

OPEC

Monthly Oil Market Report

13 June 2016

*Feature article:
World oil market prospects for the second half of 2016*

| | |
|---|----|
| Oil market highlights | 1 |
| Feature article | 3 |
| Crude oil price movements | 5 |
| Commodity markets | 12 |
| World economy | 17 |
| World oil demand | 35 |
| World oil supply | 44 |
| Product markets and refinery operations | 59 |
| Tanker market | 66 |
| Oil trade | 70 |
| Stock movements | 78 |
| Balance of supply and demand | 86 |



Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

E-mail: [prid\(at\)opec.org](mailto:prid(at)opec.org)

Website: www.opec.org

Oil market highlights

Crude Oil Price Movements

The OPEC Reference Basket averaged \$43.21/b in May, representing a gain of \$5.35 over the previous month. ICE Brent ended up \$4.31 at \$47.65/b, while Nymex WTI rose \$5.67 to \$46.80/b. The ICE Brent-Nymex WTI spread narrowed significantly to 85¢/b in May from \$2.21/b the month before.

World Economy

World economic growth is forecast at 3.1% for this year, after estimated growth of 2.9% the year before, both unchanged from the previous month. OECD growth in 2016 remains at 1.9%, slightly below the 2.0% seen in 2015. The forecast for the major emerging economies remains unchanged. China and India continue to expand this year at a considerable level of 6.5% and 7.5%, respectively. Brazil and Russia, however, are forecast to remain in recession this year, contracting by 3.4% and 1.1%, respectively.

World Oil Demand

World oil demand growth for 2016 remains unchanged from the previous report at 1.20 mb/d to average 94.18 mb/d. Other Asia, led by India, is anticipated to be the main contributor to oil demand growth in 2016. Similar to 2015, transportation fuels, supported by healthy vehicle sales and the low oil price environment, are projected to provide the bulk of expected growth. The 2015 growth estimate was also left unchanged at 1.54 mb/d to average 92.98 mb/d.

World Oil Supply

The forecast for non-OPEC oil supply in 2016 remains unchanged, with a contraction of 0.74 mb/d expected to average 56.40 mb/d. The downward revisions in Canada, Brazil and Colombia broadly offset upward revisions in the US, UK, Russia and Azerbaijan. Non-OPEC supply growth in 2015 was left unchanged at 1.47 mb/d. OPEC NGLs and non-conventionals are expected to increase by 0.16 mb/d to average 6.29 mb/d this year. In May, secondary sources show OPEC crude oil production decreased by 0.1 mb/d to average 32.36 mb/d.

Product Markets and Refining Operations

The high level of inventories in light and middle distillates, along with the approaching end of the spring maintenance season, offset the potential impact from events in Canada and France. This caused margins to edge lower in the Atlantic Basin, despite stronger gasoline demand in the region. Meanwhile, in Asia, refinery margins showed a slight recovery on the back of stronger regional gasoline and gasoil demand amid a peak in refinery maintenance.

Tanker Market

Sentiment in the dirty tanker market was generally weak in May. VLCC and Suezmax spot freight rates declined on the back of light tonnage demand and increased tanker availability. However, Aframax spot freight rates improved. Clean tanker freight rates declined on average, as a result of low freight rates reported for West of Suez. In May, global chartering activities dropped and sailings from the Middle East, and OPEC more broadly, were lower month-on-month.

Stock Movements

OECD commercial oil stocks rose slightly in April to stand at 3,046 mb. At this level, OECD commercial oil stocks are around 338 mb above the latest five-year average, with crude indicating a lower surplus of 194 mb and products broadly flat at 144 mb. In terms of days of forward cover, OECD commercial stocks stood at 66.4 days, some 7.1 days higher than the five-year average.

Balance of Supply and Demand

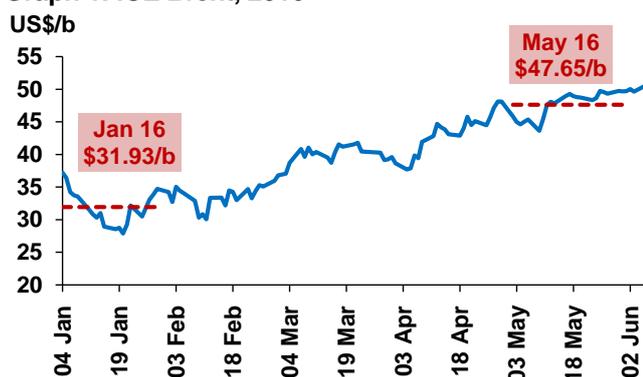
Demand for OPEC crude in 2016 is projected at 31.5 mb/d, unchanged from the last report and 1.8 mb/d higher than last year. For 2015, demand for OPEC crude is also unchanged, averaging 29.7 mb/d, which represents a decline of 0.1 mb/d from the previous year.

World oil market prospects for the second half of 2016

The OPEC Reference Basket has improved considerably from the low levels seen at the start of this year to average \$43.21/b in May. For the same month, ICE Brent averaged \$47.65/b and Nymex WTI averaged \$46.68/b (**Graph 1**). Crude oil prices were supported by the weaker US dollar, strong gasoline consumption in the US, various supply disruptions, the accelerated decline in US crude oil output, and forecasts for a sharp fall in overall non-OPEC oil supply this year. Record bullish bets by speculators for higher futures prices also helped support market sentiment.

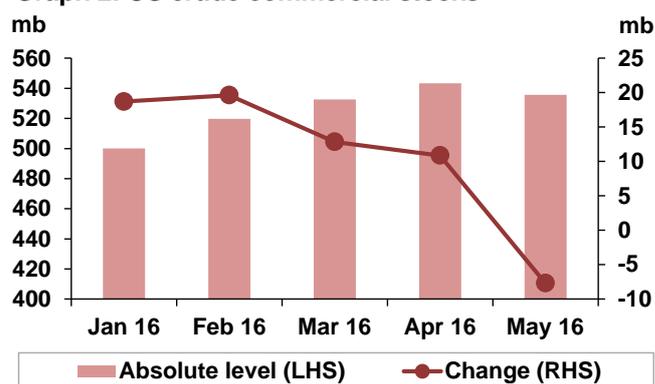
Despite a relatively weak start to the year, the global economy is forecast to rebound over the remainder of the year to reach global growth of 3.1%, after 2.9% in the past year. In the OECD, the US is expected to improve from the weak growth seen in the beginning of 2016. Growth in the economy of the Euro-zone is projected to be slightly more muted after the healthy growth estimated for 1H16, with the vote on a Brexit being a key uncertainty. After relatively robust growth estimated for 1H16, Japan's growth trend is not seen improving further from the current level. Outside the OECD, further improvements in Russia's economy are expected, supported by rising commodity prices, including for oil and gas. Brazil remains in a challenging situation, although an improving domestic situation, together with higher commodity prices leading to a positive net balance of trade, could contribute to a better performance in 2H16. Growth in China is expected to slow somewhat from the healthy pace seen in 1H16, while India's economy is forecast to continue to enjoy an elevated growth level for the remainder of the year.

Graph 1: ICE Brent, 2016



Source: IntercontinentalExchange.

Graph 2: US crude commercial stocks



Source: OPEC Secretariat.

Turning to the oil market, world oil demand growth in the second half of the year is projected to continue rising by 1.2 mb/d y-o-y. The OECD is anticipated to add around 0.2 mb/d, with OECD Americas leading growth at 0.3 mb/d, while OECD Europe is seen flat and OECD Pacific contracting by almost 0.1 mb/d. Key factors impacting OECD oil demand growth will be retail price developments during the driving season and heating demand in the Northern Hemisphere by the end of the year. In the non-OECD, oil demand is anticipated to grow by 1.0 mb/d y-o-y in the second half of the year. Demand is projected to be supported by Other Asia with growth of around 0.4 mb/d y-o-y. Much of this growth is seen coming from India, where projections for macroeconomic indicators are currently solid. In China, support will come from transportation and petrochemical sectors, while industrial fuel consumption is expected to contract.

On the supply side, non-OPEC supply in the second half of the year is anticipated to be some 140 tb/d weaker than in 1H16 and almost 1 mb/d lower compared to the same period last year. In the Developing Countries, supply is seen growing by 270 tb/d compared to the estimate in 1H16, which will broadly offset a 280 tb/d decline expected in OECD supply over the same period. FSU oil production in the second half is projected to decline by 200 tb/d, with Russian oil production contracting by 120 tb/d. Over the same period, China's output is expected to increase by 60 tb/d and production in Brazil is expected to increase by 270 tb/d due to the start-up of two new projects. In the US, despite higher growth in the Gulf of Mexico, total US output will decline by 150 tb/d in the second half of the year compared to 1H16. With the recovery of production disrupted by wildfire, supply in Canada is expected to grow by 60 tb/d compared to 1H16.

The above projections indicate that the excess supply in the market is likely to ease over the coming quarters. To some degree, this has started to be seen in the slowing pace of inventory builds in US commercial crude stocks (**Graph 2**). In May, commercial crude stocks saw a draw of around 8 mb, compared to an average 12 mb build over March and April, and a 19 mb increase over January and February. Provided that there is a clearer picture regarding oil supply and demand, the expected improvement in global economic conditions should result in a more balanced oil market toward the end of the year. In the second half, demand for OPEC crude is expected to average 32.6 mb/d.

Crude Oil Price Movements

The OPEC Reference Basket (ORB) value surged again in May to above \$45/b for the first time since October of the previous year. Its value more than doubled from slumps reached earlier in the year. This was helped by supply disruptions and signs of firming global demand that came just ahead of a seasonal, and therefore widely expected, global period of tightening toward the end of the year. Nevertheless, oversupply still persisted, global inventories remained high. The ORB gained \$5.35 to reach \$43.21/b for the month, but declined 36.4% year-to-date from a year earlier.

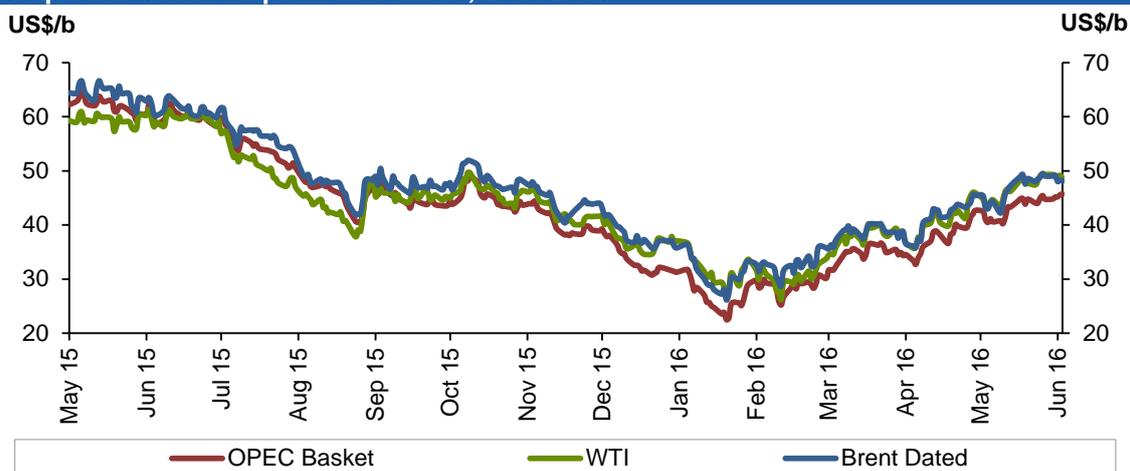
The two main oil futures surged sharply again in May to close to \$50/b on bullish market sentiment coming from supply outages, both planned and unplanned. ICE Brent ended up \$4.31 at \$47.65/b while dropping around 32.8% on the year. Nymex WTI rose by \$5.67 to \$46.80/b, but also slipped by about 27.6% year-to-date. As the month ended with prices near \$50/b, speculators cut long positions on worries that the current rally may not stick amid a global glut of oil.

The Brent-WTI spread narrowed significantly on a decline in US crude inventories, a continuing decline in US production, and the aftermath of wildfires in Alberta, Canada. The Brent-WTI spread averaged 85¢/b in May, down from \$2.21/b in April.

OPEC Reference Basket

The ORB value was up by 14% in May for the fourth month in a row, ending above \$45/b for the first time since October. Its value more than doubled from slumps reached earlier in the year. The Basket rose to seven-month highs, helped by supply disruptions and signs of firming global demand that came just ahead of a seasonal, and therefore widely expected, global period of tightening toward the end of the year. Shutdowns in Nigeria and Canada tightened the oil market markedly and brought supply and demand more closely into alignment earlier than many had expected, bolstering prices. Disruptions have been breaking out across the oil supply chain. Wildfires in Canada, rebel attacks in Nigeria, and a strike in France tightened supply. The rebalancing process in the crude oil market was also supported by a large volume of unplanned outages elsewhere on the globe, including a reduction in Middle Eastern and Latin American output. Nevertheless, there is still a massive global supply overhang.

Graph 1.1: Crude oil price movement, 2015-2016



Sources: Argus Media, OPEC Secretariat and Platts.

Crude Oil Price Movements

On a monthly basis, the OPEC Reference Basket increased by \$5.35 to \$43.21/b on average, up by 14.1%. Compared with the previous year, the ORB's value declined by 36.4%, or \$19.71, to reach \$34.35/b.

A 13% surge in global crude oil benchmarks manifested in the value of all ORB components, boosting all of them, except Merey, above the \$40/b mark. The spot prices of main benchmarks WTI, Dated Brent and Dubai rose by \$5.89/b, \$5.35/b and \$5.29/b, respectively.

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

| Basket | Apr 16 | May 16 | Change | Year-to-date | |
|----------------------|--------------|--------------|-------------|--------------|--------------|
| | | | May/Apr | 2015 | 2016 |
| Basket | 37.86 | 43.21 | 5.35 | 54.06 | 34.35 |
| Arab Light | 38.22 | 43.48 | 5.26 | 54.15 | 34.48 |
| Basrah Light | 36.62 | 42.05 | 5.43 | 52.18 | 32.95 |
| Bonny Light | 41.51 | 46.85 | 5.34 | 57.92 | 38.07 |
| Es Sider | 40.48 | 45.83 | 5.35 | 55.98 | 37.17 |
| Girassol | 41.25 | 46.58 | 5.33 | 57.94 | 37.87 |
| Iran Heavy | 36.65 | 41.67 | 5.02 | 52.98 | 32.76 |
| Kuwait Export | 36.33 | 41.60 | 5.27 | 52.37 | 32.50 |
| Qatar Marine | 38.97 | 44.13 | 5.16 | 55.38 | 35.16 |
| Merey | 28.84 | 34.28 | 5.44 | 47.32 | 26.34 |
| Minas | 38.52 | 48.64 | 10.12 | 55.56 | 36.55 |
| Murban | 42.47 | 47.12 | 4.65 | 58.43 | 39.23 |
| Oriente | 35.04 | 41.96 | 6.92 | 49.15 | 31.60 |
| Sahara Blend | 42.33 | 47.73 | 5.40 | 57.37 | 38.97 |
| Other Crudes | | | | | |
| Brent | 41.48 | 46.83 | 5.35 | 57.13 | 38.17 |
| Dubai | 39.00 | 44.29 | 5.29 | 55.62 | 35.11 |
| Isthmus | 38.14 | 44.76 | 6.62 | 54.49 | 35.55 |
| LLS | 42.69 | 48.80 | 6.11 | 56.83 | 39.48 |
| Mars | 37.31 | 43.45 | 6.14 | 53.37 | 34.28 |
| Urals | 39.89 | 45.08 | 5.19 | 56.76 | 36.53 |
| WTI | 40.95 | 46.84 | 5.89 | 51.88 | 37.62 |
| Differentials | | | | | |
| Brent/WTI | 0.53 | -0.01 | -0.54 | 5.25 | 0.54 |
| Brent/LLS | -1.21 | -1.97 | -0.76 | 0.30 | -1.31 |
| Brent/Dubai | 2.48 | 2.54 | 0.06 | 1.50 | 3.06 |

Note: As of January 2016, Argus data is being used.

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

Once again, and with the exception of Minas, Latin American ORB components outperformed other grades this month. Canadian crude supplies were reduced because of wildfires that curbed flows of heavy Canadian crude to the US Gulf Coast (USGC) and the forced shutdown of a major 220,000 b/d Colombian pipeline supported Latin American grades which probably mostly made up for a shortfall in heavy crude supplies to the Gulf Coast market. Venezuelan Merey was up \$5.44, or 18.9%, at \$34.28/b, while Oriente improved \$6.92, or 19.7%, to \$41.96/b.

In addition to benchmark improvement, Atlantic Basin light sweet components benefited from the supply tightness caused by Nigerian output disruptions as well as more US and Indian buying interest, despite subdued Chinese demand. West and North African light sweet Basket components Saharan Blend, Es Sider, Girassol and Bonny Light increased in value by an average of \$5.36, or 12.9%, to \$46.75/b, sustainably above the \$40/b mark.

Amid a narrowing Brent/Dubai spread and tighter arbitrage volumes of light sweet crudes and despite weak naphtha and gasoline refining margins in the Asia Pacific, Indonesian Minas was up by \$10.12, or 26.3%, to \$48.64/b.

Middle Eastern spot component grades Murban and Qatar Marine rose on average by \$4.91, or 12.1%, to \$45.63/b, while multi-destination grades Arab light, Basrah light, Iran Heavy and Kuwait Export increased on average by \$5.22, or 13.7%, to \$42.20/b. Firm demand supported medium sour Mideast Gulf grades.

On 10 June, the OPEC Reference Basket stood at \$47.05/b, \$3.84 above the May average.

The oil futures market

Oil futures surged sharply again in May to close to \$50/b on bullish market sentiment coming from supply outages, both planned and unplanned. Wildfires knocked out some 700,000 b/d of Canadian production in May, while Nigerian output slumped to levels not seen in over a decade on the back of a wave of militant activity coupled with some technical issues.

These unexpected outages exacerbated other enduring supply concerns, particularly a decline in US shale oil production and export limitations due to regional conflict. The timing of these unplanned outages was ideal to buoy market sentiment, as they came just ahead of a seasonal, and therefore widely expected, global period of tightening in 3Q16. Oil futures' strong performance was also supported by positively noted higher 1Q16 oil demand, particularly for gasoline.

Gasoline remained the driver of growth over the first quarter of 2016, with particularly strong consumption recorded in the US, China, India, and other Asian countries. LPG and naphtha continued to provide support on the back of petrochemical demand, while other light distillate (jet and kerosene) sales maintained their steady growth.

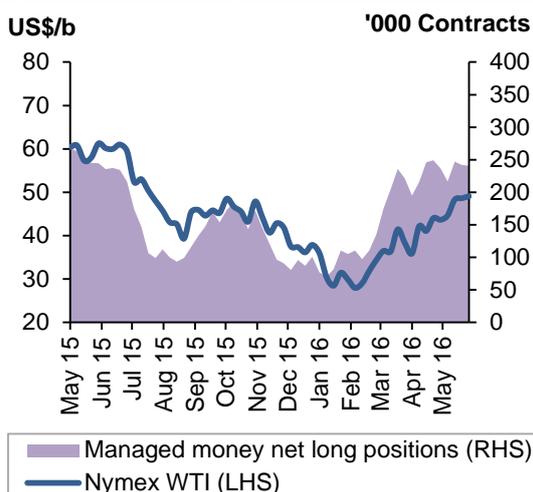
ICE Brent ended May up \$4.31, or 9.9%, at \$47.65/b on a monthly average basis, while Nymex WTI rose by \$5.67, or 13.8%, to \$46.80/b. Compared with the same period one year earlier, ICE Brent lost \$19.22, or 32.8%, to stand at \$39.23/b, while Nymex WTI declined by \$14.35, or 27.6%, to stand at \$37.63/b year-to-date.

On 10 June, ICE Brent stood at \$50.54/b and Nymex WTI at \$49.07/b.

Money managers raised their bullish bets on futures and options around the middle of the month to record highs as oil prices received a boost from a series of unplanned supply outages. However, as the month came to a close, speculators became somewhat less interested in long positions, as prices inched closer to \$50/b, on worries that the current rally may not stick as a global overhang of inventories could still pressure prices.

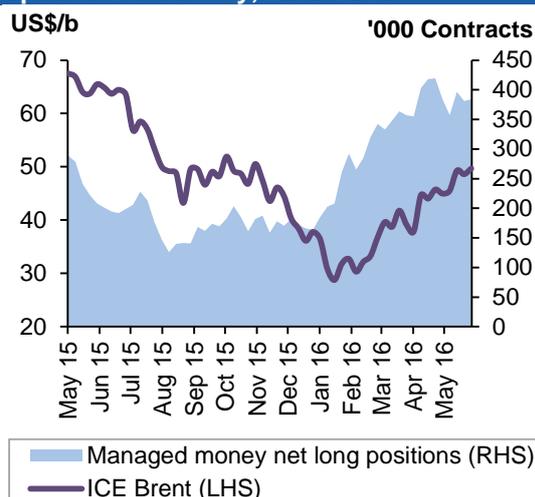
Relative to the end of the previous month, speculators cut net long positions in ICE Brent futures and options by 35,439 contracts to 383,925 lots by the last week in May, ICE exchange data showed. Similarly, money managers cut their net long US crude futures and options positions by 8,395 lots to 240,728 contracts, the US Commodity Futures Trading Commission (CFTC) reported. Meanwhile, total futures and options open interest volume in the two exchanges decreased by 1.2% or 62,064 lots from the end of April to 5.28 million contracts at the end of May.

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.

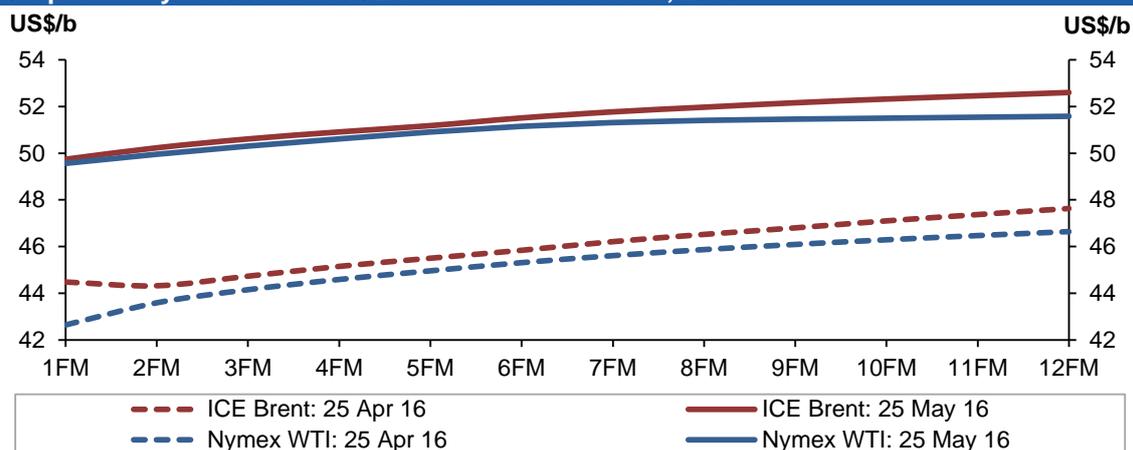
During May, daily average traded volumes for Nymex WTI contracts decreased by 100,954 lots, down by 9%, to 1,023,525 contracts, while those of ICE Brent were 146,211 contracts lower, down by 16.6%, to 735,698 lots. Daily aggregate traded volume for both crude oil futures markets declined by 247,165 contracts to about 1.76 million futures contracts, equivalent to around 1.8 billion b/d. Total traded volume in both exchanges dropped in May due to several holidays in London and New York to 21.49 million and 16.19 million contracts for Nymex WTI and ICE Brent, respectively.

The futures market structure

The **Dubai** market structure flipped into backwardation in May, with prompt prices holding a premium to forward months. It was Dubai's first backwardation since August of the previous year. This shift in inter-month values suggests a pick-up in demand for prompt Mideast Gulf sour crude and tighter supplies. Asia Pacific refiners have emerged from maintenance and are buying more Mideast Gulf crude with July loading dates. Cargoes will arrive when summer product demand is in full flow. Higher official formula prices were also driving more refiners than usual into the spot market, helping to sustain backwardation on the Dubai curve. Supply concerns amid several unplanned outages also supported the prompt market. M1 was at a 38¢ discount to M3 in April and flipped into a premium of 18¢ in May.

However, **Brent** remained in contango in May on the back of some unsold floating cargoes, with softer refining demand due to a French labour reform strike that forced run cuts at French refineries, which also weakened the spread. This occurred despite a growing number of Atlantic Basin upstream outages, particularly in Nigeria. For the month on average, the Brent front-month/third-month contango widened from 37¢/b to 89¢/b.

In the **WTI** market, ongoing wildfires in Alberta limited inflows of Canadian crude to the US and steady declines in US production helped the contango at the front end of the WTI curve to move to its narrowest level since October of the previous year, which also translated into a stock draw this month. The front-month/third-month spread was at minus \$1.04/b in May, up from minus \$2/b in April, on a monthly average basis.

Graph 1.4: Nymex WTI and ICE Brent forward curves, 2016

Note: FM = future month.

Sources: CME Group and Intercontinental Exchange.

The **Brent-WTI spread** narrowed significantly on stockdraws in US crude inventories, continuing declines in US production and the aftermath of wildfires in Alberta, Canada. On the other hand, despite the disruption in Nigerian crude output, Brent was pressured by unsold North Sea cargoes due to slow arbitrage and the French refiners' strike. With the tight WTI-Brent spread, US refiners – particularly on the East Coast, where Canadian crude is typically received via rail and tanker – likely looked to West African barrels to satisfy demand and to Latin America for more sour barrels, as well as possibly the Middle East. According to weekly EIA data, for the week ending 27 May, US crude oil imports rose by 524,000 b/d to 7.8 mb/d as the spread tightened. The bulk of this, however, came from the US Atlantic Coast, where imports rose by 254,000 b/d alone. The tighter spread made Brent-linked crudes more competitive on the Gulf Coast as well. The prompt month ICE Brent/WTI spread averaged 85¢/b in May, from \$2.21/b in April.

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

| Nymex WTI | | | | | | | |
|---------------|-------------|-------------|-------------|-------------|-------------|-----------------|--|
| | <u>1FM</u> | <u>2FM</u> | <u>3FM</u> | <u>6FM</u> | <u>12FM</u> | <u>12FM-1FM</u> | |
| 25 Apr 16 | 42.64 | 43.59 | 44.15 | 45.31 | 46.64 | 4.00 | |
| 25 May 16 | 49.56 | 49.96 | 50.31 | 51.15 | 51.58 | 2.02 | |
| Change | 6.92 | 6.37 | 6.16 | 5.84 | 4.94 | -1.98 | |
| ICE Brent | | | | | | | |
| | <u>1FM</u> | <u>2FM</u> | <u>3FM</u> | <u>6FM</u> | <u>12FM</u> | <u>12FM-1FM</u> | |
| 25 Apr 16 | 44.48 | 44.32 | 44.73 | 45.84 | 47.63 | 3.15 | |
| 25 May 16 | 49.74 | 50.23 | 50.61 | 51.51 | 52.60 | 2.86 | |
| Change | 5.26 | 5.91 | 5.88 | 5.67 | 4.97 | -0.29 | |

Note: FM = future month.

Sources: CME Group and Intercontinental Exchange.

Narrowing trend of the transatlantic spread

By the end of the 1Q16, the Brent-WTI spread shrunk to \$1.70/b, down from a yearly average in 2015 of \$4.80/b. This significant reduction in the Brent's premium to WTI has made it possible for the return of light sweet West African grades (WAF) to the US market. Such an arbitrage has not been attractive in recent years due to the US shale oil boom, which has made domestic WTI-priced crude far more competitive compared to similar Brent-related crudes.

In the 1Q16, the combined average imported US crudes from the two main WAF crude exporters – Nigeria and Angola – jumped to 354 tb/d from about 190 tb/d in 2015. The arbitrage economics also worked with several other Atlantic Basin crudes – even sour grades such as Urals – that have not been feasible for years due to the growing Canadian heavy crude exports to the US and the wide Brent-WTI spread.

