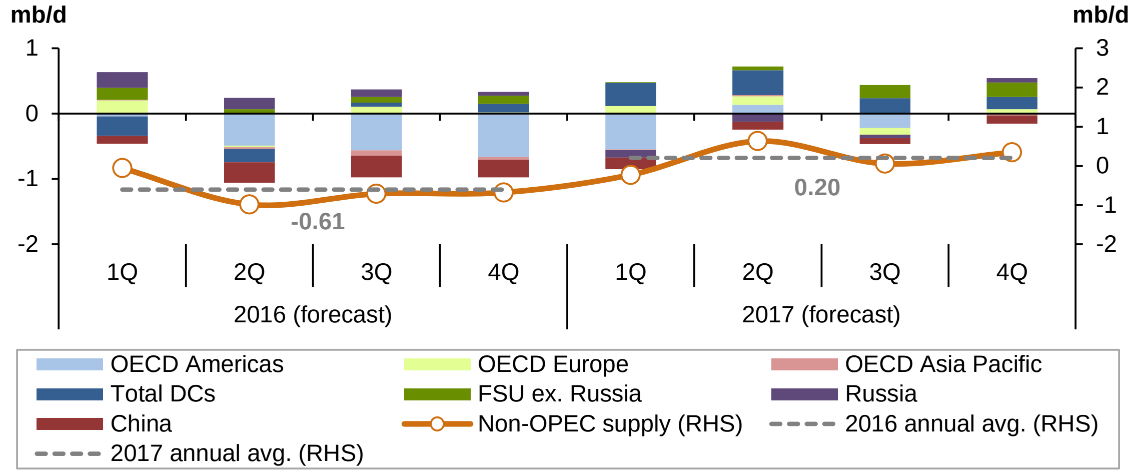


Source: OPEC Secretariat.

Non-OPEC supply on a regional basis in 2016 shows the strong impact of low oil prices on supply in OECD Americas and, to a lesser degree, across Latin America. China was also impacted, but only in 2016, while in other regions supply was affected by different factors, which are partially relevant to low oil prices.

Non-OPEC supply in 2Q16 is estimated to have contracted by 1.33 mb/d q-o-q, mainly due to production shut-ins in Alberta because of the wildfires in May, but output will again increase by 0.52 mb/d in 3Q16, partially due to the end of seasonal maintenance and ramp-ups of different projects, such as Goliat in Norway. Non-OPEC supply is also expected to grow by 0.44 mb/d in 4Q16 to average 56.57 mb/d, mainly due to the Kashagan field start-up in late October. Nevertheless, non-OPEC supply in 2H16, which was expected to be lower by 1 mb/d versus 2H15, is now expected to be less than 0.7 mb/d.

Graph 5.3: Non-OPEC quarterly supply change, 2016-2017, y-o-y change



Source: OPEC Secretariat.

OECD

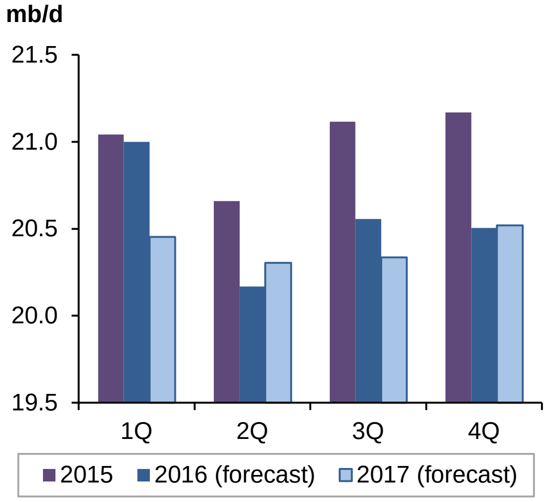
Total OECD liquids production in 2016 is expected to contract by 0.40 mb/d to average 24.82 mb/d. This represents a upward adjustment of 0.18 mb/d from the August *MOMR*. Output in 2Q16 was revised up by 19 tb/d to average 24.33 mb/d.

For comparison, OECD supply in 2Q15 declined by 0.30 mb/d compared to 1Q15, while the y-o-y contraction in 2016 is expected to come from OECD Americas, with 0.44 mb/d less, and OECD Asia Pacific, with 0.04 mb/d less. Meanwhile, OECD Europe was revised up by 100 tb/d and to show growth of 0.08 mb/d.

OECD Americas

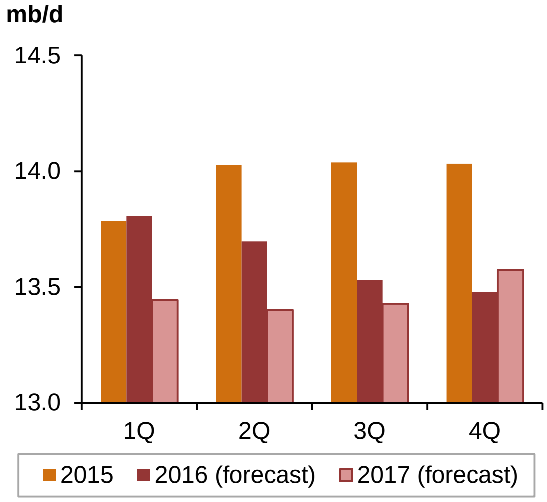
OECD Americas' oil supply has been revised higher by 85 tb/d from the August *MOMR* to now show a contraction of 0.44 mb/d to average 20.56 mb/d. The revision is likely due to the fact that the previous forecast had not fully taken into consideration the impact of hedging activities as well as production coming from drilled but uncompleted (DUC) wells. Compared to the previous year, supply in the US and Mexico is expected to decline in 2016, while production in Canada is anticipated to grow.

Graph 5.4: OECD Americas quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.5: US quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

US

US total oil production in 2016 is anticipated to decline by 0.34 mb/d to average 13.63 mb/d, representing an upward revision of 66 tb/d from the August *MOMR*. Domestic oil production is now expected to fall more slowly than previously anticipated despite the recent weakness in oil prices. Hence, total US supply for 2Q16 indicated a drop of 0.11 mb/d compared to a quarter earlier to average 13.70 mb/d. With a recent rise in the number of oil rigs by 77 during July and August to a total of 407 rigs, drilling for oil is expected to contribute to more domestic monthly oil production in the coming months.

In Texas, the two main tight oil plays both showed declines in June 2016, with output in the Permian decreasing by 12 tb/d m-o-m to average 1.99 mb/d and production in the Eagle Ford dropping by 56 tb/d m-o-m to average 1.2 mb/d. North Dakota Bakken/Three Forks output fell by 20 tb/d in June to 974 tb/d. Overall, North Dakota crude oil plus condensate output declined by 34 tb/d to 1.03 mb/d in June, a decrease of 185 tb/d in the past 12 months. Oil production from Federal Offshore in PADD-3 – the Gulf of Mexico (GoM) – decreased by 72 tb/d to average 1.54 mb/d. Oil production from Alaska also decreased by 35 tb/d to average 0.47 mb/d in June.

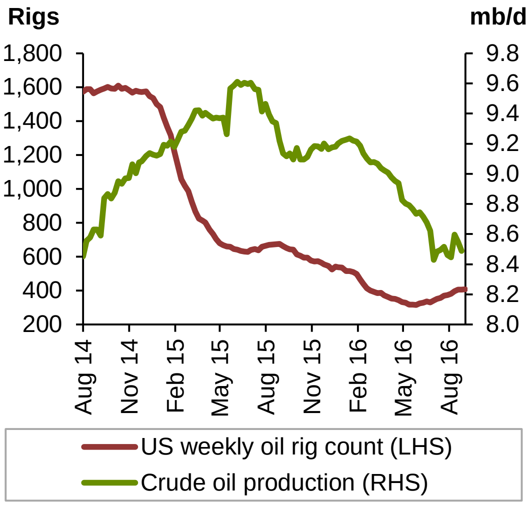
US oil rig count

The total US rig count increased by 8 rigs to 497 rigs in the week ended 2 September, while 7 rigs out of this were added for gas fields. In all, 407 rigs were active in oil fields and 88 rigs for gas. Compared to a year ago, this is still lower by 367 rigs. The most important points in the most recent Baker Hughes report are that the GoM has seen the lowest number of active rigs in three decades – only 10 rigs versus 17 rigs a week earlier and less than 21 rigs compared to a year earlier. The number of onshore rigs continues to increase, with vertical and directional oil rigs being replaced by horizontal ones.

Activities in the GoM continue to expand. In July, Gunflint oil development in the deepwater GoM entered into production. The two-well field is anticipated to reach a minimum gross production of 20 tboe/d, of which some 75% will be crude oil. This is the fourth offshore project completed within the past nine months by Noble Energy, including the start-up of Big Bend and Dantzler in the Gulf of Mexico. Total GoM production was almost 1.54 mb/d in June, according to the most recent monthly data.

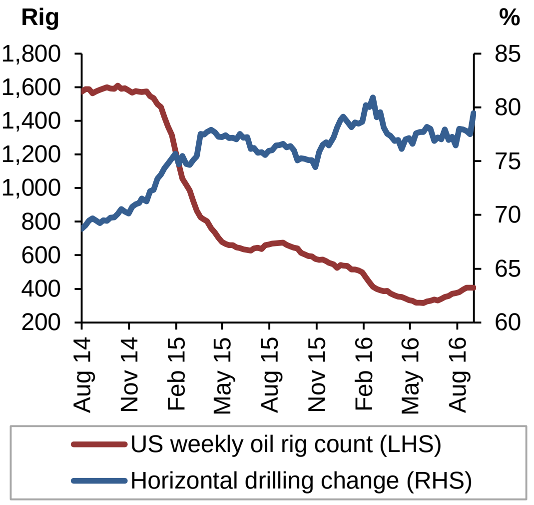
Some GoM production was shut-in in late August as operators evacuated platforms in the possible path of a tropical depression that was expected to pass through the central and eastern parts of the GoM. Some 0.32 mb/d of oil and 360 mcfd of natural gas was shut in on 31 August, represented 20% of oil production and 11% of gas production in the GoM.

Graph 5.6: US weekly oil rig count vs. Crude oil production



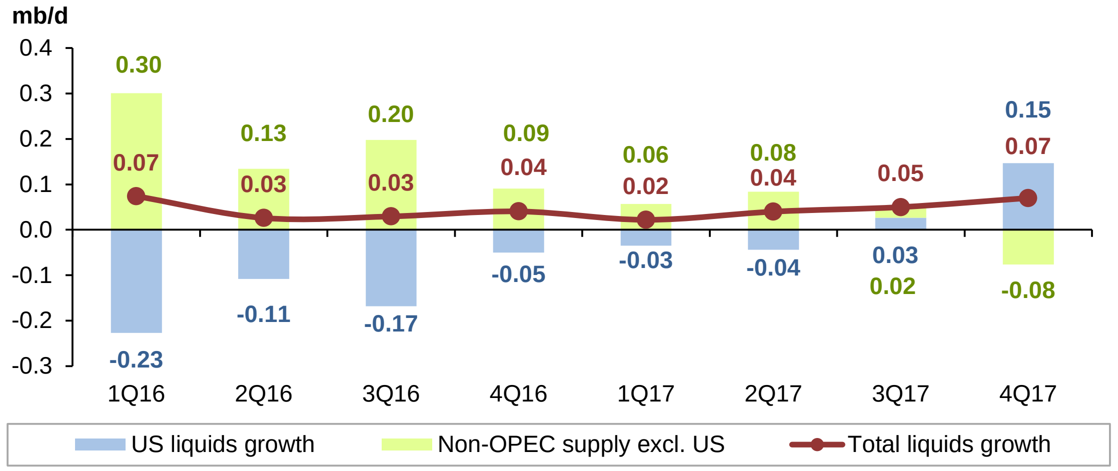
Sources: Baker Hughes and EIA.

Graph 5.7: US weekly oil right count vs. Horizontal drilling change



Source: Baker Hughes.

Graph 5.8: US liquids vs. non-OPEC supply, q-o-q growth

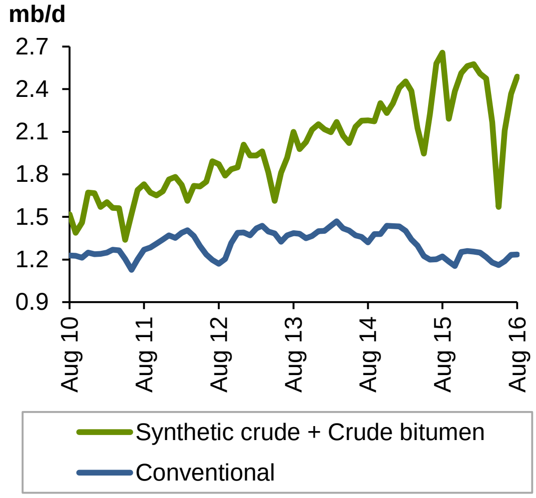


Source: OPEC Secretariat.

Canada and Mexico

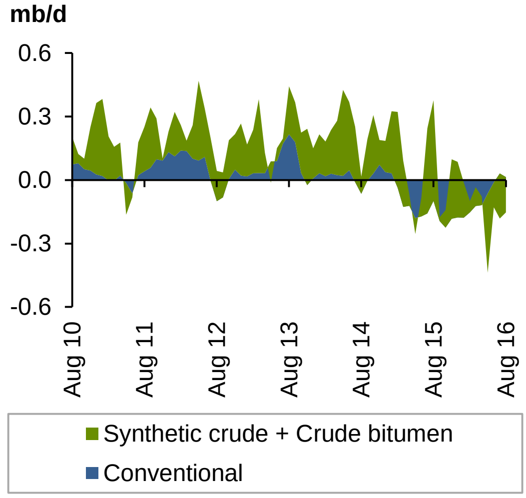
Oil supply in **Canada** is expected to grow by 20 tb/d in 2016 to average 4.44 mb/d y-o-y, revised up by 20 tb/d from the previous month. Preliminary estimates by Canadian national sources reported a decline of 632 tb/d in May, with Canadian oil output lower m-o-m to average 3.58 mb/d due to the wildfire in the state of Alberta. In May, the output of oil sands declined by 0.60 mb/d to settle at 1.6 mb/d, while conventional oil and NGLs also declined by 19 tb/d and 20 tb/d to 1.16 mb/d and 0.81 mb/d, respectively. With regard to Canadian liquids output changes during the first five months of this year compared to the same period a year earlier, production of oil sands remained unchanged at 2.3 mb/d – mainly because Alberta also witnessed wildfires last year in the summer – but the output of conventional crude declined by 127 tb/d to average 1.21 mb/d in this time period. Meanwhile, NGLs production increased by 100 tb/d to average 0.84 mb/d. A higher oil supply by 40 tb/d is anticipated in 2H16 compared to 1H16.

Graph 5.9: Canada production by crude type



Source: OPEC Secretariat.

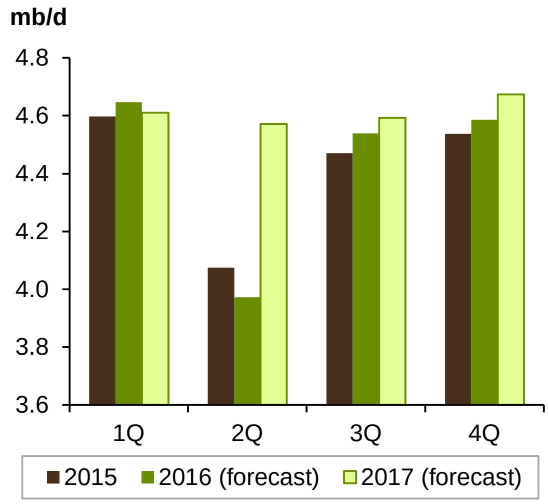
Graph 5.10: Canada production by crude type, y-o-y change



Source: OPEC Secretariat.

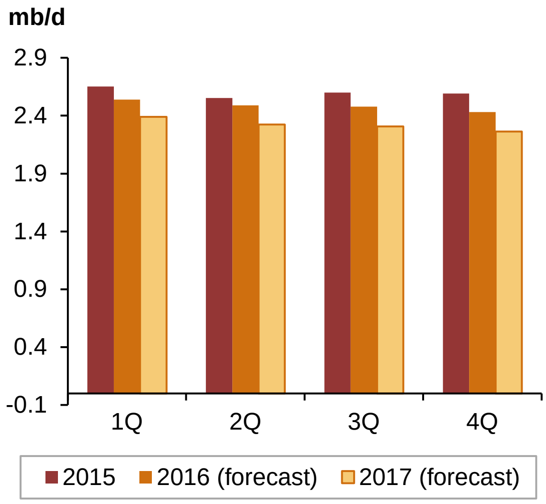
Mexican liquids production in 2016 is expected to decline by 0.11 mb/d to average 2.48 mb/d – unchanged compared to the forecast a month ago. Crude oil output declined in July by 23 tb/d m-o-m to average 2.16 mb/d, but NGLs output remained steady at 0.32 mb/d. July's output is the lowest level seen since October 1995. Mexican oil supply in 2Q16 declined by 60 tb/d y-o-y and a higher decline in 3Q is expected compared to the same period a year ago. The largest yearly decline to date came from Cantarel and Ku-Maloob-Zap (KMZ). Following steep declines in smaller fields and cuts in spending by state company Pemex, the plans are to shut down parts of the low profile oil fields.

Graph 5.11: Canada quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.12: Mexico quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

OECD Europe

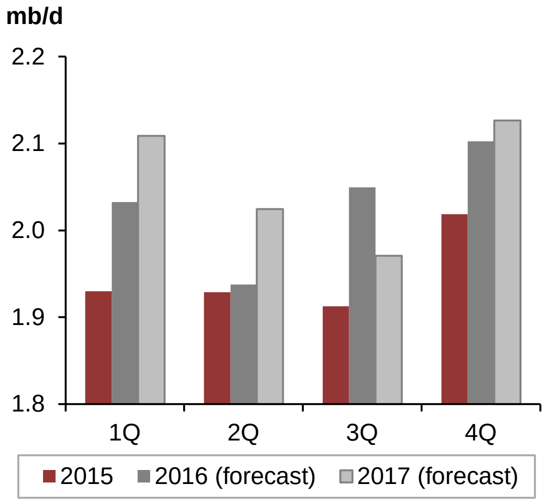
OECD Europe oil supply is expected to grow this year by 80 tb/d to average 3.83 mb/d, revised up by 97 tb/d in this month's analysis. The reason for this revision is the higher-than-expected output in both countries – Norway and the UK – in July, which was carried over to the rest of the year. Nevertheless, the growth forecast in other OECD Europe countries was revised down by 27 tb/d from the August *MOMR*.

Norway's oil supply is expected to grow by 80 tb/d from the previous year to average 2.03 mb/d in 2016, revised up by 70 tb/d from the previous MOMR. Preliminary production figures for July 2016 show average production of 2.14 mb/d of oil, NGLs and condensate, which is 0.32 mb/d or about 18% more than in June 2016. Out of this incremental output, around 0.2 mb/d is from seasonal maintenance and the rest had not been expected. Oil production in July is 10% above last year's level and 9% above that forecast by the Norwegian Petroleum Directorate (NPD). The high level of production in July is due to many fields producing above expectation, and because the Goliat field is now contributing considerably and is the fourth-largest oil producer in July.

Official data showed crude oil output in July was at 1.73 mb/d, the largest monthly oil production volume in five years, higher by 0.28 mb/d than a month earlier. The average daily production of NGLs averaged 408 tb/d, indicating m-o-m growth of 43 tb/d. It appears that some fields are producing more NGLs than crude.

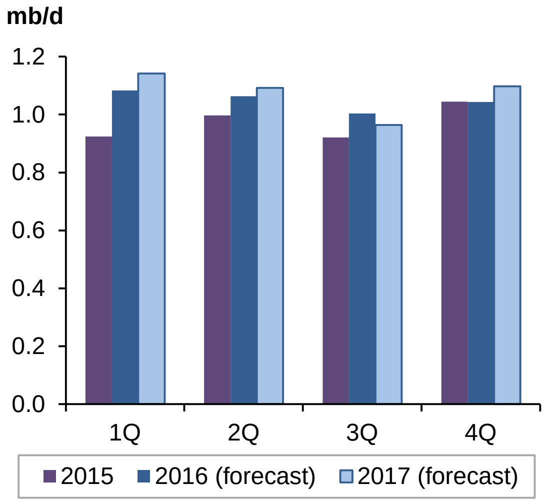
UK's oil supply, despite higher maintenance this year, is predicted to increase by 80 tb/d in 2016 y-o-y to average 1.05 mb/d, revised up by 57 tb/d from the previous MOMR. UK oil production in 3Q16 was previously expected to decline because of maintenance in different fields. But the high output in July shows that maintenance has been partially postponed to the next several months, therefore 3Q16 was revised up by 147 tb/d, which led to higher annual growth this year. UK oil production in July decreased by 10 tb/d and averaged 1.04 mb/d, which was 0.11 mb/d higher compared to July 2015. It is expected that the 0.18 mb/d Buzzard field will shut-in for a while from the middle of September for regular maintenance.

Graph 5.13: Norway quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.14: UK quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Developing Countries

Total oil production from developing countries (DCs) was revised up this month by 17 tb/d to average 11.25 mb/d in 2016, a contraction of 0.08 mb/d compared with 0.21 mb/d and 0.26 mb/d growth in 2015 and 2014, respectively. The main reasons for this year's decline are lower output levels coming from Latin America and other Asia regions, which partially is due to lower spending and fewer new projects.