Looking almost two to three years back, the first phase of the spread-narrowing trend happened when large volumes of landlocked US light sweet crude and Canadian heavy made their way to the US Gulf Coast (USGC) via a remarkable build-up of pipeline networks unusually going for the first time from the North to the South. The newly-built pipeline network, along with massive rail transport, was able to drain surplus crude from the US mid-continent to the USGC, where refining capacity can absorb the extra volumes and export facilities are available, if needed, for whatever remains. This caused the spread to narrow from an average of about \$17.50/b in 2012 to \$5.80/b in 2014. The spread more-or-less stayed at this level until the current trend started at the end of 2015.

Since the end of last year, the spread has dropped about \$3 from the 2015 average to around \$1.80/b in 1Q16. So far in June, the spread has averaged less than 50¢/b. The narrowing occurred as WTI crude gained some support from a flash drop in inventories, as well as reduced drilling activities for US shale oil as a result of low oil prices. The revised expiration date for the Brent futures contract has also affected the spread. Brent now expires at the end of the month, instead of around the middle of the month, while WTI still expires around the 20th of the month. Moreover, the psychological effect of lifting the ban on US crude exports and dwindling US light sweet crude output continues to support WTI.

With the resulting narrow spread, it now makes economic sense to ship crudes that are priced on Brent across the Atlantic to the US Gulf and East coasts, rather than bringing similar light sweet crudes from the mid-continent. The savings achieved in this way are significant, particularly to the US East Coast, where railways are used to ship crudes to refineries in that region. Even refineries on the USGC can easily justify the economics because the costs of shipping – even for smaller vessels – are much less than the pipelines fees.

The light sweet/medium sour crude spread

Sweet/sour differentials were mixed over the month, widening slightly in the Mediterranean, while continuing a narrowing trend in Asia. On the USGC, the spread remained almost unchanged.

In **Europe**, the Urals medium sour crude discount to light sweet North Sea Brent increased in May as an industrial strike in France that forced Total to halt output at all its five refineries in the country limited prompt crude oil demand in the region. Urals differentials were also pressured on ample supply and weaker refinery margins. A loading plan showed higher oil exports from the Black Sea and stable loadings in the Baltic, despite a seasonal rise in Russia's refinery runs. An influx of shipments of Mideast Gulf crudes also restrained Urals. On the other hand, the light sweet North Sea market was supported by low availability of prompt-loading barrels in the Atlantic Basin, counterbalancing the effect of the French refiners' strike on sweet grades, particularly those which are heavier. The Dated Brent-Med Urals spread widened in May to \$1.75/b.

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



Sources: Argus Media, OPEC Secretariat and Platts.

In **Asia**, the light sweet Tapis premium over medium sour Dubai shrank again this month by around 85¢ to reach \$3.60/b, its narrowest in over eight months. This took place as Asian Pacific regional sweet grades continued to suffer from slowing Chinese demand and some competition from West African North Sea cargoes. Meanwhile, high inventories and weak gasoline margins weighed on demand for ultra-light sweet crude. On the other hand, Middle East crude benchmark Dubai remained firm over the month, gaining support from several purchases in the window and firm Asia Pacific demand as refineries returned from spring maintenance.

In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars remained roughly unchanged at \$5.35/b as both grades were affected by the disruption of Canadian crude oil supplies to the US. Reduced Canadian crude supplies due to wildfires curbed flows of heavy Canadian crude to the USGC and forced the shutdown of a major 220,000 b/d Colombian pipeline supporting these grades. Light, sweet barrels on the USGC got a boost as barrels moved inland following the Canadian production curbs.

Commodity Markets

Energy commodity markets advanced in May on the continued strengthening of crude oil, while non-energy commodities showed mixed trends, with agricultural prices rising mainly due to the effects of El Niño. Meanwhile, momentum slowed in the manufacturing sector of China, weighed down by base metals prices.

Trends in selected commodity markets

In May, supply concerns, mainly caused by weather-related events, led to advances in energy and food prices. At the same time, manufacturing prospects presented a mixed picture, with the Purchasing Managers' Index (PMI) improving in the US, but slowing in the largest metal consumer China, which generally diminished support for base metals. Meanwhile, improvements in US economic conditions and signals by US Federal Reserve officials of support for interest rate hikes this year strengthened the US dollar during the month, acting as a drag on commodity prices.

Table 2.1: Commodity price data

| Commodity | Unit | Monthly averages | | | % Change | Year-to-date | |
|--|----------|------------------|----------|----------|----------|--------------|----------|
| | | Mar 16 | Apr 16 | May 16 | May/Apr | 2015 | 2016 |
| <i>World Bank commodity price indices (2010 = 100)</i> | | | | | | | |
| Energy | | 47.3 | 51.1 | 56.7 | 10.8 | 70.4 | 47.4 |
| Coal, Australia | \$/mt | 52.2 | 50.8 | 51.2 | 0.8 | 60.4 | 50.9 |
| Crude oil, average | \$/bbl | 37.3 | 40.8 | 45.9 | 12.7 | 55.0 | 37.0 |
| Natural gas, US | \$/mmbtu | 1.7 | 1.9 | 1.9 | 0.9 | 2.8 | 2.0 |
| Non-energy | | 77.8 | 79.8 | 81.0 | 1.5 | 86.1 | 77.8 |
| Agriculture | | 85.9 | 88.6 | 91.5 | 3.2 | 91.9 | 86.7 |
| Food | | 88.3 | 90.9 | 95.0 | 4.6 | 94.7 | 89.2 |
| Soybean meal | \$/mt | 325.0 | 355.0 | 434.5 | 22.4 | 415.6 | 354.7 |
| Soybean oil | \$/mt | 761.0 | 796.0 | 798.5 | 0.3 | 770.6 | 768.1 |
| Soybeans | \$/mt | 375.0 | 393.0 | 425.0 | 8.1 | 403.6 | 385.8 |
| Grains | | 84.4 | 85.7 | 87.3 | 1.8 | 93.5 | 85.2 |
| Maize | \$/mt | 159.1 | 164.4 | 169.0 | 2.8 | 172.2 | 162.6 |
| Wheat, US, HRW | \$/mt | 191.2 | 187.5 | 171.8 | -8.4 | 231.0 | 186.2 |
| Sugar, world | \$/kg | 0.3 | 0.3 | 0.4 | 11.7 | 0.3 | 0.3 |
| Base Metal | | 66.5 | 66.7 | 65.1 | -2.3 | 80.3 | 64.7 |
| Aluminum | \$/mt | 1,531.0 | 1,571.2 | 1,550.6 | -1.3 | 1,805.9 | 1,533.0 |
| Copper | \$/mt | 4,953.8 | 4,872.7 | 4,694.5 | -3.7 | 5,967.3 | 4,718.3 |
| Iron ore, cfr spot | \$/dmtu | 56.0 | 61.0 | 55.0 | -9.8 | 60.2 | 52.2 |
| Lead | \$/mt | 1,802.2 | 1,732.3 | 1,707.8 | -1.4 | 1,885.7 | 1,730.8 |
| Nickel | \$/mt | 8,717.3 | 8,878.9 | 8,660.4 | -2.5 | 13,904.2 | 8,612.5 |
| Tin | \$/mt | 16,897.6 | 17,032.7 | 16,707.0 | -1.9 | 17,362.9 | 16,011.1 |
| Zinc | \$/mt | 1,801.7 | 1,855.4 | 1,869.0 | 0.7 | 2,146.8 | 1,751.3 |
| Precious Metals | | 95.6 | 96.3 | 98.1 | 1.9 | 95.0 | 93.4 |
| Gold | \$/toz | 1,245.1 | 1,242.3 | 1,261.0 | 1.5 | 1,210.8 | 1,209.2 |
| Silver | \$/toz | 15.5 | 16.4 | 16.9 | 3.6 | 16.7 | 15.6 |

Source: World Bank, Commodity price data.

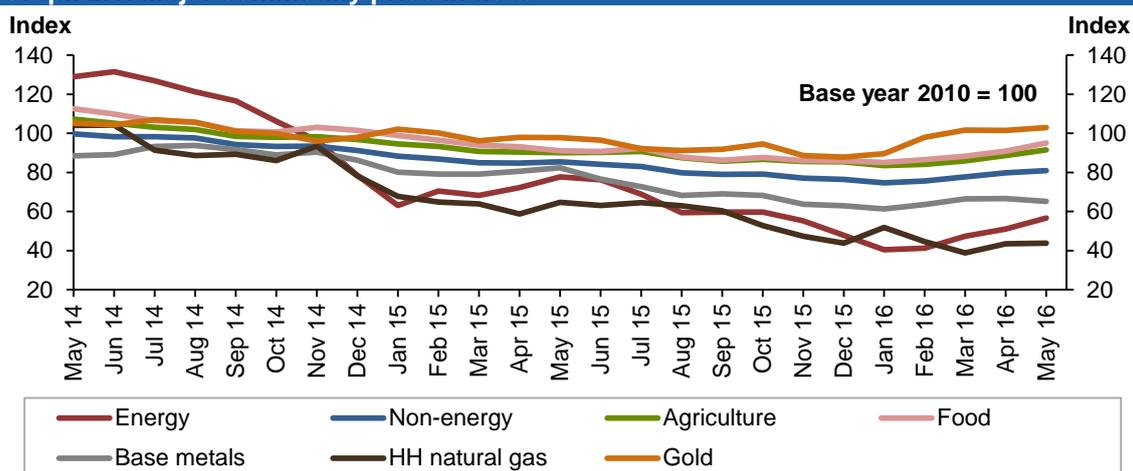
Agricultural prices advanced, mainly due to the impact of weather-related events. In Argentina, torrential rain translated into concerns about the output of soybeans and soybean meal, of which Argentina is the world's largest exporter. In fact, soybean meal prices increased by 22.3% during the month, leading gains in non-energy commodities. Meanwhile, rains in the main sugar cane producing region of Brazil translated into

harvest delays, while shipments from main export ports also slowed, which propelled a 11% advance in sugar prices. The opposite situation, a drought in Thailand, supported a jump in rice prices. Meanwhile, wheat prices declined as the US the Department of Agriculture forecasts larger ending stocks in the next marketing year.

Metals prices generally declined after having advanced over the previous three months on a stronger dollar and slowing manufacturing momentum in China, seen in May manufacturing PMI readings of 49.2 versus 49.4 the previous month. Measures undertaken by commodity exchanges to limit risk-taking in Chinese commodity futures trading also weighed on prices, especially those of iron ore and steel, which had rallied since the beginning of the year. However, housing prices continued to recover, with prices for new homes rising in 65 of the 70 largest cities in the month of April, according to the National Bureau of Statistics. This could lend support to iron ore and steel prices. Moreover, world steel output decreased by 0.5% y-o-y in April, but increased in China by 0.5%. Zinc broke the trend and rose during the month on the expectation of supply cuts and an improving housing market in China.

Energy prices advanced on top of a further recovery in oil prices due to supply outages in Canada and Nigeria and improving gasoline demand. Meanwhile, natural gas prices showed a mixed picture. In the US, prices were supported by fewer additions to storage compared to previous years. However, inventories were still high at the end of the withdrawal season, which weighed on prices. In Europe, prices declined on adequate inventories and the lagging effect of oil-indexed contracts. Data from Gas Infrastructure Europe showed that EU-28 inventories were 18% higher than a year ago at the end of May. The climate prediction centre of the US currently sees a 75% chance of development of La Niña – which tends to bring the opposite weather impacts of El Niño – during the fall and winter 2016/2017, thereby potentially supporting natural gas consumption.

Graph 2.1: Major commodity price indices



Source: World Bank, Commodity price data.

Average **energy prices** in April increased by 10.8% m-o-m due to a 12.7% increase in crude oil prices. Natural gas prices increased in the US by 0.9% m-o-m, while average prices in Europe declined by 2.2%.

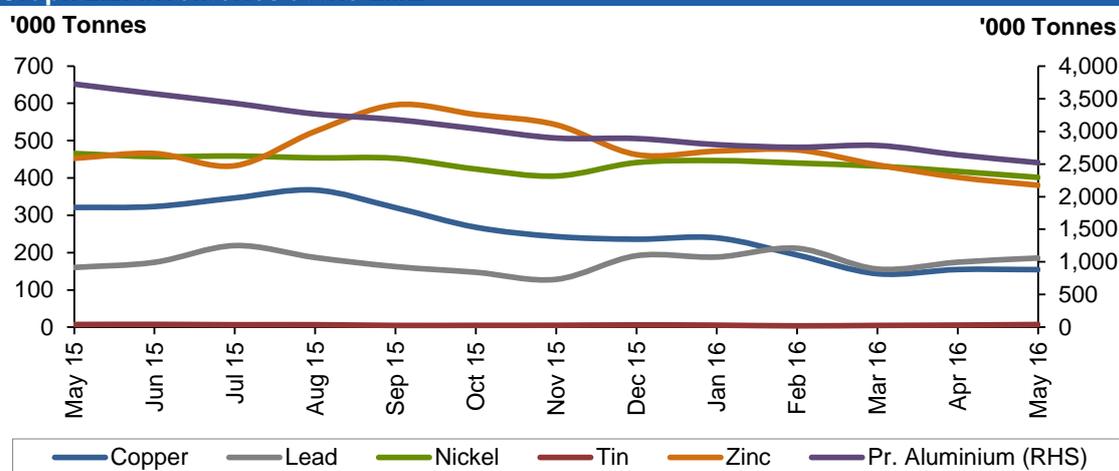
Agricultural prices advanced by 3.2% due to increases in average food, beverage and raw material prices by 4.7%, 1.3% and 0.6%, respectively. Soybeans, soy meal and sugar led the increase in food prices, advancing by 8.1%, 22.4, 8.9% and 11.7%, respectively.

Commodity Markets

Average **base metal prices** decreased by 2.3%, with declines among all group components, but zinc. Aluminum and copper prices decreased by 1.3% and 3.7%, respectively. Average iron ore prices declined by 9.8%, after having advanced by 49% in the previous four months.

In the group of **precious metals**, gold prices advanced by 1.5% m-o-m, however they showed a large decline from their monthly peak, as expectations for interest rate hikes firmed. Silver and platinum prices rose by 3.6% and 4.2%, respectively.

Graph 2.2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

In May, the **Henry Hub natural gas** index increased. The average price was up by 2¢, or 0.9%, to \$1.92 per million British thermal units (mmbtu) after trading at an average of \$1.90/mmbtu the previous month.

The US Energy Information Administration (EIA) said utilities added 82 billion cubic feet (bcf) of **gas from storage** during the week ending 27 May. This was broadly in line with the median market expectation of a 84 bcf increase. Total working gas in storage stood at 2,907 bcf, or 32.4% higher than at the same time the previous year and 35.0% higher than the previous five-year average. The EIA noted that temperatures during the reported week were “1% above normal and equal to last year at this time”.

Investment flows into commodities

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

Agriculture's OIV decreased by 2.2% to 5,083,956 contracts in May. Meanwhile, money managers increased their net long position by 2.4 times to 523,680 lots, largely because of increasing net length in corn, the soy complex and sugar for the second consecutive month.

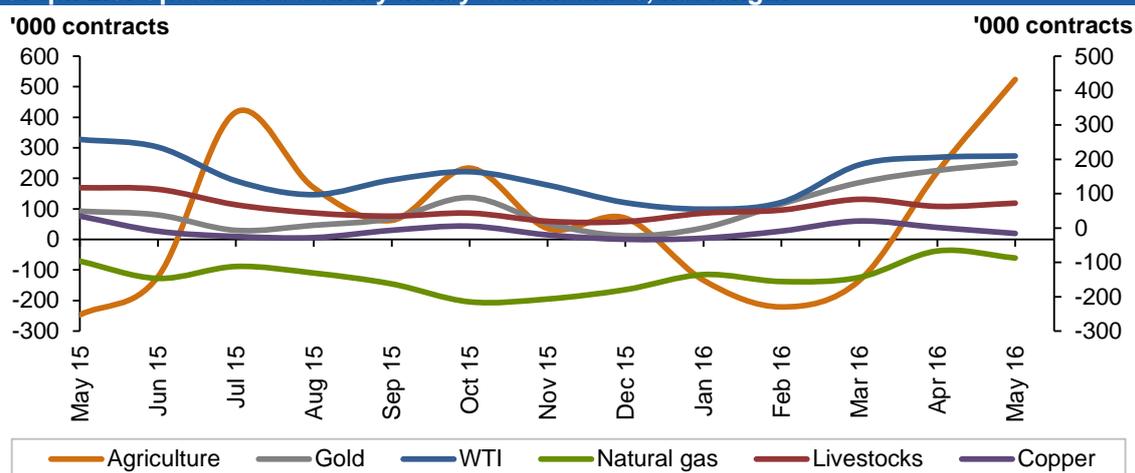
Table 2.2: CFTC data on non-commercial positions, '000 contracts

| | Open interest | | Net length | | | |
|-----------------|---------------|--------------|------------|-----------|------------|-----------|
| | Apr 16 | May 16 | Apr 16 | % OIV | May 16 | % OIV |
| Crude oil | 1,752 | 1,708 | 206 | 12 | 210 | 12 |
| Natural gas | 1,120 | 1,084 | -67 | -6 | -87 | -8 |
| Agriculture | 5,198 | 5,084 | 221 | 4 | 524 | 10 |
| Precious metals | 686 | 758 | 227 | 33 | 254 | 33 |
| Copper | 192 | 198 | 2 | 1 | -16 | -8 |
| Livestock | 553 | 548 | 63 | 11 | 72 | 13 |
| Total | 9,502 | 9,380 | 651 | 55 | 956 | 53 |

Source: US Commodity Futures Trading Commission.

Henry Hub's natural gas OIV increased by 3.2% m-o-m to 1,120,471 contracts in April. Money managers increased their net short positions by 31% to reach 87,197 lots on large inventories.

Graph 2.3: Speculative activity in key commodities, net length

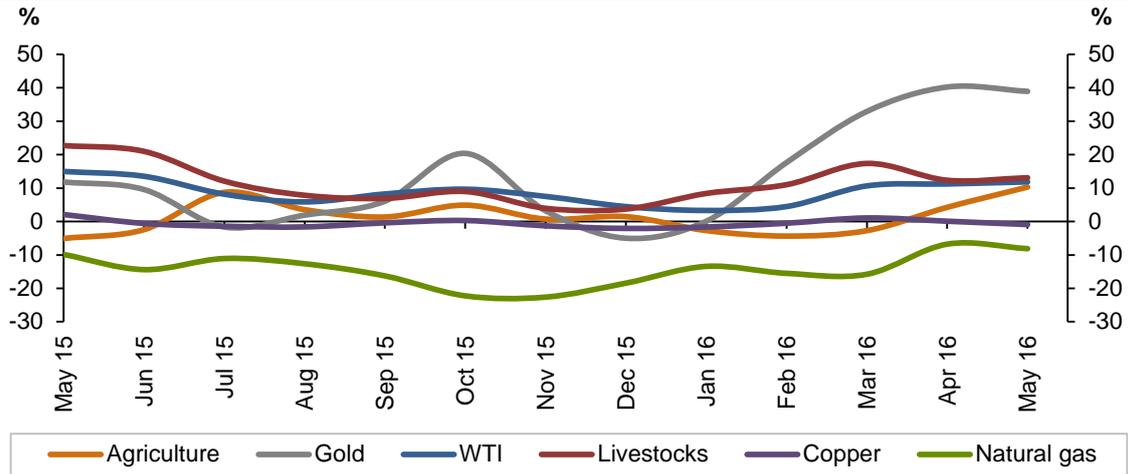


Source: US Commodity Futures Trading Commission.

Copper's OIV increased by 3.3% m-o-m to 198,355 contracts in May. Money managers switched to a net short position of 15,799 lots as manufacturing prospects in China slowed.

Precious metals' OIV advanced by 10.4% m-o-m to 758,145 contracts in May. Money managers increased their net long positions by 11.8% to 253,803 lots.

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



Source: US Commodity Futures Trading Commission.

World Economy

The risk to the global growth forecast is still tilted slightly toward the downside. However, given some recent positive signals, the forecast remains unchanged at 3.1% for 2016, after estimated growth of 2.9% in 2015.

In the OECD, 1Q16 GDP growth in the US was revised up slightly, while in the Euro-zone it seems to have continued its recovery. Japan, in turn, remains challenged by both external and domestic factors. These counterbalancing effects have kept overall OECD growth unchanged at 1.9% for 2016, after growth of 2.0% in 2015.

India and China continue to expand at a considerable rate. After a strong 1Q16 in India, the upside potential to the current growth forecast has become apparent. Meanwhile, Brazil's recession is ongoing, but the economy is expected to recover to some extent in the 2H16. Russia is also forecast to remain in recession this year, but to benefit from rising commodity prices.

Many country-specific economic challenges will need careful monitoring in the near future, while geopolitical issues – and their potential to spill over into the real economy – may add to the overall risk profile. The upside potential of the current global GDP growth forecast could come from the US, India and the Euro-zone. Central bank policies will also continue to constitute an influential factor amid lower global inflation.

Table 3.1: Economic growth rate and revision, 2015-2016, %

| | World | OECD | US | Japan | Euro-zone | China | India | Brazil | Russia |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| 2015* | 2.9 | 2.0 | 2.4 | 0.6 | 1.5 | 6.9 | 7.3 | -3.8 | -3.7 |
| Change from previous month | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2016* | 3.1 | 1.9 | 2.0 | 0.5 | 1.6 | 6.5 | 7.5 | -3.4 | -1.1 |
| Change from previous month | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Note: * 2015 = estimate and 2016 = forecast.

Source: OPEC Secretariat.

OECD

OECD Americas

US

1Q16 **GDP growth** was confirmed to be on the low side at 0.8% q-o-q, at a seasonally adjusted annualized rate (SAAR), slightly revised up from the first estimate of 0.5% q-o-q SAAR. Private household spending turned out to still be a source of solid support with a growth rate of 1.9% q-o-q SAAR, unchanged from the first estimate. However, the estimated decline in exports – amid a strong US dollar – as well as the continued decline in investments in the energy sector, declining slowing productivity and a decline in inventories, have all negatively impacted the growth pattern for the 1Q16.

Consumer sentiment, the Purchasing Manager's Index (PMI) and other **business sentiment indices** point at a strengthening during the 2Q16. But the magnitude of the improvement remains unclear. Given that the latest labour market improvements have

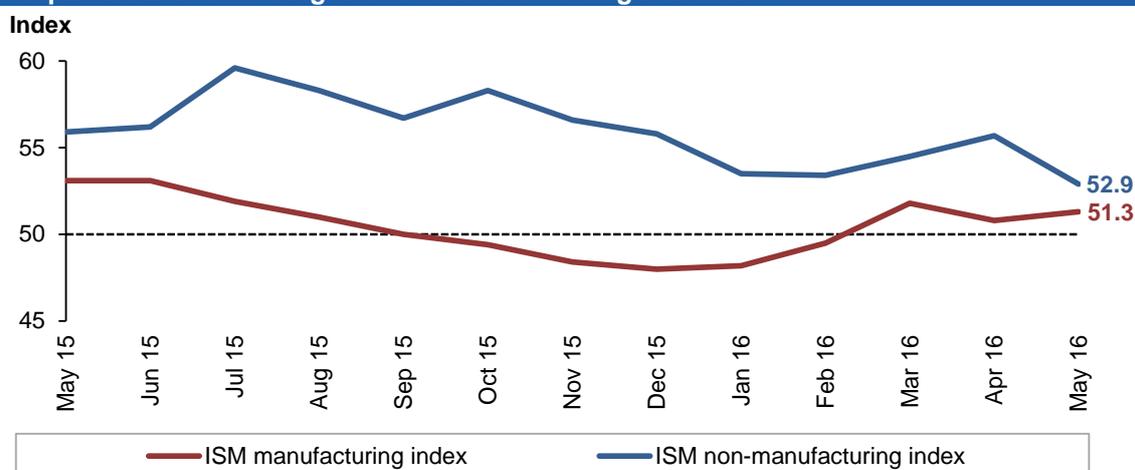
been clearly below expectations, the US Federal Reserve (Fed) will carefully review these developments. And although it seems that the Fed is envisaging another interest rate hike in the coming months, a rate hike at its upcoming June meeting seems rather unlikely, given the current uncertainties.

Total **industrial production** remains weak and has been significantly impacted by the challenges in the energy sector, while manufacturing continues growing, albeit at a low pace. Total industrial production declined by 1.1% y-o-y in April. But while it is the eighth consecutive month of decline, the rate of decline is improving – i.e. it is recovering on a monthly base. Mining, including oil sector-related output, fell considerably again, dropping 13.3% y-o-y, the largest decline in this data series on record. However, within this number, manufacturing held up relatively well at 0.6% y-o-y, following growth of 0.5% y-o-y in March. Ongoing weakness is reflected in manufacturing orders, which fell by 1.8% y-o-y in March. But this development is also less dramatic than it was in the previous month, when orders fell by 4.3% y-o-y. The negative trend of order growth in the energy sector continued to be considerably negative, with new orders for machinery in the mining, oil and gas sectors declining by 92.4% y-o-y in April.

Retail sales continued rising in April, when growth stood at 3.0% y-o-y after growth of 1.7% y-o-y in March. The lessening improvements in the **labour market**, however, are pointing at some potential softening of this growth trend. While the unemployment rate stood at 4.7% in May, non-farm payroll additions grew by a meagre 38,000 after a downward revision of 123,000 in April. The lower unemployment rate may also be explained by the worsening level of the participation rate, which fell again to 62.6% from the April level of 62.8%. The Conference Board's Consumer Confidence Index remained solid, though it fell slightly to 92.6 in May, after 94.7 in April and 96.1 in March.

A positive signal came from May's **Purchasing Manager's Index (PMI)** for the manufacturing sector, as provided by the Institute of Supply Management (ISM). The May level increased to 51.3 from 50.8 in April. The very important services sector, however, seems to have weakened as the index fell to a level of 52.9, after 55.7 in April.

Graph 3.1: Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

The 2016 growth forecast remains unchanged at 2.0%. This is considering a strong rebound in the remainder of the year, after very low GDP growth in 1Q16.

Canada

The situation of Canada's economy remains challenging. The combination of recent wildfires that have hurt the oil industry and the current soft dynamic in the US economy, Canada's most important trading partner, are estimated to have negatively impacted economic growth. Canadian exports declined again in April, falling by 2.3% y-o-y, after a decline of 4.5% y-o-y in March. Also, industrial production remained muted and rose by only 0.2% y-o-y in March and by 0.6% y-o-y in February. On a positive note, retail trade improved again by 3.2% y-o-y in March, after an already considerable increase of 5.7% y-o-y in February. Some other positive developments are reflected in the PMI for manufacturing, which remained almost unchanged in May at 52.1, compared to 52.2 in April. This is now the third consecutive month of a PMI level above 50. Given the challenges ahead, and despite some positive momentum up to around April, the GDP forecast for 2016 remains at 1.5%. This compares to estimated GDP growth of 1.1% in 2015.

OECD Asia Pacific

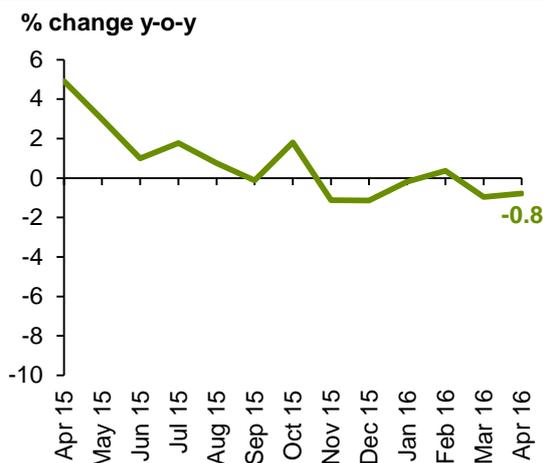
Japan

The latest signals of ongoing challenges to the Japanese economy have been provided by the government, which announced that it would postpone until 2019 a sales tax hike that was planned for 2017. Despite year-long stimulus measures, the Japanese economy remains in only a slow or no-growth dynamic. Postponing the sales tax increase may allow for slightly more fiscal stimulus, constituting one of the so-called "three arrows". But the sovereign debt level needs to be very carefully managed. Structural measures, as currently envisaged by the government, are only paying off slowly and the effect in the short-term is limited. Monetary stimulus is already at an unprecedented level. Despite these monetary measures, the yen has risen significantly over the past months and inflation has turned negative again, while the Bank of Japan (BoJ) is still trying to achieve an inflation rate of 2%. Hence, the situation for domestic demand remains challenging and the most recent lead indicators again point to only low growth this year.