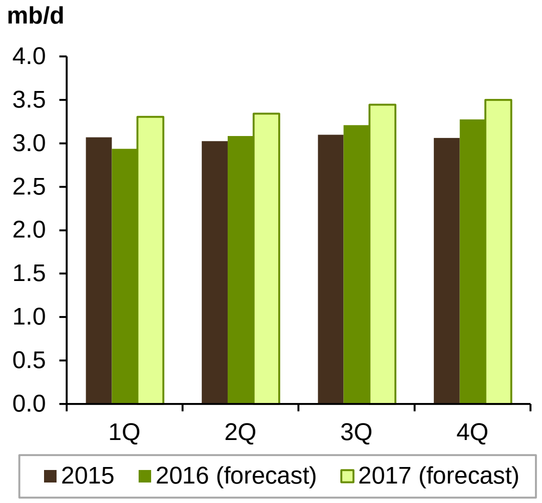
Latin America

Latin America's oil supply is estimated to decline by 0.07 mb/d to average 5.11 mb/d in 2016, revised down by 10 tb/d from the last MOMR. Latin America, which was the second-highest driver of growth in 2014 and 2015 among all non-OPEC regions next to OECD Americas, is now expected to decline in 2016 due to heavy declines in Colombia and lower growth in Brazil compared to remarkable growth in 2015 and 2014.

Brazil was the main driver of this growth in the past. But due to lower activity in the upstream compared to 2014, production growth is predicted at a slower pace for this year despite a robust increase in pre-salt output, while oil production in other Latin American countries, particularly Colombia, is expected to decline by a total of 0.10 mb/d in 2016.

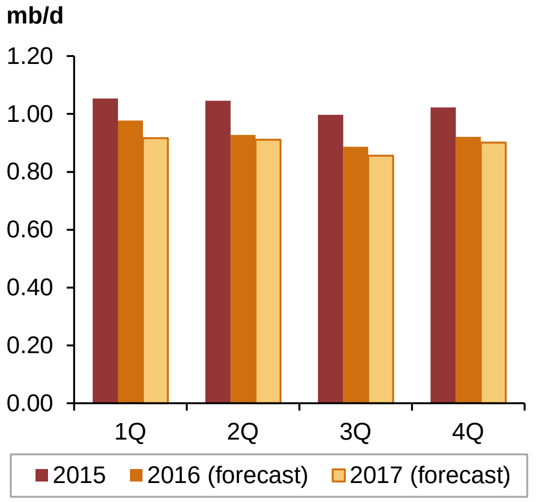
Brazil's liquid supply is expected to average 3.13 mb/d in 2016, an increase of 0.06 mb/d over the previous year. It was revised up by 10 tb/d from the previous MOMR. Petrobras set more oil and gas production records in the months of June and July. They produced 2.56 mb/d of crude oil in June – 70 tb/d higher than May – and oil production in the pre-salt layer in July was also a monthly record, reaching an average of 1.06 mb/d. For the first time, it exceeded the monthly level of 1 mb/d. In addition, a daily record was reached on 20 July with production of 1.11 mb/d. This was mainly due to the Lula Central production system coming onstream on 8 July, through the FPSO Cidade de Saquarema. It was also due to the increase in the production of new wells connected to the Cidade Maricá and Cidade de Itaguaí FPSOs, also installed in the Lula field. Moreover, according to Petrobras' plan schedule, FPSO Cidade de Caraguatatuba is expected to start producing from pre-salt layers in the Santos basin. By installing a third new FPSO in Brazil this year, Petrobras hopes to compensate for the heavy declines in post-salt fields in the Campos basin.

Graph 5.15: Brazil quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.16: Colombia quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Middle East

Middle East oil supply is estimated to increase by 10 tb/d in 2016 over the previous year to average 1.28 mb/d, revised up by 20 tb/d from the August *MOMR*. The partial re-start of production in Yemen is the main factor behind the upward adjustment.

In the month of August, media reports indicated that Yemen could be about to resume some oil production. The news focused on the lifting of some 3 million barrels of crude stored at the southern oil port of Ash Shihr and the possibility of restarting production from the Masila Basin fields in eastern Hadramawt province. However, given the ongoing civil war, a variety of technical, logistical, political and security challenges remain. Sources say efforts are currently focused on Blocks 10, 14, 51 and 53 in Hadramawt, all of which are operated by state companies. Blocks 10 and 14 hold the country's largest producing fields, with a capacity of 35 tb/d and 30 tb/d, respectively. Block 14, which is adjacent to Block 10, also has a pipeline to Ash Shihr, making this a priority area for the government to re-start. Restarting oil production may also allow the resumption of crude processing at the aging 150 tb/d Aden refinery, which has been offline due to a lack of feedstock, and which is currently acting as a storage and distribution point for product imports. Production from Marib, as well exports from the western oil port of Ras Issa, remain suspended.

Africa

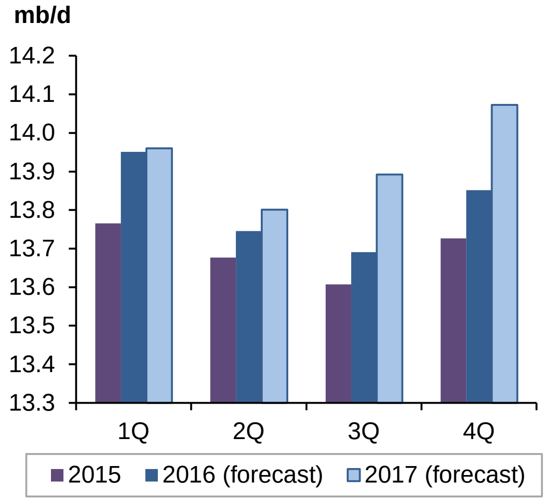
Africa's oil supply is projected to average 2.12 mb/d in 2016. This represents a decline of 20 tb/d y-o-y and reflects an upwards revision of 10 tb/d from the August *MOMR*. In 2016, oil production from Congo is only expected to grow by 50 tb/d to average 0.32 mb/d, while output in other African countries – despite increasing output from Ghana's production start-up in the Tweneboa, Enyenra, Ntomme (TEN) project and a production ramp-up in Jubilee field in 2H16 – will decline or be stagnant in 2016.

Tullow Oil has produced first oil from the TEN fields offshore Ghana. Start-up was on time and on budget, three years after Ghana's government approved the plan of development. Oil production is expected to ramp-up gradually toward the FPSO capacity of 80 tb/d through the remainder of 2016. Tullow estimates that TEN's average annual production this year will be around 23 tb/d.

FSU, other regions

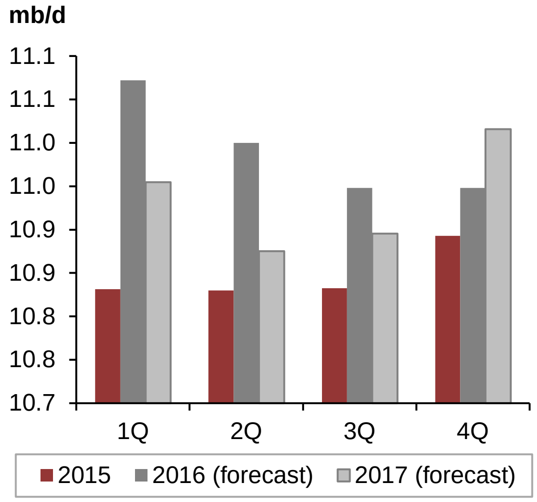
Total FSU oil supply is expected to grow by 0.12 mb/d in 2016 at an average of 13.81 mb/d. This was revised up by 58 tb/d from the previous month's estimation. In 2016, oil production in Russia and Azerbaijan will increase, while oil production in Kazakhstan, despite the early start-up of the Kashagan field in October, and in the FSU is expected to decrease.

Graph 5.17: FSU quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.18: Russia quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Russia

Russian oil output is expected to increase by 0.14 mb/d to average 10.99 mb/d in 2016, revised up by 20 tb/d from the previous MOMR. Oil output fell by 140 tb/d to a 13-month low in August to average 10.88 mb/d, mainly due to the maintenance at Sakhalin-1 field. Oil production in 1H16 increased by 0.21 mb/d to average 11.04 mb/d compared to 1H15. Russian oil production is expected to decline by 90 tb/d in 2H16 compared to 1H16, but up by 90 tb/d from the same period a year earlier.

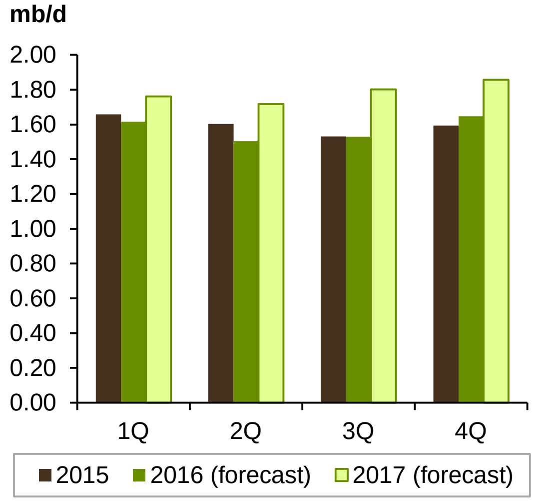
Caspian

Kazakhstan's oil production, which previously was expected to decrease by 50 tb/d over the previous year to average 1.55 mb/d in 2016, was revised up by 25 tb/d from the August *MOMR*. This comes as a result of the possible early start-up of the super-giant Kashagan field.

The **Kashagan** offshore oil field in the Kazakhstan sector of the Caspian Sea will come back on stream in late October with a much swifter ramp-up than expected. Originally, the super-giant field – which has been off-stream since 2013 – was unlikely to resume until mid-2017; however, it is now projected to reach 0.23 mb/d by year-end, according to the head of upstream of Eni, one of the main partners in the seven-member North Caspian Operating Co. (NCOC) and confirmed by Kazakhstan's Energy Minister. Production is then expected to stabilize for a few months to "allow the partial depletion of the field before the start-up of gas injection" in mid-2017, enabling the field to reach its targeted plateau of 0.37 mb/d later that year ahead of schedule for Phase 1 development. A gas leak on the sub-sea oil and gas pipeline forced the suspension of Kashagan production just weeks after its start-up in autumn 2013. Last year, the operator began replacing 180 km of pipelines that connect the 13 billion-barrel field to the onshore Bolashak processing complex.

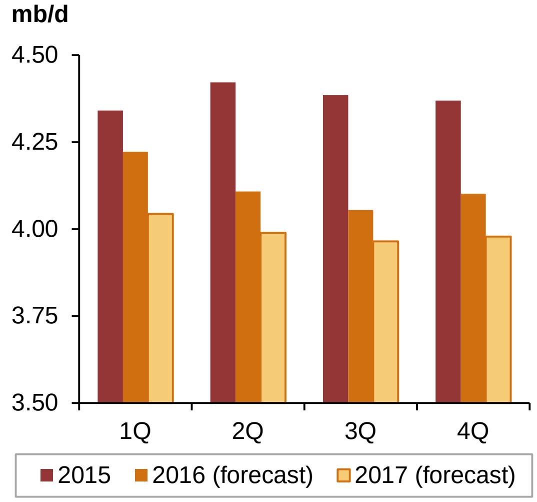
The outlook for Kazakhstan crude quality is for an increase in volumes of light, medium sour crude, due to the Kashagan project (45°API, 0.5-0.7 wt% sulphur).

Graph 5.19: Kazakhstan quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Graph 5.20: China quarterly oil supply, 2015-2017



Source: OPEC Secretariat.

Azerbaijan's oil supply is anticipated to average 0.87 mb/d, revised up by 16 tb/d from the previous MOMR, indicating minor growth of 10 tb/d in 2016. Total oil production (crude plus NGLs) was pegged at 0.87 mb/d in 1H16, the same as 1H15, but higher by 20 tb/d than 2H15. On 17 August, the Azeri-Chirag-Gunashli (ACG) field development in the Azeri sector of the Caspian Sea produced its three billionth barrel of oil since the start of production from the Chirag platform in 1997. ACG is a complex of six production platforms: Chirag-1, Central Azeri, West Azeri, East Azeri, Deepwater Gunashli, West Chirag and two process, gas compression, water injection and utilities platforms. The ACG field has been developed in several phases and the Chirag platform started producing in 1997 as part of the Early Oil Project.

China

China's oil supply is expected to contract by 0.26 mb/d over the previous year to average 4.12 mb/d in 2016, revised down by 66 tb/d in annual terms from last month's forecast due to expected lower output in 3Q16. Chinese crude output in 2Q16 was lower by 120 tb/d at 4.11 mb/d compared to 1Q16. Following the decreasing trend of oil production in China, July's production data shows again a decline of 110 tb/d versus June, although bad weather conditions – namely, Typhoon Nepartak – and floods may have impacted the production both in the offshore and onshore. As mentioned before, declining oil output in China could be attributed to hefty spending cuts in 2016 by Chinese oil companies, particularly as they have further reduced their upstream targets for this year when their profit in 2Q16 contracted remarkably – for instance, PetroChina by 26% and Sinopec by 43% y-o-y.

Nevertheless, CNOOC's progress report for the first half of 2016 shows that they had six new discoveries and drilled 20 successful appraisal wells. Progress has been good at four projects scheduled to come onstream this year, with the Kenli 10-4 oilfield and Panyu 11-5 oilfield are already in production. Hence, CNOOC total net oil and gas production was 241.5 mboe, an increase of 0.6% y-o-y. Net production from offshore China was 160.1 mboe, up by 2.4%, mainly due to start-ups in Bohai and the western South China Sea.

Forecast for 2017

Non-OPEC supply

Non-OPEC oil supply growth in 2017 was revised up by 0.35 mb/d this month and now is expected to grow by 0.20 mb/d over the current year to average 56.52 mb/d. This revision was due to the 2016 base change and also partly due to the changes in next year's forecasts. This includes mainly increases of 0.23 mb/d in Kazakhstan, 50 tb/d in Norway, 40 tb/d in the UK, 30 tb/d in Canada and minor upward revisions in the US, Brazil, Yemen, Congo and Azerbaijan, all of which were partly offset by lower expectations in China. Thus, supply in 1H17 is expected to be 0.13 mb/d higher than 2H16, while 2H17 is forecast to be 50 tb/d stronger than 1H17.

On a regional breakdown, OECD countries are seen contracting by 0.11 mb/d in 2017 to average 24.70 mb/d, while DCs are expected to grow by 0.29 mb/d to average 11.54 mb/d. OECD Americas will see an annual decline of 0.15 mb/d, OECD Europe will see growth of 0.05 mb/d, and OECD Asia Pacific will keep output steady next year. In DCs, Other Asia, Latin America and Africa are expected to see growth of 0.02 mb/d, 0.21 mb/d and 0.08 mb/d, respectively. In other regions, FSU will grow by 0.12 mb/d in 2017, Other Europe is anticipated to increase by 0.02 mb/d, and China will contract by 0.13 mb/d. The forecast for non-OPEC supply in 2017 is associated with a high level of risk.

Table 5.2: Non-OPEC oil supply in 2017, mb/d

							Change 2017/16	
	2016	1Q17	2Q17	3Q17	4Q17	2017	Growth	%
Americas	20.56	20.45	20.30	20.33	20.52	20.40	-0.15	-0.75
of which US	*13.63*	*13.44*	*13.40*	*13.43*	*13.57*	*13.46*	*-0.17*	*-1.21*
Europe	3.83	4.01	3.87	3.68	3.96	3.88	0.05	1.21
Asia Pacific	0.42	0.43	0.44	0.43	0.40	0.42	0.00	-0.86
Total OECD	**24.82**	**24.89**	**24.61**	**24.44**	**24.88**	**24.70**	**-0.11**	**-0.45**
Other Asia	2.73	2.76	2.75	2.75	2.74	2.75	0.02	0.85
Latin America	5.11	5.27	5.29	5.33	5.42	5.33	0.21	4.17
Middle East	1.28	1.27	1.26	1.25	1.24	1.26	-0.03	-2.10
Africa	2.12	2.18	2.19	2.21	2.23	2.20	0.08	3.74
Total DCs	**11.25**	**11.47**	**11.49**	**11.54**	**11.64**	**11.54**	**0.29**	**2.57**
FSU	13.81	13.96	13.80	13.89	14.07	13.93	0.12	0.89
of which Russia	*10.99*	*10.95*	*10.88*	*10.90*	*11.02*	*10.94*	*-0.06*	*-0.51*
Other Europe	0.14	0.15	0.15	0.15	0.16	0.15	0.02	12.89
China	4.12	4.04	3.99	3.96	3.98	3.99	-0.13	-3.10
Total "Other regions"	**18.07**	**18.15**	**17.94**	**18.01**	**18.21**	**18.08**	**0.01**	**0.07**
Total non-OPEC production	**54.13**	**54.52**	**54.05**	**53.99**	**54.72**	**54.32**	**0.19**	**0.35**
Processing gains	2.19	2.20	2.20	2.20	2.20	2.20	0.01	0.50
Total non-OPEC supply	**56.32**	**56.71**	**56.24**	**56.19**	**56.92**	**56.52**	**0.20**	**0.36**
Previous estimate	56.13	56.17	55.73	55.59	56.41	55.97	-0.15	-0.27
Revision	0.19	0.55	0.51	0.60	0.51	0.54	0.35	0.63

Source: OPEC Secretariat.

On a country basis, the main contributors to growth next year are Brazil with 0.27 mb/d, Kazakhstan with 0.21 mb/d, Canada with 0.18 mb/d, Congo with 0.07 mb/d, Malaysia with 0.04 mb/d, and Norway and the UK each with 0.03 mb/d. In contrast, the US, Mexico, China, Colombia, Azerbaijan, Russia and Vietnam are all expected to provide the main declines.

Table 5.3: Non-OPEC supply forecast comparison in 2016 and 2017

Region	2016	Change 2016/15	2017	Change 2017/16
OECD Americas	20.56	-0.44	20.40	-0.15
OECD Europe	3.83	0.08	3.88	0.05
OECD Asia Pacific	0.42	-0.04	0.42	0.00
Total OECD	**24.82**	**-0.40**	**24.70**	**-0.11**
Other Asia	2.73	0.01	2.75	0.02
Latin America	5.11	-0.07	5.33	0.21
Middle East	1.28	0.01	1.26	-0.03
Africa	2.12	-0.02	2.20	0.08
Total DCs	**11.25**	**-0.08**	**11.54**	**0.29**
FSU	13.81	0.12	13.93	0.12
Other Europe	0.14	0.00	0.15	0.02
China	4.12	-0.26	3.99	-0.13
Non-OPEC production	54.13	-0.62	54.32	0.19
Processing gains	2.19	0.01	2.20	0.01
Non-OPEC supply	**56.32**	**-0.61**	**56.52**	**0.20**

Source: OPEC Secretariat.

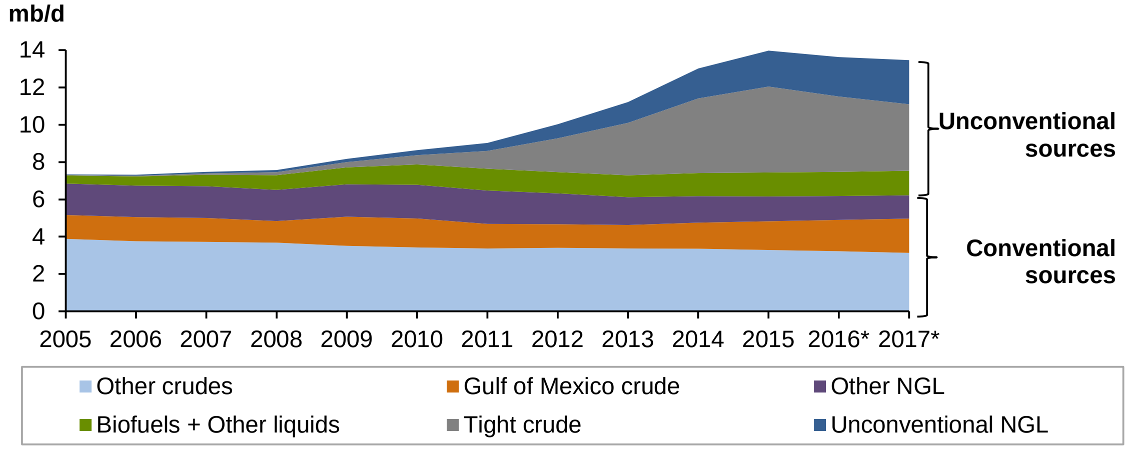
In the **US**, total liquids production saw an upward adjustment of 10 tb/d and is forecast to decline by 0.17 mb/d on average for 2017 to average 13.46 mb/d. US onshore crude oil is forecast to decline by 0.58 mb/d to average 6.7 mb/d in 2017. Some of the declines in onshore crude will be offset by growth of 0.16 mb/d in the GoM. Nevertheless, growth for NGLs and biofuels output is expected to increase by 0.23 mb/d and 20 tb/d, respectively. The main component of US oil output – tight oil – is forecast to contract by 0.49 mb/d y-o-y. Growth in oil production in GoM in 2017 will be mostly on the back of ramp-ups of projects implemented in 2016.

Table 5.4: US liquids production breakdown forecast, 2014-2017, tb/d

	2014	2015	*Change*	2016 *	*Change*	2017 *	*Change*
Tight crude	4,000	4,602	*602*	4,038	*-564*	3,563	*-475*
Gulf of Mexico crude	1,397	1,541	*144*	1,677	*136*	1,837	*160*
Other crudes	3,357	3,287	*-69*	3,223	*-64*	3,133	*-90*
Unconventional NGL	1,604	1,926	*322*	2,114	*188*	2,364	*250*
Other NGL	1,420	1,331	*-89*	1,280	*-51*	1,250	*-30*
Biofuels + Other liquids	1,238	1,283	*45*	1,295	*11*	1,315	*20*
US total supply	**13,016**	**13,972**	***955***	**13,627**	***-345***	**13,462**	***-165***

*Note: * 2016-2017 = forecast.*
Source: OPEC Secretariat.

Graph 5.21: Trend of US oil production's components, 2005-2017



*Note: *2016-2017= forecast.*
Source: OPEC Secretariat.

In **Brazil,** which is expected to show the most growth in 2017, six main oil fields are expected to have the highest share in next year's growth. These include Lula (with the highest daily output in Brazil), Roncador, Sapinhoa, Jubarte, Marlim and Marlim Sul. In addition, following the three planned projects of Lula Central, Lula Alto and Lapa – of which two have been implemented with total peak capacity of 0.38 mb/d in 1H16 – Petrobras has planned to add another seven FPSOs in the Santos Basin, including three in the Lula field. These include Lula South (FPSO P-66) and Lula South Extension (FPSO P-68), two in the Buzios field, one in the Lapa field and one at the giant Libra area. Oil production is expected to grow by 0.27 mb/d after this month's upward revision of 16 tb/d to average 3.40 mb/d when the new projects materialize.

Kazakhstan, which is expected to potentially show robust growth from the Kashagan field in the Northern Caspian Sea, after starting production in late October 2016, is forecast to see the second highest growth in 2017 at 0.21 mb/d. This would indicate an average production of 1.78 mb/d next year.

Canada is anticipated to be the third largest source of non-OPEC supply growth in 2017 after Kazakhstan, expanding by 0.18 mb/d – with an upward revision of 30 tb/d – to average 4.61 mb/d. The estimated growth will come mainly from ramp-ups in the Surmont 2, Christian Lake, Sunrise and Kearl oil sands projects, as well as from new start-ups from Edam East, West and Vawm heavy oil thermal projects in 2017. Other oil sands projects such as Kirby North phase 1, Christian Lake phase G and Foster Creek phase H, which were planned to start in 2017, were deferred beyond 2018 due to low oil prices. The total plateau volumes of these three projects are estimated at about 0.11 mb/d, with total capex of $5.4 bn.

OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids (mostly GTLs) were estimated to average 6.29 mb/d in 2016, representing growth of 0.16 mb/d over the previous year. In 2017, OPEC NGLs and non-conventional liquids are projected to average 6.43 mb/d, an increase of 0.15 mb/d over the previous year. There are no changes in the 2016 estimation or in the 2017 predictions for OPEC NGLs and non-conventional liquids production compared with the last MOMR.

Table 5.5: OPEC NGLs + non-conventional oils, 2014-2017

	2014	2015	Change 15/14	1Q16	2Q16	3Q16	4Q16	2016	Change 16/15	2017	Change 17/16
Total OPEC	**6.00**	**6.13**	0.13	6.24	6.27	6.30	6.34	**6.29**	0.16	**6.43**	0.15

Note: 2016 and 2017 = Forecast.
Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, OPEC crude oil production stood at 33.24 mb/d in August, a decrease of 23 tb/d over the previous month. Crude oil output increased mainly from Saudi Arabia and Iran, while Nigeria and Libya showed the largest drop.

Table 5.6: OPEC crude oil production based on *secondary sources*, tb/d

	2014	2015	4Q15	1Q16	2Q16	Jun 16	Jul 16	Aug 16	Aug/Jul
Algeria	1,123	1,106	1,110	1,092	1,084	1,082	1,089	1,089	0.0
Angola	1,654	1,754	1,780	1,766	1,781	1,789	1,767	1,775	8.8
Ecuador	544	546	545	547	549	549	549	542	-6.2
Gabon	222	219	218	219	217	218	215	223	7.7
Indonesia	695	696	707	714	722	726	725	725	-0.4
Iran, I.R.	2,778	2,840	2,874	3,096	3,539	3,605	3,631	3,653	22.3
Iraq	3,267	3,933	4,232	4,235	4,284	4,242	4,356	4,354	-2.0
Kuwait	2,781	2,730	2,720	2,765	2,731	2,787	2,787	2,791	4.1
Libya	470	405	401	370	314	326	313	292	-21.3
Nigeria	1,953	1,867	1,885	1,793	1,554	1,550	1,520	1,468	-51.2
Qatar	714	667	669	667	662	662	664	664	0.0
Saudi Arabia	9,688	10,123	10,122	10,147	10,297	10,455	10,577	10,605	28.0
UAE	2,759	2,856	2,881	2,807	2,847	2,930	2,952	2,952	0.0
Venezuela	2,361	2,357	2,354	2,278	2,176	2,132	2,117	2,104	-12.8
Total OPEC	**31,010**	**32,099**	**32,498**	**32,497**	**32,756**	**33,053**	**33,260**	**33,237**	**-23.1**

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

Table 5.7: OPEC crude oil production based on *direct communication*, tb/d

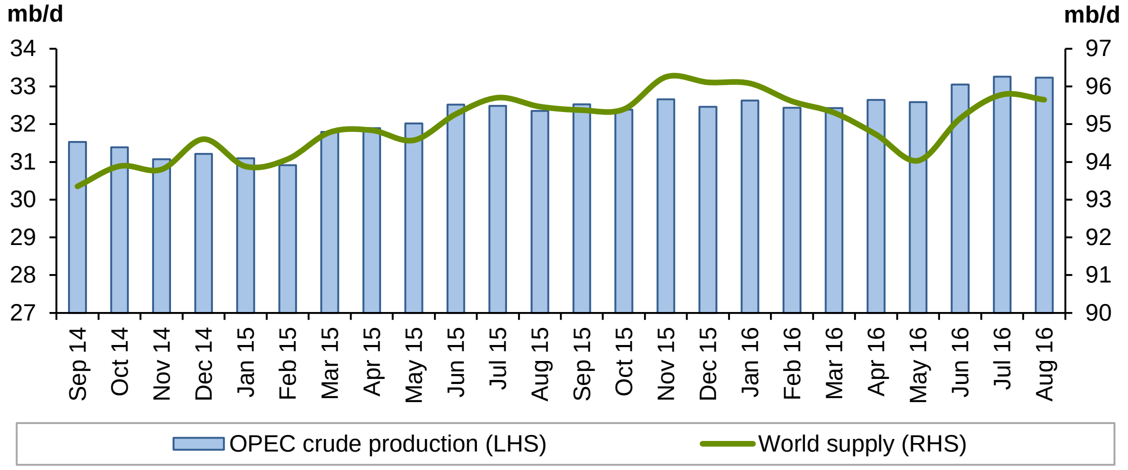
	2014	2015	4Q15	1Q16	2Q16	Jun 16	Jul 16	Aug 16	Aug/Jul
Algeria	1,193	1,157	1,179	1,128	1,126	1,104	1,145	..	..
Angola	1,654	1,767	1,742	1,773	1,730	1,752	1,761	1,747	-13.6
Ecuador	557	543	536	548	554	550	546	549	3.4
Gabon	..	..	..	..	..	..	..	..	..
Indonesia	697	690	693	739	739	744	745	742	-2.6
Iran, I.R.	3,117	3,152	3,313	3,385	3,570	3,610	3,620	3,630	10.0
Iraq	3,110	3,504	3,846	4,598	4,523	4,549	4,606	4,638	32.0
Kuwait	2,867	2,859	2,876	3,000	2,934	2,950	2,950	2,987	37.0
Libya	480	..	..	..	..	..	..	..	..
Nigeria	1,807	1,748	1,778	1,667	1,485	1,379	1,270	1,456	185.9
Qatar	709	656	651	675	655	670	677	643	-34.1
Saudi Arabia	9,713	10,193	10,202	10,225	10,360	10,550	10,673	10,630	-42.7
UAE	2,794	2,989	2,999	2,944	3,035	3,168	3,181	3,154	-27.5
Venezuela	2,683	2,654	2,587	2,510	2,392	2,364	2,355	2,328	-27.2
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**

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

World oil supply

Preliminary data indicates that world oil supply decreased by 0.14 mb/d to average 95.65 mb/d in August 2016, compared with the previous month. The decline of non-OPEC supply by 0.11 mb/d and drop of OPEC crude oil production by 23 tb/d in August led to decreased global oil output. The share of OPEC crude oil at 34.7% of total global production remained unchanged in August compared to a month earlier. Estimates are based on preliminary data for non-OPEC supply as well as OPEC NGLs and non-conventional liquids from direct communication, while estimates for OPEC crude production come from secondary sources.

Graph 5.22: OPEC and world oil supply

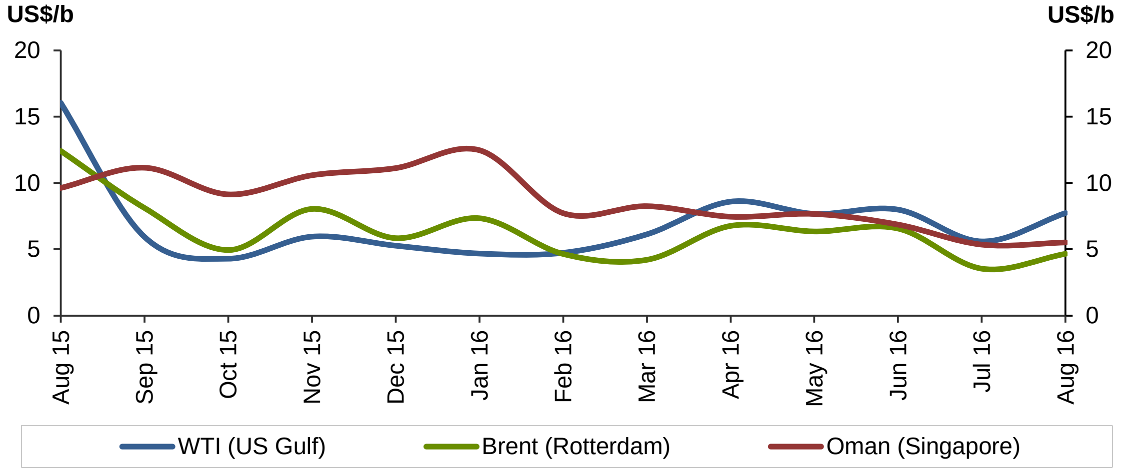


Source: OPEC Secretariat.

Product Markets and Refinery Operations

Product markets in the Atlantic Basin strengthened during August on the back of positive performances at the top of the barrel. Gasoline was supported by strong US demand amid export opportunities to the EU. This, along with the tightening market environment fuelled by concerns about the impact of tropical storms and some refinery outages, lent further support. Meanwhile, Asian margins showed a slight recovery on the back of firm demand and falling inventories ahead of autumn maintenance.

Graph 6.1: Refinery margins, 2015-2016



Sources: Argus Media and OPEC Secretariat.

Strong **US** gasoline demand continued in August, reaching around 9.7 mb/d, the highest level seen in years. This contributed to the fall seen in inventories and, along with operational problems witnessed at several refineries amid concerns regarding the potential impact of a tropical storm, lent some support to product markets and allowed refinery margins to strengthen. Refinery margins for WTI crude on the US Gulf Coast gained more than $2 versus the previous month's levels, to average around $8/b during August.

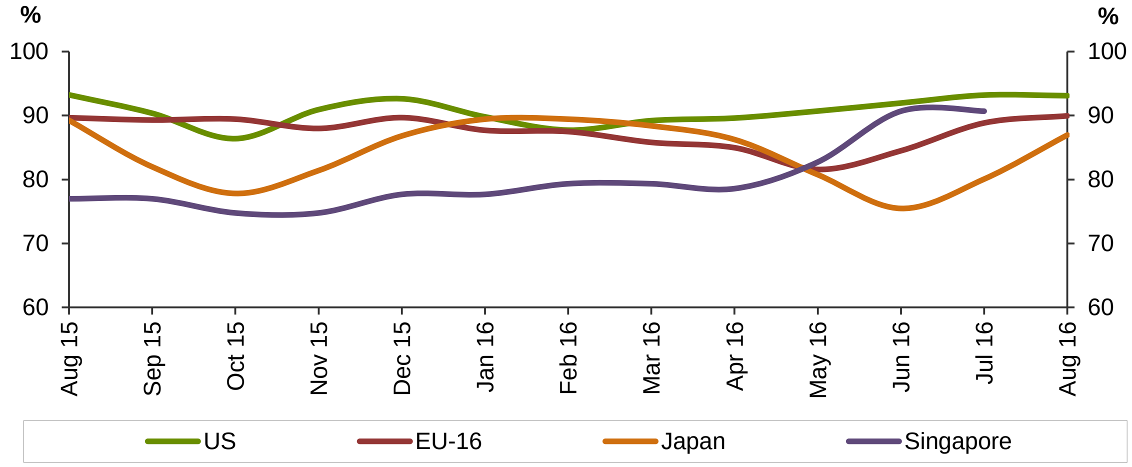
Product markets in **Europe** showed mixed performances during August as the improvements seen in gasoline crack spreads allowed refinery margins to recover by more than offsetting the weakness seen at the rest of the barrel, which has been hit by the oversupply environment. The refinery margin for Brent crude in Northwest Europe showed a gain of more than $1 versus the previous month, to average $4.7/b during August.

Despite ongoing oversupply in **Asia**, firm demand for distillates and falling inventories ahead of the autumn maintenance season lent some support to gasoline and middle distillate crack spreads and allowed refinery margins in Singapore to show a slight recovery of 20¢ to average $5.5/b during August.

Refinery operations

Refinery utilization in the **US** averaged around 93% in August, corresponding to 16.7 mb/d, a level similar to the previous month and to the same month a year ago. Refinery levels were impacted by heavy flooding, which caused significant operational problems at several refineries, mainly in southern Louisiana.

Graph 6.2: Refinery utilisation rates, 2015-2016



Sources: Argus Media and OPEC Secretariat.

European refinery runs averaged around 90% of capacity in August, corresponding to a throughput of 10.6 mb/d, which was 130 tb/d higher than in the previous months. Refinery runs were on the rise in Europe last month following the recovery from the negative impacts of the strike in France. However, reduced run levels are expected due to the still-high level of inventories and the upcoming maintenance season.

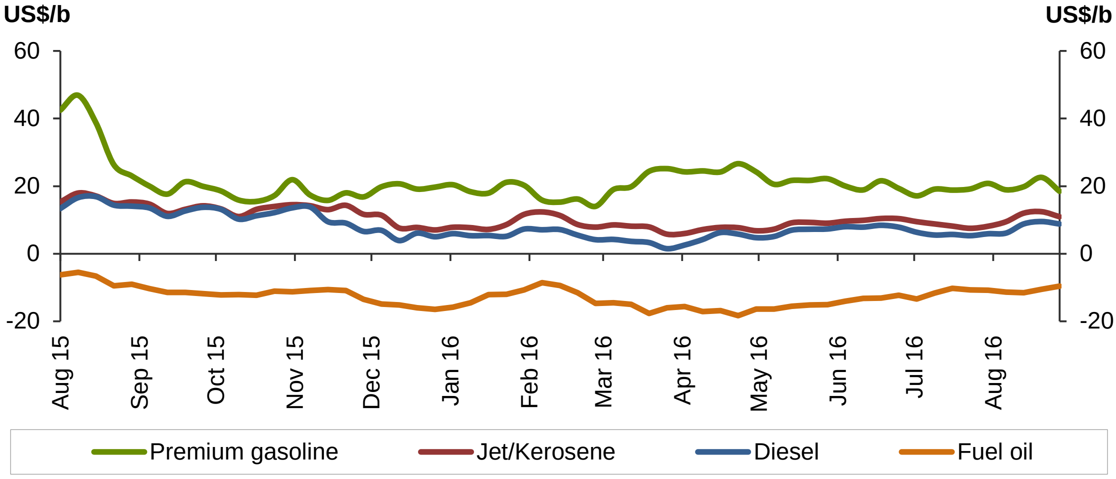
In **Asia**, refinery utilization rates were mixed. Refinery runs in China had been on the rise, hitting a new record level of around 11 mb/d during June, however, during July, the runs averaged 10.7 mb/d as the sector was impacted by bad weather conditions, with flooding causing several unplanned outages. In addition, maintenance activities are planned at several teapot refineries. Refinery runs in Singapore for July averaged around 91%, meanwhile, Japanese throughputs averaged 87% of capacity, 7 pp higher than in the previous month, as some refineries returned from maintenance.

US market

US gasoline demand stood at around 9.7 mb/d in August, approximately 70 tb/d lower than in the previous month and more than 200 tb/d higher than in the same month a year earlier. Strong domestic gasoline demand, hitting levels not seen in years, along with falling inventories, allowed crack spreads to strengthen. Additional support came from concerns over potential impacts of the tropical storm.

The gasoline crack spread gained almost $2 compared with the previous month’s level to average $20.3/b in August.

Graph 6.3: US Gulf crack spread vs. WTI, 2015-2016



Sources: Argus Media and OPEC Secretariat.

Middle distillate demand stood at around 3.8 mb/d in August, some 115 tb/d higher than in the previous month and around 120 tb/d lower than in the same month a year earlier. The middle distillates market received support from higher export opportunities to Latin America and the tightening sentiment fueled by some operational issues at refineries in Louisiana and Indiana. The US Gulf Coast (USGC) gasoil crack averaged around $8/b, gaining more than $2 from the previous month.

At the **bottom of the barrel**, the fuel oil market continued its recovery trend, supported by slowing production, as refinery yields continued to be low, which contributed to lower inventories. Additional support came with the arbitrage opportunities to Asia. The USGC high sulphur fuel oil crack gained around $1 to average minus $10.8/b in August.

European market

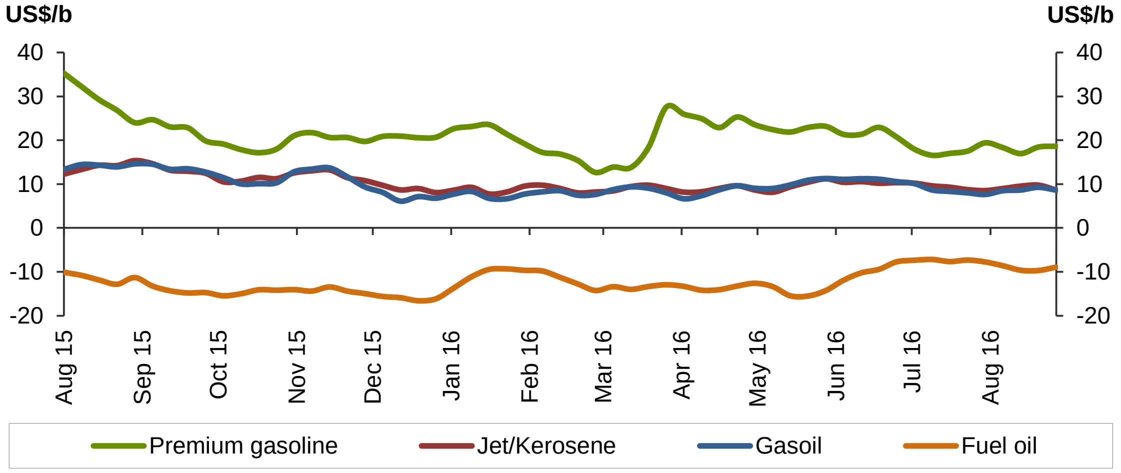
Product markets in Europe showed mixed performances during August, with gasoline getting support from stronger export opportunities to the Americas and West Africa, while the bottom of the barrel weakened due to lower domestic demand amid limited arbitrage opportunities.

The **gasoline** market received support from increasing arbitrage to the US due to stronger demand amid lower freight rates, which favored the transatlantic movement amid higher requirements in the US as tropical storm fuelled tightening supply sentiment. Additional support came from higher export opportunities to West Africa and Latin America, mainly to Mexico.

The gasoline crack spread against Brent saw an increase of almost $1 from the previous month to average around $18.2/b.

The light distillate **naphtha** crack continued to weaken as a result of oversupply in the region, with slowing demand from gasoline blenders amid reduced arbitrage to the Asia Pacific region, where Indian and Middle East exports have been hitting the market.

Graph 6.4: Rotterdam crack spreads vs. Brent, 2015-2016



Sources: Argus Media and OPEC Secretariat.

The European **gasoil** market continued to weaken last month due to continued pressure from the supply side as increasing regional supplies outweighed slower Russian inflows seen in the last weeks. Meanwhile, weak domestic demand has also been exerting pressure on the gasoil market.

The gasoil crack spread against Brent crude at Rotterdam averaged around $8.4/b in August, losing around 50¢ versus the previous month's level. Inflows to the region were boosted by low freight rates seen in the last weeks, however, losses in the margins were capped by export opportunities to West Africa and Egypt.

At the **bottom of the barrel**, the fuel oil market lost some ground last month due to weakening domestic demand amid some pressure coming from the supply side with the outage of the conversion unit at the Turkish refinery and some inflows from America, which outweighed lower Russian exports. Another bearish factor was the limited arbitrage opportunities to Singapore.

The Northwest Europe (NEW) fuel oil crack lost more than $1 compared with the previous month to average around minus $9/b in August.

Asian market

The Asian market exhibited a small recovery on the back of firm demand for distillates and falling inventories, fuelling tightening sentiment ahead of the autumn maintenance season in the region. In addition, some refinery outages also lent some support to the margins.