After having turned slightly positive in February, **consumer prices** fell by 0.3% y-o-y in April, after remaining stagnant in March. When excluding the two volatile groups of energy and food, the country's core inflation figure stood at 0.7% in April, slightly higher than in March. Support for domestic consumption – and inflation – came again from the March data for real income. After a decline in labour-related earnings in 2015, the 1Q has shown an increase of 1.4% y-o-y, followed by now a monthly rise of 0.8% y-o-y in April. This trend has continued to be supported by the extremely tight labour market, which saw an unemployment rate of only 3.2% in April, unchanged from March.

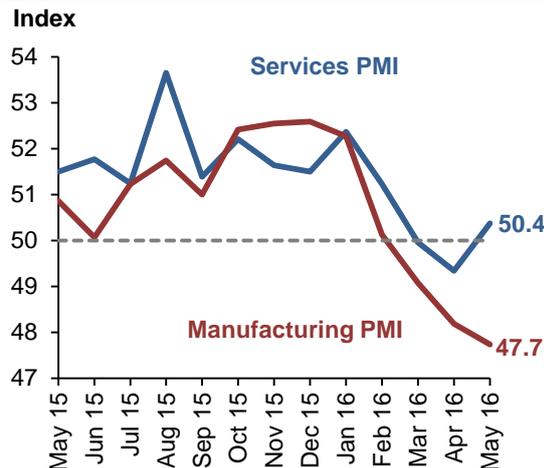
Japanese exports continued their declining trend. They have now declined for the eighth consecutive month in April, falling by 10.1% y-o-y. The 1Q16 average decline stood at 7.8% y-o-y. Also, **industrial production** fell again considerably in April, declining by 1.9% y-o-y. 1Q16 industrial production already declined by 3.3% y-o-y. **Domestic demand** has also remained weak in the past months. It remained negative and again declined by 0.8% y-o-y in April, compared to a decline of 1.0% in March.

Graph 3.2: Japanese retail trade



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

Graph 3.3: Japanese PMI indices



Sources: Markit, Japan Materials Management Association and Haver Analytics.

The ongoing weakness in the Japanese economy is also reflected in the **latest PMI numbers** provided by Markit. The PMI for manufacturing activity again points at a slow-down of the sector, which dropped from 48.2 in April to 47.7 in May. In contrast, the services sector PMI pointed at modest improvements in the sector, moving to 50.4 in May from 49.3 in April.

The growth forecast for 2016 remains at 0.5%. However, some risks remain and the situation will need close monitoring in the coming months. The 2015 growth level has been revised up slightly by the statistical office to now stand at 0.6%, compared to 0.5% in the previous estimate.

South Korea

The GDP growth rate during the 1Q16 stood at a slightly revised 2.8%, which is in line with expectations, but better than the first estimate of 2.7%. Also, exports recovered and grew by 1.5% y-o-y in May, after numerous months of decline. The decline in exports in the 1Q16 stood at an average rate of 5.7% y-o-y. The relative weakness in industrial output has been confirmed, to some extent, by the latest PMI numbers for the manufacturing sector. However, this indicator also turned at least slightly positive in May, when it stood at 50.1, above the growth indicating level of 50. After already having taken into consideration the current growth trend, the GDP growth forecast remains unchanged at 2.7% for 2016, following estimated growth of 2.6% in 2015.

OECD Europe

Euro-zone

After the Euro-zone's surprisingly better-than-expected **1Q GDP growth** of 0.6% q-o-q at a seasonally adjusted rate, output seemed to slow down slightly but remains at a relatively healthy level. The additional monetary stimulus from the European Central Bank (ECB) is also showing some positive effects on short-term economic growth in the Euro-zone, although it seems to be becoming less effective and the consequences of negative interest rates remain uncertain. Numerous challenges to the economy continue to persist with ongoing sovereign debt issues in Greece, the uncertainty of the outcome of a UK referendum on exiting the EU, the still weak banking system and the slow improvements in the Euro-zone's labour market.

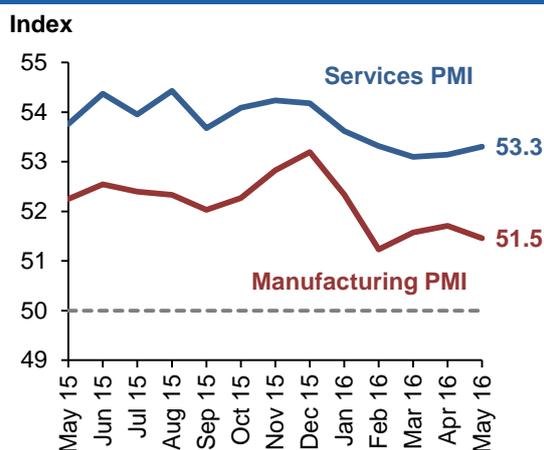
After a strong recovery at the beginning of the year, the latest **industrial production** number for February shows again some softening dynamic. It rose only marginally by 0.1% y-o-y, after growth of 1.1% y-o-y in February and 3.6% y-o-y in January. Also, manufacturing growth was very low in March, expanding only by 0.2% y-o-y, after 2.0% in February and 4.4% y-o-y in January. As in other economies, mining and quarrying declined considerably, amid falling commodity prices in the past months. However, the rate of decline decreased, falling by 4.5% y-o-y in March, after a decline of 12.5% y-o-y in February and a drop of 14.3% y-o-y in January.

Retail sales performed well, too, though at a slightly lower growth rate when compared to previous months. Consumers increased spending in the retail sector by 1.5% y-o-y in April, after 1.9% y-o-y in March. The latest consumer confidence surveys point at some slowdown in the coming months, as growing uncertainties about the development of the Euro-zone's economy, in combination with ongoing challenges in the labour market, may dent private household consumption. The unemployment rate stood at 10.2% in April, the same level as in March.

Despite the latest round of ECB stimulus, **inflation** remained negative. It declined by 0.1% y-o-y in May, after a decline of 0.2% y-o-y in April. While slightly improving, the lessening effectiveness of ECB stimulus seems to be also mirrored in the latest figures of credit supply. April's growth stood at only 0.5% y-o-y, after 0.3% y-o-y in March. This may also be the outcome of the ongoing challenges in the banking system, with volatile developments in the credit supply seen in the past months pointing at some continuing fragility.

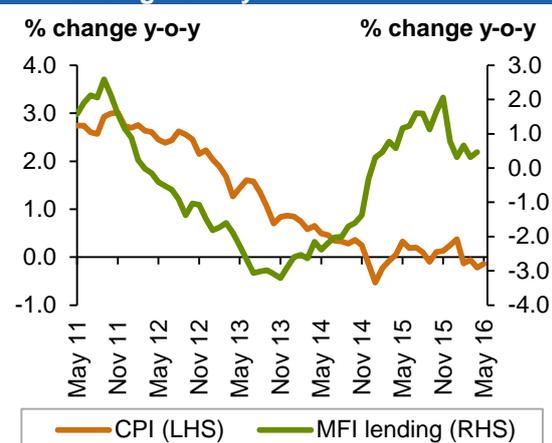
The latest **PMI indicators** are holding up well. The manufacturing PMI for May stood at 51.5, compared to 51.7 in April and 51.6 in March. The important services PMI even increased slightly to 53.3 in May, from 53.1 in April.

Graph 3.4: Euro-zone PMI indices



Sources: 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 the recovery in the Euro-zone is ongoing, multiple challenges remain. Taking these into account, the 2016 growth forecast remains unchanged at 1.6%. This compares to estimated growth of 1.5% last year.

UK

The most important question currently is certainly the effect a UK exit from the EU and the effect that this may have on the former's economy. It seems somewhat obvious that the effect might be significantly negative in the short-term. However, it remains to be seen how British voters will decide. The subject will certainly need close monitoring. In the meantime, the UK economy continues on a relatively healthy growth trajectory, while some softening in the economy is ongoing, due to the uncertainty about the 23 June referendum. Industrial production in April rose considerably after many months of weak output, growing by 1.6% y-o-y, compared to a decline of 0.3% y-o-y in March. International trade has continued declining this year, with exports falling again by 0.6% y-o-y in March, after a decline of 0.7% y-o-y in February. This marks the seventh consecutive month of decline. The latest May PMI number for the manufacturing sector points at some improvement. It moved again above the growth indicating level of 50 to stand at 50.1 in May, after 49.4 in April. The services sector PMI increased to 53.5 in May, compared to 52.3 in April. The current 2016 GDP growth forecast reflects the current slowing underlying momentum and hence remains at 2.1%, just below the estimated growth of 2.2% in 2015.

Emerging and Developing Economies

In **Brazil**, GDP contracted by 5.4% y-o-y in 1Q16. The contraction was an outcome of another slowdown in private consumption (by 6.3% y-o-y), a sharp drop in investment (by 17.5% y-o-y) and less government consumption (by 1.5%). The country's trade balance was the only supportive element with a 13.0% increase in exports and a 21.7% y-o-y decline in imports. Growth data for 1Q16 and the monthly indicators of the past two months only confirm expectations for negative economic growth in Brazil in 2016, with an anticipated contraction in GDP of 3.4%.

In **Russia**, the Federal State Statistics Service published the 1Q16 GDP, showing a deceleration of 1.2% y-o-y. Disaggregate data is still not available. Monthly GDP data from the Ministry of Economic Development showed a decline of 0.7% y-o-y in April, down from the 1.2% drop reported in March of this year. There have been some encouraging signals in the past four months, though not enough to suggest any notable growth this year. These have supported the perception of a slower GDP deceleration this year, compared to 2015. The GDP is forecast to decline 1.1% y-o-y in 2016 from the 3.7% dip seen in 2015.

The **Indian** economy expanded 7.9% y-o-y in 1Q16, higher than downwardly revised 7.2% growth in the previous quarter and better than market expectations. Indian factory output growth remained almost flat for the second consecutive month in May, suggesting business conditions in manufacturing are barely improving. India's beneficial net-oil-importing position and its strong reliance on domestic consumption has helped to strengthen the economy in 2015. This has made the country's economy a bright spot in an otherwise challenging global environment.

China's economic momentum moderated in April, following the earlier pick-up triggered by stimulus and a turnaround in real estate construction. The health of China's manufacturing sector continued to decline in May, with output and new orders both falling slightly. At the same time, job shedding persisted across the sector, with the rate of reduction remaining close to February's post-global financial crisis record. Weak demand conditions underpinned further falls in both purchasing activity and inventory holdings in May. Inflationary pressures, however, appeared to cool slightly with input prices and output charges both rising at weaker rates.

Table 3.2: Summary of macroeconomic performance of BRIC countries

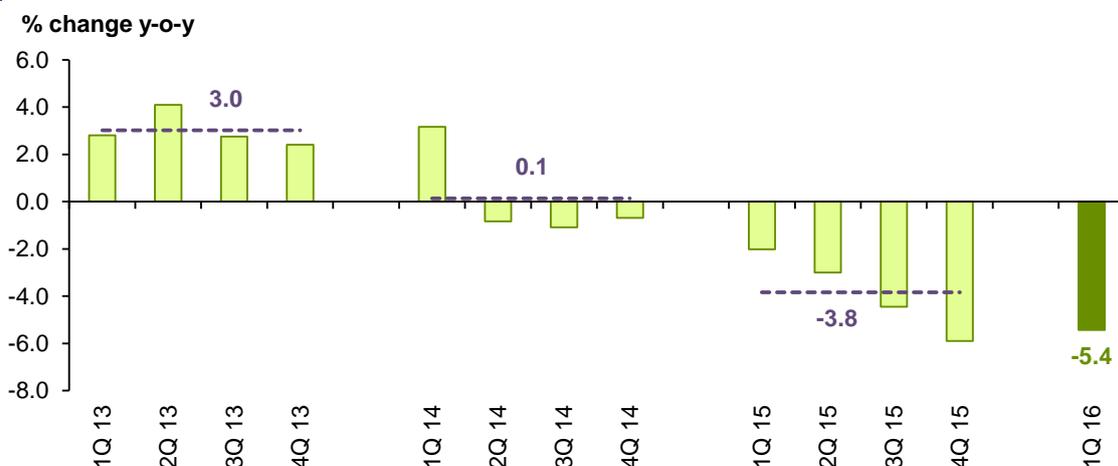
| | GDP growth rate | | Consumer price index, % change y-o-y | | Current account balance, US\$ bn | | Government fiscal balance, % of GDP | | Net public debt, % of GDP | |
|---------------|-----------------|------|--------------------------------------|------|----------------------------------|-------|-------------------------------------|------|---------------------------|------|
| | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 |
| Brazil | -3.8 | -3.4 | 9.0 | 7.3 | -58.9 | -39.8 | -10.5 | -8.4 | 66.5 | 76.5 |
| Russia | -3.7 | -1.1 | 15.5 | 6.6 | 69.5 | 44.8 | -2.4 | -4.1 | 9.4 | 13.4 |
| India | 7.3 | 7.5 | 4.9 | 5.1 | -22.6 | -21.9 | -3.9 | -3.8 | 50.5 | 49.9 |
| China | 6.9 | 6.5 | 1.5 | 2.4 | 330.6 | 312.0 | -3.4 | -3.5 | 18.9 | 23.3 |

Note: 2015 = estimate and 2016 = forecast.

Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

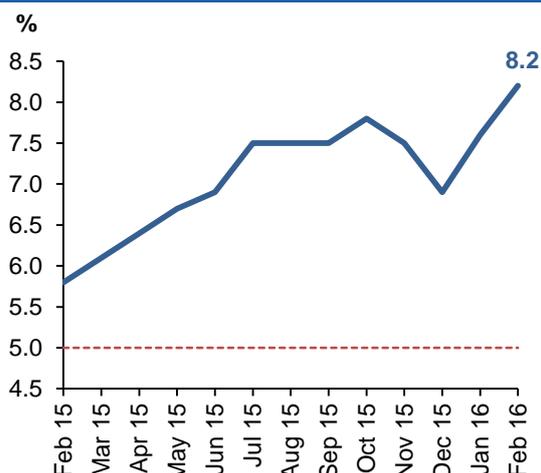
GDP contracted by 5.4% y-o-y in 1Q16, compared to the 2.0% drop in the same period of 2015. This contraction was an outcome of another slowdown in **private consumption** by 6.3% y-o-y, a sharp drop in **investment** by 17.5% y-o-y and less **government consumption** by 1.5%. The trade balance was the only supportive element with **exports** increasing 13.0% and **imports** declining 21.7% y-o-y.

Graph 3.6: Brazilian quarterly GDP growth, NSA

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

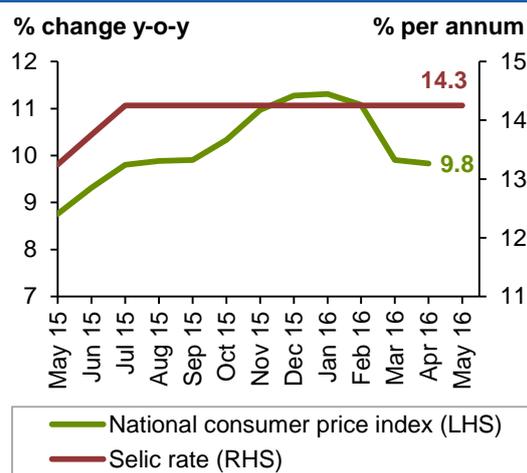
The central bank kept its benchmark **interest rate** at 14.25% for the eleventh consecutive month in May, while **inflation** changed slightly in April to 9.8% from 9.9% a month earlier. Changes in inflation largely mirrored the **exchange rate** of the real versus the US dollar. The appreciation in the real slowed from 6.8% m-o-m in March to 3.7% in April. In May, the real only appreciated slightly by 0.7% m-o-m. The **unemployment rate** in Brazil reached 8.2% y-o-y in February, the highest rate in nearly seven years.

Graph 3.7: Brazilian unemployment rate



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

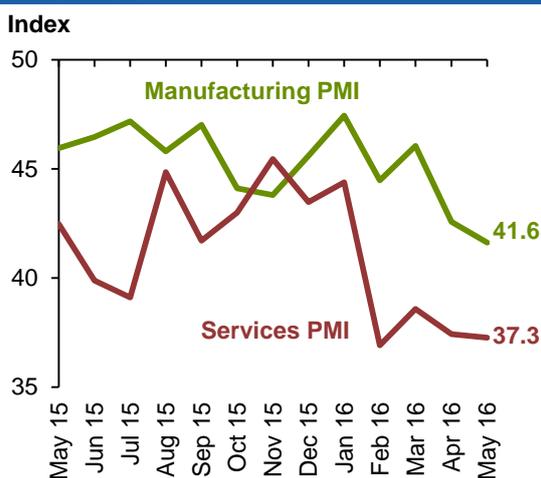
Graph 3.8: Brazilian inflation vs. Interest rate



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

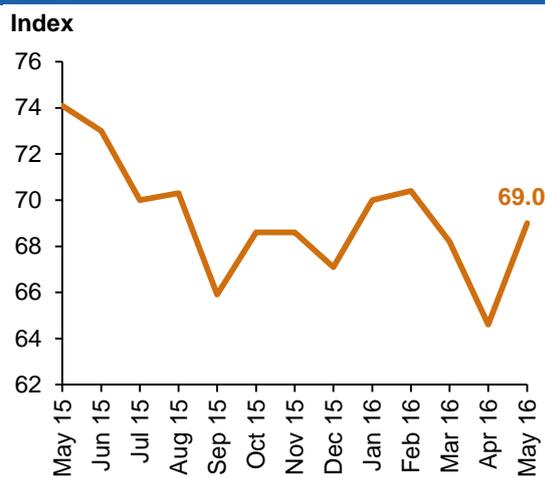
Downturns in the **manufacturing** and **services** sectors intensified in May. Business conditions in the manufacturing sector deteriorated by their largest rate since February 2009 on a fall in production and new business at fastest rates in more than seven years. The index dropped to an 87-month low of 41.6 in May from 42.6 in April. The services economy also remained in recession last month on a steep contraction in activity by the second-quickest rate on record as a result of a continuing decline in the inflow of new orders. The Services Business Activity Index posted 37.3 in May, down slightly from 37.4 in April.

Graph 3.9: Brazilian manufacturing and services PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.10: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Growth data for 1Q16 and the monthly indicators of the past two months have only confirmed the negative expectation for the economic growth of Brazil in 2016, which sees a contraction of 3.4% in GDP.

Russia

The Federal State Statistics Service published the GDP of 1Q16, showing a deceleration of 1.2% y-o-y. Disaggregate data is still not available. The monthly GDP data from the Ministry of Economic Development showed a decline of 0.7% y-o-y in April, down from the 1.2% drop reported in March of this year.

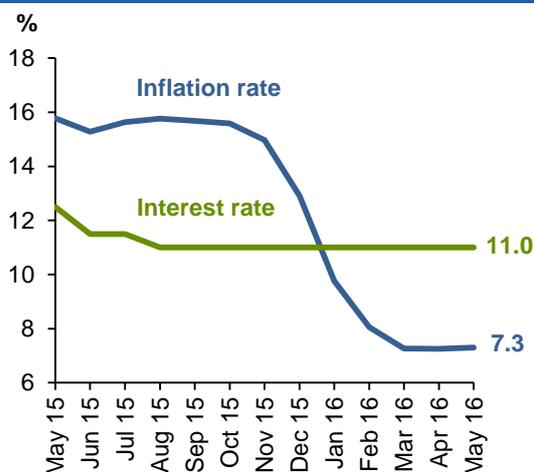
Graph 3.11: Russian quarterly GDP growth, NSA



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

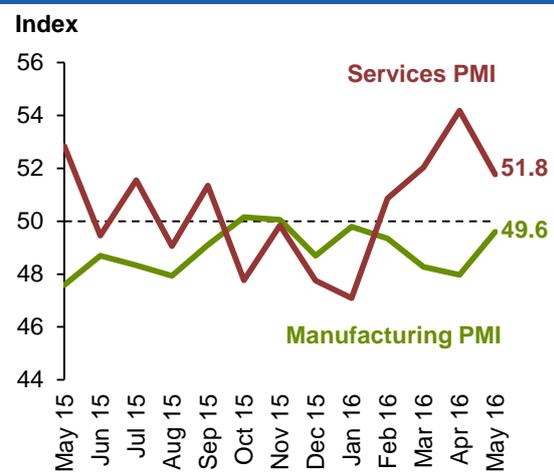
The **ruble** showed its third consecutive appreciation so far this year in May, increasing 1.4% m-o-m, following appreciations of 8.7% and 5.4% in March and April, respectively. This has helped **inflation** to ease to 7.2% in April from 8.1% in February. While the central bank left its benchmark interest rate unchanged at 11.0% for the tenth month in May, falling inflation could allow the central bank to gradually soften the interest rate to support consumption and growth.

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



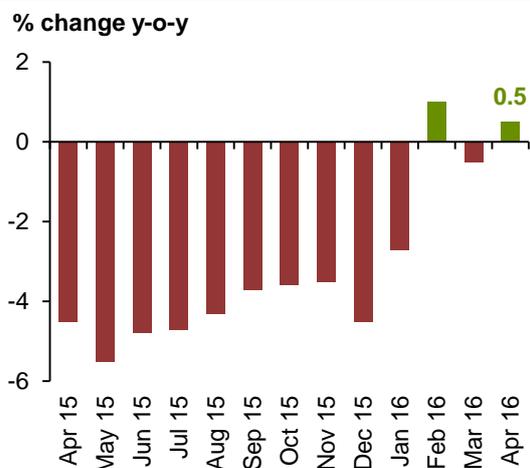
Sources: HSBC, Markit and Haver Analytics.

The deceleration continued in the **manufacturing sector**, though at a slower pace, as suggested by the manufacturing PMI of May which stood at 49.6, up from April's 48.0. This modest improvement was due to production returning to growth territory and job creation for the first time in 35 months. This movement towards stabilization was

reflected in the 0.5% y-o-y increase in the country's **industrial production** reported for April.

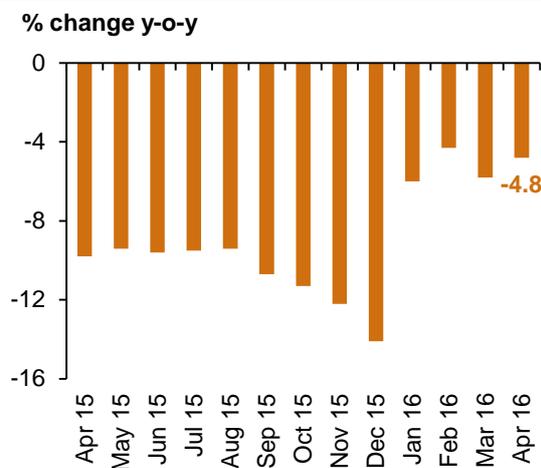
The recovery of the **services sector** continued for the fourth month in a row in May. The index registered 51.8 last month on growth in both output and new business. This has caused an encouraging trend regarding retail sales, which are declining by a notably slower pace. Retail sales declined only 4.8% y-o-y in April, compared to the 14.1% drop seen in December 2015.

Graph 3.14: Russian industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3.15: Russian retail sales

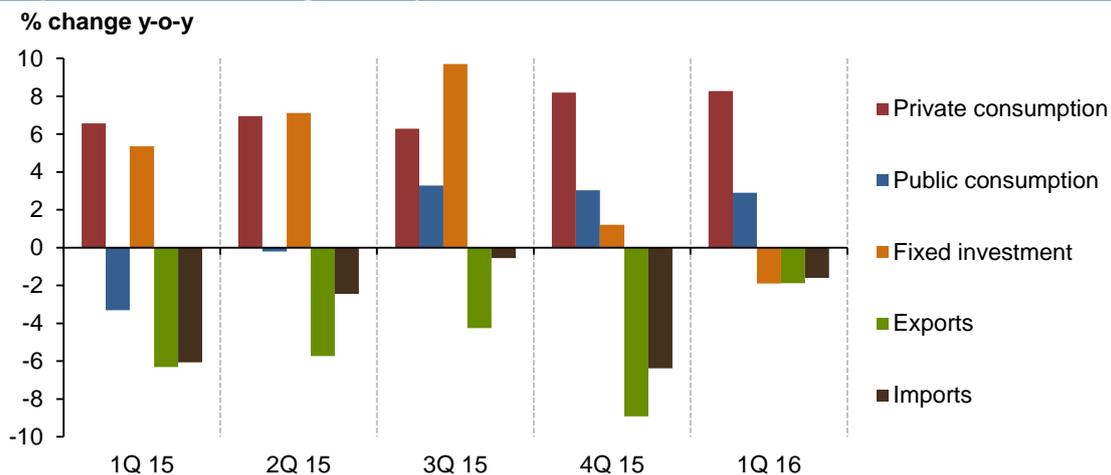


Sources: Federal State Statistics Service and Haver Analytics.

Encouraging signals in the past four months have supported the perception of slower deceleration in GDP this year compared to 2015, though they have remained insufficient to suggest any notable growth this year. The GDP is forecast to decline 1.1% y-o-y in 2016, a slight improvement over the 3.7% dip in 2015.

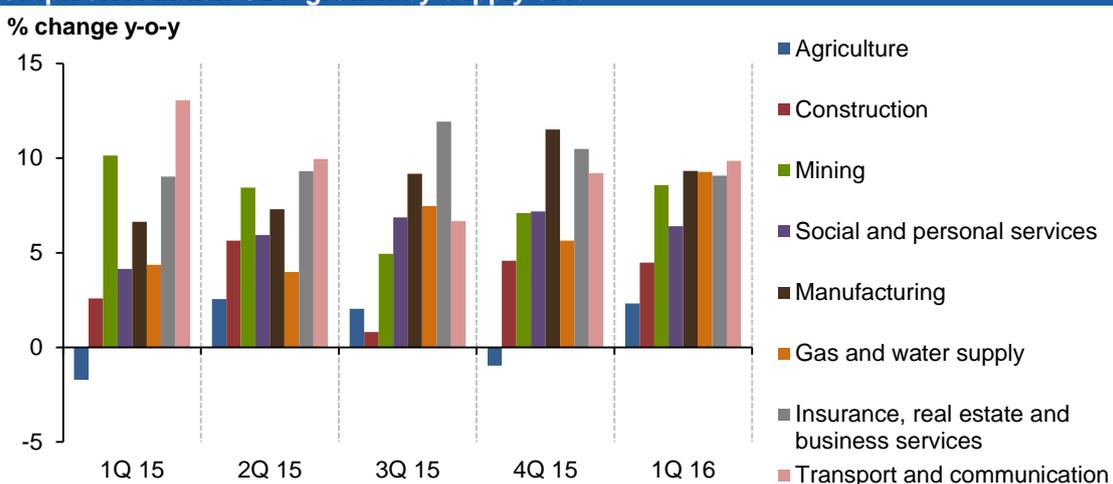
India

The Indian economy expanded 7.9% y-o-y in the first three months of 2016, higher than a downwardly revised 7.2% growth in the previous quarter and better than market expectations. It is the best performance in six quarters. It was boosted by private spending while investment and exports declined. Considering the full 2015/2016 year (April to March), it seems private consumption remains India's growth engine, with growth accelerating to 8.3% from 8.2% in the previous quarter. Government spending, in the meantime, went up 2.9%, slowing down slightly from 3% growth in 4Q15. Gross fixed capital formation shrank 1.9%, following a 1.2% growth in the previous period. Stocks increased 5.6%, slowing from a 7.6% gain in 4Q15. Exports declined 1.9%, following an 8.9% drop in the previous quarter and imports went down 1.6% after falling 6.4%. On the production side, the gross value added for agriculture, forestry and fishery went up 2.3%, rebounding from a 1% drop in the previous period. Gross value added accelerated for mining and quarrying (up 8.6% from 7.1%), utilities (up 9.3% from 5.6%) and trade, hotels, transport and communication (up 9.9% from 9.2%) but slowed for manufacturing (up 9.3% from 11.5%), construction (up 4.5% from 4.6%), financing, insurance and real estate (up 9.1% from 10.5%).