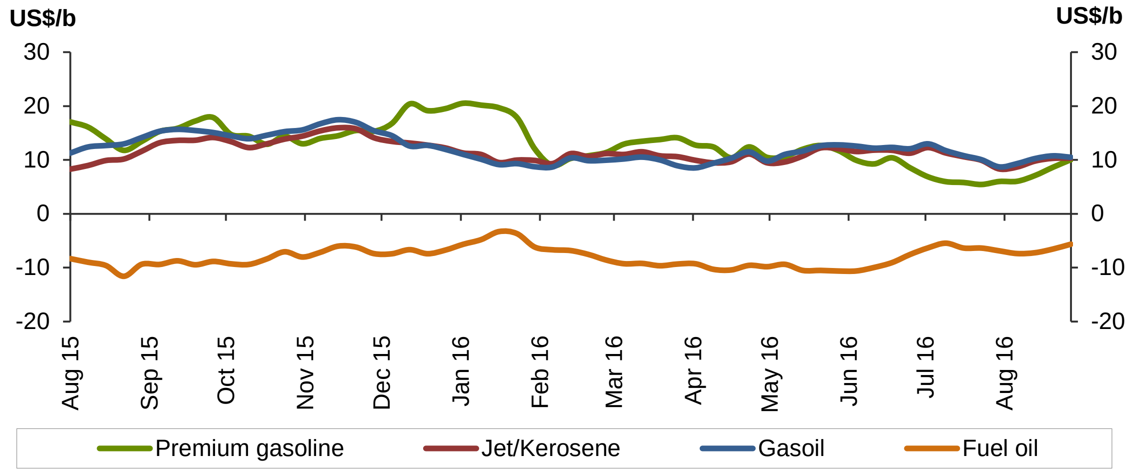
The Asian **gasoline** market showed a recovery during August, supported by stronger demand from Northeast Asia amid lower exports from Chinese refineries and some gasoline unit outages at Taiwanese and Indonesian refineries. Another positive factor was the falling inventories seen in Japan and South Korea, which caused tightening sentiment ahead of the autumn maintenance season in the region.

The gasoline crack spread against Oman crude in Singapore averaged $7.5/b in August, gaining almost $2 compared with the previous month's level.

The Singapore **naphtha** crack continued its downward trend, losing more than $2/b over the month due to persistent oversupply with increasing volumes coming from India. Demand was impacted by reduced imports from Japan and Taiwan due to the ongoing maintenance of cracker units.

On the other hand, a potential upside in the naphtha crack spreads remains unlikely with cheaper LPG limiting any switch in petrochemical feedstocks.

Graph 6.5: Singapore crack spread vs. Oman, 2015-2016



Sources: Argus Media and OPEC Secretariat.

At the **middle of the barrel,** the gasoil crack spread exhibited some recovery from the slump suffered in the previous month when demand was impacted by bad weather conditions in the region, including heavy rains, floods and typhoons.

Demand has started to recover in India, following the limited construction activity during the heavy monsoon season seen in previous months. Additional support came from some arbitrage opportunities opened to Europe, which, along with the tightening sentiment fueled by the upcoming autumn maintenance season, have contributed to ease the persistent overhang in the region.

The gasoil crack spread in Singapore against Oman averaged around $10.6/b in August, gaining more than $2 compared with the previous month's level.

The Asian **fuel oil** market weakened slightly, pressured by the supply side, with increasing inflows seen in the last weeks amid higher arbitrage from the West.

The fuel oil crack spread in Singapore against Oman averaged about minus $6.7/b in August, losing around 50¢ from the previous month.

Losses were capped by the expectations of seasonal increasing demand in the region amid lower exports seen from South Korea.

Table 6.1: Refined product prices, US$/b

		Jul 16	Aug 16	Change Aug/Jul	Year-to-date 2015	Year-to-date 2016
US Gulf (Cargoes FOB):						
Naphtha*		44.93	46.23	1.30	63.62	43.02
Premium gasoline	*(unleaded 93)*	63.42	65.03	1.61	85.67	61.08
Regular gasoline	*(unleaded 87)*	59.19	61.78	2.59	74.38	55.28
Jet/Kerosene		53.34	55.33	1.99	69.46	49.55
Gasoil	*(0.2% S)*	50.60	52.51	1.91	68.97	46.67
Fuel oil	*(3.0% S)*	34.06	34.50	0.44	45.70	28.17
Rotterdam (Barges FoB):						
Naphtha		41.73	40.52	-1.21	53.64	40.01
Premium gasoline	*(unleaded 98)*	62.35	64.07	1.72	80.61	61.28
Jet/Kerosene		54.48	54.91	0.43	71.54	50.35
Gasoil/Diesel	*(10 ppm)*	53.84	54.28	0.44	71.13	49.92
Fuel oil	*(1.0% S)*	37.60	36.83	-0.77	45.19	29.84
Fuel oil	*(3.5% S)*	32.21	32.87	0.66	45.87	25.57
Mediterranean (Cargoes FOB):						
Naphtha		41.06	39.93	-1.13	50.58	39.02
Premium gasoline**		54.85	56.45	1.61	76.68	53.86
Jet/Kerosene		53.21	53.33	0.12	69.34	48.68
Diesel		55.04	55.56	0.51	73.73	51.13
Fuel oil	*(1.0% S)*	36.85	37.35	0.50	46.92	30.16
Fuel oil	*(3.5% S)*	34.84	35.36	0.52	45.65	28.24
Singapore (Cargoes FOB):						
Naphtha		41.74	39.96	-1.78	55.18	40.49
Premium gasoline	*(unleaded 95)*	51.87	54.18	2.31	73.37	53.26
Regular gasoline	*(unleaded 92)*	49.46	51.52	2.06	70.22	50.35
Jet/Kerosene		54.37	53.55	-0.82	69.27	49.65
Gasoil/Diesel	*(50 ppm)*	54.76	53.99	-0.77	70.73	49.60
Fuel oil	*(180 cst 2.0% S)*	38.35	38.67	0.32	51.42	32.92
Fuel oil	*(380 cst 3.5% S)*	36.47	36.61	0.14	49.44	30.76

*Note: * Barges.*
*** Cost, insurance and freight (CIF).*
Sources: Argus Media and OPEC Secretariat.

Table 6.2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Jun 16	Jul 16	Aug 16	Change Aug/Jul	Jun 16	Jul 16	Aug 16	Change Aug/Jul
US	16.48	16.71	16.69	-0.02	91.96	93.20	93.11	-0.10
France	0.75	1.11	1.19	0.08	53.63	78.73	84.57	5.83
Germany	1.89	1.90	1.91	0.01	86.20	86.65	87.16	0.50
Italy	1.24	1.30	1.32	0.02	60.65	63.29	64.47	1.17
UK	1.07	1.05	1.08	0.03	76.39	74.75	77.25	2.50
Euro-16	10.01	10.53	10.66	0.13	84.50	88.84	89.96	1.11
Japan	2.96	3.14	3.41	0.27	75.47	80.07	86.96	6.89

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

Tanker Market

Dirty tanker spot freight rates were under pressure again in August, reflecting decreases among all classes, occasionally reporting the lowest levels seen so far this year.

VLCC rates were down by 12% on average compared with the previous month, while Suezmax spot freight rates reflected an even larger drop, decreasing by 30% from a month ago. The decline in rates was mainly driven by excess tonnage supply as new deliveries continued to join the fleet, along with reduced delays in different ports in addition to limited cargo-loading opportunities. Aframax freight rates were no exception, falling by 14% on average from a month earlier, as excess vessels created an imbalanced market, leading to a drop in freight rates in different regions, with the only exception being the Aframax market in the Caribbean, which remained stable.

Clean tanker spot freight rates strengthened in East of Suez as a result of balanced trading conditions, while the quiet West of Suez market saw a drop in rates as the position list kept growing.

Spot fixtures

Global fixtures dropped by 16.6% in August, compared with the previous month. OPEC spot fixtures declined by 1.74 mb/d, or 15.2%, averaging 9.73 mb/d, according to preliminary data. The drop in fixtures was registered in all regions. Fixtures in the Middle East to both East- and West-bound destinations were lower, as were fixtures outside of the Middle East, which averaged 2.65 mb/d in August, down by 0.46 mb/d from one month ago. Compared with the same period a year earlier, all fixtures were lower in August by between 28% and 12% from the previous year.

Table 7.1: Tanker chartering, sailings and arrivals, mb/d

	Jun 16	Jul 16	Aug 16	*Change* Aug 16/Jul 16
Spot Chartering				
All areas	16.59	16.57	13.82	-2.76
OPEC	11.60	11.47	9.73	-1.74
Middle East/East	5.78	5.18	4.65	-0.53
Middle East/West	2.57	3.17	2.43	-0.74
Outside Middle East	3.25	3.11	2.65	-0.46
Sailings				
OPEC	24.01	24.08	23.55	-0.53
Middle East	17.41	17.47	16.94	-0.54
Arrivals				
North America	9.82	10.62	9.62	-1.00
Europe	12.60	12.09	12.49	0.40
Far East	8.85	8.50	8.36	-0.14
West Asia	4.37	4.69	4.89	0.20

Source: Oil Movements.

Sailings and arrivals

Preliminary data showed that OPEC sailings declined by 2.2% in August, averaging 23.55 mb/d, remaining 0.57 mb/d, or 2.4%, higher than the same month a year before. Arrivals in Europe and West Asia were up from the previous month, while Far Eastern and North American arrivals declined by 0.2 mb/d and 1 mb/d, respectively, to average 4.89 mb/d and 9.62 mb/d.

Spot freight rates

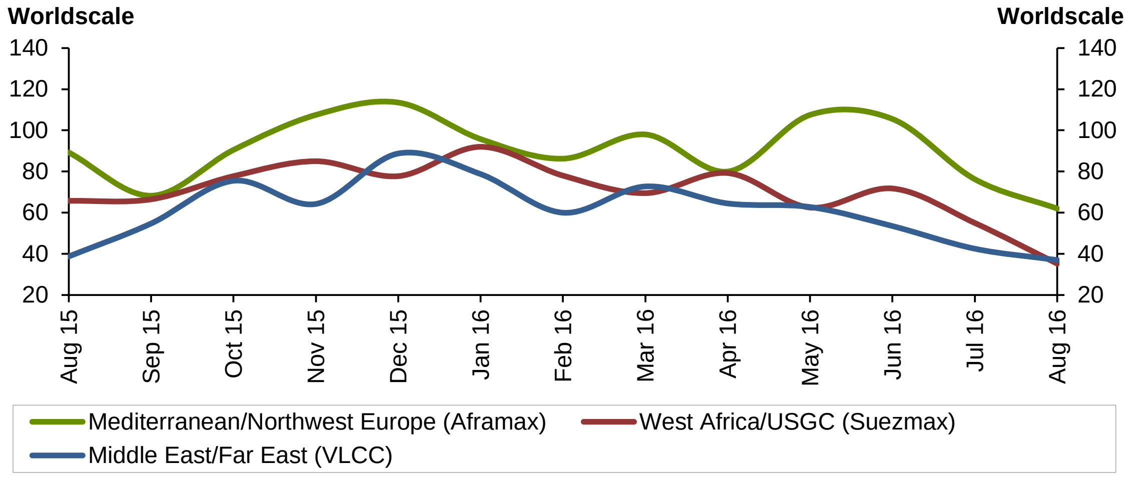
VLCC

In August, VLCC freight rates dropped further as a bearish trend continued. Rates were under pressure on all selected routes, influenced mostly by a high number of idle ships, lack of delays and slow movement in the market. Freight rates dropped despite a tolerable amount of fixtures in August, as total tonnage supply remained above the demand level. The imbalance was also caused by the continuation of newly built deliveries to the market. Lower freight rates were registered on many routes as high vessel availability existed on all major trading routes.

The highest monthly decline in freight earnings for tankers was seen on the West Africa-to-East route, where earnings declined by 16% to stand at WS41 points. Levels for West Africa were weak as the market suffered from slow activity and competition from smaller Suezmax vessels, the rates for which fell dramatically, making them a viable option on a split cargo basis.

Middle East-to-East and Middle East-to-West spot freight rates decreased by 12% and 6%, respectively, from the previous month. VLCC freight rates showed some firming tendency towards the end of August as September chartering requirements came into the market. However, any enhancement in rates remained only relative, mainly as charterers held back their orders, allowing tonnage buildup to grow.

Graph 7.1: Monthly averages of crude oil spot freight rates



Sources: Argus and Platts.

Suezmax

As seen in the VLCC market, **Suezmax** freight rates came under pressure in August, though showing higher drops on both a monthly and an annual basis. Suezmax average rates dropped by 30% compared with the previous month.

The biggest rate drop was seen for Suezmax vessels operating on the West Africa-to-US route where they fell by 37%, to average WS35 points, while rates for Northwest Europe-to-US routes decreased by 23% to average WS41 points. The freight rate drop for Suezmax came partially on the back of low loadings from main exporters, combined with an over-populated tonnage list, largely influencing the balance of the tonnage market. An occasional pickup in activities and tonnage demand was seen towards the end of the month, but remained insufficient to balance excess tonnage supply in the market. Suezmax rates reached lows not seen in years despite a rush of inquiries for September loading and partial cargo opportunities.

Table 7.2: Spot tanker crude freight rates, Worldscale

	Size *1,000 DWT*	Jun 16	Jul 16	Aug 16	*Change* Aug 16/Jul 16
Crude					
Middle East/East	230-280	54	43	37	-6
Middle East/West	270-285	31	26	24	-2
West Africa/East	260	58	49	41	-8
West Africa/US Gulf Coast	130-135	72	55	35	-20
Northwest Europe/US Gulf Coast	130-135	61	54	41	-13
Indonesia/East	80-85	97	89	71	-18
Caribbean/US East Coast	80-85	93	79	82	3
Mediterranean/Mediterranean	80-85	111	82	66	-16
Mediterranean/Northwest Europe	80-85	106	76	62	-14

Sources: Argus Media and OPEC Secretariat.

Aframax

Aframax spot freight rates followed other classes in the dirty tanker segment in August, falling on average by 14% on reported routes. Aframax rates on all routes dropped without exception from the year before. Vessel availability in the spot market was ample and many markets were lacking activity.

North Sea and Black Sea markets were mostly quiet as fuel oil loading requirements were limited. Additionally, some loading opportunities were lost as a result of maintenance work at the Primorsk port terminal. Spot freight rates for the Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe routes declined by 20% and 19% to stand at WS66 points and WS62 points, respectively.

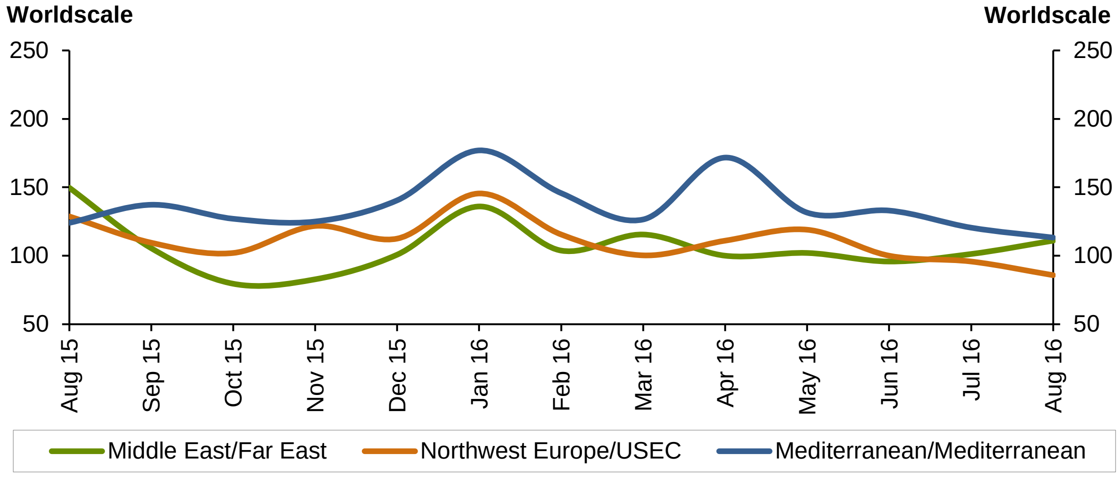
Aframax freight rates in the East were no exception. They dropped on the Indonesia-to-East route by 19% to average WS72 points.

The Aframax market in the Caribbean also suffered from ample tonnage supply, which came together with a limited volume of cargoes. However, freight rates were occasionally supported by some replacements by late-running ships and the opening of September deals at the end of August, leading to nearly flat rates from the previous month on the Caribbean-to-US route, where they averaged WS180 points.

Clean spot freight rates

In the clean sector, tankers trading on most reported routes registered drops in August, as seen in previous months. The drop in clean freight rates was mostly driven by lower rates registered in West of Suez trade, where those for westbound fixtures declined by 7% from a month before.

Graph 7.2: Monthly average of clean spot freight rates



Sources: Argus Media and OPEC Secretariat.

In East of Suez, the clean tanker market was balanced mainly for long-range (LR) ships as the Middle East tanker market saw a steady flow of cargoes. The medium-range (MR) market was mostly stable in August, closing the month up by 10%, or WS10 points, from the previous month.

Spot freight rates for tankers operating on the Middle East-to-East route increased to the highest level seen in months to average WS111 points, though rates for the Singapore-to-East route did not follow, dropping by 3% from a month earlier to average WS118 points in August.

Clean West of Suez spot freight rates dropped on all reported routes in August. Rates seen on the Northwest Europe-to-US route registered the highest drop, down by 11% to average WS86 points.

Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe routes declined by 6% each to stand at WS113 and WS123 points, respectively.

Table 7.3: Spot tanker product freight rates, Worldscale

	Size 1,000 DWT	Jun 16	Jul 16	Aug 16	*Change* Aug 16/Jul 16
Products					
Middle East/East	30-35	96	101	111	10
Singapore/East	30-35	126	121	118	-3
Northwest Europe/US East Coast	33-37	100	96	86	-10
Mediterranean/Mediterranean	30-35	133	121	113	-7
Mediterranean/Northwest Europe	30-35	143	131	123	-8

Sources: Argus Media and OPEC Secretariat.

Oil Trade

Preliminary data shows that US crude oil imports increased by 252 tb/d in August, or 3%, from the previous month to average 8.5 mb/d. US product imports declined by 45 tb/d, or 2%, to average 2.2 mb/d m-o-m, while y-o-y they went up by 129 tb/d, or 6%.

Japan's crude oil imports increased slightly in July by 12 tb/d, to average 3.1 mb/d. On an annual basis, crude imports dropped in July by 9%. Japan's product imports increased in July by 138 tb/d, to average 550 tb/d. However, on an annual basis, product imports were lower by 51 tb/d, or 9%. Japan's monthly product imports' increase came mainly as a result of higher imports of naphtha and gasoline.

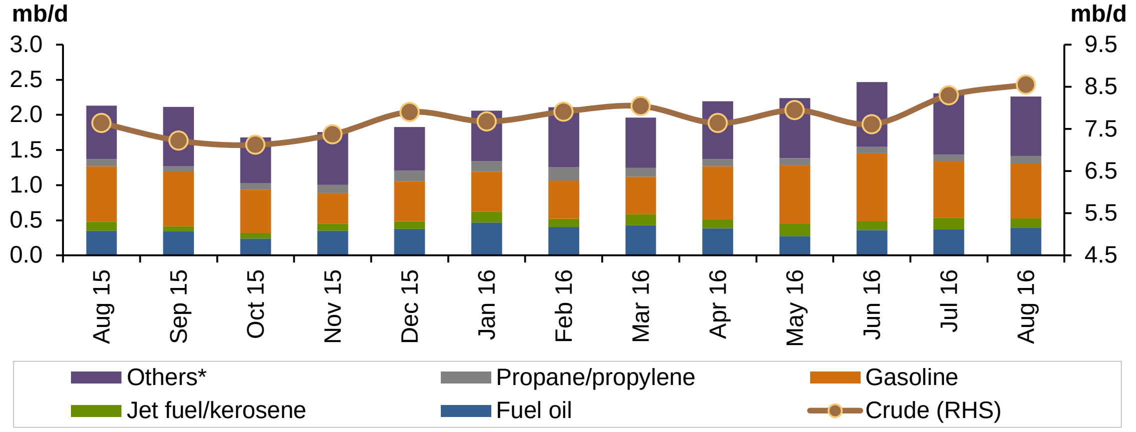
China's crude oil imports dropped in July by 136 tb/d, or 2%, from the previous month, to average 7.3 mb/d. On an annual comparison, China's crude imports were higher by just 1%. China's product imports decreased in July by a slight 12 tb/d from the previous month, while remaining above the previous year by 395 tb/d.

India's crude imports averaged 4 mb/d in July, which is 214 tb/d, or 5%, lower than the level seen last month. On an annual basis, they dropped by 99 tb/d, or 2%. Product imports also dropped in July by 28 tb/d, or 5%, from a month ago, to average 588 tb/d. This reflects a y-o-y drop of 84 tb/d, or 13%.

US

Preliminary weekly data shows that **US crude oil imports** increased by 252 tb/d, or 3%, in August from the previous month to average 8.5 mb/d. Although the data remains preliminary, it shows that US crude imports reached the highest level since August 2012. On an annual basis, this reflects a gain of 911 tb/d, or 12%, from a year earlier.

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.

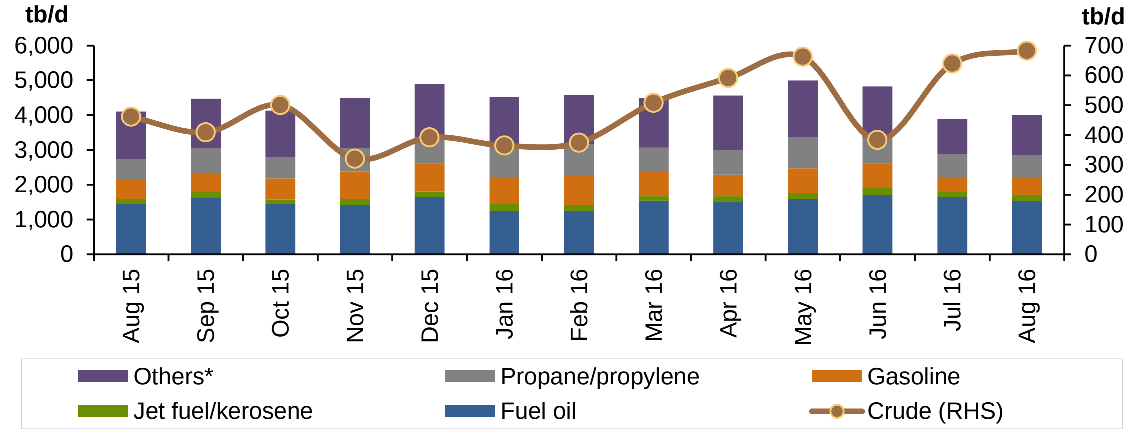
US product imports declined by 45 tb/d, or 2%, to average 2.2 mb/d m-o-m, while y-o-y they went up by 129 tb/d, or 6%.

On a year-to-date comparison, both crude and product imports were up by 9% and 2%, respectively.

As to **product exports**, in August US product exports registered a gain by 105 tb/d, or 3%, to average 4 mb/d. On an annual comparison, the figures reflect a drop of 100 tb/d, or 2%.

As a result, **US total net imports** rose in August to average 6.1 mb/d, which is 1% higher than the previous month and 17% 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 crude supplier**, accounting for 39% of total US crude imports, though by 24 tb/d less than one month before. Canada continues to hold the position of top supplier to the US since March 2006. Saudi Arabia came in as second supplier to the US holding a share of 14% of total crude imports, though their crude exports to the US dropped from a month earlier by 82 tb/d. Venezuela came in as third top supplier to US in June, though its volumes were 79 tb/d less than the previous month.

Crude imports from **OPEC Member Countries** went down in June from the previous month by 384 tb/d, or 11%, to average 3 mb/d. Crude imports from OPEC Member Countries accounted for 40% of total US crude imports. On the other hand, US product imports from OPEC Member Countries were higher than a month earlier and stand at 284 tb/d. This represents a share of 11% of total products imported by the US. On an annual basis it also remains 38% above the volumes it had in the same month last year.

As to the **products supplier share**, Canada and Russia maintained their position as first and second suppliers to the US with share of 20% and 17%, respectively. Yet in terms of volume, both Canada and Russia decreased their exports from last month by 11% and 2%, respectively. The UK was the third largest products supplier to US in June.

Imports by regions remain with no major changes. In June 2016, as seen before, the largest crude import volumes to the US were sourced from North America, averaging 3 mb/d. North America came in as the top region for US crude imports followed by Latin America, which averaged 2.2 mb/d. The Middle East came in as the third region with an average of 1.7 mb/d. Imports from Africa and Asia declined from a month earlier, while imports from the Former Soviet Union (FSU) increased to average 57 tb/d.

Looking into the imports of each **PADD**, crude imports by PADD-1 mainly came from Africa, North America and Latin America to average 322 tb/d, 266 tb/d and 130 tb/d, respectively. Imports from PADD-2 were mostly sourced from North America as seen before and stood at 1.9 mb/d, down by 69 tb/d from the previous month. PADD-3 sourced its largest imports from Latin America and its imports were up by 33 tb/d to average 1.7 mb/d, while imports from the Middle East were down by 178 tb/d from last month to average 1.1 mb/d. PADD-4 only imported from North America and averaged 272 tb/d in June, higher by 39 tb/d from a month before. In PADD-5, the highest imports came from the Middle East, which remains a top supplying region to PADD-5, averaging 513 tb/d in June, followed by Latin America and North America.

Table 8.1: US crude and product net imports, tb/d

	Jun 16	Jul 16	Aug 16	*Change* Aug 16/Jul 16
Crude oil	7,228	7,659	7,867	208
Total products	-2,358	-1,594	-1,744	-150
Total crude and products	**4,870**	**6,065**	**6,123**	**58**

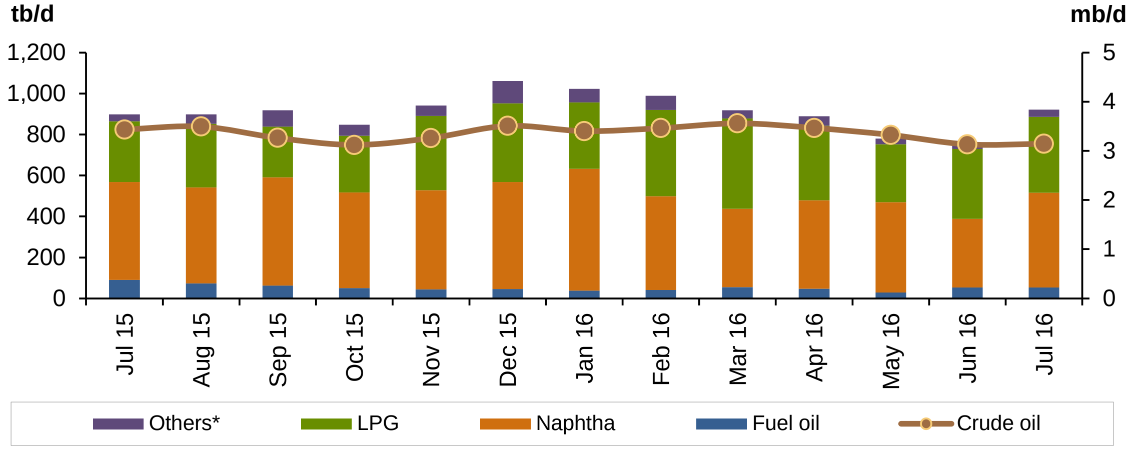
Sources: US Energy Information Administration and OPEC Secretatiat.

Japan

Japan's crude oil imports increased slightly in July by 12 tb/d to average 3.1 mb/d. On an annual basis, crude imports dropped in July by 9%.

As to the **suppliers' share**, Saudi Arabia, as in the previous month, came in as the first crude supplier to Japan holding a share of 34% of total crude exports to Japan. This was up by 47 tb/d, or 5%, from last month. Nevertheless, this volume was found to be 69 tb/d, or 6%, less than the previous year. The UAE came in as the second largest supplier to Japan with a share of 26% of total crude imports. Qatar came in third, holding a share of 8%. Both UAE's and Qatar's crude exports were less than the previous month by 5 tb/d and 47 tb/d, respectively.

Graph 8.3: Japan's imports of crude and petroleum products

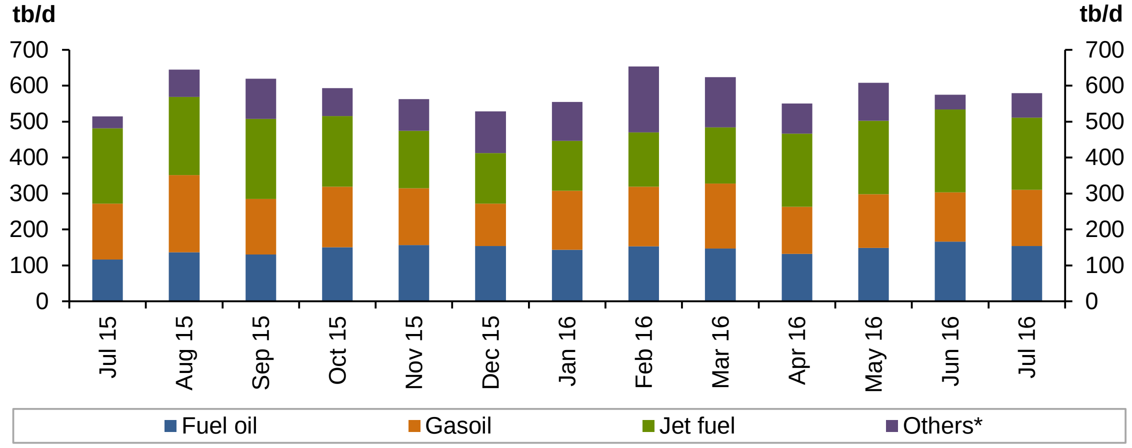


*Note: *Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

With a similar pattern, **Japan's product imports** increased in July by 138 tb/d to average 550 tb/d. However, annual product imports were lower by 51 tb/d, or 9%. Japan's monthly product imports increased mainly as a result of higher imports of naphtha and gasoline, which increased by 38% and 40%, or 126 tb/d and 7 tb/d, respectively. Additionally, imports of LPG were also higher in July from a month before.

As to **product exports**, Japan's exports in July remained almost stable from the previous month showing a slight drop by 5 tb/d to average 579 tb/d. Annually they increased by 64 tb/d, or 13%.

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 net imports** increased in July by 145 tb/d to average 3.1 mb/d, reflecting a monthly gain of 5%. However, annually they dropped by 9%.

Table 8.2: Japan's crude and products net imports, tb/d

	May 16	Jun 16	Jul 16	*Change* Jul 16/Jun 16
Crude oil	3,324	3,132	3,144	12
Total products	-112	-163	-29	134
Total crude and products	**3,212**	**2,969**	**3,115**	**145**

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

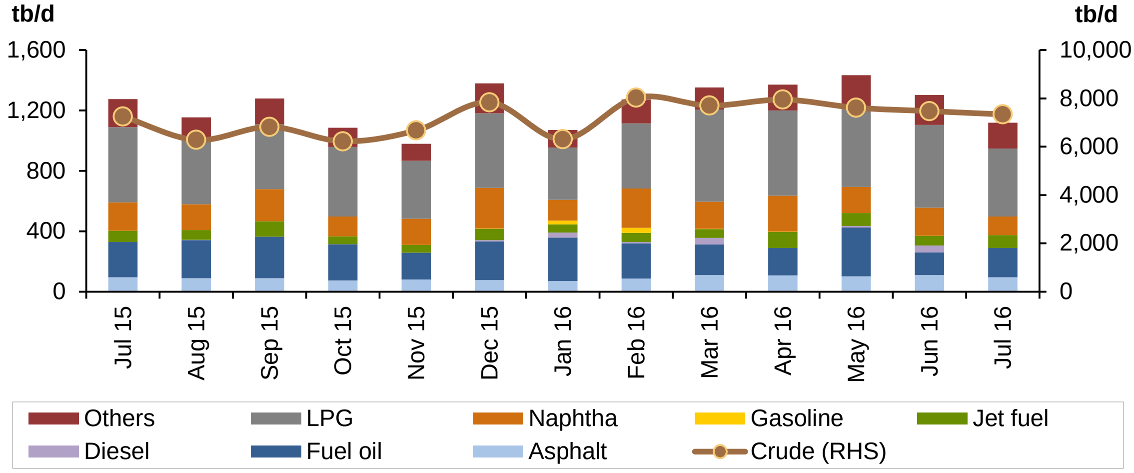
China

China's crude oil imports dropped in July by 136 tb/d, or 2%, from the previous month to average 7.3 mb/d. On an annual comparison, China's crude imports were higher by just 1%. On a year to date basis, China's crude imports shows an increase by 779 tb/d.

In terms of **supplier share**, Angola was the main supplier to China in July as its exports to the country averaged 1.1 mb/d. This is up by 207 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 13% to average 950 tb/d less than one month before by 164 tb/d.

On the other hand, **China's product imports** decreased in July by a slight 12 tb/d from the previous month while it remains 395 tb/d above the levels from a year earlier to average 1.2 mb/d.

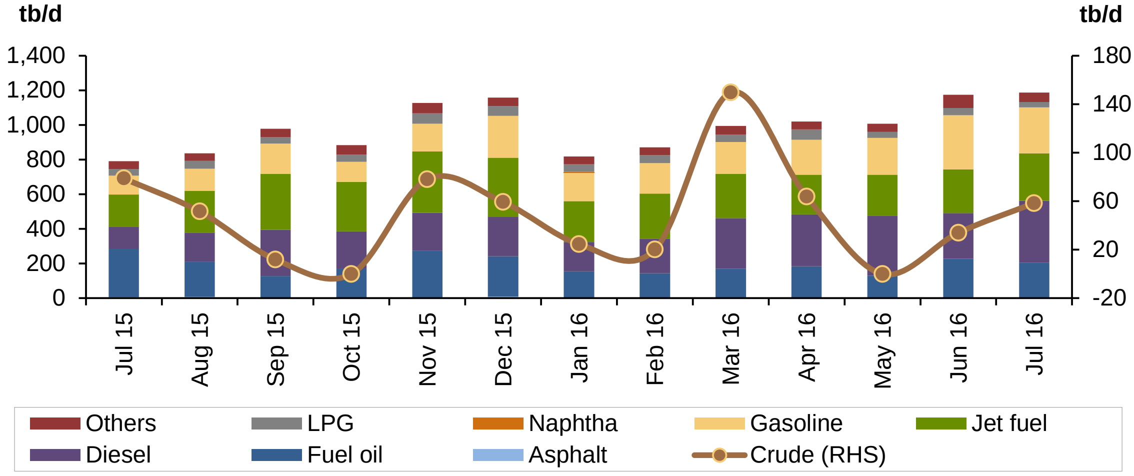
Graph 8.5: China's imports of crude and petroleum products



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

China's crude exports increased in July by 25 tb/d to average 58 tb/d, the highest since April 2016. **China's product exports** were up from the previous month's level to average 1.2 mb/d.

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 357 tb/d, or 5%, from the previous month and 6% from a year earlier.

Table 8.3: China's crude and products net imports, tb/d

	May 16	Jun 16	Jul 16	Change Jul 16/Jun 16
Crude oil	7,613	7,438	7,278	-161
Total products	426	129	-68	-196
Total crude and products	**8,039**	**7,567**	**7,210**	**-357**

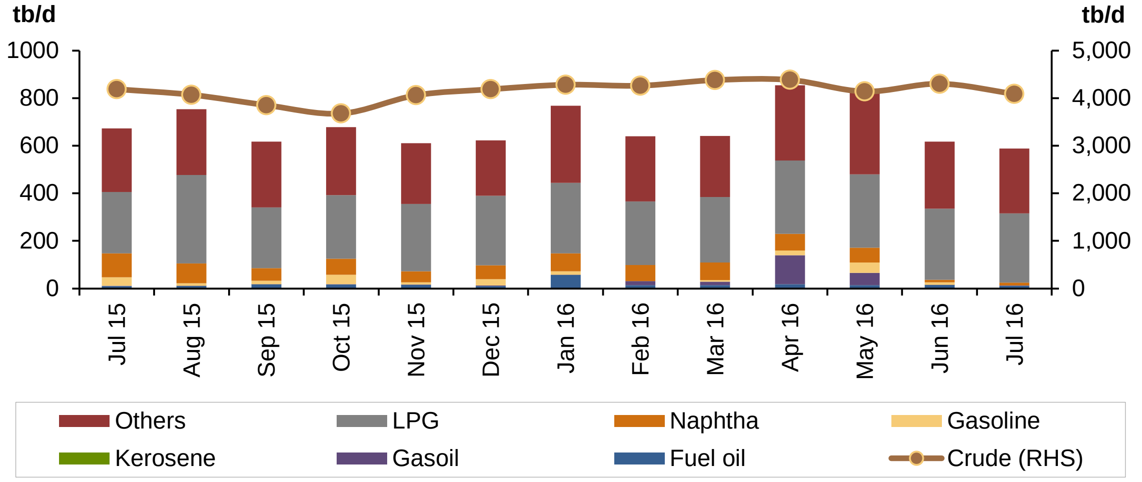
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

In July, **India's crude imports** averaged 4 mb/d, that is 214 tb/d, or 5%, lower than the level seen last month. On an annual basis, it dropped by 99 tb/d or 2%.

Product imports also dropped in July, down by 28 tb/d, or 5%, from a month ago to average 588 tb/d. Y-o-y it reflects a drop of 84 tb/d or 13%. The monthly increase in product imports came mainly as a result of a drop in imports of petrol, LPG and fuel oil, while diesel imports remained at the same level as the previous month.

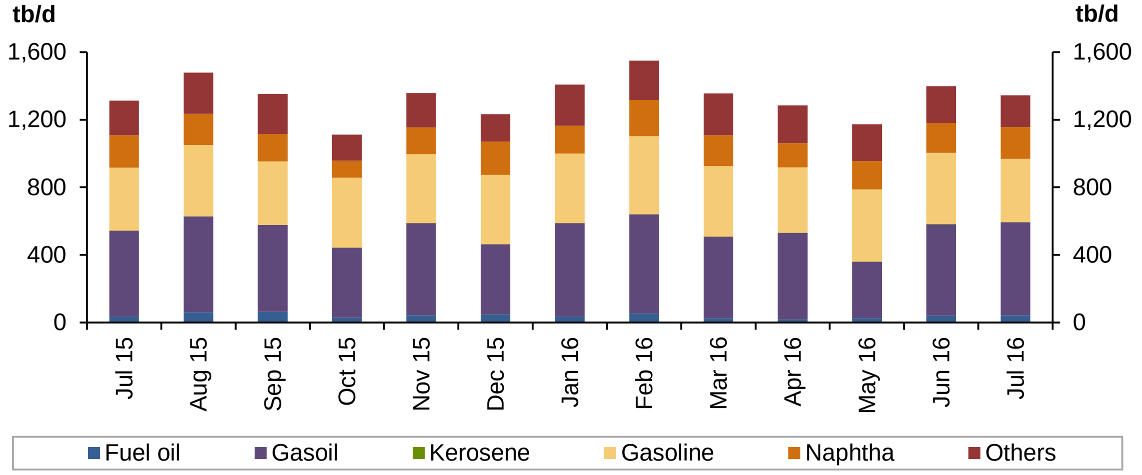
Graph 8.7: India's imports of crude and petroleum products



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

In terms of exports, **India's product exports** dropped in July by 53 tb/d from the previous month to average 1.3 mb/d, while from a year earlier they increased by 32 tb/d, or 2%. Monthly exports of petrol dropped by 11% from the previous month, while most other product exports increased.

Graph 8.8: India's exports of petroleum products



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

Consequently, **India's net imports** declined by 189 tb/d to average 3.3 mb/d, which is 5% lower than last month and down by 6% from a year ago.

Table 8.4: India's crude and products net imports, tb/d

	May 16	Jun 16	Jul 16	*Change* Jul 16/Jun 16
Crude oil	4,139	4,302	4,088	-214
Total products	-344	-782	-757	25
Total crude and products	**3,794**	**3,520**	**3,331**	**-189**

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 FSU were almost stable from the previous month. There was a slight decline by 8 tb/d to average 6,781 tb/d.

Crude exports through **Russian pipelines** saw a minor gain, increasing by 22 tb/d, or 0.5%, to average 4.2 mb/d.

In the **Transfneft system**, Black Sea exports dropped by 100 tb/d, or 15%, to average 548 tb/d. Exports from the Baltics declined by a slight 2 tb/d to average 1.5 mb/d in July. Shipments from the Druzhba pipeline to Central and Eastern Europe increased by 72 tb/d, or 7%, to average 1,090 tb/d. Exports through Kozmino increased by 100 tb/d to average 676 tb/d in July.

Black Sea total exports went up by 102 tb/d mainly as Novorossiyk port terminal increased its exports by 64 tb/d to average 1.1 mb/d.

In the **Mediterranean Sea**, BTC supplies increased by 10 tb/d, or 1%, from the previous month to average 743 tb/d.

FSU total product exports dropped by 342 tb/d, or 10%, in July from the previous month to average 2.8 mb/d. This drop in product exports came as a result of a decline seen in all exported products with the exception of jet and VGO which increased from last month by 15 tb/d and 75 tb/d, respectively.