Graph 3.16: Indian GDP growth by demand side

Sources: Central Statistics Office and Haver Analytics.

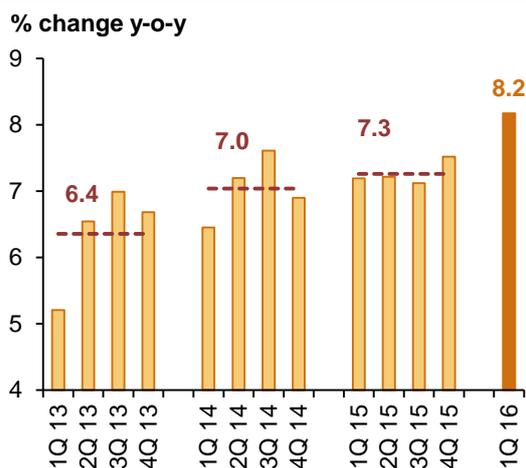
India's **industrial output** provided positive indications in February following three months of contraction, up by 2.0% y-o-y. The improvement in India's February industrial growth was largely limited to solid growth in electricity output that accelerated to 9.6% y-o-y, the highest level since September 2015. However, the remaining industrial sub-sectors indicated much weaker growth, with manufacturing output up by a mere 0.7% y-o-y. Meanwhile, on a sequential month-over-month basis, the country's headline **industrial production** index declined by 0.9% from January.

Graph 3.17: Indian GDP growth by supply side

Sources: Central Statistics Office and Haver Analytics.

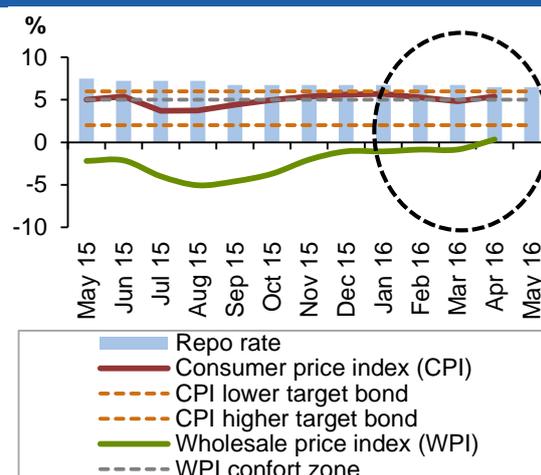
April **CPI** inflation was at 5.3% y-o-y. The **WPI** also increased in April. The Indian Meteorological Department (IMD) released its first forecast of the upcoming monsoon season and it seems the prospect of normal/above-normal monsoons after successive droughts will be a welcome relief to policymakers.

Graph 3.18: Indian quarterly GDP growth, SAAR



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

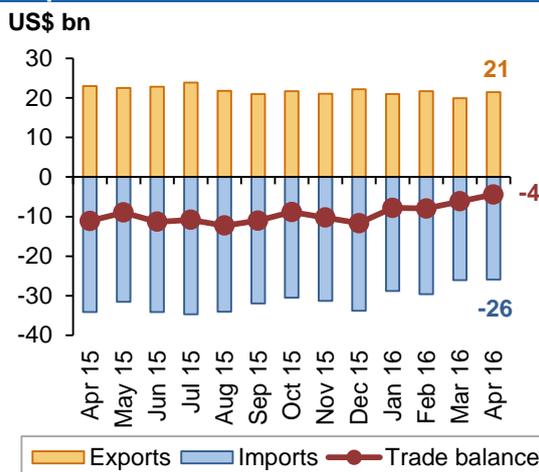
Graph 3.19: Indian inflation vs. Repo rate



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

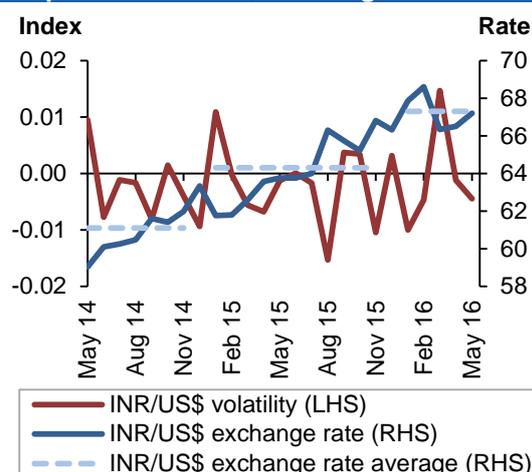
India's monthly **trade deficit** narrowed to a five-year low of \$4.7 billion in March from \$6.7 billion in February, helped by seasonality. Exports and imports excluding oil and gold both stabilized after losing momentum in 4Q15. India's merchandise imports stood at just \$25.8 billion in April. Rising international gold prices also deterred purchases of the metal, reducing demand. The crash in global commodity prices, as well as falling global demand and fierce competition from weaker currency exporters, seem to have caused Indian exports to precipitously decline in 2015/16. This has resulted in the country's longest spell of exports contraction to date, exceeding even that of the financial crisis of 2008–09. Even a slight improvement in March would be unlikely to revive exports in the coming months.

Graph 3.20: Indian trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3.21: INR/US\$ exchange rate

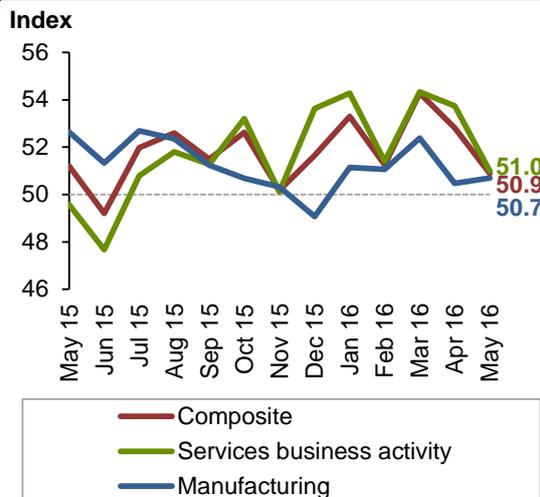


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Indian **factory output** growth remained almost flat for the second consecutive month in May, suggesting business conditions in manufacturing are barely improving. The Nikkei/Markit **Manufacturing PMI** stood at 50.7 in May, up from April's 50.5, which was one of the lowest readings since the end of 2013.

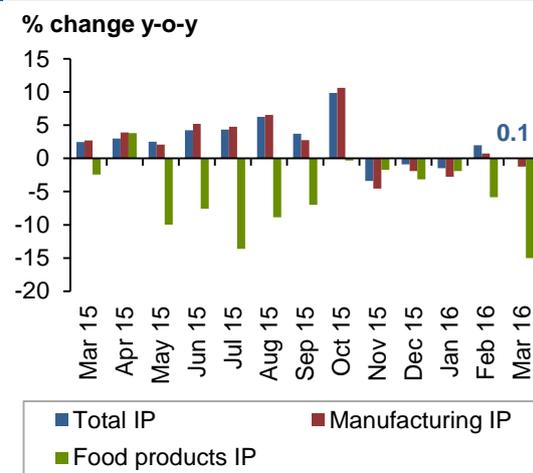
The new orders sub-index climbed to 51.3 points from 50.2 in April. Nevertheless, new **export orders** slipped into contraction for the first time since September 2013, with the sub-index now below 50, the critical mark separating expansion from contraction.

Graph 3.22: Indian PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.23: Indian industrial production breakdown



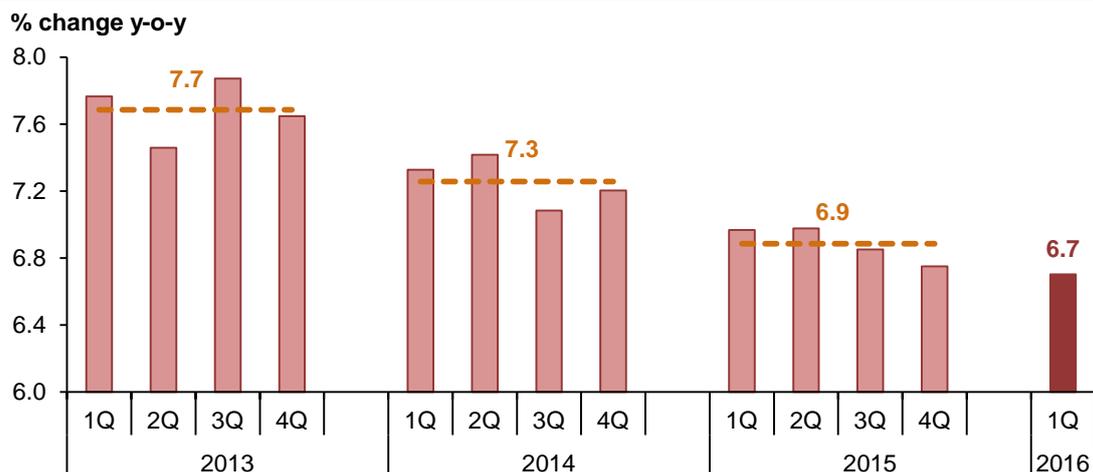
Sources: Central Statistical Organisation of India and Haver Analytics.

The **GDP growth** expectation for 2016 remained unchanged this month at 7.5%.

China

Economic momentum moderated in April, following the earlier pick-up triggered by government stimulus and a turnaround in real estate construction. The growth industrial value added fell back again to 6.0% y-o-y from 6.8% in March, mostly due to slower growth in mining and infrastructure. Consumption growth also slowed, with real retail sales growth falling from 9.7% y-o-y in 1Q16 to 9.4% in April, likely reflecting weaker growth of wages and household incomes. Infrastructure spending will remain a key policy lever this year, with much of it financed in the traditional quasi-fiscal way. But spending on health, education and social security should also continue to expand robustly. In addition, a cut to employers' social security charges and the replacement of the business tax by a VAT in the services sector will help lower the tax burden. It seems consumer spending is becoming an increasingly important driver of growth as households get richer and as demand for services remain strong. Indeed, the services sector has outpaced industry since 2012.

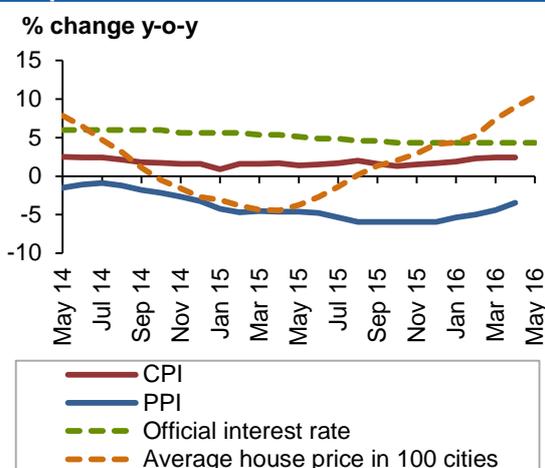
Graph 3.24: Chinese quarterly GDP growth rate, SAAR



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

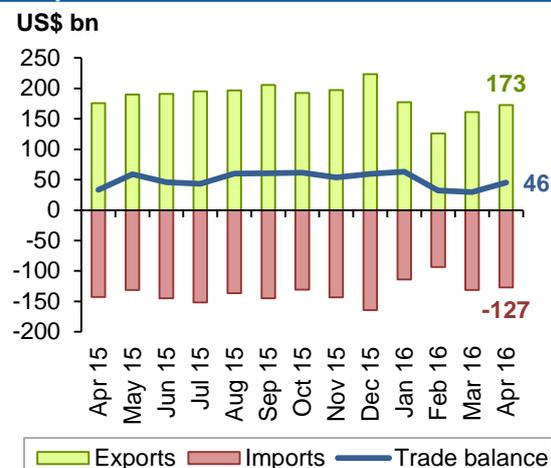
China's **CPI inflation** increased slightly to 2.42% y-o-y in April from 2.41% in March. Excluding food and energy prices, the core CPI rose 1.5% y-o-y in April. Deflation of the producer price index (PPI) moderated to 3.4% y-o-y in April from 4.3% y-o-y in March. Overall, PPI deflation has run uninterrupted for 50 months.

Graph 3.25: Chinese CPI vs. PPI



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

Graph 3.26: Chinese trade balance



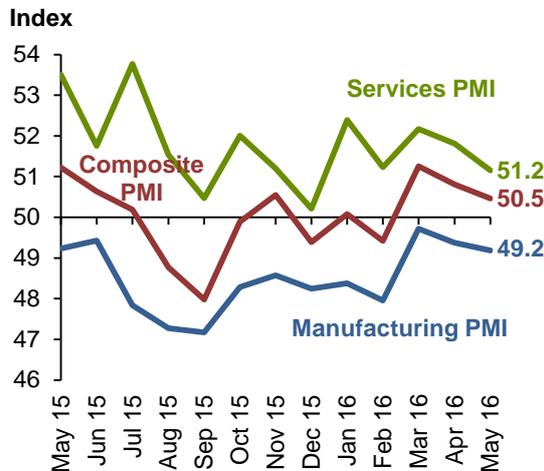
Sources: China Customs and Haver Analytics.

China's **trade surplus** will play a marginally positive role in GDP growth in the first quarter. But this will also dissipate as 2016 progresses. China's April trade report showed some improvements, with April exports (in US dollar terms) dropping 1.8% y-o-y after increasing 11.5% y-o-y in March. Imports, in US dollar terms, dropped 10.9% y-o-y in April, after falling 7.6% in March. As a result, the trade surplus increased to \$45.5 billion from March's \$29.8 billion. China's weak trade figures are consistent with weak global trade in recent years.

The health of China's manufacturing sector continued to decline in May, with output and new orders both falling slightly. At the same time, job shedding persisted across the sector, with the rate of reduction remaining close to February's post-global financial crisis record. Weak demand conditions underpinned further falls in both purchasing activity and inventory holdings in May. Inflationary pressures appeared to cool slightly, however, with input prices and output charges both rising at weaker rates.

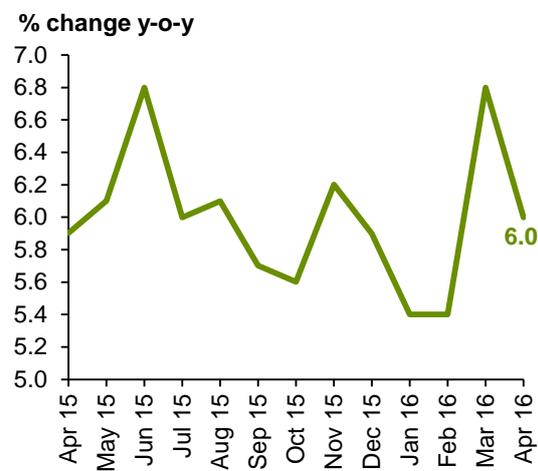
China's **manufacturing PMI** for May came in at 49.2, down 0.2 from April's reading, marking the second consecutive monthly decline. Readings for the output and new order categories fell again, but employment improved slightly. Overall, China's economy has not been able to sustain the recovery it had in 1Q16 and is in the process of bottoming out.

Graph 3.27: Chinese PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.28: Chinese industrial production



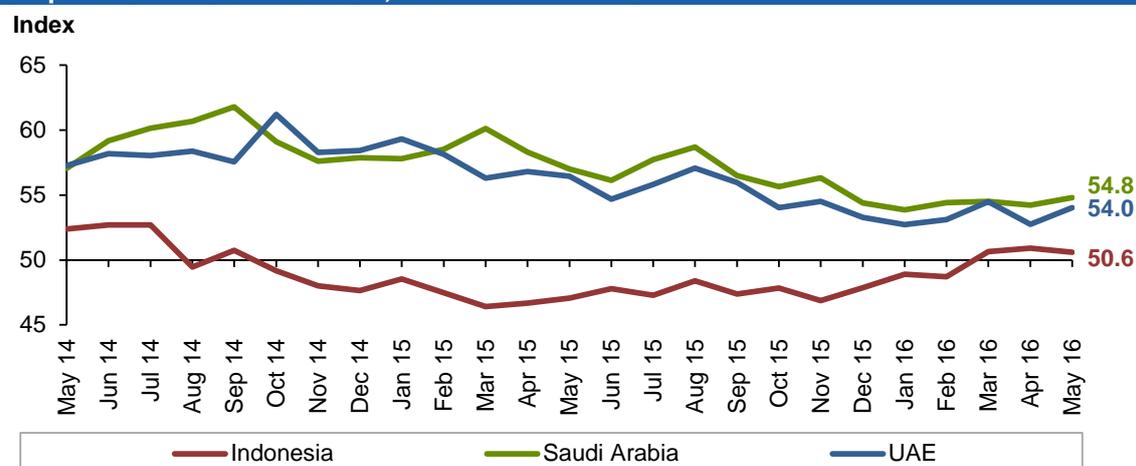
Sources: China National Bureau of Statistics and Haver Analytics.

China's **GDP growth** expectation in 2016 has been kept unchanged this month at 6.5%.

OPEC Member Countries

In **Saudi Arabia**, the non-oil private sector grew by the highest rate in six months in May, with the PMI posting 54.8, up from 54.2 in April. The survey showed the fastest rise in total new orders so far this year. Purchasing activity and output both notably rose. This improvement in the private sector is perceived as an encouraging signal, showing the resilience of the economy and strong domestic demand during times of fiscal challenges.

Graph 3.29: PMIs of Indonesia, Saudi Arabia and UAE



Sources: HSBC, Markit, Nikkei, SAAB, Stanbic IBTC Bank and Haver Analytics.

The manufacturing sector in **Indonesia** continued posting improvements in business conditions in May though slightly less than April as shown by its respective PMI. The index posted 50.6 last month, from 50.9 in April, showing an increase in incoming new orders, while production stagnated in May following two consecutive months of expansion.

In the **UAE**, the non-oil private sector regained momentum last month due to the large increase in output, while growth in new work led to a notable rise in activity, increasing at its fastest pace in eight months. The PMI registered 54.0 in May, up from 52.8 in April.

Other Asia

In **Malaysia**, GDP grew 4.2% y-o-y in 1Q16, highlighting the lowest 1Q growth since 2009, while private and government final consumption expenditure increased 5.3% and 3.8% y-o-y, respectively. Gross fixed capital formation barely increased by 0.1%. In addition, net exports of goods and services declined 12.4% y-o-y in 1Q. The country's manufacturing sector reported a fall in production by the sharpest rate in more than three-and-a-half years on a large drop in new work orders and intensifying inflationary pressures.

The GDP of the **Philippines** grew 6.9% y-o-y in 1Q16, the highest 1Q growth in two years. Private consumption expenditure expanded robustly by 7.0% y-o-y, while government consumption grew by 9.9%, gross fixed capital formation by 25.6%, exports by 6.6% and imports by 16.2%.

Africa

For the first time in 12 months, **South Africa's** private sector showed an improvement in its business conditions according to the PMI reading of May. The index registered 50.2 last month, up from 47.9 in April, on stronger demand from export markets which supported the increase in total new orders. The consumer price inflation stood at 6.5% y-o-y in April, down slightly from 6.6% a month earlier.

In **Egypt**, inflation posted 10.9% y-o-y in April, the highest reading in three months. Business conditions of the country's non-oil private sector worsened last month with the PMI at 47.6, up from 46.9 in April. This suggests that while the downturn continues, its pace has been slowing. The survey revealed lesser cuts in production, new work and employment, while the weakness of the currency put high-cost pressure on the private sector.

Latin America

In **Argentina**, the currency started to slightly appreciate in the previous two months after losing more than 46% of its value against the US dollar during December 2015-February 2016 on the back of a currency-floating decision. The peso appreciated 3.7% and 1.9% m-o-m in April and May, respectively.

In **Chile**, GDP expanded 2.0% y-o-y in 1Q16, the lowest 1Q growth since 2009. Private and government consumption increased by 1.6% and 5.4% y-o-y, respectively, while gross fixed capital formation grew 1.2%, exports by 2.5% and imports declined 3.0%.

Transition region

The economy of **Poland** grew 2.5% y-o-y in 1Q16, the lowest 1Q rate of growth in two years. Public and household consumption increased 3.7% and 3.0% y-o-y, respectively. Gross fixed capital formation declined 2.2%, exports of goods and services rose 6.8%, and imports increased 9.3% y-o-y.

Gross fixed capital formation also declined in the **Czech Republic** by 0.1% where GDP expanded 2.6% y-o-y in 1Q16. The manufacturing sector posted a fall in its PMI to the lowest level in about three years, registering 53.3 in May on a slower increase in production since July 2013, while input prices increased.

Oil prices, US dollar and inflation

The US dollar showed mixed trends in May against all major currencies. It gained slightly against the euro by 0.2% in May, after having declined the previous three months. It declined by 0.8% against the yen and has declined for six consecutive months – down by 11% since November 2015. It also declined by 1.5% compared to the pound sterling. Its movements have been generally related to market assessments on the outcome of the upcoming referendum in the UK. And against the Swiss franc, the US dollar advanced by 1.3%.

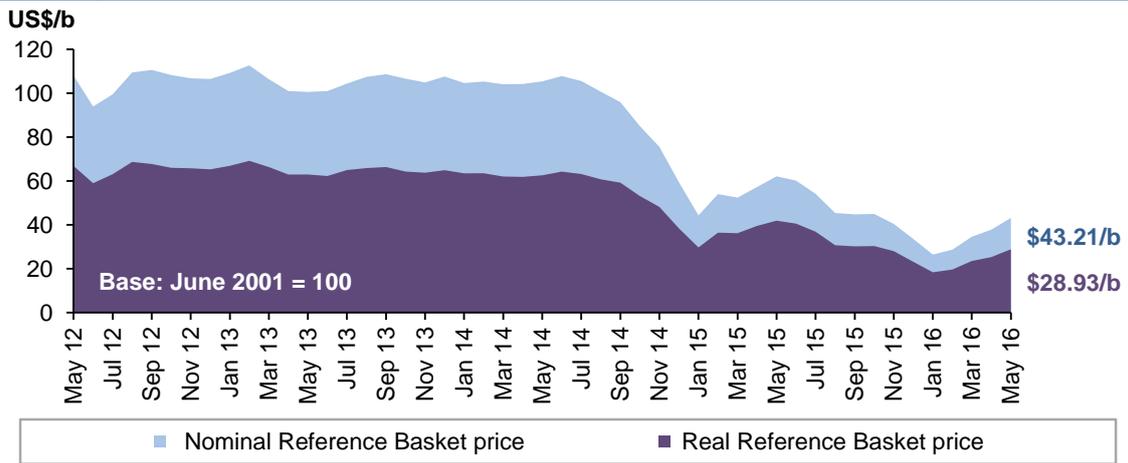
Compared to the Chinese yuan, the US dollar advanced by 0.5% m-o-m on average in May, after three consecutive monthly declines. Compared to the Brazilian real, it fell by 0.7% m-o-m on average in May, the fourth consecutive month of decline, helped by higher commodity prices and internal political developments. Also, against the Russian ruble, the US dollar fell by 1.4% m-o-m due to rising crude oil prices. And against the Indian rupee, the US dollar advanced by 0.7% m-o-m.

Minutes from the April meeting of the Fed suggest diminishing concerns regarding “the risks to the economic outlook posed by global economic and financial developments” since the previous meeting. This, in conjunction with speeches by some Fed officials during the month, increased the market’s assessment of the potential of interest rate hikes at upcoming meetings, with the effect of strengthening the US dollar during the month. However, the recent employment report of May in the US showing non-farm payrolls well below market expectations, as well as the uncertainty regarding the upcoming Brexit referendum, are likely to prevent further interest rate increases at the upcoming Fed meeting until further information confirming the recent pick-up in economic activity in the US is received.

In nominal terms, the price of the OPEC Reference Basket (ORB) rose by a monthly average of \$5.35, or 14.1%, from \$37.86/b in April to \$43.21/b in May. In real terms, after accounting for inflation and currency fluctuations, the ORB rose by 14.1%, or \$3.57, to \$29.02/b from \$25.36/b (base June 2001=100). Over the same period, the US dollar fell slightly by 0.2% against the import-weighted modified Geneva I + US dollar basket*, while inflation declined by 0.2%.

* 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.

Graph 3.30: 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

In 2015, world oil demand was left broadly unchanged from last month's *MOMR*. Total world oil demand growth stood at 1.54 mb/d and total oil consumption at 92.98 mb/d. In 2016, world oil demand is anticipated to grow by 1.20 mb/d from 2015, which is largely unchanged from last month's projections. Total oil consumption in 2016 is anticipated to be around 94.18 mb/d.

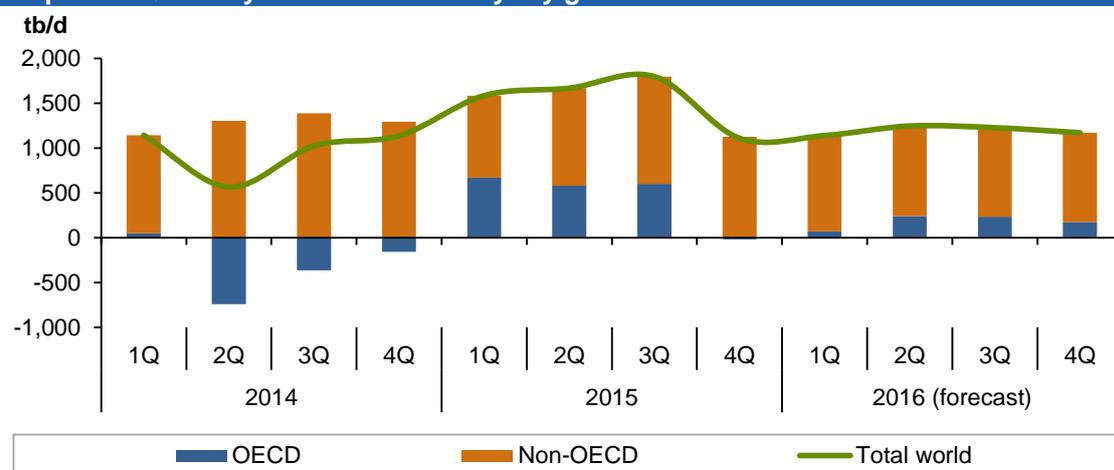
Table 4.1: World oil demand in 2015, mb/d

| | 2014 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 2015 | Change 2015/14 | |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|
| | | | | | | | Growth | % |
| Americas | 24.14 | 24.24 | 24.12 | 24.77 | 24.37 | 24.37 | 0.24 | 0.99 |
| of which US | 19.41 | 19.62 | 19.54 | 20.02 | 19.68 | 19.71 | 0.30 | 1.56 |
| Europe | 13.45 | 13.46 | 13.57 | 14.14 | 13.68 | 13.71 | 0.26 | 1.95 |
| Asia Pacific | 8.13 | 8.75 | 7.72 | 7.63 | 8.28 | 8.09 | -0.04 | -0.49 |
| Total OECD | 45.72 | 46.45 | 45.40 | 46.54 | 46.34 | 46.18 | 0.46 | 1.01 |
| Other Asia | 11.58 | 11.63 | 12.06 | 12.03 | 12.30 | 12.01 | 0.42 | 3.64 |
| of which India | 3.79 | 4.01 | 3.98 | 3.94 | 4.27 | 4.05 | 0.26 | 6.99 |
| Latin America | 6.61 | 6.33 | 6.58 | 6.85 | 6.47 | 6.56 | -0.05 | -0.78 |
| Middle East | 7.86 | 7.95 | 7.98 | 8.55 | 7.97 | 8.11 | 0.26 | 3.28 |
| Africa | 3.90 | 4.01 | 3.98 | 3.92 | 4.06 | 3.99 | 0.09 | 2.26 |
| Total DCs | 29.96 | 29.91 | 30.61 | 31.35 | 30.80 | 30.67 | 0.72 | 2.39 |
| FSU | 4.64 | 4.48 | 4.32 | 4.69 | 4.99 | 4.62 | -0.02 | -0.43 |
| Other Europe | 0.65 | 0.66 | 0.62 | 0.66 | 0.75 | 0.67 | 0.02 | 2.88 |
| China | 10.46 | 10.44 | 11.06 | 10.69 | 11.13 | 10.83 | 0.37 | 3.51 |
| Total "Other regions" | 15.76 | 15.57 | 16.01 | 16.04 | 16.86 | 16.13 | 0.37 | 2.32 |
| Total world | 91.44 | 91.94 | 92.02 | 93.93 | 94.00 | 92.98 | 1.54 | 1.69 |
| Previous estimate | 91.44 | 91.94 | 92.01 | 93.93 | 94.00 | 92.98 | 1.54 | 1.69 |
| Revision | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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

Source: OPEC Secretariat.