Table 8.5: Recent FSU exports of crude and petroleum products by source, tb/d

Transneft system		**2014**	**3Q15**	**4Q15**	**Jun 16**	**Jul 16**
Europe	**Black sea total**	**605**	**653**	**622**	**647**	**548**
	Novorossiysk port terminal - total	605	653	622	647	548
	of which: Russian oil	438	502	461	484	407
	Others	166	151	161	164	141
	Baltic sea total	**1,304**	**1,511**	**1,632**	**1,538**	**1,536**
	Primorsk port terminal - total	842	922	1,062	938	979
	of which: Russian oil	834	922	1,062	938	979
	Others	8	0	0	0	0
	Ust-Luga port terminal - total	462	590	570	600	558
	of which: Russian oil	284	359	388	408	371
	Others	177	231	182	192	186
	Druzhba pipeline total	**1,005**	**1,044**	**1,047**	**1,017**	**1,090**
	of which: Russian oil	973	1,012	1,015	984	1,058
	Others	32	32	32	33	31
Asia	**Pacific ocean total**	**507**	**617**	**645**	**576**	**676**
	Kozmino port terminal - total	507	617	645	576	676
	China (via ESPO pipeline) total	**342**	**349**	**348**	**348**	**300**
	China Amur	342	349	348	348	300
Total Russian crude exports		**3,763**	**4,174**	**4,295**	**4,127**	**4,149**
Lukoil system		**2014**	**3Q15**	**4Q15**	**Jun 16**	**Jul 16**
Europe &	**Barents sea total**	**120**	**161**	**157**	**151**	**184**
N. America	Varandey offshore platform	120	161	157	151	184
Europe	**Baltic sea total**	**12**	**19**	**14**	**16**	**11**
	Kalinigrad port terminal	12	19	14	16	11
Other routes		**2014**	**3Q15**	**4Q15**	**Jun 16**	**Jul 16**
Asia	**Russian Far East total**	**275**	**369**	**424**	**516**	**344**
	Aniva bay port terminal	112	118	128	142	92
	De Kastri port terminal	162	251	296	374	252
	Central Asia total	**228**	**199**	**183**	**179**	**188**
	Kenkiyak-Alashankou	228	199	183	179	188
Europe	**Black sea total**	**982**	**1,158**	**979**	**1,026**	**1,127**
	Novorossiysk port terminal (CPC)	855	1,029	862	898	962
	Supsa port terminal	80	94	81	90	104
	Batumi port terminal	39	35	36	38	61
	Kulevi port terminal	9	0	0	0	0
	Mediterranean sea total	**602**	**695**	**701**	**732**	**743**
	BTC	602	695	701	732	743
Russian rail		**2014**	**3Q15**	**4Q15**	**Jun 16**	**Jul 16**
	Russian rail	**46**	**17**	**46**	**41**	**35**
	of which: Russian oil	8	*10*	*42*	*38*	*32*
	Others	38	7	4	4	3
Total FSU crude exports		**6,028**	**6,792**	**6,798**	**6,789**	**6,781**
Products		**2014**	**3Q15**	**4Q15**	**Jun 16**	**Jul 16**
	Gasoline	124	226	204	204	189
	Naphtha	485	525	479	432	419
	Jet	5	25	39	44	59
	Gasoil	933	1,113	1,000	991	833
	Fuel oil	1,487	1,074	1,052	1,197	969
	VGO	245	248	284	238	313
Total FSU product exports		**3,280**	**3,212**	**3,058**	**3,106**	**2,782**
Total FSU oil exports		**9,308**	**10,004**	**9,856**	**9,895**	**9,563**

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

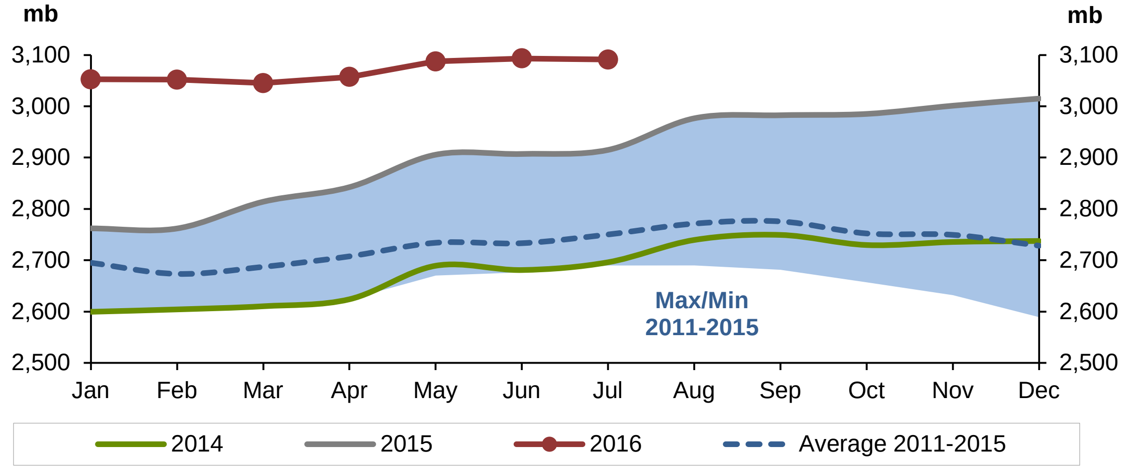
OECD commercial oil stocks fell in July to stand at 3,091 mb. This is around 341 mb above the latest five-year average. Crude and products indicated a surplus of around 200 mb and 141 mb, respectively, above the seasonal norm. In terms of days of forward cover, OECD commercial stocks stood at 66.1 days, which is 6.8 days higher than the latest five-year average.

Preliminary data for August shows that total commercial oil stocks in the US rose slightly by 1.2 mb, At 1,391 mb, inventories were around 238 mb higher than the latest five-year average. Within the components, crude stocks fell by 11.2 mb, while products rose by 12.4 mb. The latest information for China showed a drop in July of 3.1 mb in total commercial oil inventories, to stand at 381.1 mb. Within the components, crude fell by 13.3 mb, while products inventories rose by 0.8 mb.

OECD

Preliminary data for July shows that **total OECD commercial oil stocks** fell by 2.1 mb to stand at 3,091 mb. At this level, OECD commercial oil stocks were around 176 mb higher than the same time one year ago and 341 mb above the latest five-year average. Within the components, crude fell by 8.9 mb, while products rose by 6.8 mb. OECD commercial stocks have indicated a slowing build since the beginning of this year. The difference with the five-year average reached nearly 380 mb at the end of February, before slowing down to about 340 mb at the end of July 2016.

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 ended July at 1,544 mb, standing 64 mb above the same time one year earlier and more than 200 mb higher than the latest five-year average. OECD North America experienced a drop, while OECD Europe and OECD Pacific experienced builds.

In contrast, **OECD product inventories** rose by 6.8 mb to stand at 1,547 mb. At this level, products inventories stood 112 mb higher than the same time a year ago, and were 141 mb above the seasonal norm. Within the various OECD regions, all experienced a build.

In terms of **days of forward cover**, OECD commercial stocks rose in July by 0.2 days to stand at 66.1 days. At this level, they were 3.3 days above the same period the previous year and 6.8 days higher than the latest five-year average. Within the regions, OECD Americas had 7.8 days more days of forward cover than the historical average to stand at 65.7 days in July. OECD Asia Pacific stood 4.1 days above the seasonal average to finish July at 57.1 days. At the same time, OECD Europe indicated a surplus of 6.3 days above the seasonal norm, averaging 71.4 days in July.

Commercial stocks in **OECD Americas** fell by 2.7 mb in July to stand at 1,642 mb. At this level, they represented a surplus of 100 mb above a year ago and were 232 mb higher than the seasonal norm. Within the components, crude stocks fell by 6.1 mb, while products stocks rose by 3.4 mb.

At the end of July, **crude commercial oil stocks** in **OECD Americas** fell, ending the month at 857 mb, which was 53 mb above the same time one year ago, and 157 mb above the latest five-year average. The fall in crude stocks oil came from lower domestic production, which declined by around 100,000 b/d to stand at 8.69 mb/d. Higher US crude runs also contributed to the drop in US crude stocks.

In contrast**, product stocks in OECD Americas** rose by 3.4 mb, ending July at 785 mb. At this level, they indicated a surplus of 47 mb above the same time one year ago, and were 76 mb higher than the seasonal norm. Lower consumption in US demand in July from the previous month contributed to the build in products inventories.

OECD Europe's commercial stocks rose slightly by 0.2 mb in July, ending the month at 1,008 mb. At this level, they were 74 mb higher than the same time a year ago and 92 mb above the latest five-year average. Both crude inventories rose slightly by 0.1 mb.

OECD Europe's commercial crude stocks rose slightly by 0.1 mb, ending the month at 424 mb, and were 17 mb above the same period a year earlier and 38 mb higher than the latest five-year average. The build in July's crude oil stocks could be attributed to higher production from the North Sea.

OECD Europe's commercial products stocks also rose by 0.1 mb to end July at 584 mb. At this level, OECD Europe's commercial products stocks were 58 mb higher than the same time a year ago, and 60 mb higher than the seasonal norm. The small build could be attributed to lower demand in the region.

OECD Asia Pacific commercial oil stocks rose by 0.4 mb in July for the third consecutive month. At 441 mb, they were 2.1 mb higher than a year ago and 16 mb above the five-year average. Within the components, crude fell by 2.9 mb, while products stocks rose by 3.3 mb.

Table 9.1: OECD's commercial stocks, mb

	May 16	Jun 16	Jul 16	*Change* Jul 16/Jun 16	Jul 15
Crude oil	1,563	1,553	1,544	-8.9	1,480
Products	1,524	1,540	1,547	6.8	1,435
Total	**3,087**	**3,093**	**3,091**	**-2.1**	**2,915**
Days of forward cover	**66.0**	**66.0**	**66.1**	**0.2**	**62.8**

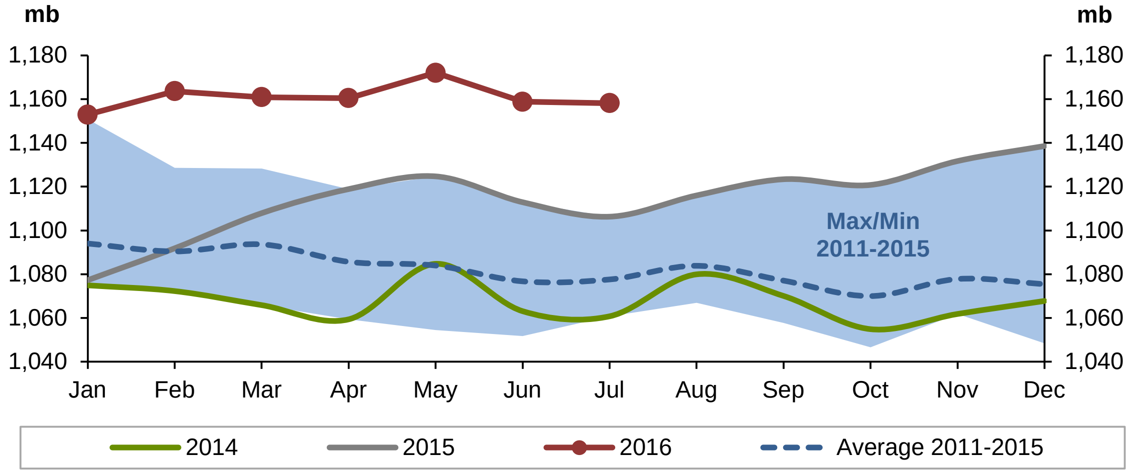
Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US Energy Information Administration.

In July, **crude inventories** ended the month at 263 mb, indicating a deficit of 5.5 mb below a year ago, and are 10.4 mb above the seasonal norm. OECD Asia Pacific's total **products inventories** ended July at 178 mb, standing 7.7 mb higher than the same time a year ago and 5.8 mb above the seasonal norm.

EU plus Norway

Preliminary data for July shows total **European stocks** drop slightly by 0.6 mb following a stock draw of 13.2 mb in June. At 1,158.2 mb, they are 51.9 mb, or 4.7%, above the same time a year ago and 80.6 mb, or 7.5%, higher than the latest five-year average. Crude rose slightly by 0.1 mb, while total products stocks fell by 0.7 mb.

Graph 9.2: EU-15 plus Norway's total oil stocks



Source: Euroilstock.

European crude inventories rose slightly in July, reversing the stock draw of the previous month to stand at 493.0 mb. This was 2.2 mb, or 0.5%, above the same period a year ago, and 24.8 mb, or 5.3%, higher than the seasonal norm. The slight increase in crude oil stocks could derive from higher North Sea output, which offset the rise in crude throughput. Indeed, in July EU-16 refineries processed an average of 10.4 mb/d, which was 40,000 b/d higher than in the previous month.

In contrast, **European products stocks** fell, ending July at 665.1 mb. At this level, they were 49.6 mb, or 8.1%, above the same time a year ago, and 55.7 mb, or 9.1%, above the seasonal norm. All products, with the exception of distillates, witnessed a stock draw.

Distillate stocks rose by 1.1 mb in July to stand at 443.8 mb. At this level, they were 29.9 mb, or 7.2%, higher than the same time one year ago and 52.3 mb, or 13.4%, above the latest five-year average. The fall in distillate stocks came from lower distillate demand, which fell by nearly 30,000 b/d putting the year-to-date up by only 50,000 b/d.

In contrast, **gasoline stocks** fell by 0.7 mb in July to stand at 119.4 mb. Despite this stock draw, they were 14.9 mb, or 14.3%, above a year earlier, and 12.9 mb, or 12.1%, higher than the seasonal norm. The fall in gasoline stocks may have been driven by lower gasoline yields, mainly in French refineries. Higher demand in the region also contributed to the drop in distillate stocks.

Residual fuel oil stocks fell also by 0.7 mb in July to stand at 77.7 mb. At this level, they stood 2.5 mb, or 3.4%, above the same month a year ago but remained 6.1 mb, or

7.3%, lower than the latest five-year average. The fall in residual fuel oil stocks was a result of higher fuel oil demand, especially for marine bunkers.

Table 9.2: EU-15 plus Norway's total oil stocks, mb

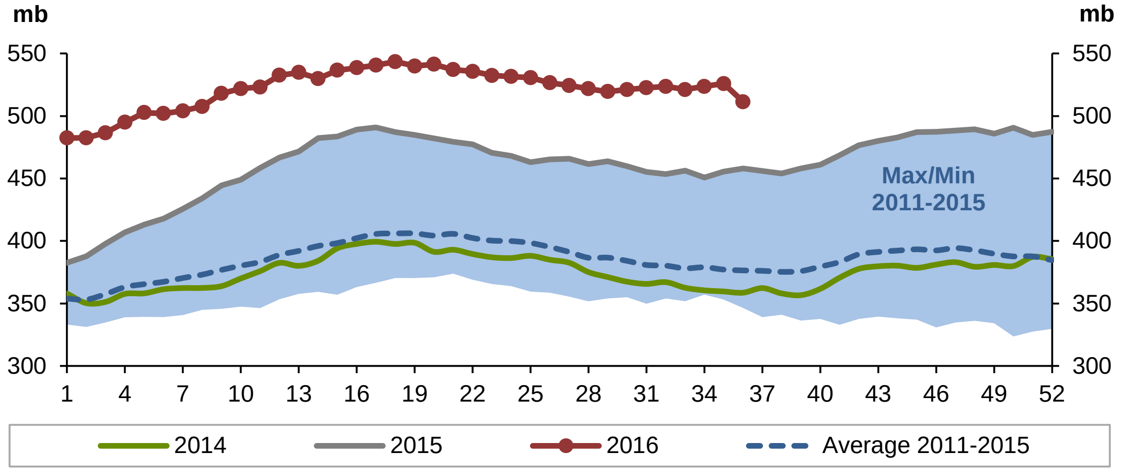
	May 16	Jun 16	Jul 16	*Change* Jul 16/Jun 16	Jul 15
Crude oil	**496.5**	**493.0**	**493.0**	**0.1**	**490.8**
Gasoline	124.4	120.1	119.4	-0.7	104.5
Naphtha	24.2	24.6	24.2	-0.4	21.9
Middle distillates	444.4	442.7	443.8	1.1	413.9
Fuel oils	82.6	78.5	77.7	-0.7	75.2
Total products	**675.6**	**665.9**	**665.2**	**-0.7**	**615.5**
Total	**1,172.0**	**1,158.8**	**1,158.2**	**-0.6**	**1,106.3**

Sources: Argus and Euroilstock.

US

Preliminary data for August shows that **total commercial oil stocks** in the US rose slightly by 1.2 mb, following a build of 4.3 mb in the previous month. At 1,390.9 mb, they were around 94.9 mb, or 7.3%, above the same period a year ago and 238.5 mb, or 21%, higher than the latest five-year average. Within the components, crude stocks fell by 11.2 mb, while products rose by 12.4 mb.

Graph 9.3: US weekly commercial crude oil stocks



Sources: US Energy Information Administration and OPEC Secretariat.

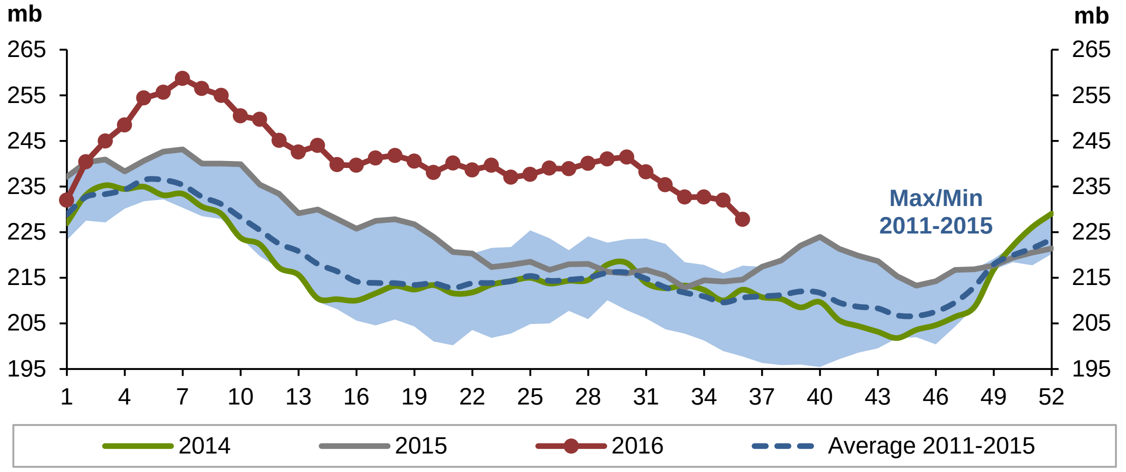
US commercial crude stocks fell in August for the third consecutive month to stand at 511.4 mb. At this level, they were 53.5 mb, or 11.7%, above the same time one year ago and 132.2 mb, or 34.9%, above the latest five-year average. The fall in crude stocks came from lower domestic production, which outpaced the decline in refinery inputs as well higher crude imports. In August, crude commercial inventories at Cushing, Oklahoma, stood at 63.4 mb, slightly higher than the previous month.

In contrast, **total product stocks** rose by 12.4 mb in August for the fifth consecutive month to stand at 879.6 mb. At this level, US product stocks were around 41.3 mb, or 4.9%, above the level seen at the same time a year ago, showing a surplus of 106.3 mb, or 14.9%, above the seasonal norm. Within products, the picture was mixed. Distillates, other unfinished products, jet fuel inventories and residual fuel oil stocks witnessed a build, while gasoline inventories experienced a large drop.

Distillate stocks rose by 5.0 mb in August, ending the month at 158.1 mb, indicating a surplus of 6 mb, or 3.9%, from the same period a year ago to stand 19.4 mb, or 14.0%, above the latest five-year average. The build in middle distillate stocks came mainly on higher output averaging more than 4.95 mb/d, while higher demand limited a further build.

Jet fuel stocks also rose by 0.8 mb, ending July at 41.8 mb. At this level, jet fuel stocks stood 1.3 mb or 2.9% below the same period one year ago and were 0.9 mb or 2.2% higher than the latest five-year average

Graph 9.4: US weekly gasoline stocks



Sources: US Energy Information Administration and OPEC Secretariat.

Residual fuel oil inventories also rose by 1.3 mb to 39.6 mb in August, 1.3 mb or 0.9% lower than the same period a year ago, and 2.7 mb, or 7.3%, above the seasonal norm.

In contrast**, gasoline stocks** fell by 10.4 mb to end the month of August at 227.8 mb. At this level, they are 9.6 mb or 4.4% above the same period a year ago, and 15.7 mb, or 7.4%, above the latest five-year average. The fall in gasoline stocks came mainly on the back of stronger demand reaching 9.7 mb/d, the highest in seven years.

Table 9.3: US onland commercial petroleum stocks, mb

	Jun 16	Jul 16	Aug 16	*Change* Aug 16/Jul 16	Aug 15
Crude oil	**528.6**	**522.5**	**511.4**	**-11.2**	**457.8**
Gasoline	242.1	238.2	227.8	-10.4	218.2
Distillate fuel	149.2	153.2	158.1	5.0	152.1
Residual fuel oil	40.3	38.3	39.6	1.3	38.7
Jet fuel	40.4	41.1	41.8	0.8	43.1
Total	**1,382.4**	**1,389.7**	**1,390.9**	**1.2**	**1,296.1**
SPR	695.1	695.1	695.1	0.0	695.1

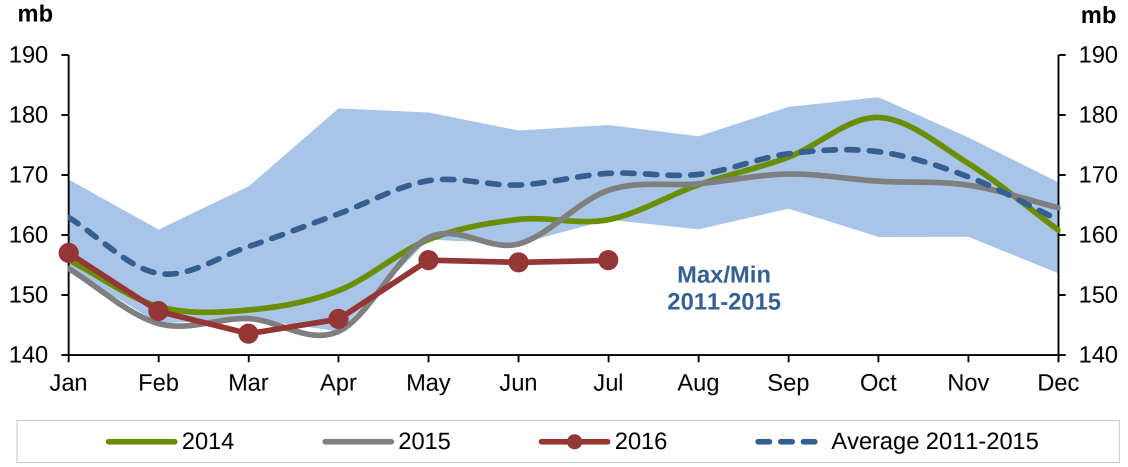
Source: US Energy Information Administration.

Japan

In Japan, total **commercial oil stocks** rose slightly by 0.4 mb in July for the third consecutive month, to stand at 155.8 mb. At this level, Japanese commercial oil inventories stood at 11.7 mb, or 7.0%, less than the same time a year ago and are

14.5 mb or 8.5% below the five-year average. Within the components, crude stocks went down 2.9 mb, while products stocks rose by 3.3 mb.

Graph 9.5: Japan's commercial oil stocks



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

In July, Japanese commercial **crude oil stocks** fell, ending the month at 93.4 mb, which is 9.9 mb, or 9.6%, below the same period a year ago, and 8.2 mb, or 8.1%, below the seasonal norm. The fall in crude stocks came on the back of higher crude throughput, which rose by 180,000 b/d, or 6.0%, to stand at 3.14 mb/d. The slight increase in crude oil imports by 12,000 b/d, or 0.4%, to average 3.1 mb/d limited further build in crude oil stocks.

In contrast, Japan's **total products inventories** rose by 3.3 mb in July, ending the month at 62.3 mb. At this level, products stocks stood 1.8 mb, or 2.8 %, above the same time a year ago and showed a deficit of 6.3 mb, or 9.1%, with the five-year average. Within products, the picture was mixed. Distillate stocks and naphtha experienced builds, while gasoline and residual fuel oil inventories witnessed a drop.

Distillate stocks rose by 3.4 mb in July to stand at 29.6 mb. At this level, they were 0.6 mb, or 2.2%, above the same period a year ago and are 0.6 mb, or 2.1%, below the seasonal average. Within distillate components, all the components saw builds. Jet fuel rose by 17.6% on the back of higher output and lower domestic sales. Kerosene and gasoil stocks also rose by 19% and 2.6%, respectively. This build came on the back of higher production. However, stronger domestic sales limited a further build.

Naphtha inventories also rose by 0.5 mb, ending July at 9.1 mb. At this level, they were 2.8 mb, or 23%, lower than a year ago at the same time and 1.6 mb, or 14.7%, higher than the seasonal norm. This build was driven by higher imports, which rose by nearly 40%. Lower output, which decreased by 4.8%, limited further build in naphtha inventories.

In contrast**, gasoline** stocks fell by 0.3 mb to end July at 10.6 mb. At this level, they were 0.9 mb, or 8.8%, above the same time a year ago but 1.5 mb, or 12.4%, below the latest five-year average. This fall in gasoline stocks was mainly driven by higher domestic sales, which increased by 13%. Higher gasoline output, which rose by 15%, limited the fall in gasoline stocks.

Total residual **fuel oil stocks** also fell by 0.3 mb in July to stand at 13.1 mb, which was 0.5 mb, or 3.7%, lower than a year ago and 2.6 mb, or 16.4%, lower than the latest five-year average. Within fuel oil components, fuel oil A rose by 1.7% on the back higher output, while fuel oil B.C stocks fell by 4.7%. The drop in fuel oil B.C inventories came on the back of higher demand, which rose by nearly 20%.

Table 9.4: Japan's commercial oil stocks*, mb

	May 16	Jun 16	Jul 16	*Change* Jul 16/Jun 16	Jul 15
Crude oil	**93.2**	**96.4**	**93.4**	**-2.9**	**103.3**
Gasoline	11.1	10.8	10.6	-0.3	9.7
Naphtha	11.6	8.6	9.1	0.5	11.9
Middle distillates	26.9	26.2	29.6	3.4	28.9
Residual fuel oil	13.0	13.4	13.1	-0.3	13.6
Total products	**62.6**	**59.1**	**62.3**	**3.3**	**64.1**
Total**	**155.8**	**155.4**	**155.8**	**0.4**	**167.4**

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

China

The latest information for China showed a drop of 12.5 mb in **total commercial oil inventories** in July to stand at 381.1 mb. At this level, Chinese commercial oil inventories were 39.8 mb lower than the previous year at the same time. Within the components, crude fell by 13.3 mb, while products inventories rose by 0.8 mb.

In July, **commercial crude stocks** fell to 219.1 mb, which is 33.5 mb below the previous year at the same time. The fall in crude oil commercial stocks could be attributed to higher crude throughput, which rose by 0.53%. Lower crude oil imports also contributed to this stock-draw.

Total **products stocks** in China rose slightly by 0.8 mb ending July at 161.9 mb. At this level, products stocks were 6.3 mb lower than the same time a year ago. Within products, gasoline and kerosene dropped, while diesel stocks saw builds.

Gasoline stocks went down by 1.5 mb in July to stand at 68.6 mb. At this level, gasoline stocks are 12.1 mb above the same time a year ago. This fall was driven mainly by higher gasoline demand due to increasing tourism activities along with higher consumption for air conditioning. Kerosene stocks also fell by 0.2 mb in July ending the month at 19.8 mb, but they remain 3.9 mb higher than the same period last year.

In contrast, diesel stocks rose by 2.5 mb, ending July at 73.6 mb, which is still 22.3 mb higher than the same time the previous year. This build was mainly driven by lower apparent demand.

Table 9.5: China's commercial oil stocks, mb

	May 16	Jun 16	Jul 16	*Change* Jul 16/Jun 16	Jul 15
Crude oil	**231.1**	**232.4**	**219.1**	**-13.3**	**252.7**
Gasoline	70.5	70.1	68.6	-1.5	56.5
Diesel	75.9	71.1	73.6	2.5	95.9
Jet kerosene	19.1	19.9	19.8	-0.2	15.8
Total products	**165.5**	**161.1**	**161.9**	**0.8**	**168.2**
Total	**396.7**	**393.5**	**381.1**	**-12.5**	**420.9**

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of July, **products stocks in Singapore** rose by 4.8 mb, reversing the fall of last month. At 55.2 mb, they were 3.4 mb, or 6.6%, above the same period a year ago. Within products, all products experienced a build.

Residual fuel oil stocks rose by 1.1 mb, reversing the drop of last month and ending July at 26.6 mb. At this level, they were 0.5 mb, or 1.8%, less than at the same time a year ago. The build in fuel oil stocks could be attributed to lower marine bunker demand in the region. **Light distillate** stocks also rose by 2.2 mb, ending the month of July at 15.3 mb, which was 3.4 mb, or 28.8%, above the same time a year ago. **Middle distillate** stocks also rose by 1.6 mb to end July at 26.6 mb, which was 0.5 mb, or 3.8%, above the previous year at the same time. The build was driven by lower diesel export to the region.

Products stocks in Amsterdam-Rotterdam-Antwerp (ARA) rose slightly by 0.3 mb to end July at 47.5 mb. At this level, products stocks were 0.9 mb, or 1.8%, higher than at the same time a year ago. Within products, the picture was mixed: gasoil and jet oil saw builds, while fuel oil showed a stock draw. Gasoline remained flat versus last month.

Gasoline stocks were unchanged ending July at 10.5 mb. At this level, they were 1.0 mb, or 10.6%, above the previous year at the same time. **Fuel oil stocks** fell by 1.8 mb in July to stand at 5.4 mb, which was 0.4 mb, or 7.5%, lower than the same period a year ago. This fall was mainly driven by higher marine bunker demand in the region. In contrast, **gasoil** inventories rose by 1.0 mb ending July at 24.1 mb, which was 0.5 mb, or around 2.2%, above the same month the previous year.

Balance of Supply and Demand

Demand for OPEC crude in 2016 was revised down by 0.2 mb/d to stand at 31.7 mb/d, which is 1.7 mb/d higher than the previous year. In 2017, the demand for OPEC crude is projected at 32.5 mb/d, around 0.5 mb/d higher than in the August *MOMR* and 0.8 mb/d higher than the current year.

Forecast for 2016

Demand for OPEC crude for 2016 was revised down by 0.2 mb/d to stand at 31.7 mb/d, representing an increase of 1.7 mb/d from the previous year. Within the quarters, 1Q16 and 2Q16 remain unchanged, while 3Q16 and 4Q16 were revised up by 0.3 mb/d and 0.4 mb/d, respectively. 1Q16 and 2Q16 rose by 1.0 mb/d and 2.3 mb/d, respectively, versus the same quarters last year; while 3Q16 and 4Q16 are estimated to show growth of 1.8 mb/d and 1.7 mb/d, respectively

Table 10.1: Summarized supply/demand balance for 2016, mb/d

	2015	1Q16	2Q16	3Q16	4Q16	2016
(a) World oil demand	**93.04**	**93.23**	**93.54**	**95.12**	**95.16**	**94.27**
Non-OPEC supply	56.92	56.94	55.61	56.13	56.57	56.32
OPEC NGLs and non-conventionals	6.13	6.24	6.27	6.30	6.34	6.29
(b) Total non-OPEC supply and OPEC NGLs	**63.05**	**63.18**	**61.88**	**62.43**	**62.91**	**62.60**
Difference (a-b)	**29.99**	**30.05**	**31.66**	**32.70**	**32.25**	**31.67**
OPEC crude oil production	32.10	32.50	32.76			
Balance	2.11	2.45	1.09			

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

Forecast for 2017

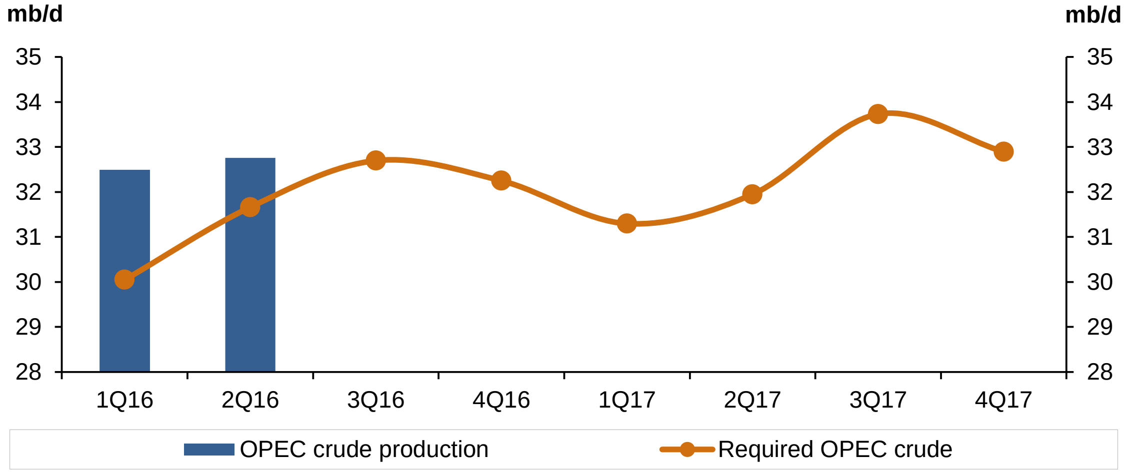
Demand for OPEC crude for 2017 was revised down by 0.5 mb/d from the August *MOMR*, representing an increase of 0.8 mb/d over 2016, to average 32.5 mb/d. Within the quarters, all the quarters were revised down by about 0.5 mb/d. 1Q16 and 2Q16 are expected to increase by 1.2 mb/d and 0.3 mb/d, respectively, while 3Q16 and 4Q16 are projected to increase by 1.1 mb/d and 0.6 mb/d, respectively, versus the same quarters this year.

Table 10.2: Summarized supply/demand balance for 2017, mb/d

	2016	1Q17	2Q17	3Q17	4Q17	2017
(a) World oil demand	**94.27**	**94.37**	**94.59**	**96.37**	**96.33**	**95.42**
Non-OPEC supply	56.32	56.71	56.24	56.19	56.92	56.52
OPEC NGLs and non-conventionals	6.29	6.36	6.40	6.45	6.52	6.43
(b) Total non-OPEC supply and OPEC NGLs	**62.60**	**63.07**	**62.64**	**62.64**	**63.44**	**62.95**
Difference (a-b)	**31.67**	**31.30**	**31.95**	**33.73**	**32.89**	**32.48**

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

Graph 10.1: Balance of supply and demand



Source: OPEC Secretariat.

Table 10.3: World oil demand and supply balance, mb/d

	2013	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017
World demand													
OECD	46.1	45.8	46.2	46.6	46.0	46.8	46.5	46.5	46.7	46.0	47.0	46.6	46.6
Americas	24.2	24.2	24.5	24.5	24.6	25.1	24.7	24.7	24.7	24.7	25.3	24.9	24.9
Europe	13.6	13.5	13.7	13.6	13.9	14.2	13.7	13.8	13.5	13.8	14.2	13.7	13.8
Asia Pacific	8.3	8.1	8.0	8.6	7.6	7.6	8.1	8.0	8.5	7.5	7.5	8.0	7.9
DCs	29.2	30.0	30.7	30.7	31.2	31.9	31.4	31.3	31.4	31.9	32.6	32.2	32.0
FSU	4.5	4.6	4.6	4.5	4.4	4.7	5.0	4.7	4.6	4.4	4.8	5.1	4.7
Other Europe	0.6	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	10.1	10.5	10.8	10.7	11.3	11.0	11.4	11.1	11.0	11.6	11.3	11.7	11.4
(a) Total world demand	**90.5**	**91.5**	**93.0**	**93.2**	**93.5**	**95.1**	**95.2**	**94.3**	**94.4**	**94.6**	**96.4**	**96.3**	**95.4**
Non-OPEC supply													
OECD	22.2	24.3	25.2	25.3	24.3	24.8	24.8	24.8	24.9	24.6	24.4	24.9	24.7
Americas	18.2	20.1	21.0	21.0	20.2	20.6	20.5	20.6	20.5	20.3	20.3	20.5	20.4
Europe	3.6	3.6	3.8	3.9	3.7	3.8	3.9	3.8	4.0	3.9	3.7	4.0	3.9
Asia Pacific	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
DCs	10.9	11.1	11.3	11.1	11.1	11.3	11.4	11.2	11.5	11.5	11.5	11.6	11.5
FSU	13.6	13.5	13.7	14.0	13.7	13.7	13.9	13.8	14.0	13.8	13.9	14.1	13.9
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
China	4.2	4.3	4.4	4.2	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.0	4.0
Processing gains	2.1	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	53.1	55.5	56.9	56.9	55.6	56.1	56.6	56.3	56.7	56.2	56.2	56.9	56.5
OPEC NGLs + non-conventional oils	5.8	6.0	6.1	6.2	6.3	6.3	6.3	6.3	6.4	6.4	6.4	6.5	6.4
(b) Total non-OPEC supply and OPEC NGLs	**59.0**	**61.5**	**63.0**	**63.2**	**61.9**	**62.4**	**62.9**	**62.6**	**63.1**	**62.6**	**62.6**	**63.4**	**62.9**
OPEC crude oil production (secondary sources)	31.2	31.0	32.1	32.5	32.8								
Total supply	90.2	92.5	95.1	95.7	94.6								
Balance (stock change and miscellaneous)	-0.4	1.0	2.1	2.4	1.1								
OECD closing stock levels (mb)													
Commercial	2,589	2,738	3,015	3,045	3,093								
SPR	1,584	1,580	1,587	1,593	1,593								
Total	4,174	4,318	4,602	4,638	4,686								
Oil-on-water	909	924	1,017	1,055	1,094								
Days of forward consumption in OECD													
Commercial onland stocks	56.5	59.2	64.8	66.2	66.0								
SPR	34.6	34.2	34.1	34.6	34.0								
Total	91.1	93.4	99.0	100.8	100.0								
Memo items													
FSU net exports	9.0	8.9	9.1	9.5	9.4	9.0	8.8	9.2	9.4	9.4	9.1	9.0	9.2
(a) - (b)	**31.6**	**30.0**	**30.0**	**30.0**	**31.7**	**32.7**	**32.3**	**31.7**	**31.3**	**31.9**	**33.7**	**32.9**	**32.5**

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

Table 10.4: World oil demand/supply balance: changes from last month's table* , mb/d

	2013	2014	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17	4Q17	2017
World demand													
OECD	-	-	-	-	0.1	-	-	-	-	0.2	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	0.1	-	-	-	-	0.1	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	0.1	0.1	-0.1	-	-	0.1	0.1	-0.1	-	-
World demand growth	-	-	-	0.1	0.1	-0.1	-	-	-	-	-	-	-
Non-OPEC supply													
OECD	-	0.1	-	-	-	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3
Americas	-	0.1	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1	0.1	0.1
FSU	-	-	-	-	-	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	0.1	-	-	-	0.3	0.4	0.2	0.5	0.5	0.6	0.5	0.5
Total non-OPEC supply growth	-	-	-0.1	-	-	0.3	0.4	0.2	0.5	0.5	0.3	0.1	0.4
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	0.1	-	-	-	0.3	0.4	0.2	0.5	0.5	0.6	0.5	0.5
OPEC crude oil production (secondary sources)	-	-	-	-	-								
Total supply	-	0.1	-	-	-								
Balance (stock change and miscellaneous)	-	0.1	-	-0.1	-0.1								
OECD closing stock levels (mb)													
Commercial	-	-	-	-4	48								
SPR	-	-	-	-	2								
Total	-	-	-	-4	50								
Oil-on-water	-	-	-	-	-								
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	1								
SPR	-	-	-	-	-								
Total	-	-	-	-	1								
Memo items													
FSU net exports	-	-	-	-	-	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3
(a) - (b)	-	-0.1	-	-	0.1	-0.4	-0.4	-0.2	-0.5	-0.4	-0.7	-0.5	-0.5

*Note: * This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the August 2016 issue.*
This table shows only where changes have occurred.

Source: OPEC Secretariat.

Table 10.5: OECD oil stocks and oil on water at the end of period

	2012	2013	2014	2015	3Q14	4Q14	1Q15	2Q15	3Q15	4Q15	1Q16	2Q16
Closing stock levels, mb												
OECD onland commercial	**2,683**	**2,589**	**2,738**	**3,015**	**2,749**	**2,738**	**2,814**	**2,907**	**2,983**	**3,015**	**3,045**	**3,093**
Americas	1,365	1,316	1,446	1,590	1,416	1,446	1,483	1,537	1,571	1,590	1,620	1,645
Europe	912	881	886	990	898	886	939	940	967	990	1,004	1,008
Asia Pacific	405	392	405	435	436	405	392	430	445	435	421	440
OECD SPR	**1,547**	**1,584**	**1,580**	**1,587**	**1,578**	**1,580**	**1,583**	**1,585**	**1,579**	**1,587**	**1,593**	**1,593**
Americas	696	697	693	697	693	693	693	696	697	697	697	697
Europe	436	470	470	473	469	470	470	471	467	473	477	475
Asia Pacific	415	417	417	416	417	417	420	418	415	416	419	421
OECD total	**4,230**	**4,174**	**4,318**	**4,602**	**4,328**	**4,318**	**4,397**	**4,492**	**4,562**	**4,602**	**4,638**	**4,686**
Oil-on-water	**879**	**909**	**924**	**1,017**	**952**	**924**	**864**	**916**	**924**	**1,017**	**1,055**	**1,094**
Days of forward consumption in OECD												
OECD onland commercial	**58**	**57**	**58**	**57**	**59**	**59**	**62**	**62**	**64**	**65**	**66**	**66**
Americas	55	55	57	54	58	59	61	62	64	65	66	65
Europe	68	66	67	65	66	66	69	66	71	73	73	71
Asia Pacific	49	47	49	48	53	47	52	56	54	51	56	58
OECD SPR	**34**	**33**	**34**	**35**	**34**	**34**	**35**	**34**	**34**	**34**	**35**	**34**
Americas	30	29	29	29	28	28	29	28	28	29	28	28
Europe	30	31	32	35	35	35	35	33	34	35	35	34
Asia Pacific	51	49	50	51	50	48	55	55	51	49	56	55
OECD total	**92**	**90**	**92**	**91**	**93**	**93**	**97**	**96**	**98**	**99**	**101**	**100**