Graph 4.1: Quarterly world oil demand y-o-y growth



Source: OPEC Secretariat.

OECD Americas

US oil demand, mainly supported by rising gasoline requirements, came up strong in March 2016, recording the highest monthly y-o-y growth since August 2015, at 0.4 mb/d or 2.0%. To a large extent, this growth originates in the road transportation sector and particularly gasoline. This was also been supported by solid growth in new car registrations, notably pick-up truck and sport utility vehicles (SUVs). Strong gains have been observed in propane/propylene and residual fuel oil demand, while distillate fuel requirements declined y-o-y as a result of warmer weather, both compared to the same month a year earlier and the historical normal.

Table 4.2: US oil demand, tb/d

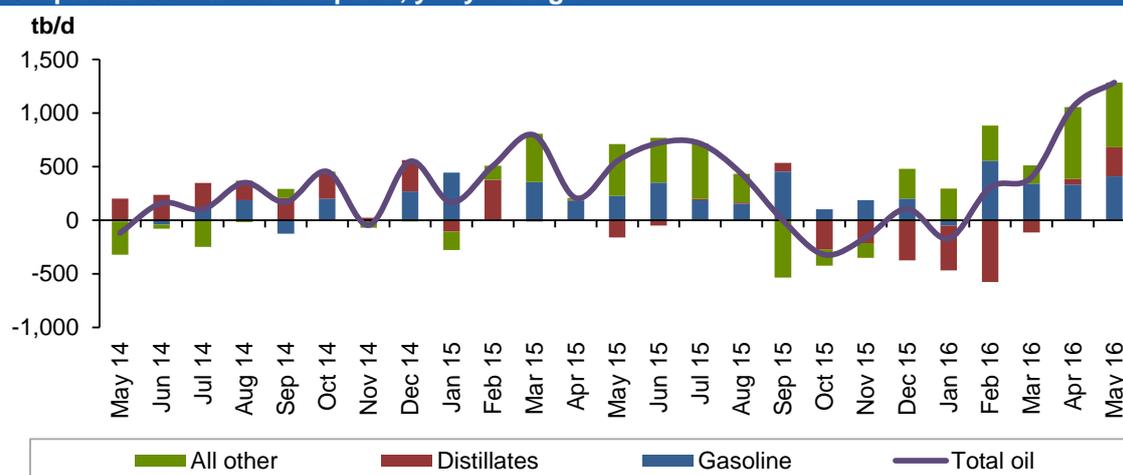
| | Average January - May | | Change 2016/15 | |
|------------------------|-----------------------|---------------|----------------|------------|
| | <u>2016</u> | <u>2015</u> | <u>tb/d</u> | <u>%</u> |
| Motor gasoline | 9,343 | 9,027 | 316 | 3.5 |
| Distillate fuel oil | 3,992 | 4,143 | -151 | -3.7 |
| Kerosene-type jet fuel | 1,566 | 1,478 | 88 | 6.0 |
| Residual fuel oil | 320 | 225 | 95 | 42.1 |
| Propane/Propylene | 1,234 | 1,217 | 17 | 1.4 |
| Other products | 3,435 | 3,242 | 193 | 6.0 |
| US 50 | 19,890 | 19,333 | 558 | 2.9 |
| US territories | 399 | 376 | 23 | 6.1 |
| Total | 20,290 | 19,709 | 581 | 2.9 |

Source: US Energy Information Administration.

The 1Q16 has shown solid growth in US oil demand, with an overall growth of 0.2 mb/d, as compared to the same quarter of last year and with gasoline accounting for the lion's share of that growth. Preliminary April and May 2016 volumes, which are based on weekly data, imply a continuation of this positive trend, with transportation fuels accounting for the bulk of these increases.

The 2016 US oil demand growth depends on several factors, such as the economy, the degree of substitution with other commodities and the oil price environment. However, potential remains skewed to the upside, compared with last month's publication, as a result of recent developments in the demand for transportation fuels – such as the dominance of pick-ups and SUVs in new car sales.

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



Source: US Energy Information Administration.

In **Mexico**, April 2016 was a month of growth for oil demand and was dominated by substantial decreases in the demand for residual fuel oil, which was partly offset by slight increases in LPG demand. However, this was partly offset by y-o-y declines in gasoline and residual fuel oil requirements.

The latest March 2016 **Canadian** data showed overall declines in oil demand. Losses were seen for LPG and gas diesel oil requirements, and have been partly offset by strong gains in the demand for gasoline and naphtha. The 2016 projections for Canadian oil demand remain unchanged from those reported last month and foresee a slight decline as compared to 2015.

In 2015, **OECD Americas** oil demand grew by 0.24 mb/d as compared to 2014. For 2016, OECD Americas oil demand is projected to grow once more by 0.26 mb/d as compared to the previous year.

OECD Europe

European oil demand continued to grow in the first four months of 2016, particularly during 1Q16. The main reasons behind these figures are the improving economy and colder weather, in addition to lower fuel oil prices in the road transportation sector, despite rigorous taxation measures that minimized the effect of the reduction in international oil prices.

Preliminary total oil demand data for April 2016 from the 'Big 4' indicate, however, a reverse in the current trend showing declines of around 0.2 mb/d y-o-y. Slight gains in jet fuel requirements have been largely offset by declines in all other main petroleum categories requirements compared with the same month last year, with gasoline and gas oil requirements falling by approximately 4% and 2%, respectively.

The European oil demand outlook for 2016 remains slightly positive, mainly as a result of improving industrial production and a continuously growing auto market, which showed gains in April 2016 of around 9% y-o-y. Downside risks also continue to exist and are of a financial nature: unsolved debt issues in a number of countries in the region, in combination with high oil-use related taxes, especially in the transportation sector. The general expectations for the region's oil demand during 2016 remain cautiously optimistic and are largely related to developments in the economy.

In 2015, European oil demand grew by 0.26 mb/d, while oil demand in 2016 is projected to only slightly increase by 0.01 mb/d.

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

| | Apr 16 | Apr 15 | Change from Apr 15 | Change from Apr 15, % |
|----------------|---------------|---------------|---------------------------|------------------------------|
| LPG | 430 | 442 | -11 | -2.6 |
| Naphtha | 715 | 717 | -2 | -0.3 |
| Gasoline | 1,095 | 1,137 | -42 | -3.7 |
| Jet/Kerosene | 761 | 757 | 4 | 0.5 |
| Gas/Diesel oil | 3,158 | 3,236 | -78 | -2.4 |
| Fuel oil | 252 | 257 | -5 | -2.0 |
| Other products | 555 | 618 | -64 | -10.3 |
| Total | 6,966 | 7,164 | -198 | -2.8 |

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

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

OECD Asia Pacific

April 2016 **Japanese** oil demand decreased sharply by 5.6% y-o-y, continuing the declining trend seen each month since April 2015. There have been falling requirements in all main product categories, notably in fuels used for direct crude burning and electricity generation, the result of natural gas and coal substitution in addition to warmer weather conditions. Japanese oil demand growth has been deeply in the negative during the first four months of the year with declines largely dominated by electricity generating fuels and naphtha.

The outlook risks for 2016 are skewed to the downside as a result of rather gloomy economic forecasts and the relatively high likelihood of a the re-start of operations in some of the country's nuclear plants during 2H16.

Table 4.4: Japanese domestic sales, tb/d

| | <u>Apr 16</u> | <u>Change from Apr 15</u> | <u>Change from Apr 15, %</u> |
|----------------------|---------------|---------------------------|------------------------------|
| LPG | 469 | -15 | -3.0 |
| Gasoline | 882 | -15 | -1.7 |
| Naphtha | 818 | -7 | -0.8 |
| Jet fuel | 88 | -5 | -5.2 |
| Kerosene | 206 | -9 | -4.3 |
| Gasoil | 558 | -17 | -3.0 |
| Fuel oil | 436 | -67 | -13.4 |
| Other products | 56 | 3 | 5.8 |
| Direct crude burning | 66 | -80 | -54.6 |
| Total | 3,580 | -212 | -5.6 |

Source: Ministry of Economy Trade and Industry of Japan.

In **South Korea**, March 2016 oil demand came up bullish for the second month in a row. Flourishing petrochemical activities, which have called for increasing LPG requirements, have been accompanied by bullish demand for petroleum products in the transportation and industrial sectors – notably diesel, jet fuel and residual fuel. The risks for the 2016 outlook for South Korean oil demand remain positively skewed to the upside.

For 2015, **OECD Asia Pacific** oil demand shrank by 0.04 mb/d. The downward trend is expected to continue also in 2016, by 0.09 mb/d.

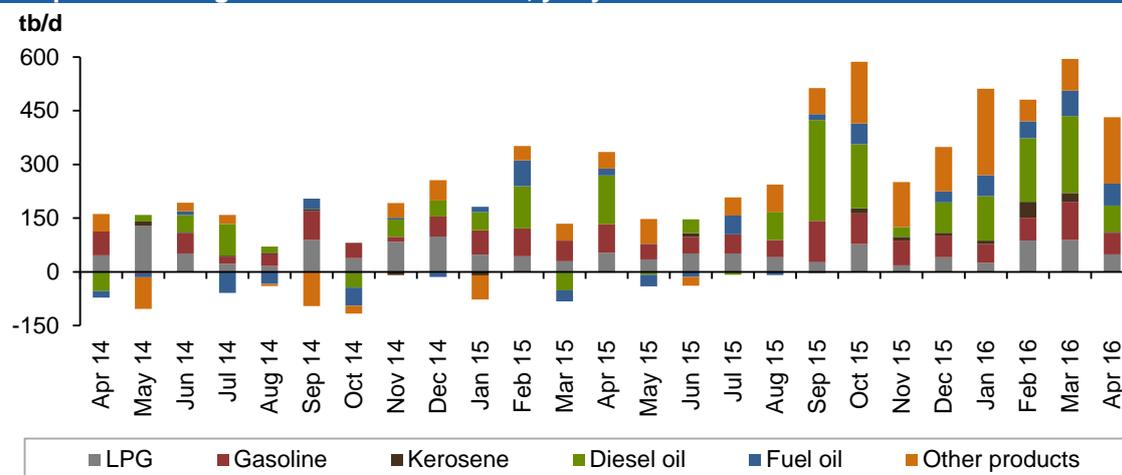
Other Asia

In April, oil consumption in **India** remained growing at a high pace with demand rising by over 0.4 mb/d y-o-y, or an increase of over 10% y-o-y. Total consumption remained hovering around a historical high of 4.6 mb/d. All product categories registered solid growth with fuel oil and gasoline rising the most. Fuel oil added more than 29% and gasoline around 12% y-o-y.

Fuel oil consumption received support from drought conditions in the country limiting hydropower output and increasing product consumption for the purpose of generating electricity. There was also solid demand in sectors such as fertilizers, steel and general trade sectors. Fuel oil was 62 tb/d higher than in the same month a year earlier. April data for gasoline remained positive, too, with total consumption close to 0.57 mb/d, rising by 60 tb/d y-o-y, largely supported by passenger car sales data.

According to the Petroleum, Planning and Analysis Cell of the Ministry of Petroleum, general improvements in the Indian economy have played a positive role, with increasing income levels and subsequent increases in vehicle owners. Furthermore, declining prices have also contributed to the expansion in household expenditures on energy, which have benefited the additional use of cars and two-wheelers in particular.

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



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

For LPG, demand picked up in April as compared to the same period a year earlier, registering around 50 tb/d, or more than an 8% rise y-o-y, as LPG demand in households continues to provide support to consumption.

Weather-related developments have boosted diesel oil consumption in India, as well as in some other Southeast Asian countries such as Pakistan and Vietnam, during the month of April. The El Niño phenomenon crippled water availability reducing hydropower generation output and, in turn, pushing consumption for diesel and fuel oil higher. Demand for diesel in India received support from the rise in industrial output, which is in line with general improvements in the macroeconomic indicators of the country. Diesel oil demand grew by 73 tb/d, or around 5% y-o-y.

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

| | <u>Apr 16</u> | <u>Apr 15</u> | <u>Change</u> | <u>Change, %</u> |
|-------------------------|---------------|---------------|---------------|------------------|
| LPG | 643 | 595 | 49 | 8.2 |
| Gasoline | 568 | 508 | 60 | 11.9 |
| Kerosene | 305 | 302 | 3 | 0.9 |
| Diesel oil | 1,687 | 1,614 | 73 | 4.5 |
| Fuel oil | 272 | 211 | 62 | 29.2 |
| Other products | 1,110 | 924 | 185 | 20.1 |
| Total oil demand | 4,586 | 4,154 | 432 | 10.4 |

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

In **Indonesia**, the latest available March 2016 data indicates slightly lower growth from the previous month, with a rise of around 20 tb/d or around 1% y-o-y. All product categories were in positive territory, with the exception of fuel oil. Jet/kerosene, LPG and gasoline led the growth, each increasing by around 10%, 6% and 5% y-o-y, respectively.

For the remainder of 2016, the continuing positive oil demand momentum in India, along with a number of other countries in the region, indicates an optimistic projection for regional consumption going forward. Demand is anticipated to be supported by the positive push in Indian consumption levels as the overall economic situation in the country expects to remain positive.

Other Asia's oil demand increased by 0.42 mb/d in 2015. For 2016, oil demand is anticipated to increase by similar levels rising by around 0.43 mb/d.

Latin America

In **Brazil**, oil demand for the month of April was declining again, with product demand dipping by more than 0.12 mb/d, or around 5% y-o-y, with total consumption at 2.35 mb/d. All product categories have lost momentum in the continuation of a negative trend which has been seen since the beginning of 2015. Slower industrial output was just one factor contributing to the overall sluggish activity in the Brazilian economy.

In percentage terms, ethanol declined the most, losing around 23% from the same month a year earlier, as the product has lost its competitive edge over gasoline, which has permitted consumers to switch to gasoline. Gasoline demand, on the other hand, remained elevated, recording growth of around 25 tb/d, or around 3%, y-o-y. Fuel oil consumption declined as well, with the product decreasing by around 20 tb/d y-o-y, which again reflects slower requirements from the industrial and power generation sectors. Diesel also eased when compared to the same month last year, declining by around 35 tb/d, which is in line with slower economic momentum. Jet/kerosene decreased by around 10% y-o-y. All in all, the negative trend in oil demand performance has persisted for another reporting period, with similar trends anticipated in the coming months, albeit at lower magnitudes and mainly supported by transportation fuel requirements for the Olympic games.

Table 4.6: Brazilian inland deliveries, tb/d

| | Apr 16 | Apr 15 | Change | Change, % |
|--------------|---------------|---------------|---------------|------------------|
| LPG | 222 | 229 | -7 | -3.1 |
| Gasoline | 749 | 724 | 25 | 3.4 |
| Jet/Kerosene | 111 | 124 | -13 | -10.3 |
| Diesel | 959 | 994 | -35 | -3.5 |
| Fuel oil | 63 | 82 | -19 | -23.0 |
| Alcohol | 243 | 314 | -71 | -22.7 |
| Total | 2,347 | 2,467 | -120 | -4.9 |

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

In **Argentina**, oil demand declined with mixed performance from product categories. Industrial fuel – diesel oil – was in a declining trend, dropping by around 6% y-o-y, a reflection of slower industrial output during the month. Transportation fuels, on the other hand, led by gasoline and jet kerosene, inched higher by more than 4% y-o-y each.

The risks for 2016 oil demand in the region are currently pointing south as slower economic momentum in Brazil and Argentina is anticipated to slow oil demand performance for the rest of 2016. However, transportation fuels should receive some support toward the end of 2Q16 and 3Q16 with the Olympic games planned to take place during the month of August.

In 2015, Latin America shed around 50 tb/d of its oil demand from the levels seen a year earlier. For 2016, oil demand projections are unchanged from last month's expectations as oil demand is expected to decline slightly by around 10 tb/d.

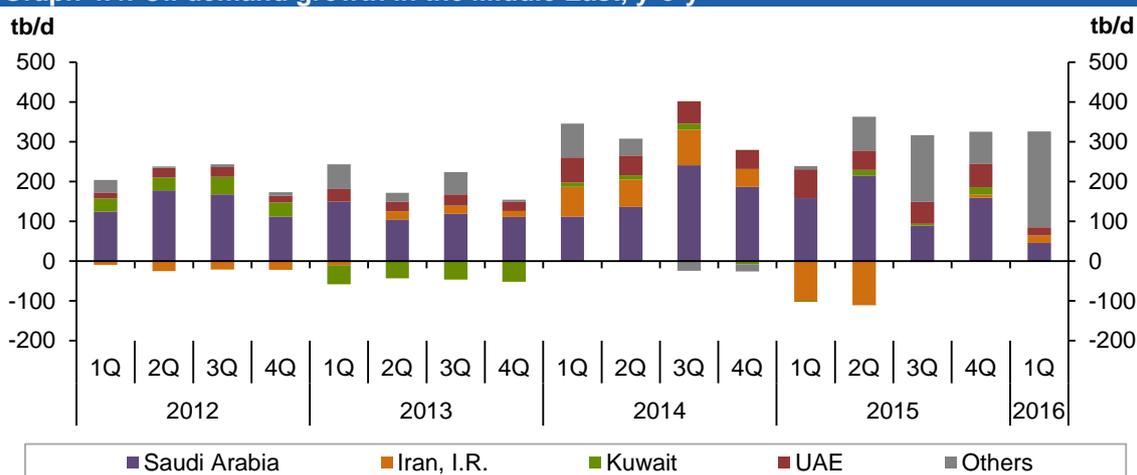
Middle East

In **Saudi Arabia**, April 2016 oil demand showed a decline, dropping by 63 tb/d, or 3% y-o-y, with total oil demand reaching around 2.29 mb/d. However, on a cumulative basis from January-April, oil demand remained in the positive territory. Nevertheless, this was far lower than the initial projection.

Most of the products had negative growth, with the exception of direct crude burning and jet/kerosene. 'Other products', LPG and fuel oil were the products with the highest decline levels of around 43%, 20% and 16% y-o-y, respectively. The ease in road transportation fuels was primarily a result of a higher base of comparison. In addition, the decline in fuel oil consumption can be largely attributed to the less-than-anticipated demand for power generation requirements.

On the other hand, oil demand in **Iraq** increased during the month of April, reversing the trend witnessed in the previous two months. Total demand increased by 25 tb/d, or 5% y-o-y. Total oil demand, in absolute terms, is now at 0.55 mb/d, yet still below the high of 0.75 mb/d in 3Q15. Fuel oil growth, used in the industrial sector and for power generation, was sharply higher during the month, with a y-o-y increase of around 44 tb/d, or 34%, followed by gasoline and LPG which increased by around 3% and 2% y-o-y, respectively.

Graph 4.4: Oil demand growth in the Middle East, y-o-y



Sources: Direct communication, JODI and OPEC Secretariat.

For 2015, Middle East oil demand grew by 0.26 mb/d, while oil demand in 2016 is projected to increase by 0.15 mb/d.

China

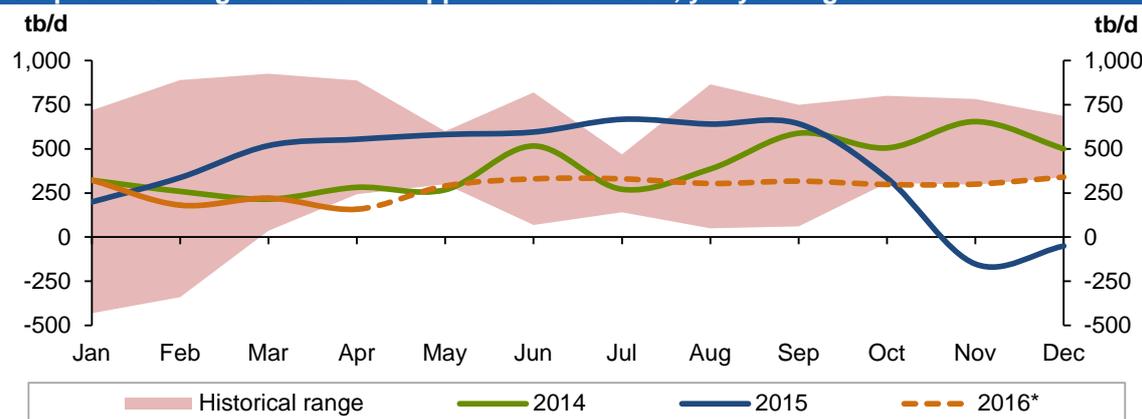
Chinese data for the month of April indicated somewhat solid demand growth supported by a growing transportation sector and new expansions in the petrochemical sector.

Based on initial data for the month of April, gasoline demand reached 2.9 mb/d, which was 0.19 mb/d, or 25%, higher y-o-y. This increase was consistent with sales of passenger cars, which continue to grow at healthy rates. According to the China Association of Automobile Manufacturers, sales of passenger cars reached around 1.8 million units, up by around 7% y-o-y, during April. The sales of passenger cars with an engine capacity of 1.6 litres and below, reached 1.3 million units, up by around 12% y-o-y, which represents around 72% of total passenger car sales. On a cumulative basis, with data up to April, sales of passenger cars were at around 7.5 million units, up by around 7% y-o-y. SUVs continued their high growth as sales shot up by more than 46% as compared to the same period last year. Multi-purpose vehicles also grew solidly, increasing by more than 13% y-o-y.

Jet/kerosene consumption surged to a record figure during the month of April, reaching a total consumption of 0.74 mb/d and an increase of around 0.15 mb/d y-o-y. This was very much supported by solid aviation demand and higher refinery output.

In the petrochemical sector, LPG consumption rose by around 6% y-o-y, implying healthy demand in the sector. On the other hand, diesel oil demand declined, shedding as much as 0.28 mb/d (despite improving PMI data) from the levels experienced in 2H15. Consumption of fuel oil dropped for another month as data seemed to suggest a decrease in growth of around 50 tb/d y-o-y.

Graph 4.5: Changes in Chinese apparent oil demand, y-o-y changes



Note: 2016 = forecast.

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

Looking ahead 2016, oil consumption in China shows a balanced outlook. Downside risks are linked to slower economic activities in addition to government policies that encourage a reduction in transportation fuels. On the other hand, the introduction of new propane dehydrogenation units in the petrochemical sector and growing car sales data point to the upside potential for China oil demand growth.

For 2015, Chinese oil demand grew by 0.37 mb/d, while oil demand in 2016 is projected to increase by 0.34 mb/d.

Table 4.7: World oil demand in 2016, mb/d

| | <u>2015</u> | <u>1Q16</u> | <u>2Q16</u> | <u>3Q16</u> | <u>4Q16</u> | <u>2016</u> | <i>Change 2016/15</i> | |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|-------------|
| | | | | | | | <u>Growth</u> | <u>%</u> |
| Americas | 24.37 | 24.39 | 24.44 | 25.09 | 24.64 | 24.64 | 0.26 | 1.09 |
| <i>of which US</i> | 19.71 | 19.82 | 19.81 | 20.29 | 19.91 | 19.96 | 0.25 | 1.25 |
| Europe | 13.71 | 13.50 | 13.58 | 14.14 | 13.67 | 13.72 | 0.01 | 0.08 |
| Asia Pacific | 8.09 | 8.64 | 7.62 | 7.54 | 8.20 | 8.00 | -0.09 | -1.16 |
| Total OECD | 46.18 | 46.52 | 45.64 | 46.77 | 46.51 | 46.36 | 0.18 | 0.39 |
| Other Asia | 12.01 | 12.22 | 12.43 | 12.40 | 12.68 | 12.43 | 0.43 | 3.56 |
| <i>of which India</i> | 4.05 | 4.41 | 4.15 | 4.11 | 4.44 | 4.28 | 0.23 | 5.67 |
| Latin America | 6.56 | 6.25 | 6.61 | 6.86 | 6.47 | 6.55 | -0.01 | -0.16 |
| Middle East | 8.11 | 8.07 | 8.14 | 8.72 | 8.13 | 8.26 | 0.15 | 1.85 |
| Africa | 3.99 | 4.12 | 4.09 | 4.03 | 4.17 | 4.10 | 0.11 | 2.78 |
| Total DCs | 30.67 | 30.67 | 31.27 | 32.01 | 31.44 | 31.35 | 0.68 | 2.21 |
| 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 | 92.98 | 93.08 | 93.26 | 95.16 | 95.17 | 94.18 | 1.20 | 1.29 |
| Previous estimate | 92.98 | 93.08 | 93.26 | 95.16 | 95.17 | 94.18 | 1.20 | 1.29 |
| Revision | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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

Source: OPEC Secretariat.

World Oil Supply

Non-OPEC oil supply for 2016 remains unchanged from the previous report, despite various changes in different regions; it is forecast to contract by 0.74 mb/d to average 56.40 mb/d. Downward revisions were seen mainly in Canada, Brazil and Colombia. These are offset by upward revisions in the US, the UK, Russia and Azerbaijan. Overall revisions have led to changes in all quarters in 2016, particularly to a contraction in 2Q16 of 234 tb/d, mainly due to wildfires in Canada. There was no revision to non-OPEC supply growth in 2015; it remained at 1.47 mb/d.

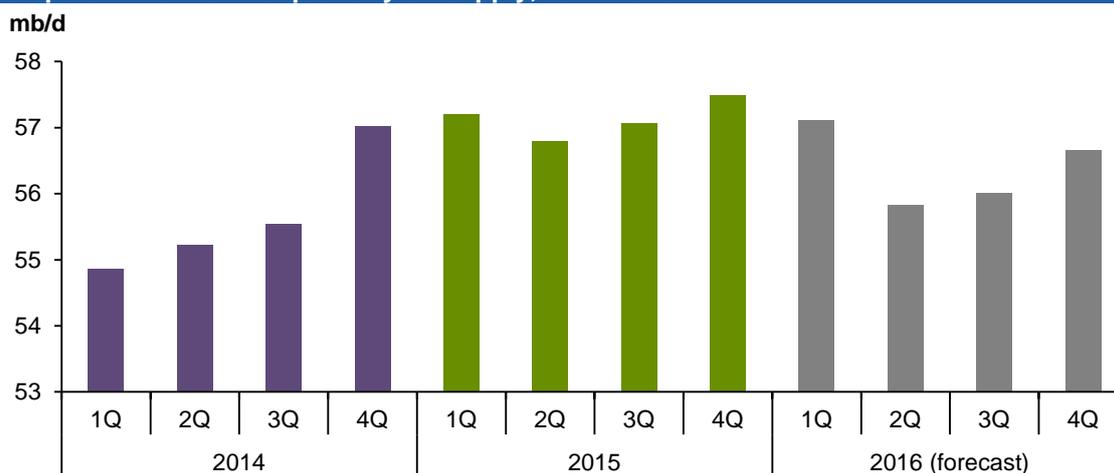
OPEC NGLs and non-conventional oil production growth in 2016 is expected at 0.16 mb/d, to average 6.29 mb/d.

In May, OPEC crude oil production decreased by 0.1 mb/d to average 32.36 mb/d, according to secondary sources. As a result, preliminary data indicates that the global oil supply decreased by 0.73 mb/d in May to average 94.51 mb/d.

Non-OPEC supply

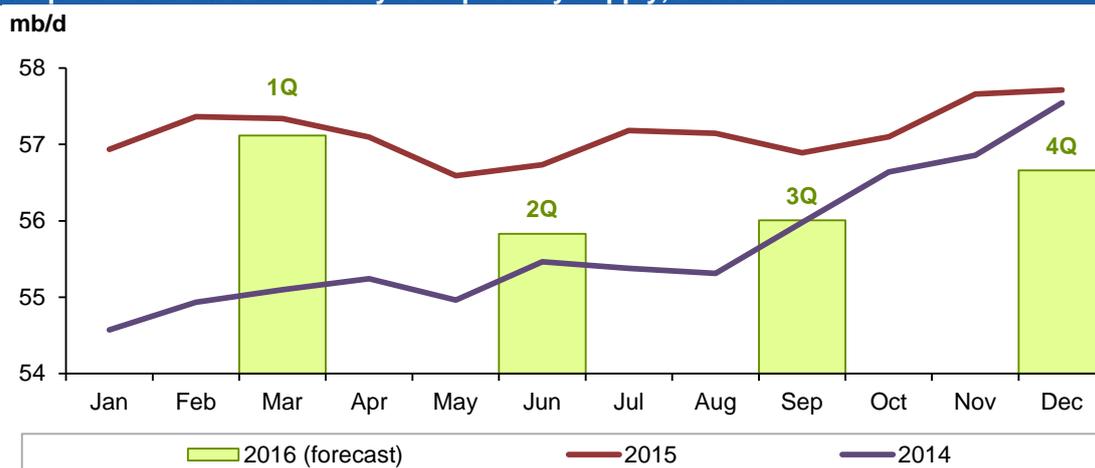
According to the latest update to historical data, total non-OPEC oil supply for 2015 remained unchanged, averaging 57.14 mb/d. Non-OPEC supply for 2016 is forecast to contract by 0.74 mb/d, despite several upward and downward revisions in May, indicating no changes in absolute supply compared with a month earlier, to average 56.40 mb/d. Expectations for crude oil production reductions in Canada, Australia, Asia Others, Brazil, Colombia and Oman will be offset by total upward revisions in the UK, the US, Congo, Russia, Azerbaijan and Turkmenistan. Non-OPEC oil supply in 2016 is subject to many uncertainties from economic and technical to geopolitical factors.

Graph 5.1: Non-OPEC quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

The updating of historical data in 1Q16 led to non-OPEC oil supply in this quarter being revised up by 162 tb/d, to average 57.12 mb/d. This includes upward changes in the US, Canada, the UK, Russia and Azerbaijan, and downward revisions in Australia, Brazil, Oman and Egypt. Moreover, 2Q16, 3Q16 and 4Q16 supply figures changed by -234 tb/d, -39 tb/d and 111 tb/d to average 55.83 mb/d, 56.01 mb/d and 56.66 mb/d, respectively.

Graph 5.2: Non-OPEC monthly and quarterly supply, 2014-2016

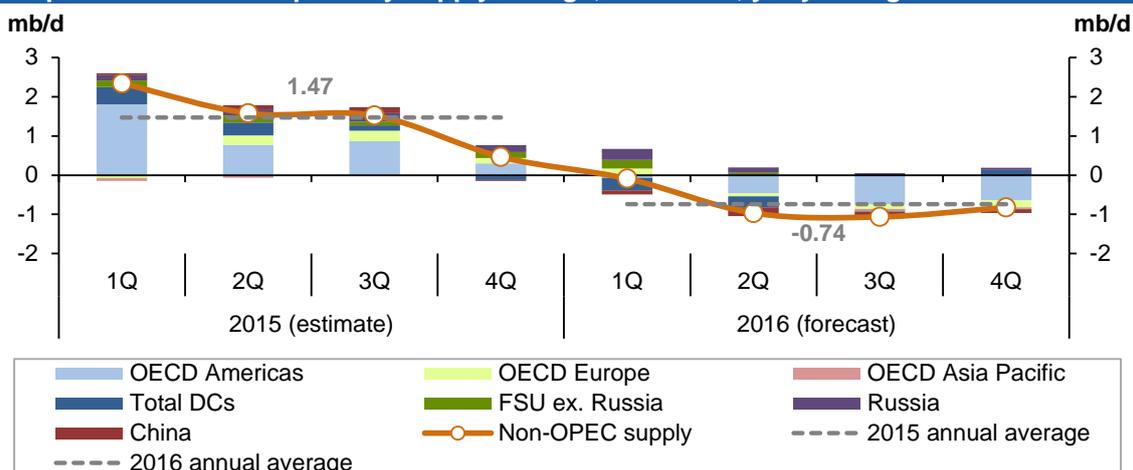
Source: OPEC Secretariat.

Table 5.1: Non-OPEC oil supply in 2015, mb/d

| | <u>2014</u> | <u>1Q15</u> | <u>2Q15</u> | <u>3Q15</u> | <u>4Q15</u> | <u>2015</u> | <u>Change 2015/14</u> | |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|-------------|
| | | | | | | | <u>Growth</u> | <u>%</u> |
| Americas | 20.08 | 21.04 | 20.69 | 21.14 | 21.19 | 21.01 | 0.93 | 4.64 |
| of which US | 12.96 | 13.78 | 14.05 | 14.06 | 14.05 | 13.99 | 1.03 | 7.92 |
| Europe | 3.61 | 3.69 | 3.77 | 3.68 | 3.89 | 3.76 | 0.14 | 4.01 |
| Asia Pacific | 0.51 | 0.43 | 0.45 | 0.50 | 0.47 | 0.46 | -0.05 | -9.15 |
| Total OECD | 24.20 | 25.16 | 24.90 | 25.32 | 25.55 | 25.23 | 1.03 | 4.25 |
| Other Asia | 2.60 | 2.71 | 2.71 | 2.65 | 2.73 | 2.70 | 0.10 | 3.83 |
| Latin America | 5.01 | 5.23 | 5.16 | 5.17 | 5.18 | 5.18 | 0.18 | 3.52 |
| Middle East | 1.34 | 1.30 | 1.27 | 1.26 | 1.25 | 1.27 | -0.07 | -5.11 |
| Africa | 2.38 | 2.39 | 2.37 | 2.36 | 2.35 | 2.37 | -0.01 | -0.43 |
| Total DCs | 11.33 | 11.63 | 11.51 | 11.45 | 11.52 | 11.53 | 0.20 | 1.74 |
| FSU | 13.55 | 13.77 | 13.68 | 13.61 | 13.73 | 13.69 | 0.15 | 1.10 |
| of which Russia | 10.68 | 10.83 | 10.83 | 10.83 | 10.89 | 10.85 | 0.17 | 1.61 |
| Other Europe | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.00 | -0.25 |
| China | 4.30 | 4.33 | 4.39 | 4.38 | 4.37 | 4.37 | 0.07 | 1.67 |
| Total "Other regions" | 17.98 | 18.23 | 18.20 | 18.12 | 18.24 | 18.20 | 0.22 | 1.22 |
| Total non-OPEC production | 53.51 | 55.02 | 54.61 | 54.88 | 55.30 | 54.95 | 1.45 | 2.70 |
| Processing gains | 2.16 | 2.19 | 2.19 | 2.19 | 2.19 | 2.19 | 0.02 | 1.06 |
| Total non-OPEC supply | 55.67 | 57.20 | 56.80 | 57.07 | 57.48 | 57.14 | 1.47 | 2.64 |
| Previous estimate | 55.67 | 57.20 | 56.80 | 57.07 | 57.48 | 57.14 | 1.47 | 2.64 |
| Revision | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Source: OPEC Secretariat.

On a regional and quarterly basis, OECD Americas' oil supply saw the greatest increase among all non-OPEC regions in 2015 at 0.93 mb/d. This will switch to the largest contraction in 2016 of 0.48 mb/d, revised down by 10 tb/d, compared with the previous month's forecast. OECD Europe's oil supply growth in 2015 reached 0.14 mb/d, while it is expected that with an upward revision of 30 tb/d due to higher-than-expected output by the UK in 1Q16, total production in this region will contract by 50 tb/d to average 3.71 mb/d in 2016. OECD Asia Pacific also will see a lower decline of 20 tb/d in 2016 compared with minus 50 tb/d a year earlier.

Graph 5.3: Non-OPEC quarterly supply change, 2015-2016, y-o-y change


Source: OPEC Secretariat.

Table 5.2: Non-OPEC oil supply in 2016, mb/d

| | 2015 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 2016 | Change 2016/15 | |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|--------------|
| | | | | | | | Growth | % |
| Americas | 21.01 | 20.98 | 20.21 | 20.39 | 20.55 | 20.53 | -0.48 | -2.29 |
| of which US | 13.99 | 13.77 | 13.51 | 13.42 | 13.56 | 13.57 | -0.42 | -3.00 |
| Europe | 3.76 | 3.86 | 3.70 | 3.57 | 3.71 | 3.71 | -0.05 | -1.32 |
| Asia Pacific | 0.46 | 0.44 | 0.45 | 0.45 | 0.43 | 0.44 | -0.02 | -4.44 |
| Total OECD | 25.23 | 25.27 | 24.36 | 24.41 | 24.68 | 24.68 | -0.55 | -2.19 |
| Other Asia | 2.70 | 2.73 | 2.67 | 2.72 | 2.74 | 2.72 | 0.01 | 0.46 |
| Latin America | 5.18 | 4.97 | 5.04 | 5.18 | 5.38 | 5.15 | -0.04 | -0.75 |
| Middle East | 1.27 | 1.26 | 1.23 | 1.22 | 1.22 | 1.23 | -0.04 | -2.91 |
| Africa | 2.37 | 2.34 | 2.29 | 2.32 | 2.31 | 2.31 | -0.06 | -2.37 |
| Total DCs | 11.53 | 11.30 | 11.24 | 11.44 | 11.65 | 11.41 | -0.12 | -1.04 |
| FSU | 13.69 | 13.99 | 13.74 | 13.59 | 13.72 | 13.76 | 0.06 | 0.47 |
| of which Russia | 10.85 | 11.11 | 10.97 | 10.88 | 10.95 | 10.98 | 0.13 | 1.19 |
| Other Europe | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.00 | -1.11 |
| China | 4.37 | 4.23 | 4.17 | 4.23 | 4.28 | 4.23 | -0.14 | -3.23 |
| Total "Other regions" | 18.20 | 18.34 | 18.04 | 17.96 | 18.13 | 18.12 | -0.08 | -0.43 |
| Total non-OPEC production | 54.95 | 54.92 | 53.63 | 53.81 | 54.46 | 54.20 | -0.75 | -1.36 |
| Processing gains | 2.19 | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 0.01 | 0.59 |
| Total non-OPEC supply | 57.14 | 57.12 | 55.83 | 56.01 | 56.66 | 56.40 | -0.74 | -1.29 |
| Previous estimate | 57.14 | 56.95 | 56.06 | 56.04 | 56.55 | 56.40 | -0.74 | -1.29 |
| Revision | 0.00 | 0.16 | -0.23 | -0.04 | 0.11 | 0.00 | 0.00 | 0.00 |

Source: OPEC Secretariat.

Developing countries' supply growth averaged 200 tb/d in 2015, and is forecast to see a contraction of 120 tb/d in 2016. With regard to regional breakdown, Other Asia's supply growth in 2016 saw a downward revision of 10 tb/d, to stand at 10 tb/d, compared with 100 tb/d of growth in the previous year. Meanwhile, Latin America will see a contraction of 40 tb/d, revised down this month by 30 tb/d, due to lower expectations in Brazil and Colombia in 2016, compared with remarkable growth of 0.18 mb/d a year earlier. Growth in both the Middle East and Africa will contract by 40 tb/d and 60 tb/d, respectively, compared with the previous year's contractions of 70 tb/d and 10 tb/d, respectively. FSU's output is anticipated to grow by 60 tb/d in 2016, revised up by 60 tb/d this month due to upward revisions in Russia, Azerbaijan and Turkmenistan compared with the previous year's growth of 0.15 mb/d. Chinese oil

output saw growth of 70 tb/d in 2015, but is expected to contract by 0.14 mb/d in 2016, due to several capex cuts by Chinese oil companies and heavy declines in mature onshore fields. No changes are expected in Other Europe's oil supply in 2016 over a year earlier.

On a country basis, the US was the main contributor to growth in 2015 with 1.03 mb/d, followed by Brazil, Russia, Canada, the UK, China, Norway, Malaysia, Oman and Vietnam, while Mexico, Yemen and Kazakhstan witnessed the strongest declines for the year. In 2016, the US, China, Mexico, the UK, Kazakhstan, Azerbaijan, Yemen and Colombia are all expected to see large declines, while Russia, Canada, Brazil, Malaysia and Congo will experience the greatest growth.

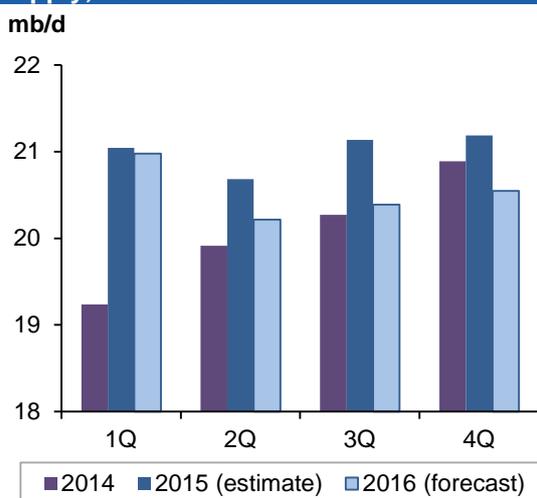
OECD

Total OECD oil supply for 2016 is projected to decline by 0.55 mb/d over the previous year, revised up by 10 tb/d from the previous *MOMR* due to an upward revision in the UK, to average 24.68 mb/d. An upward revision by 30 tb/d for OECD Europe and downward revisions for OECD Americas and OECD Asia Pacific, each by 10 tb/d, led to this overall upward revision for the OECD.

OECD Americas

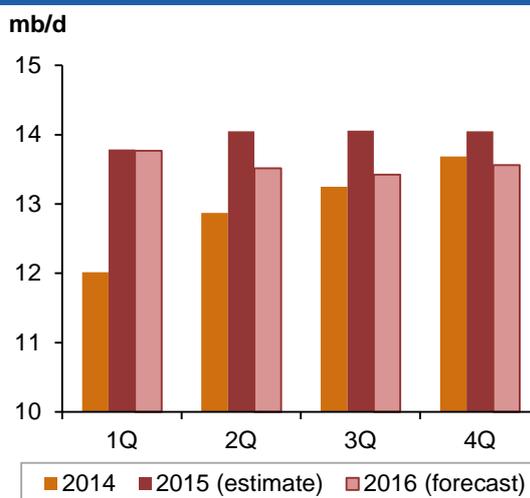
In 2016, this region is expected to see the greatest decline, contracting by 0.48 mb/d, revised down by 10 tb/d m-o-m, mainly due to changes in output from the US and Canada, to average 20.53 mb/d. OECD Americas' yearly growth of 1.91 mb/d in 2014 declined by about 1 mb/d in 2015 for several reasons; a heavier decline in Mexico, lower production in the US due to a sharp decline in drilling activities, as well as lower-than-expected conventional Canadian oil output due to lower rig counts.

Graph 5.4: OECD Americas quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.5: US quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

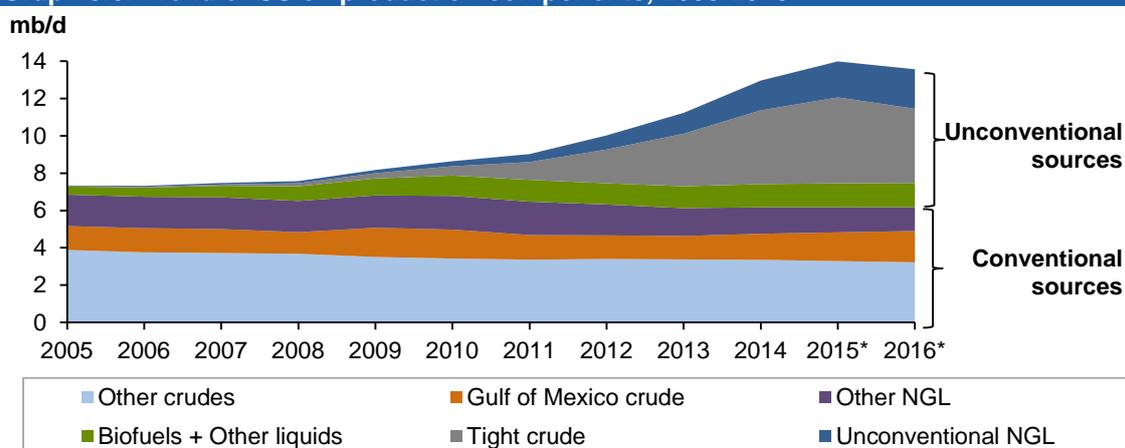
US

US crude oil production in March 2016 dipped by only 6 tb/d from output a month earlier to average 9.13 mb/d, the smallest monthly change since September 2015. The US Energy Information Administration (EIA) expected output would drop to 9.04 mb/d, or by 86 tb/d more than the official monthly oil output, based on its interpolated

World Oil Supply

estimated weekly data, which is based on drilling rig counts only. Moreover, it was 224 tb/d higher than the EIA projected in December in its Short-Term Energy Outlook (STEO). This indicates that other factors beyond drilling could affect output to prevent US crude oil production from a steep decline. Nevertheless, US onshore crude oil production in March declined by 60 tb/d, m-o-m.

Graph 5.6: Trend of US oil production components, 2005-2016



Note: * 2015 = estimate and 2016 = forecast.
Source: OPEC Secretariat.

On the other hand, NGL output increased by 50 tb/d to average 3.38 mb/d in March, and the EIA expects higher production in the coming months. Total US liquids production, excluding processing gains, was pegged at 13.81 mb/d in March 2016, higher by 10 tb/d and 100 tb/d over February and January 2016, respectively. Nevertheless, average liquids production in 1Q16 declined by 0.28 mb/d compared with 4Q15.

Table 5.3: Trend of US oil production components, 2014-2016

| | 2014 | 2015 | Change | 2016 * | Change |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|
| Tight crude | 3,954 | 4,602 | 648 | 3,978 | -624 |
| Gulf of Mexico crude | 1,397 | 1,541 | 144 | 1,677 | 136 |
| Other crudes | 3,357 | 3,287 | -69 | 3,223 | -64 |
| Unconventional NGL | 1,594 | 1,926 | 332 | 2,114 | 188 |
| Other NGL | 1,420 | 1,347 | -74 | 1,280 | -67 |
| Biofuels + Other liquids | 1,238 | 1,283 | 45 | 1,295 | 11 |
| US total supply | 12,960 | 13,987 | 1,027 | 13,567 | -420 |

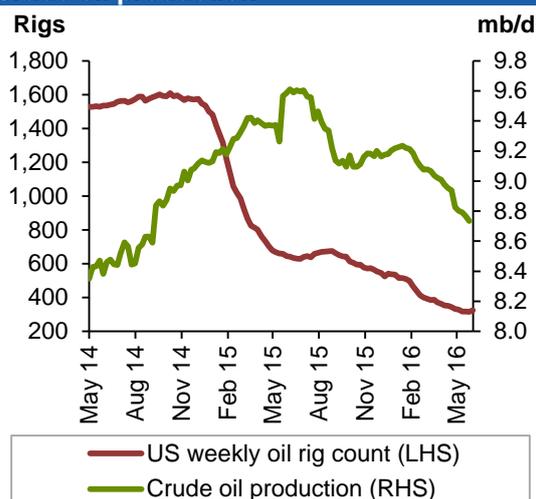
Note: * 2016 = forecast.
Source: OPEC Secretariat.

Total US liquids output is expected to decline by 0.42 mb/d in 2016, to average 13.57 mb/d, revised down by 10 tb/d from the previous report. Quarterly output declined by 280 tb/d in 1Q16, q-o-q. Crude oil production in 1Q16 declined by 168 tb/d to average 9.15 mb/d q-o-q, primarily from a drop in tight crude production in different regions of the US; a contraction of 46 tb/d was seen in North Dakota to average 1.11 mb/d and Texas saw a decline of 69 tb/d to average 3.32 mb/d, while oil production in the Gulf of Mexico (GoM) increased by a minor 18 tb/d to average 1.61 mb/d 1Q16. Moreover, NGLs and unconventional liquids output such as biofuels declined by 76 tb/d and 38 tb/d, to average 3.34 mb/d and 1.29 mb/d in 1Q16 over 4Q15, respectively. Yearly historical US production, as well as the forecast for 2016,

are shown in **Graph 5.6**. The estimated output of different components in 2014 and 2015 and the prediction for 2016 are shown in **Table 5.3**.

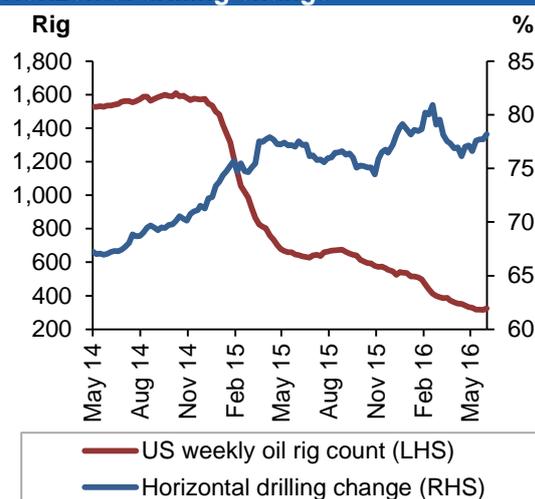
According to the Baker Hughes' survey for the week ending 3 June, the **US rig count** in May 2016 decreased by 26 rigs to 407 rigs, while the oil rig count dropped by 24 rigs to 321 rigs, on average. The US total average rig count in May 2016 declined by 475 rigs, or 54%, to average 407 rigs, y-o-y. The oil rig count also declined by 334 rigs or 51%, y-o-y. Active rigs in offshore regions, mostly in the GoM, also decreased by eight rigs (-26%) to 23 rigs in May, y-o-y. Moreover, within the total US rig count figure, the horizontal rig count fell to 316 from 681 (-54%), y-o-y. The greatest number of active rigs were in Texas at 178 in May, down by 193 (-52%), y-o-y. In comparison, there were 23 rigs active in North Dakota in May, down by 55 (-71%), y-o-y.

Graph 5.7: US weekly oil rig count vs. Crude oil production



Sources: Baker Hughes and EIA.

Graph 5.8: US weekly oil right count vs. Horizontal drilling change



Source: Baker Hughes.

Canada and Mexico

Canadian oil production in 2016 – despite an upward revision by 60 tb/d in 1Q16 – was revised down by 25 tb/d from the previous *MOMR* to average 4.48 mb/d, due to a vast wildfire in the Fort McMurray area in the province of Alberta, which has caused an approximate outage of 0.7 mb/d in May. This has dragged the forecast lower by 160 tb/d for 2Q16. Expectations for Canadian oil production growth for the year are now lower at 60 tb/d, despite the startup of 0.17 mb/d of new projects and the ramp-up of nine old projects started in 2015.

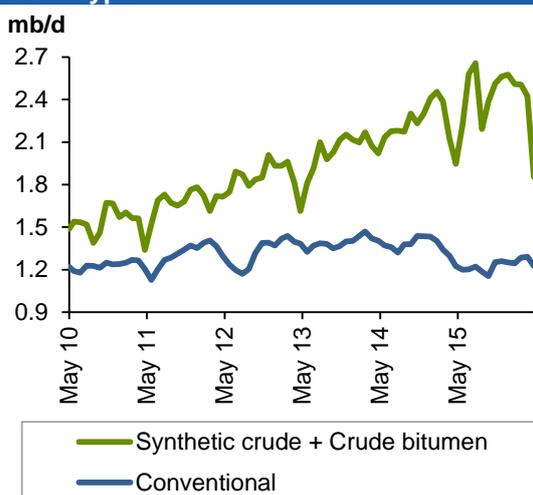
The wildfire began on 1 May southwest of Fort McMurray and on 3 May swept through the area, forcing the largest wildfire evacuation in Albertan history. It continues to spread across northern Alberta and into Saskatchewan, consuming forested areas and impacting Athabasca oil sands operations. On 16 May, the fire reached oil sands work camps south of Fort MacKay, forcing the evacuation of 19 oil sites and camps with approximately 8,000 workers. By 18 May, the fire had grown to 423 thousand hectares and expanded into Saskatchewan. It is still burning and is expected to take months to contain and extinguish.

The wildfire has halted oil sands production at facilities north of Fort McMurray, shutting down an Albian Sands mining operation located about 70 kilometres north of Fort McMurray. The Albian Sands operation supplies Shell Canada's 255 tb/d Scotford

World Oil Supply

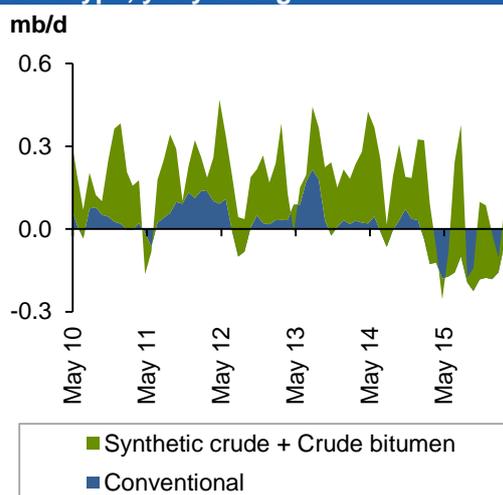
upgrader. Suncor Energy and Syncrude Canada also scaled back operations. Suncor's Millennium and North Steepbank mines are two of the largest and oldest oil sands mining operations in the Fort McMurray area, and Syncrude's Mildred Lake oil sands mine is located 35 kilometres north of Fort McMurray. On 7 May, Syncrude shut down all site and processing operations. Syncrude Canada reduced total May deliveries to customers by 35% on 9 May after shutting production. A quarter of Canada's oil production, equal to approximately 1 mb/d, was halted as a result of the fire. Other sources reported that the fire led to the shut-in of an estimated 1.2 mb/d, as producers at 11 oil sands plants suspended operations due to safety concerns, a lack of pipeline transport and diminishing diluent supply.

Graph 5.9: Canada production by crude type



Source: OPEC Secretariat.

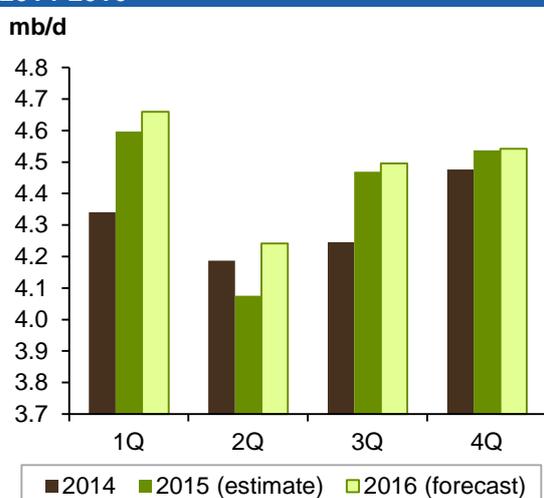
Graph 5.10: Canada production by crude type, y-o-y change



Source: OPEC Secretariat.

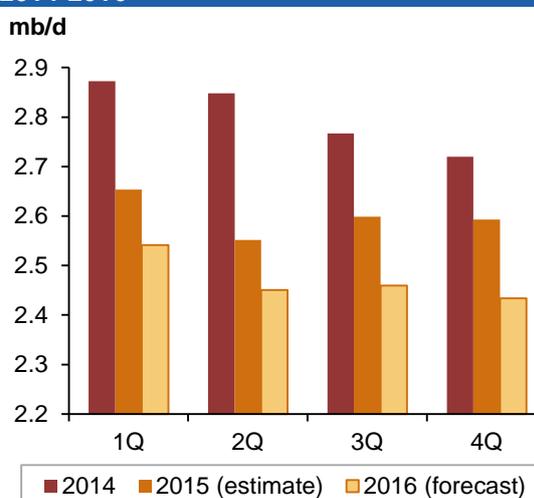
There were 41 active rotary rigs in May (14 oil rigs and 27 gas rigs) based on Baker Hughes' weekly report ended 03 June, down by 44 rigs (-52%), y-o-y. Of these, 29 are active in Alberta, five in British Columbia and six in Saskatchewan. Moreover, one offshore rig was active in the province of Newfoundland.