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

Table 10.6: Non-OPEC supply and OPEC natural gas liquids, mb/d

	2013	2014	2015	3Q16	4Q16	2016	*Change* 16/15	1Q17	2Q17	3Q17	4Q17	2017	*Change* 17/16
US	11.2	13.0	14.0	13.5	13.5	13.6	-0.3	13.4	13.4	13.4	13.6	13.5	-0.2
Canada	4.0	4.3	4.4	4.5	4.6	4.4	0.0	4.6	4.6	4.6	4.7	4.6	0.2
Mexico	2.9	2.8	2.6	2.5	2.4	2.5	-0.1	2.4	2.3	2.3	2.3	2.3	-0.2
OECD Americas*	**18.2**	**20.1**	**21.0**	**20.6**	**20.5**	**20.6**	**-0.4**	**20.5**	**20.3**	**20.3**	**20.5**	**20.4**	**-0.2**
Norway	1.8	1.9	1.9	2.0	2.1	2.0	0.1	2.1	2.0	2.0	2.1	2.1	0.0
UK	0.9	0.9	1.0	1.0	1.0	1.0	0.1	1.1	1.1	1.0	1.1	1.1	0.0
Denmark	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Other OECD Europe	0.7	0.7	0.7	0.6	0.6	0.6	-0.1	0.6	0.6	0.6	0.6	0.6	0.0
OECD Europe	**3.6**	**3.6**	**3.8**	**3.8**	**3.9**	**3.8**	**0.1**	**4.0**	**3.9**	**3.7**	**4.0**	**3.9**	**0.0**
Australia	0.4	0.4	0.4	0.3	0.4	0.3	0.0	0.4	0.4	0.4	0.3	0.4	0.0
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**	**0.5**	**0.4**	**0.4**	**0.4**	**0.0**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.0**
Total OECD	**22.2**	**24.3**	**25.2**	**24.8**	**24.8**	**24.8**	**-0.4**	**24.9**	**24.6**	**24.4**	**24.9**	**24.7**	**-0.1**
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	0.8	0.8	0.8	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	0.6	0.7	0.7	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Thailand	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Vietnam	0.3	0.3	0.4	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Asia others	0.2	0.2	0.2	0.2	0.3	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Asia	**2.6**	**2.6**	**2.7**	**2.7**	**2.8**	**2.7**	**0.0**	**2.8**	**2.8**	**2.7**	**2.7**	**2.8**	**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	2.6	2.9	3.1	3.2	3.3	3.1	0.1	3.3	3.3	3.4	3.5	3.4	0.3
Colombia	1.0	1.0	1.0	0.9	0.9	0.9	-0.1	0.9	0.9	0.9	0.9	0.9	0.0
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
Latin America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Latin America	**4.8**	**5.0**	**5.2**	**5.2**	**5.2**	**5.1**	**-0.1**	**5.3**	**5.3**	**5.3**	**5.4**	**5.3**	**0.2**
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	0.9	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Syria	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
Yemen	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**0.0**	**1.3**	**1.3**	**1.3**	**1.2**	**1.3**	**0.0**
Chad	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
Congo	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.4	0.4	0.4	0.4	0.4	0.1
Egypt	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
Equatorial Guinea	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
South Africa	0.2	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	0.2	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.2	0.2	0.2	0.0
Africa other	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.4	0.4	0.4	0.1
Africa	**2.1**	**2.1**	**2.1**	**2.1**	**2.2**	**2.1**	**0.0**	**2.2**	**2.2**	**2.2**	**2.2**	**2.2**	**0.1**
Total DCs	**10.9**	**11.1**	**11.3**	**11.3**	**11.4**	**11.2**	**-0.1**	**11.5**	**11.5**	**11.5**	**11.6**	**11.5**	**0.3**
FSU	**13.6**	**13.5**	**13.7**	**13.7**	**13.9**	**13.8**	**0.1**	**14.0**	**13.8**	**13.9**	**14.1**	**13.9**	**0.1**
Russia	10.6	10.7	10.8	10.9	10.9	11.0	0.1	11.0	10.9	10.9	11.0	10.9	-0.1
Kazakhstan	1.6	1.6	1.6	1.5	1.6	1.6	0.0	1.8	1.7	1.8	1.9	1.8	0.2
Azerbaijan	0.9	0.9	0.9	0.8	0.9	0.9	0.0	0.9	0.8	0.8	0.8	0.8	0.0
FSU others	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Other Europe	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.0**
China	**4.2**	**4.3**	**4.4**	**4.1**	**4.1**	**4.1**	**-0.3**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**	**-0.1**
Non-OPEC production	**51.0**	**53.4**	**54.8**	**53.9**	**54.4**	**54.1**	**-0.6**	**54.5**	**54.0**	**54.0**	**54.7**	**54.3**	**0.2**
Processing gains	2.1	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	**53.1**	**55.5**	**56.9**	**56.1**	**56.6**	**56.3**	**-0.6**	**56.7**	**56.2**	**56.2**	**56.9**	**56.5**	**0.2**
OPEC NGL	5.6	5.7	5.8	6.0	6.0	6.0	0.1	6.0	6.1	6.1	6.2	6.1	0.1
OPEC non-conventional	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
OPEC (NGL+NCF)	**5.8**	**6.0**	**6.1**	**6.3**	**6.3**	**6.3**	**0.2**	**6.4**	**6.4**	**6.4**	**6.5**	**6.4**	**0.1**
Non-OPEC & OPEC (NGL+NCF)	**59.0**	**61.5**	**63.0**	**62.4**	**62.9**	**62.6**	**-0.4**	**63.1**	**62.6**	**62.6**	**63.4**	**62.9**	**0.3**

*Note: * Chile has been included in OECD Americas.*
Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 10.7: World Rig Count

	2012	2013	2014	2015	*Change* 15/14	3Q15	4Q15	1Q16	2Q16	Jun 16	Jul 16	*Change* Jul/Jun
US	1,919	1,761	1,862	977	-885	866	754	551	420	417	449	32
Canada	364	354	380	192	-188	191	169	172	49	64	95	31
Mexico	106	106	86	52	-34	42	39	36	22	20	23	3
Americas	2,390	2,221	2,327	1,221	-1,107	1,098	962	759	490	501	567	66
Norway	17	20	17	17	1	18	15	18	17	16	20	4
UK	18	17	16	14	-2	13	12	9	9	10	10	0
Europe	119	135	145	117	-28	109	110	104	92	91	94	3
Asia Pacific	24	27	26	17	-9	16	15	10	6	4	4	0
Total OECD	**2,533**	**2,383**	**2,499**	**1,355**	**-1,144**	**1,222**	**1,087**	**873**	**588**	**596**	**665**	**69**
Other Asia	172	180	194	175	-19	177	167	157	161	162	165	3
Latin America	180	166	172	145	-27	149	128	83	62	58	66	8
Middle East	136	102	108	102	-6	100	106	98	92	92	91	-1
Africa	7	16	28	11	-16	8	3	2	0	0	-3	-3
Total DCs	**494**	**465**	**502**	**433**	**-69**	**435**	**404**	**340**	**315**	**312**	**319**	**7**
Non-OPEC rig count	**3,027**	**2,848**	**3,000**	**1,788**	**-1,213**	**1,657**	**1,492**	**1,213**	**903**	**908**	**984**	**76**
Algeria	36	47	48	51	3	51	49	52	54	53	55	2
Angola	9	11	15	11	-4	8	11	9	9	9	5	-4
Ecuador	20	26	24	12	-12	12	4	3	3	5	4	-1
Gabon	5	6	7	4	-3	4	2	1	1	1	0	-1
Indonesia	45	38	34	27	-7	24	24	19	17	16	17	1
Iran**	54	54	54	54	0	54	54	57	57	57	57	0
Iraq**	58	83	79	52	-27	47	51	49	42	41	39	-2
Kuwait**	31	32	38	47	8	44	42	41	42	44	47	3
Libya**	9	15	10	3	-8	1	1	1	1	1	1	0
Nigeria	36	37	34	30	-4	28	28	27	25	24	24	0
Qatar	8	9	10	8	-3	7	6	7	7	7	7	0
Saudi Arabia	112	114	134	155	21	154	158	157	154	155	156	1
UAE	24	28	34	42	8	41	52	50	50	50	50	0
Venezuela	117	121	116	110	-6	114	112	111	103	95	92	-3
OPEC rig count	**562**	**620**	**637**	**606**	**-31**	**589**	**592**	**584**	**566**	**558**	**554**	**-4**
Worldwide rig count*	**3,589**	**3,467**	**3,637**	**2,393**	**-1,244**	**2,246**	**2,084**	**1,797**	**1,469**	**1,466**	**1,538**	**72**
of which:												
Oil	2,594	2,611	2,795	1,727	-1,068	1,606	1,471	1,268	1,043	1,034	1,084	50
Gas	886	746	743	563	-180	536	509	422	315	319	338	19
Others	106	109	95	100	5	99	102	106	110	112	117	5

Note: Totals may not add up due to independent rounding.
na: Not available.
Sources: Baker Hughes Incorporated & Secretariat's estimates.

** Excludes China and FSU.*
*** Estimated figure when Baker Hughes Incorporated did not reported the data.*

Monthly Endnotes

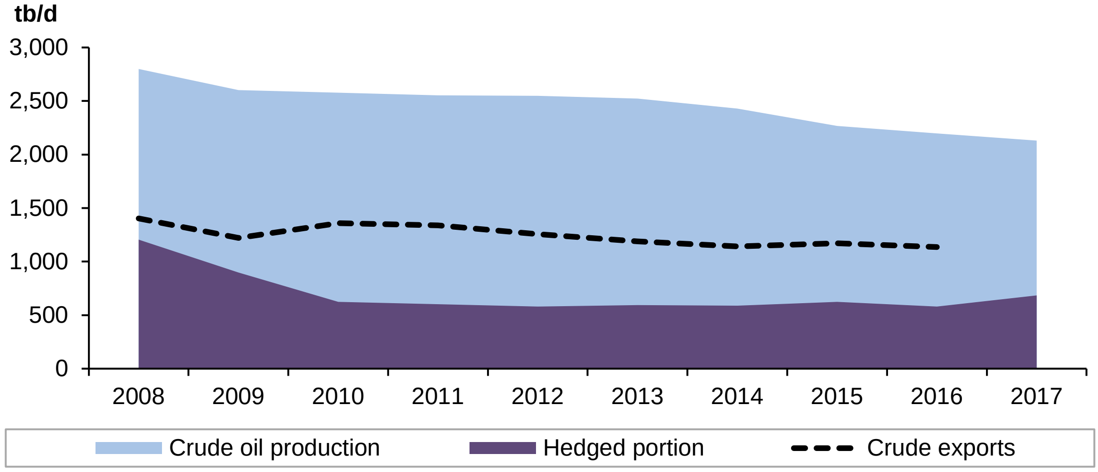
Mexico hedging programme in place for 2017

Mexico's Ministry of Finance announced at the end of August that it had completed its oil hedging programme for 2017. According to a statement, Mexico hedged 228 million barrels – or around 685 tb/d out of a total expected 2.1 mb/d of production in 2017 – at a price of $38/b for a mixed basket of Mexican export crudes. An additional $4/b will be provided by the Oil Income Stabilization Fund to cover the budgeted price of $42/b.

Mexico's hedging programme is the world's largest single hedge in commodities markets by value. Mexico is also the only producing country to consistently hedge a substantial portion of its oil revenues. The objective of the programme is to reduce the impact of oil price changes on Federal Government revenues and public finances. The country's Stabilization Fund is required by law to compensate if the average price levels for the mix of Mexico's oil exports are below those set in the expenditure budget. The hedging programme serves the function of reducing the amount that needs to be compensated.

The country uses a floor price strategy as an insurance policy against falling oil prices. Mexico buys 'put options' that gives it the right, but not the obligation, to sell oil at an agreed price. The country would only exercise this option if the relevant oil price were to fall below the set level. The hedge volume is calculated netting crude oil exports versus diesel and gasoline imports.

Graph 11.1: Mexico's hedging programme, 2008-2017: Production, exports and hedged volumes



Sources: Pemex and Mexico's Ministry of Finance.

Graph 11.1 represents Mexico's hedging programme since 2008, showing volumes hedged relative to the country's crude production and exports. In 2008, the country hedged some 43% of its crude production, representing approximately 86% of its exports.

More recently, the hedging programme has tended to cover around 25% of total production or approximately 50% of exports. For 2017, the Ministry has hedged a higher percentage – approximately 32% of expected production – despite a forecast 3% drop in crude oil output.

The first time the government hedged any of its production was in 1991. The country reportedly hedged some 100 mb of oil, representing 10% of crude production and 18% of crude exports, at a time when prices moved sharply higher. When prices fell back later that year, the hedge allowed Mexico to secure a higher price.

Graph 11.2: Mexico hedging programme, 2008-2017: Option strike price versus annual crude price

Sources: Pemex and Mexico's Ministry of Finance.

Even with this first-time success, the programme only became an annual exercise in the mid-2000s. Since 2008, the options have only been exercised in 2009 and 2015 (***Graph 11.2***), where the government received payments of $5.1 bn and $6.3 bn. A review of government statements indicates that the annual cost of the programme is around $1 billion. If prices for the Mexican oil basket remain around current levels, some estimates expect Mexico to receive around $3 bn in 2016 from a hedge price of around $49/b.

US crude exports finding new destinations

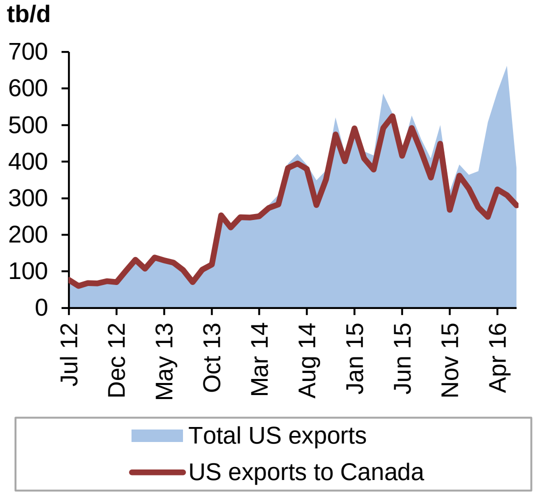
The impact of the lifting of the ban on domestic US crude exports has not been as immediate as previously expected.

The 40-year ban on US crude oil exports was lifted at the end of 2015, thus 2016 will be the first full year in which US crudes are available for export. Prior to this, exports were only allowed for a few specific grades – Alaska North Slope, Cook Inlet and California heavy crude – or for use in Canada. In 2014, the government began allowing condensate exports, and a swap of US light crude for heavy Mexican crude was approved earlier in 2015.

In terms of volumes, US crude oil exports in 1H16 averaged around 0.5 mb/d, broadly flat compared with the volumes exported during the same period of 2015. This was despite US crude exports hitting a fresh historic high of 0.7 mb/d in May. Developments during the first half of 2016 are even more surprising considering the strong growth seen in the previous three years of 67%, 1.3 times and 89%, respectively.

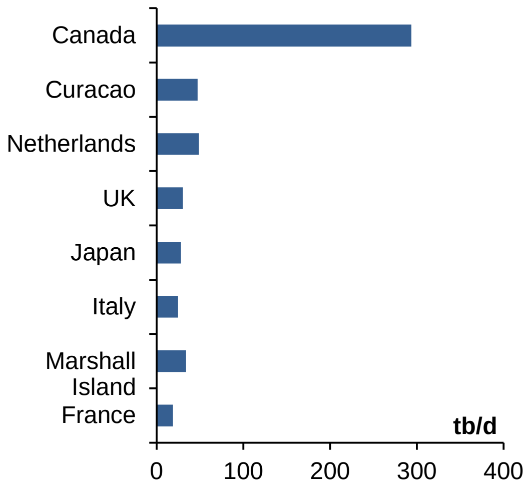
A more notable shift, however, has been seen in the number of countries receiving US crude exports, which have risen to 18 in the first half of 2016, up from nine in 2014 and 11 in 2015. Canada remains the main destination, although its share has fallen from 92% of US exports last year to average around 60% in the first half of this year. So far this year, US exports have found markets in Curacao in the Caribbean, in the Netherlands and in other West European countries, including the UK, France and Italy. The Marshall Islands in the Pacific Ocean is the seventh-highest destination, serving as a location for ship-to-ship transfers for final destinations in Asia.

Graph 11.3: US crude oil exports



Source: US Energy Information Administration.

Graph 11.2: US crude oil exports by destination, January - June 2016



Source: US Energy Information Administration.

US exports of domestic crudes have come at the time when the Brent-WTI spread has been narrow, averaging around $1.43/b in 1H16, compared with $6.01/b in the first half of the previous year. This has limited the competitiveness of US grades, although low freight rates have helped to partially offset this narrow spread. Indeed, since the removal of the ban, US exports have been a contributing factor in narrowing the transatlantic spread, providing alternative markets for excess US oil output.

Going forward, exports could rise further as buyers for these destinations become more familiar with having US crude as an available option in times when the economics works.

G20 Summit forges Hangzhou Consensus

This year's China G20 Summit was held in Hangzhou China, on 3-4 September. The meeting concluded with the release of the *G20 Leaders' Communique*, which presented the outcome of this year's G20 process.

In their review of the global economy, G20 leaders stated that they were meeting "at a time when the global economic recovery is progressing, resilience is improved in some economies and new sources for growth are emerging." However, they also noted that economic growth was "still weaker than desirable." Downside risks were seen coming from potential financial market volatility, commodity price fluctuations, sluggish trade and investment, and slow productivity and employment growth in some countries. Challenges due to geopolitical developments, increased refugee flows, terrorism and conflicts were also said to "complicate the global economic outlook". More broadly, the communique noted the "continued shifts and profound transformations in the configuration of the global economic landscape and dynamics for growth". "With these transformations come challenges and uncertainties as well as opportunities."

At the start of China's G20 Presidency, the country's president, Xi Jinping, said the G20 should "strive to build an innovative, invigorated, interconnected and inclusive global economy". He called all the G20 members to "embrace the vision of a global community" and "improve global economic and financial governance so as to address inequality and imbalance in global development and ensure that the benefits of economic growth will be equitably shared by people of all countries."

To this end, the G20 Summit adopted of a package of policies and actions termed as the *Hangzhou Consensus*. These were framed under four high-level concepts, namely, Vision, Integration, Openness, and Inclusiveness. *Vision* is characterized as catalyzing new drivers of growth and opening up new horizons for development to transform their economies in a more innovative and sustainable manner and better reflecting the shared interest of both present and coming generations. *Integration* was described as pursing innovative growth concepts by forging synergies among fiscal, monetary and structural policies. *Openness* calls for building an open world economy that rejects protectionism. *Inclusiveness* promises to work to ensure economic growth serves the needs of everyone and benefits all countries and all people," "addressing inequalities and eradicating poverty so that no one is left behind."

The first G20 Summit was held in 2008, at the height of the financial crisis, to discuss efforts to strengthen economic growth, address with the financial crisis, and to lay the foundation for regulatory reform to help prevent a similar crisis from happening again. In follow-up meetings in 2009 in London and Pittsburgh, the G20 leaders unveiled a package of measures to tackle the global downturn and boost the international monetary supply, as well as took steps to reform and strengthen the global regulatory architecture, which included establishing the Financial Stability Board, an international body with representatives of all the G20 countries that monitor and make recommendations about the global financial system. It was during this period that the G20 began to be referred to by its members as the "premier forum for international economic cooperation".

In the communique, leaders stated their belief that "closer partnership and joint action by G20 members will boost confidence in, foster driving forces for, and intensify cooperation on global economic growth, contributing to shared prosperity and better well-being of the world." The communique concluded by "reaffirm[ing] that the G20's founding spirit is to bring together the major economies on an equal footing to catalyze action", stating that "once we agree, we will deliver."

Contributors to the OPEC Monthly Oil Market Report

Editor-in-Chief

Oswaldo Tapia, Head, Energy Studies Department, In Charge of Research Division
email: otapia(at)opec.org

Editor

Hojatollah Ghanimi Fard, Head, Petroleum Studies Department
email: h.ghanimifard(at)opec.org

Analysts

Crude Oil Price Movements	Eissa Alzerma email: ealzerma(at)opec.org
Commodity Markets	Hector Hurtado email: hhurtado(at)opec.org
World Economy	Afshin Javan email: ajavan(at)opec.org Imad Al-Khayyat email: ial-khayyat(at)opec.org Joerg Spitzy email: jspitzy(at)opec.org
World Oil Demand	Hassan Balfakeih email: hbalfakeih(at)opec.org
World Oil Supply	Mohammad Ali Danesh email: mdanesh(at)opec.org
Product Markets and Refinery Operations	Elio Rodriguez email: erodriguez(at)opec.org
Tanker Market *and* Oil Trade	Anisah Almadhayyan email: aalmadhayyan(at)opec.org
Stock Movements	Aziz Yahyai email: ayahyai(at)opec.org
Monthly Endnotes	Douglas Linton email: dlinton(at)opec.org
Technical and editorial team	Aziz Yahyai email: ayahyai(at)opec.org Douglas Linton email: dlinton(at)opec.org

Data services

Adedapo Odulaja, Head, Data Services Department (aodulaja(at)opec.org),
Hossein Hassani, Statistical Systems Coordinator (hhassani(at)opec.org),
Pantelis Christodoulides (World Oil Demand),
Klaus Stoeger (World Oil Supply and World Economy),
Mouhamad Moudassir (Product Markets and Refinery Operations),
Mohammad Sattar (Crude Oil Price Movements, Commodities, Tanker Market and Oil Trade), Ryszard Pospiech (Stock Movements)

Editing, production, design and circulation

Alvino-Mario Fantini, Maureen MacNeill, Scott Laury,
Viveca Hameder, Hataichanok Leimlehner, Andrea Birnbach

Disclaimer

OPEC Basket average price

US$/b

up 0.42 in August	August 2016	43.10
	July 2016	42.68
	Year-to-date	**37.99**

August OPEC crude production

mb/d, according to secondary sources

down 0.02 in August	August 2016	33.24
	July 2016	33.26

Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
2016	2.9	1.6	1.5	0.7	1.5	6.5	7.5
2017	3.1	1.7	2.1	0.9	1.2	6.1	7.2

Supply and demand

mb/d

2016		**16/15**	**2017**		**17/16**
World demand	94.3	1.2	World demand	95.4	1.2
Non-OPEC supply	56.3	–0.6	Non-OPEC supply	56.5	0.2
OPEC NGLs	6.3	0.2	OPEC NGLs	6.4	0.1
Difference	**31.7**	**1.7**	**Difference**	**32.5**	**0.8**

OECD commercial stocks

mb

	May 16	Jun 16	Jul 16	Jul 16/Jun 16	Jul 15
Crude oil	1,563	1,553	1,544	–8.9	1,480
Products	1,524	1,540	1,547	6.8	1,435
Total	**3,087**	**3,093**	**3,091**	**–2.1**	**2,915**
Days of forward cover	66.0	66.0	66.1	0.2	62.8

Next report to be issued on 12 October 2016.