Graph 5.11: Canada quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.12: Mexico quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Mexico's oil supply for 2016 is expected to decline at a slower pace of 0.13 mb/d, with average supply anticipated to be at 2.47 mb/d. Mexican liquids production in April averaged 2.49 mb/d, down by 30 tb/d m-o-m, while oil output in 1Q16 was pegged at 2.54 mb/d, down by 50 tb/d q-o-q and 0.11 mb/d y-o-y. In April, crude oil saw a decrease of 40 tb/d to average 2.18 mb/d, while NGLs remained at more or less 0.3 mb/d. Mexican oil output in 1Q16 decreased by 50 tb/d to average 2.23 mb/d q-o-q. According to Pemex, crude oil output from the KMZ complex was lower in April by 170 tb/d to average 0.84 mb/d compared with March figures and lower by 20 tb/d y-o-y. Production in Chuc and Cantarell were also down in April by 10 tb/d and 6 tb/d, respectively.

OECD Europe

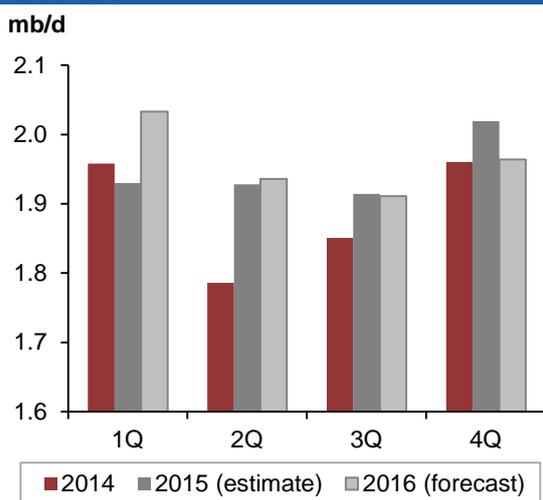
OECD Europe's oil supply in 2016 was revised up by 30 tb/d this month, leading to an expected total contraction of 50 tb/d to average 3.71 mb/d. This revision came from upward revisions for the UK in 1Q16 and 2Q16.

Preliminary April total liquids output figures for **Norway** indicate an increase of 20 tb/d m-o-m to average 2.03 mb/d, higher y-o-y by 87 tb/d. Oil production is about 3% above the Norwegian Petroleum Directorate (NPD)'s prognosis for the month. This was the 12th consecutive month of y-o-y increases. Of this, 1.63 mb/d was crude oil, with the remainder consisting of 0.37 mb/d of NGLs and 0.03 mb/d of condensate, according to the NPD. Oil production is about 4% above that of April one year earlier.

Production in the 0.1 mb/d Edvard Grieg field, which began production in late-November, averaged 58 tb/d across 1Q16—a rapid ramp-up that has boosted Norwegian output this year. Peak production at the Lundin field is expected to be maintained in 2H16. Output was also supported by the ramp-up of Eni's 0.1 mboe/d Goliath field, which achieved first oil on 13 March, although production at the field was temporarily halted on 17 April following a gas leak, according to Energy Aspects.

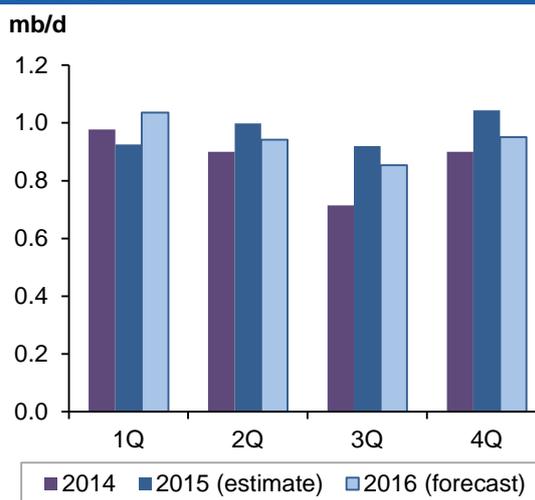
But heavy summer maintenance will weigh on output, reaching a pinnacle in June, when at least seven fields totalling 0.23 mb/d will be offline. The major fields out during the month are Ekofisk (0.12 mb/d), Eldfisk (49 tb/d) and Valhall (42 tb/d). August will again see a pick-up in works, including the 50 tb/d Alvheim field for 10 days, and the 65 tb/d Skarv field for three weeks, commencing 27 August. Meanwhile, 11 Norwegian oil fields totalling 33 tb/d will shut down earlier than expected; starting from this year, with Repsol confirming that the 6 tb/d Varg field will cease production in June. Norway decreased investment in oil and gas development and production for 2016 by 9.3% y-o-y.

Graph 5.13: Norway quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.14: UK quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

The **UK's** average liquids production in April declined by 10 tb/d to average 1.01 mb/d. Crude oil production for April decreased by 0.16 mb/d, compared with March to stand at 0.92 mb/d, while NGLs output increased by 15 tb/d to average 84 tb/d, m-o-m.

The UK's oil supply in 2016 will benefit from the production ramp-ups of four project startups in 2015–2016, including that of the Alma/Galia, with an estimated peak capacity of 20 tb/d (startup was in October 2015), the 17 tb/d Cladhan (December 2015), the 20 tb/d Laggan Tormore (February 2016), and the 20 tb/d Solan (April 2016). On the other hand, the 10 tb/d Don field was shut down from mid-March throughout April, due to a chemical treatment campaign, while the 2 tb/d Pierce field was shut between mid-March and mid-April for planned works, according to Energy Aspects. The 9 tb/d Erskine field, which was shut in late February due to a pipeline blockage, remained closed through April, with the expected return date pushed back to 3Q16, after the Lomond field returns from two-months of maintenance. Planned maintenance is high this summer. Several fields are undergoing turnarounds for a full month in June to coincide with work on the CATS pipeline. Work on fields in the J-area will shut-in around 30 tb/d of capacity from early June to early July. Two weeks of maintenance in August on the Brent pipeline system will shut-in around 80 tb/d from a plethora of small fields. One of the three trains at the Kinneil terminal will also undergo work for 10 weeks, starting 12 August. The 0.18 mb/d Buzzard field is due to be offline for 30 days commencing 17 September, thus UK production is likely to be lower y-o-y in 3Q16 despite new startups.

OECD Asia Pacific

The oil production forecast in the OECD Asia Pacific region for 2016 has been revised down by 10 tb/d this month and it is anticipated to decline by 20 tb/d to average 0.44 mb/d. Oil production in Australia is expected to remain unchanged y-o-y at 0.38 mb/d.

Developing Countries

Total oil production in developing countries (DCs) in 2016 is expected to decline by 0.12 mb/d to average 11.41 mb/d. Predicted supply for 2016 was revised down in this month's assessment by 72 tb/d, due to weak output in 1Q16 in different regions, as

well as higher-than-expected declines in Africa and Latin America in 2Q16 and 3Q16. On a yearly basis, the expected contraction is coming mainly from Africa, Middle East and Latin America, while minor growth in Other Asia is anticipated.

Other Asia

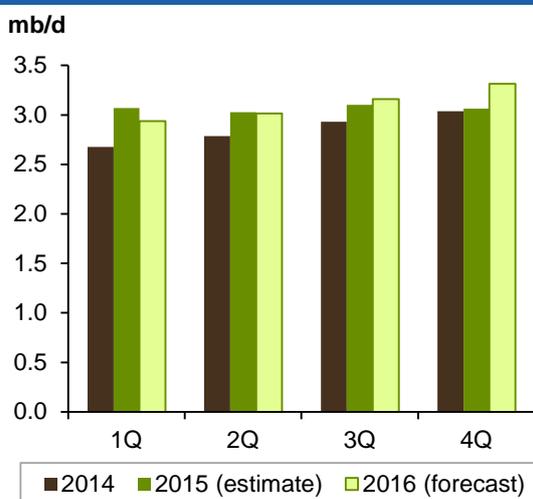
Other Asia's oil supply is forecast to reach 2.72 mb/d in 2016. Oil production in India and Vietnam is expected to decline by 20 tb/d and 10 tb/d, respectively, while oil production in Malaysia, Thailand and Asia Others is expected to grow by 30 tb/d and 10 tb/d each, respectively.

Latin America

Latin America's oil supply for 2016 is expected to contract by 0.04 mb/d, revised down by 27 tb/d compared with the previous month's prediction due to lower output in 1Q16 and lower-than-expected output in 2Q16 and 3Q16 from Brazil and Colombia. Total output for Latin America will reach an average of 5.15 mb/d, with growth coming only from Brazil.

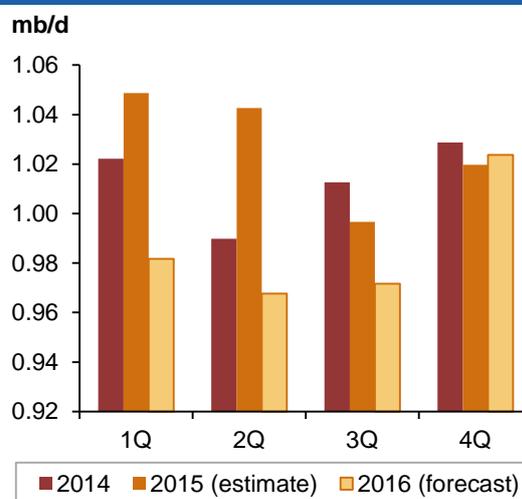
Brazil's crude and NGLs output in April was higher by around 100 tb/d m-o-m, according to Petrobras's monthly report, supported by the return of the P-31 (Albacora) and P-48 units in the post-salt Campos Basin. Hence, total Brazilian production, including biofuels, increased to 2.99 mb/d in April. With the return of production in the Campos Basin, total output increased m-o-m by 0.12 mb/d to 1.47 mb/d, which was partially offset by reducing pre-salt output to 0.62 mb/d – the lowest level in 10 months – mainly due to maintenance at the Cidade de Angra dos Reis floating storage and offloading (FPSO) platform as well as the FPSO Cidade de Paraty. According to Energy Aspects, in the year-to-April, maintenance reduced production by 5%, but output should rise in the coming months as the 0.15 mb/d FPSO Cidade de Saquarema produces first oil in July from the pre-salt layer of the Lula Central project, followed by the 0.1 mb/d FPSO Cidade de Caraguatatuba from the Lapa project in 3Q16. Nevertheless, growth in 2016 is not expected to be more than 40 tb/d to average 3.11 mb/d, revised down by 20 tb/d from the previous month's forecast.

Graph 5.15: Brazil quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.16: Colombia quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Colombia's oil production in 2016 is expected to be negative due to a lack of appropriate investment and necessary spending. Colombia's total oil output will contract by 40 tb/d – revised down by 10 tb/d compared with the previous month's forecast – to average 0.99 mb/d. Oil production in 1Q16 declined by 70 tb/d y-o-y to 0.98 mb/d, while oil output in April was steady compared with that of March at 0.94 mb/d.

Middle East

The **Middle East's** oil supply has been stagnant during March, April and May 2016 at 1.24 mb/d, with input coming mainly coming from Oman at 0.98 mb/d, Bahrain at 0.23 mb/d, Syria at 30 tb/d and Yemen at 20 tb/d. It is expected that total annual average production will contract by 40 tb/d to 1.23 mb/d.

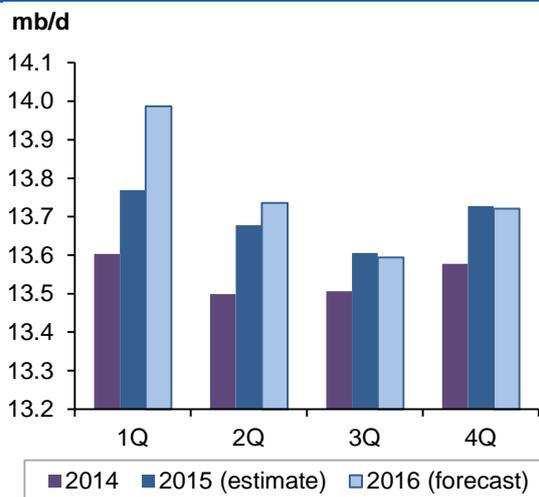
Africa

Africa's oil supply is expected to see a further contraction of 60 tb/d in 2016, revised down by 29 tb/d to average 2.31 mb/d. The reason for this negative revision is due to production outages in **Ghana**. Amid unresolved technical issues at Tullow's FPSO vessel in the giant Jubilee oilfield offshore Ghana, production is back online, but output is less than half of what it should be, while investors have been told they won't see any dividends this year. Production resumed on 4 May, but the repair of a turret could take up to a year, according to the media. Right now, the company is working to ramp up production to above 30,000 b/d, but this is well under the originally anticipated 100,000 b/d. It was producing 103,000 b/d the previous year.

FSU, other regions

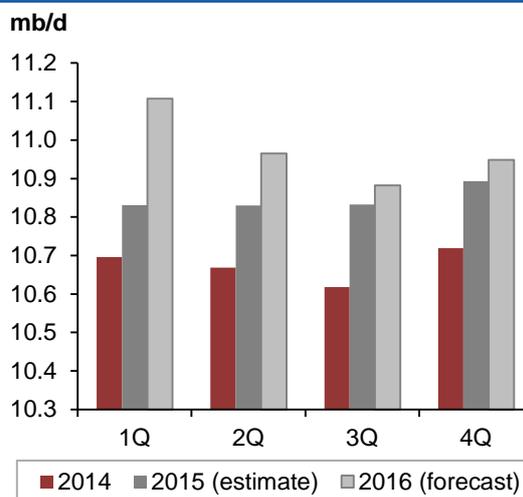
Total FSU oil production forecast averaged 13.76 mb/d in 2016, indicating an upward revision by 63 tb/d in growth to average 0.06 mb/d y-o-y, compared with the previous *MOMR*. This revision came from higher-than-expected output from Russia in 1Q16 and the expected continuation in production in 2Q16. Moreover, upward revisions for production from Azerbaijan and Turkmenistan were another reason for anticipated growth in the FSU. Nevertheless, oil production in 2H16 would be less than in 1H16 by 0.2 mb/d, mainly due to lower expectations for Russian production.

Graph 5.17: FSU quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.18: Russia quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Russia

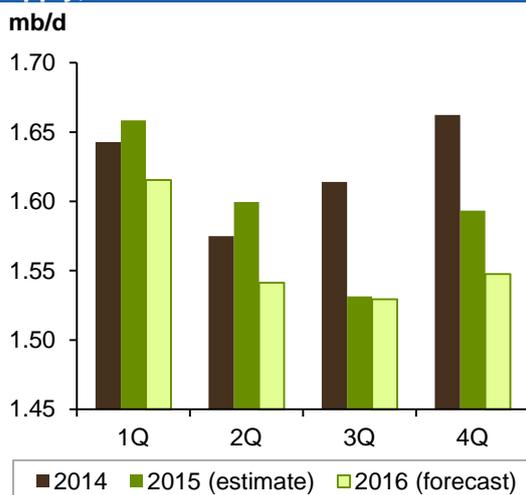
Russia's oil supply in April and May reached 11.06 mb/d and 11.05 mb/d, respectively. This is a little weaker than in February and March, but still above 11 mb/d, according to ministry information and estimations for monthly NGLs output. Higher growth in Russia is due to the new 70 tb/d Yarudeiskoye field startup in December 2015. As mentioned in the FSU summary, Russian production will drop by 120 tb/d in 2H16 compared with 1H16, mainly due to maintenance, including a 20-day shut-in at ExxonMobil's Sakhalin 1 project in August. Nevertheless, according to the latest review of the most prolific fields in Russia and supported by the remarkable growth seen in the first five months of the year, averaging 11.09 mb/d, higher production by 0.26 mb/d over the same period a year ago has been maintained. Oil supply in 2016 is expected grow by 0.13 mb/d to average 10.94 mb/d, revised up by 0.12 mb/d.

Caspian

Kazakhstan's oil production in April declined by 0.11 mb/d to average 1.50 mb/d, mainly due to summer maintenance at the Karachaganak oil field. A further supply contraction of 40 tb/d is anticipated for Kazakhstan in 2016, to bring production to 1.56 mb/d.

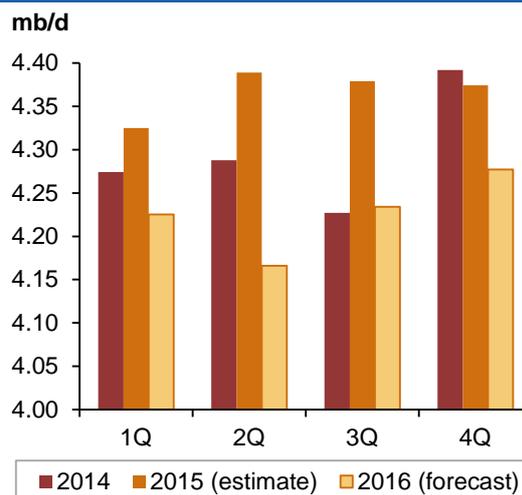
In **Azerbaijan**, oil supply declined by 20 tb/d to average 0.87 mb/d in April 2016. An average oil supply of 0.85 mb/d is expected for 2Q16, 20 tb/d less than in 1Q16. Average annual output growth was revised up by 20 tb/d, compared with the previous month, therefore annual output is expected to decline y-o-y by 20 tb/d to reach 0.84 mb/d.

Graph 5.19: Kazakhstan quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.20: China quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Other Europe's supply is expected to remain steady, averaging 0.13 mb/d in 2015 as well as in 2016.

China

China's oil supply is forecast to decline by 0.14 mb/d to average 4.23 mb/d in 2016, unchanged from the previous *MOMR*. Crude oil output plummeted to 4.04 mb/d in April, lower y-o-y by 0.22 mb/d, or 5.2%. Chinese total liquids output in April decreased by 60 tb/d to average 4.13 mb/d, including 90 tb/d of unconventional fuels. Nevertheless, oil production in 2H16 is expected to be higher by 60 tb/d than in 1H16.

OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids production in 2015 grew by 0.13 mb/d, and averaged 6.13 mb/d, based on OPEC MCs direct communication. In 2016, OPEC NGLs and non-conventional liquids are projected to average 6.29 mb/d, to reach 0.16 mb/d, y-o-y.

Table 5.4: OPEC NGLs + non-conventional oils, 2013-2016

| | | | <i>Change</i> | | | | | <i>Change</i> | | <i>Change</i> | |
|-------------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|---------------|--------------|---------------|--------------|
| | <u>2013</u> | <u>2014</u> | <u>14/13</u> | <u>1Q15</u> | <u>2Q15</u> | <u>3Q15</u> | <u>4Q15</u> | <u>2015</u> | <u>15/14</u> | <u>2016</u> | <u>16/15</u> |
| Total OPEC | 5.82 | 6.00 | 0.17 | 5.97 | 6.15 | 6.23 | 6.17 | 6.13 | 0.13 | 6.29 | 0.16 |

Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, total OPEC crude oil production in May averaged 32.36 mb/d, a decrease of 100 tb/d over the previous month. Crude oil output increased mostly from Kuwait, IR Iran and Saudi Arabia, while production decreased in Nigeria, Venezuela and Iraq.

Table 5.5: OPEC crude oil production based on *secondary sources*, tb/d

| | <u>2014</u> | <u>2015</u> | <u>3Q15</u> | <u>4Q15</u> | <u>1Q16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>May 16</u> | <u>May/Apr</u> |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Algeria | 1,123 | 1,106 | 1,110 | 1,110 | 1,093 | 1,092 | 1,087 | 1,080 | -7.1 |
| Angola | 1,654 | 1,754 | 1,763 | 1,780 | 1,760 | 1,797 | 1,790 | 1,773 | -16.8 |
| Ecuador | 544 | 546 | 541 | 545 | 548 | 554 | 546 | 549 | 3.9 |
| Indonesia | 696 | 695 | 696 | 707 | 720 | 726 | 730 | 740 | 10.4 |
| Iran, I.R. | 2,778 | 2,840 | 2,861 | 2,874 | 3,093 | 3,236 | 3,473 | 3,562 | 89.2 |
| Iraq | 3,267 | 3,933 | 4,154 | 4,232 | 4,242 | 4,179 | 4,342 | 4,281 | -60.1 |
| Kuwait | 2,781 | 2,730 | 2,717 | 2,720 | 2,765 | 2,768 | 2,647 | 2,740 | 93.3 |
| Libya | 470 | 405 | 382 | 401 | 370 | 338 | 348 | 296 | -52.0 |
| Nigeria | 1,953 | 1,867 | 1,861 | 1,885 | 1,792 | 1,761 | 1,675 | 1,424 | -251.4 |
| Qatar | 714 | 667 | 655 | 669 | 667 | 672 | 658 | 659 | 1.9 |
| Saudi Arabia | 9,688 | 10,123 | 10,263 | 10,122 | 10,147 | 10,146 | 10,157 | 10,241 | 84.0 |
| UAE | 2,759 | 2,856 | 2,878 | 2,881 | 2,807 | 2,724 | 2,753 | 2,826 | 73.9 |
| Venezuela | 2,361 | 2,357 | 2,357 | 2,354 | 2,309 | 2,286 | 2,257 | 2,188 | -69.0 |
| Total OPEC | 30,788 | 31,879 | 32,238 | 32,280 | 32,314 | 32,275 | 32,461 | 32,361 | -99.8 |

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

Source: OPEC Secretariat.

Table 5.6: OPEC crude oil production based on *direct communication*, tb/d

| | <u>2014</u> | <u>2015</u> | <u>3Q15</u> | <u>4Q15</u> | <u>1Q16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>May 16</u> | <u>May/Apr</u> |
|-------------------|---------------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|----------------|
| Algeria | 1,193 | 1,157 | 1,159 | 1,179 | 1,128 | 1,137 | 1,141 | 1,133 | -8.0 |
| Angola | 1,654 | 1,767 | 1,777 | 1,742 | 1,773 | 1,782 | 1,733 | 1,707 | -26.0 |
| Ecuador | 557 | 543 | 538 | 536 | 548 | 552 | 555 | 556 | 0.5 |
| Indonesia | 697 | 690 | 695 | 693 | 739 | 747 | 726 | 737 | 11.6 |
| Iran, I.R. | 3,117 | 3,152 | 3,170 | 3,313 | 3,385 | 3,400 | 3,500 | 3,600 | 100.0 |
| Iraq | 3,110 | 3,504 | 3,744 | 3,846 | 4,598 | 4,553 | 4,521 | 4,499 | -22.0 |
| Kuwait | 2,867 | 2,859 | 2,870 | 2,876 | 3,000 | 3,000 | 2,900 | 2,950 | 50.0 |
| Libya | 480 | .. | .. | .. | .. | .. | .. | .. | .. |
| Nigeria | 1,807 | 1,748 | 1,790 | 1,778 | 1,667 | 1,505 | 1,570 | 1,506 | -64.5 |
| Qatar | 709 | 656 | 640 | 651 | 675 | 699 | 625 | 671 | 45.7 |
| Saudi Arabia | 9,713 | 10,193 | 10,285 | 10,202 | 10,225 | 10,224 | 10,262 | 10,270 | 8.4 |
| UAE | 2,794 | 2,989 | 3,030 | 2,999 | 2,944 | 2,909 | 2,827 | 3,107 | 280.0 |
| Venezuela | 2,683 | 2,654 | 2,631 | 2,587 | 2,515 | 2,515 | 2,490 | 2,370 | -120.3 |
| Total OPEC | 31,380 | .. | .. | .. | .. | .. | .. | .. | .. |

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

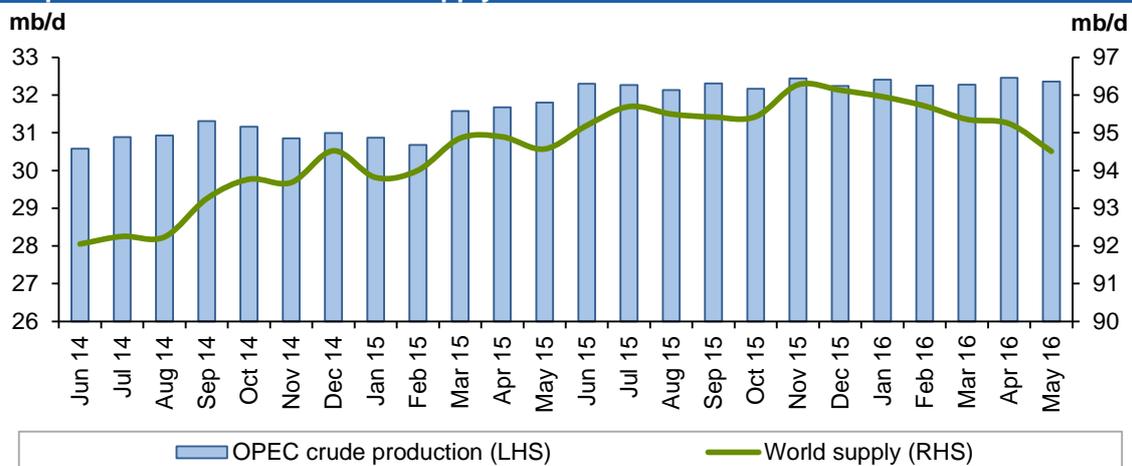
.. Not available.

Source: OPEC Secretariat.

World oil supply

Preliminary data indicates that the global oil supply decreased by 0.73 mb/d in May compared with the previous month, to average 94.51 mb/d. Non-OPEC supply decreased by 0.63 mb/d, while OPEC production decreased by 0.10 mb/d. The share of OPEC crude oil in total global production increased to 34.2% in May compared with the previous month. Estimates are based on preliminary data from direct communications for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5.21: OPEC and world oil supply

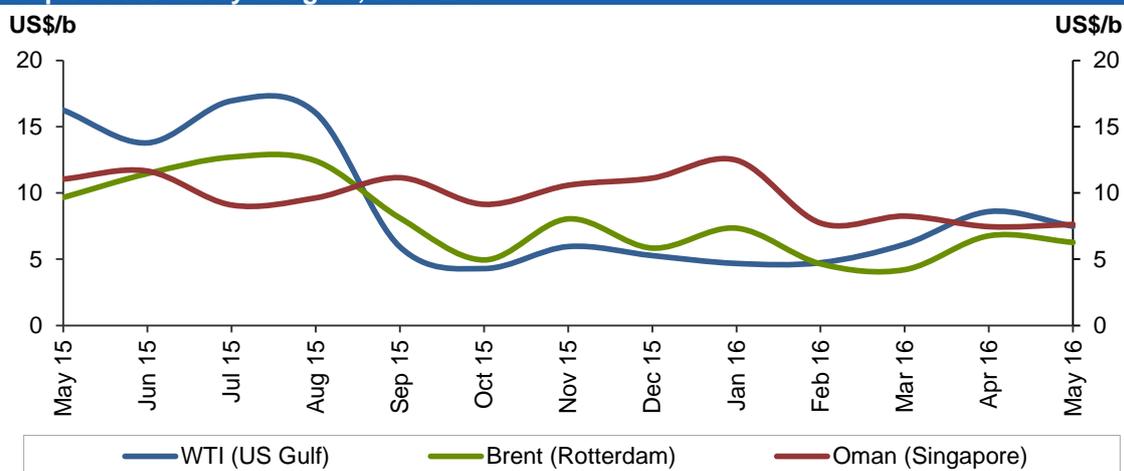


Source: OPEC Secretariat.

Product Markets and Refinery Operations

A high level of light and middle distillate inventories, along with the approaching end of the spring maintenance season, offset the potential impact of refinery outages seen in Canada and France, causing margins to slightly fall in the Atlantic Basin, despite stronger gasoline demand in the region. Meanwhile, refinery margins in Asia showed a slight recovery on the back of stronger regional demand amid the peaking of refinery maintenance.

Graph 6.1: Refinery margins, 2015-2016



Sources: Argus Media and OPEC Secretariat.

US product markets continued to be supported by stronger domestic gasoline demand, which continued rising during May, hitting levels not seen since 2007. However, despite the higher demand, gasoline crack spreads were under supply pressure due to higher imports, along with the re-start of several gasoline/producer units. Meanwhile, the temporary tightening sentiment caused by Canadian crude supply disruptions was offset by increasing refinery runs, with several refineries returning from maintenance. US Gulf Coast (USGC) refinery margins for WTI crude dropped by around \$1/b versus the previous month's levels to average around \$7.5/b in May.

Product markets in **Europe** showed a mixed performance during May as the middle of the barrel exhibited some recovery, supported by stronger regional demand, while the gasoline crack spread weakened. This mixed performance, along with higher product inventories, offset the potential impact of French refinery outages, causing refinery margins to slightly fall in Europe. The refinery margin for Brent crude in Northwest Europe (NWE) showed a loss of 50¢ versus the previous month, to average \$6.3/b in May.

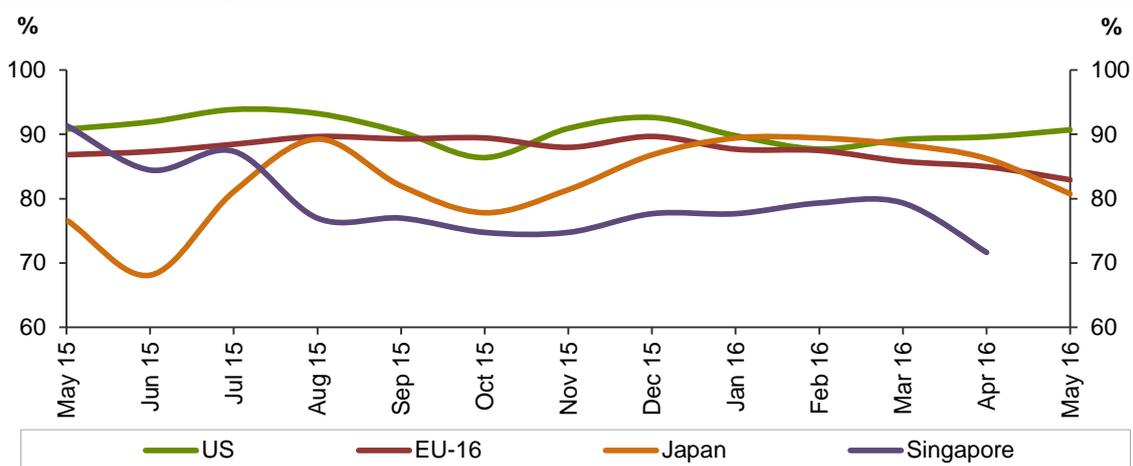
Asian product markets strengthened slightly in May, supported by stronger regional demand amid a peak in refinery maintenance in the region. Refinery margins in Singapore recovered slightly by 20¢ to average \$7.6/b in May. The uptick in margins was limited by pressure exerted from the oversupply environment.

Refinery operations

Refinery utilization rates have been ramped up worldwide, with spring maintenance approaching an end. In Asia, throughput levels continued at near-record levels in China, South Korea and India. Meanwhile, in the Atlantic Basin, several refineries were impacted by events in France and Canada.

Refinery utilization in the **US** averaged around 91% in May, corresponding to 16.3 mb/d, which was 200 tb/d higher than a month earlier. Refineries were running at maximum levels in the USGC, with several refineries back from maintenance, thus compensating for lower levels in other areas possibly impacted by a shortage of Canadian crudes, which also affected refinery levels in Canada.

Graph 6.2: Refinery utilisation rates, 2015-2016



Sources: Argus Media and OPEC Secretariat.

European refinery runs averaged around 83% of capacity in May, corresponding to a throughput of 9.8 mb/d, 240 tb/d lower than in the previous month and around 460 tb/d lower than the same month a year ago. European refinery throughputs continued to be impacted by some maintenance and in addition, in May, were impacted by the French strike, which affected operations in several refineries, ports and gas stations in the country. This caused refinery utilization in France to drop to 60%.

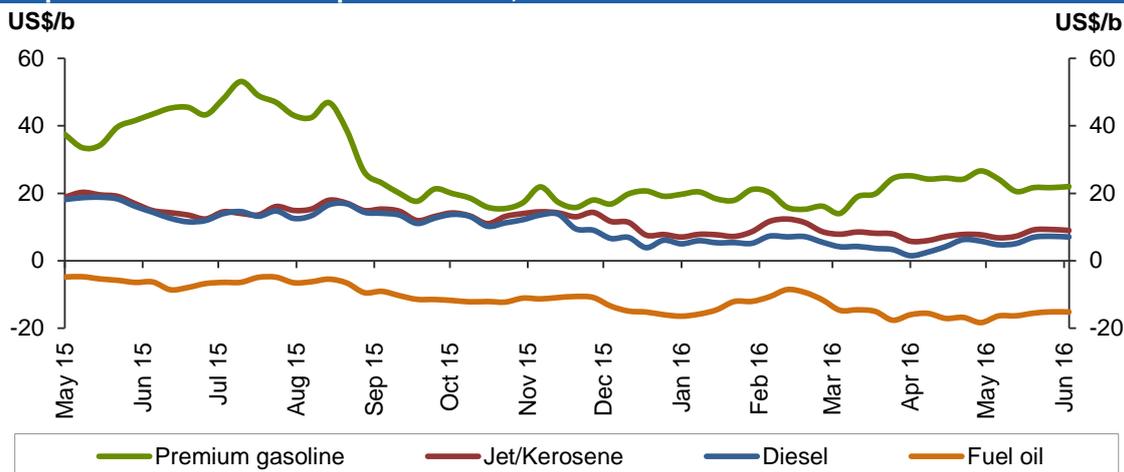
In **Asia**, refinery utilization has continued to rise, mainly in South Korea, India and China, where Chinese teapot refineries contributed to continuing record-high levels, hitting around 10.9 mb/d in April. Indian refinery runs hit 4.9 mb/d during recent months, responding to strong demand growth in the country. Refinery runs in Singapore for April averaged around 72%. Meanwhile, Japanese throughputs averaged 81% of capacity in May, 5 pp lower than the previous month as some maintenance continued in the country.

US market

US **gasoline** demand stood at around 9.6 mb/d in May, approximately 190 tb/d higher than in the previous month and more than 400 tb/d higher than in the same month a year earlier. Stronger domestic gasoline demand has been supporting the gasoline market. However, the crack spreads were under pressure due to higher imports, along with the re-start of several gasoline/producer units. The temporary tightening sentiment caused by crude supply disruptions due to the wildfires in Canada has been offset by increasing refinery runs, with several refineries returning from maintenance.

The gasoline crack spread lost more than \$2 versus the previous month's level to average \$22/b in May.

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



Sources: Argus Media and OPEC Secretariat.

Middle distillate demand stood at around 4.1 mb/d in May, some 20 tb/d higher than in the previous month and around 270 tb/d higher than in the same month a year earlier. The middle distillate market has exhibited weak fundamentals in the last years. However, during May it showed some signs of recovery. Some support has come from stronger domestic demand, which has picked up since the middle of April. Another supporting factor has been increasing exports to Latin America, mainly Argentina. This has allowed inventories to continue falling, despite the increase seen in refinery runs. In the futures market, heating oil Nymex positions reached net-long territory, something which has not been seen since mid-2014. The US Gulf Coast (USGC) gasoil crack averaged around \$6/b in May, gaining around \$2 from the previous month. The uptick has been somehow limited by the pressure exerted by persistently high gasoil availability in the Atlantic Basin, as reflected in recent weeks, with almost no impact seen on the middle distillate market due to the French strikes.

At the **bottom of the barrel**, the fuel oil market recovered some ground, supported by strong bunker demand in the USGC during the last several weeks, amid increasing requirements from Mexico. The USGC high-sulphur fuel oil crack gained almost \$1 to average around minus \$16/b in May.

European market

Product markets in Europe showed a mixed performance during May as the middle of the barrel exhibited a recovery on the back of stronger regional demand, while the gasoline crack spread weakened despite some export opportunities. Higher product inventories offset the potential impact of the French refinery outages, causing refinery margins to fall slightly in Europe.

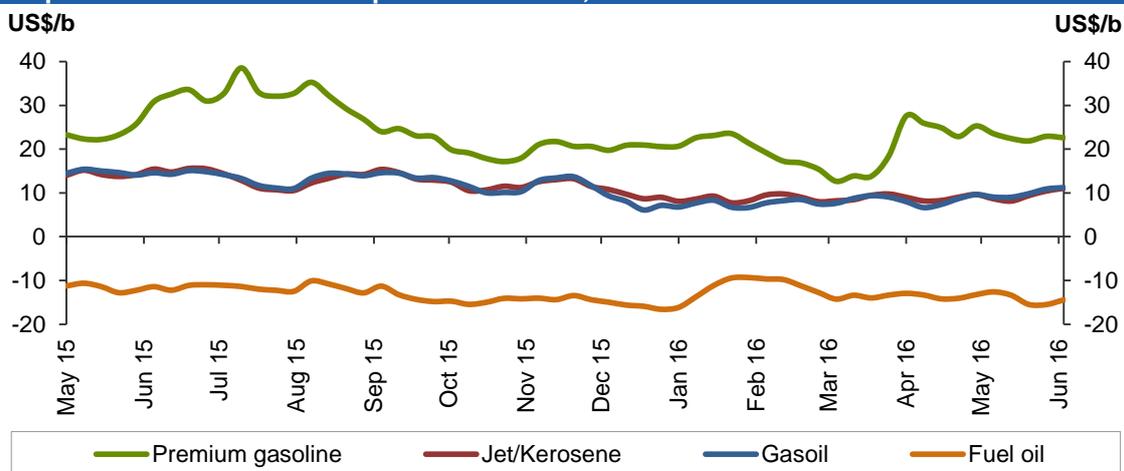
The **gasoline** market partially retained the recovery seen in April, on the back of higher export opportunities, driven by persistently strong demand in the US. This has allowed for hefty transatlantic outflows to satisfy the increasing gasoline imports from the US East Coast (USEC). However the gasoline cracks lost some ground last month as the market was under pressure from additional volumes coming out of storage, increasing availability, in addition to the approaching end of the maintenance season in the region. Another bearish factor has been lower exports to West Africa. The gasoline crack

Product Markets and Refinery Operations

spread against Brent saw a drop of \$2 from the previous month, to average around \$23/b in May.

The light-distillate **naphtha** crack weakened as domestic demand has been falling due to the French petrochemical producers being impacted by the labour strikes. Additional pressure has come from higher inventories amid lower arbitrage opportunities to Asia.

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



Sources: Argus Media and OPEC Secretariat.

The European **gasoil** market showed a recovery during May on the back of support coming from strong domestic demand reported from several countries, mainly Italy and Spain, along with higher requirements from Egypt and Algeria. Additional support came from the supply side with some slow-down seen in imports from the Middle East, thus contributing to the easing of the oversupply by offsetting the continued higher imports from India and Russia. The gasoil crack spread against Brent crude at Rotterdam averaged around \$10/b in May, gaining around \$2 versus the previous month's level. The potential additional gains in the crack spreads, due to the tightening sentiment fuelled by the strike at French ports and refineries, were capped by floating storage outside several European ports and high ARA inventories.

At the **bottom of the barrel**, the fuel oil market continued under pressure due to a lack of arbitrage opportunities to Singapore as inventories remain high in that region. On the other hand, the expected increase in Baltic exports following the end of the Russian refinery maintenance season has also been exerting some pressure. The NWE Europe fuel oil crack lost 50¢ versus the previous month to average around minus \$14/b in May, hitting the lowest level seen this year.

Impact of French refinery strike

A strike against proposed labour reforms disrupted France's refining sector starting in the latter part of May. Some 40% of petrol stations in the Paris region were reporting shortages, fuel depots were being blockaded by oil workers, and the country's refinery activity was significantly disrupted, with four refineries completely shut down and a fifth forced to cut throughputs by around 25%, for a combined impact of more than 0.8 mb/d in refinery capacity during the affected period representing more than half of the country's total capacity.

In response, the French government released its strategic fuel stocks for the first time in six years. By 25 May, the country's Transport Secretary said the government had used three days' worth of reserves to supply the petrol stations that had been affected and stated that the government had sufficient strategic reserves to last 115 days. Some of the shortages were attributed to panic buying, as fuel consumption was roughly three times normal levels.

Table 6.1: Distillation capacity in France and the impact

| Refinery | Operator | Capacity, tb/d | Impact |
|------------------------------|----------|----------------|---------------------|
| Normandy, Gonfreville | Total | 247 | Full disruption |
| Donges | Total | 219 | Full disruption |
| Provence, La Mède | Total | 153 | Reduced runs by 25% |
| Feyzin | Total | 117 | Full disruption |
| Grandpuits | Total | 101 | Full disruption |

Source: Total and Thomson Reuters.

The disruptions contributed to a sharp fall in refinery utilization rates in France in May, which dropped to 62% for the first time since December 2013, after reaching a high so far this year of 85% the month before. Despite this disruption, existing high inventories of light and middle distillates in the region, along with the government's release of strategic product stocks, were sufficient to prevent a spike in refining margins. According to the latest Euroilstock data, middle distillate inventories in the EU-16 fell less than 1% in May m-o-m, while gasoline stocks ended higher, keeping both around 10% above the same month a year ago.

The strike appeared to be winding down by the second week of June, with Total reporting that it was restarting its Donges, Gonfreville, Feyzin, and Grandpuits refineries, and returning La Mède to full operations. However, some striking workers were blocking the full restart of operations at Donges, Gonfreville, and Feyzin.

The situation in the country's oil ports may take longer to normalize as strikes continue to disrupt the country's oil terminals. All discharges have been halted at the southern oil terminal of Fos-Lavera as well as at the northern terminal of Le Havre since 23 May and union workers recently voted to extend the shutdown until 14 June.

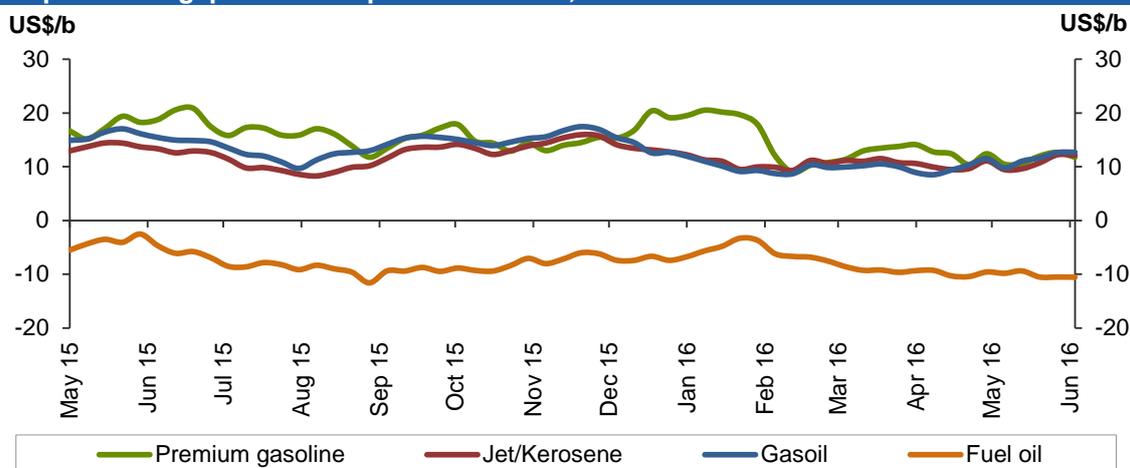
Asian market

The Asian market strengthened slightly in May, supported by stronger regional demand amid the peaking of the refinery maintenance season in the region. The uptick in the margins was limited by the pressure exerted by the oversupply environment.

Despite the heavy maintenance season, the **gasoline** market continued weak, pressured by ample supply in the region, with volumes in floating storage continuing to keep the market under pressure. Higher exports reported from northeast Asian refineries – mainly from Japan and the Shandong province of China – have been outweighing the higher regional demand being reported from India, Pakistan and Indonesia. The gasoline crack spread against Oman crude in Singapore averaged \$12/b in May, losing 40¢ versus the previous month's level. Losses were capped by expectations that increasing seasonal demand amid heavy maintenance could tighten the market in the coming weeks.

The Singapore **naphtha** crack continued its downward trend, losing around \$3/b over the month due to demand being impacted by the heavy petrochemical steam cracker maintenance. The LPG discount to naphtha has encouraged switching to LPG feedstock, which has also pressured the market.

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 continued relatively steady, getting support from lower supplies seen from India due to heavy maintenance amid strong demand. This has allowed the gasoil crack spread to hit its highest value seen this year. Demand in the region remained strong in several countries, mainly India, Vietnam, Indonesia and Pakistan, while some arbitrage opportunities to West Africa and Europe also supported the gasoil market in the region.

The gasoil crack spread in Singapore against Oman averaged around \$12/b in May, gaining around \$2 versus the previous month's level. Although the drought suffered by several countries has been a supportive factor, additional gains were capped by concerns about potential downturn in demand with the upcoming monsoon season in the region.

The Asian **fuel oil** market was relatively stable during May as strong demand reported from South Korea and Pakistan offset the pressure coming from high inventories in Singapore and lower Chinese fuel oil demand. The fuel oil crack spread in Singapore

against Oman averaged about minus \$10/b in May, unchanged from the previous month.

Table 6.2: Refinery operations in selected OECD countries

| | Refinery throughput, mb/d | | | | Refinery utilization, % | | | |
|----------------|---------------------------|--------|--------|-------------------|-------------------------|--------|--------|-------------------|
| | Mar 16 | Apr 16 | May 16 | Change May/Apr | Mar 16 | Apr 16 | May 16 | Change May/Apr |
| US | 15.99 | 16.06 | 16.26 | 0.20 | 89.21 | 89.61 | 90.71 | 1.10 |
| France | 1.12 | 1.19 | 0.87 | -0.32 | 79.59 | 84.78 | 61.95 | -22.83 |
| Germany | 1.86 | 1.76 | 1.71 | -0.06 | 85.01 | 80.62 | 78.02 | -2.61 |
| Italy | 1.24 | 1.38 | 1.30 | -0.08 | 60.41 | 67.20 | 63.29 | -3.91 |
| UK | 0.94 | 1.05 | 1.08 | 0.04 | 67.19 | 74.61 | 77.25 | 2.64 |
| Euro-16 | 10.17 | 10.07 | 9.83 | -0.24 | 85.81 | 84.97 | 82.94 | -2.03 |
| Japan | 3.46 | 3.38 | 3.16 | -0.22 | 88.39 | 86.25 | 80.76 | -5.49 |

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

Note: Data has been revised from January 2016 according to the latest capacity update.

Table 6.3: Refined product prices, US\$/b

| | Apr 16 | May 16 | Change May/Apr | Year-to-date | |
|-------------------------------------|--------|--------|-------------------|--------------|-------|
| | | | | 2015 | 2016 |
| US Gulf (Cargoes FOB): | | | | | |
| Naphtha* | 43.96 | 48.45 | 4.49 | 65.59 | 40.90 |
| Premium gasoline (unleaded 93) | 65.83 | 68.73 | 2.90 | 80.25 | 58.21 |
| Regular gasoline (unleaded 87) | 59.30 | 62.63 | 3.33 | 71.15 | 51.33 |
| Jet/Kerosene | 48.07 | 54.89 | 6.82 | 71.49 | 45.81 |
| Gasoil (0.2% S) | 45.60 | 52.79 | 7.19 | 71.32 | 42.70 |
| Fuel oil (3.0% S) | 26.15 | 31.98 | 5.83 | 46.78 | 24.33 |
| Rotterdam (Barges FoB): | | | | | |
| Naphtha | 41.69 | 44.28 | 2.59 | 54.68 | 38.39 |
| Premium gasoline (unleaded 98) | 66.41 | 69.51 | 3.10 | 76.63 | 58.73 |
| Jet/Kerosene | 50.30 | 56.15 | 5.85 | 73.39 | 46.91 |
| Gasoil/Diesel (10 ppm) | 49.57 | 56.67 | 7.10 | 72.68 | 46.38 |
| Fuel oil (1.0% S) | 27.82 | 32.52 | 4.70 | 46.27 | 25.29 |
| Fuel oil (3.5% S) | 23.66 | 29.28 | 5.62 | 46.94 | 21.45 |
| Mediterranean (Cargoes FOB): | | | | | |
| Naphtha | 40.39 | 43.51 | 3.12 | 51.56 | 37.21 |
| Premium gasoline** | 58.04 | 61.12 | 3.08 | 71.87 | 51.37 |
| Jet/Kerosene | 48.01 | 54.44 | 6.43 | 70.39 | 45.11 |
| Diesel | 50.56 | 57.91 | 7.35 | 74.20 | 47.62 |
| Fuel oil (1.0% S) | 28.01 | 33.72 | 5.71 | 48.32 | 26.02 |
| Fuel oil (3.5% S) | 26.30 | 31.91 | 5.61 | 46.64 | 24.23 |
| Singapore (Cargoes FOB): | | | | | |
| Naphtha | 42.52 | 44.20 | 1.68 | 56.32 | 39.33 |
| Premium gasoline (unleaded 95) | 54.49 | 59.14 | 4.65 | 72.20 | 52.19 |
| Regular gasoline (unleaded 92) | 51.45 | 56.00 | 4.55 | 69.25 | 49.07 |
| Jet/Kerosene | 49.51 | 55.18 | 5.67 | 71.34 | 46.20 |
| Gasoil/Diesel (50 ppm) | 49.33 | 55.95 | 6.62 | 72.30 | 45.81 |
| Fuel oil (180 cst 2.0% S) | 31.02 | 35.80 | 4.78 | 53.31 | 29.54 |
| Fuel oil (380 cst 3.5% S) | 29.17 | 34.03 | 4.86 | 50.98 | 27.26 |

Note: * Barges.

** Cost, insurance and freight (CIF).

Sources: Argus Media and OPEC Secretariat.

Tanker Market

Dirty tanker market sentiment weakened in May as average spot freight rates dropped on most reported routes. On average, dirty tanker freight rates dropped by 4% from the previous month, mainly on the back of lower rates registered for VLCC and Suezmax, which dropped by 7% and 15%, respectively. Freight rates declined on all reported routes from the previous year and month. However, Aframax spot freight rates saw bright spots, rising by around 6% on average as a result of an active market and premiums paid mainly in the Mediterranean.

Clean spot freight rates showed a mixed performance in May, dropping on average. They were mainly affected by lower rates in West of Suez, while those in East of Suez remained mostly flat from the month before.

Spot fixtures

Preliminary data for May shows that OPEC spot fixtures dropped by 3.6%, compared with the previous month, to average 11.49 mb/d. Global spot fixtures declined as well by 2.4% in May, compared with the previous month, to average 16.6 mb/d. Fixtures on the Middle East-to-East route were down by 2.2% and on the Middle East-to-West routes by 0.5 mb/d. In general, global chartering activity showed a drop of 12.6% from the same month one year earlier on reported destinations.

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

| | <u>Mar 16</u> | <u>Apr 16</u> | <u>May 16</u> | <i>Change</i> <u>May 16/Apr 16</u> |
|------------------------|---------------|---------------|---------------|---------------------------------------|
| Spot Chartering | | | | |
| All areas | 17.68 | 17.01 | 16.60 | -0.41 |
| OPEC | 12.19 | 11.92 | 11.49 | -0.43 |
| Middle East/East | 5.22 | 5.44 | 5.32 | -0.12 |
| Middle East/West | 3.23 | 3.19 | 2.68 | -0.50 |
| Outside Middle East | 3.74 | 3.29 | 3.49 | 0.20 |
| Sailings | | | | |
| OPEC | 24.08 | 24.27 | 23.99 | -0.28 |
| Middle East | 17.50 | 17.67 | 17.38 | -0.29 |
| Arrivals | | | | |
| North America | 10.00 | 9.95 | 9.99 | 0.04 |
| Europe | 12.57 | 12.51 | 12.46 | -0.05 |
| Far East | 8.52 | 8.46 | 8.43 | -0.03 |
| West Asia | 4.62 | 4.70 | 4.83 | 0.13 |

Source: Oil Movements.

Sailings and arrivals

OPEC sailings dropped by 0.28 mb/d, or 1.2%, in May from a month ago while remaining up by 0.17 mb/d from a year before. Sailings from the Middle East dropped from the previous month by 0.29 mb/d and from one year earlier by 0.06 mb/d. According to preliminary data, arrivals at main importing regions in North American and West Asian ports showed an increase from a month earlier, rising by 0.4%, and 2.8%, respectively, from the previous month. In contrast, vessel arrivals in the Far East and Europe declined from a month earlier by 0.3% and 0.4%, respectively.

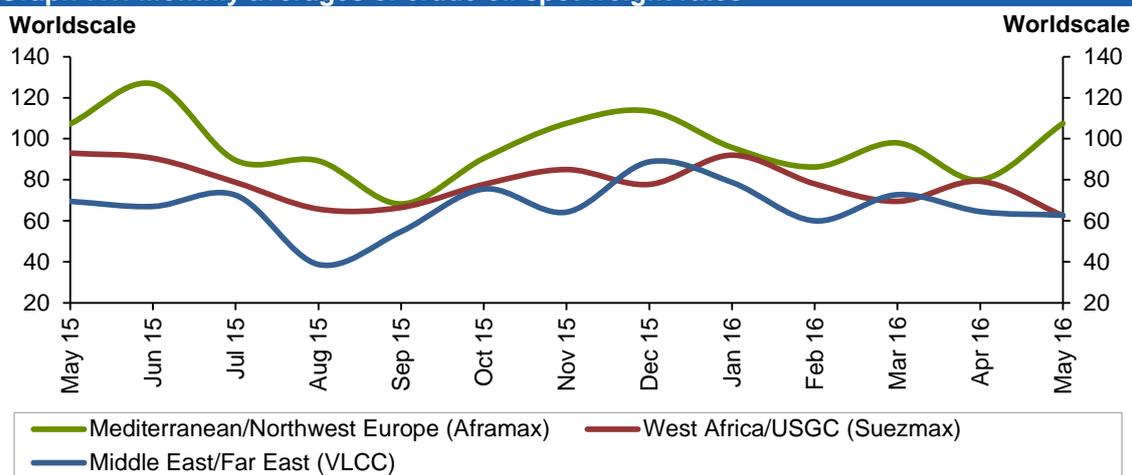
Spot freight rates

VLCC

VLCC freight rates dropped on average in May from the month before, down by 7% from April, to stand at WS73 points. Increased activity at the beginning of the month was seen to support VLCC freight rates, mainly in the Middle East and West Africa, despite high vessel supply at that point. Spot freight rates further improved when June requirements came onto the market.

However, rates edged down to reverse previous gains as sluggish demand in the Middle East and West Africa combined with reduced delays in Asian ports to support the expansion of available vessels on the tonnage list. Thus, Middle East-to-East freight rates dropped by 3%, to stand at WS63 points. West Africa-to-East freight rates followed the same pattern, though reflecting a higher drop of 12%, to stand at WS38 points. Freight rates for tankers operating on the Middle East-to-West route also dropped by 8% from one month before.

Graph 7.1: Monthly averages of crude oil spot freight rates



Sources: Argus and Platts.

Suezmax

As seen in the VLCC sector, Suezmax spot freight rates also underwent negative development in May. At the beginning of the month, rates for Suezmax were weak due to holidays and low activity, generally. Increased activity was only later able to stabilize rates and prevent further drops.

In West Africa, spot freight rates for tankers operating on the West Africa-to-US Gulf Coast route dropped by 21% to stand at WS63 points. Spot freight rates for tankers operating on the Northwest Europe (NWE)-to-US Gulf Coast (USGC) route dropped by 8% to average WS63 points. Suezmax rates on both routes showed a higher decline, compared with freight rates registered on the same routes the previous year.

Table 7.2: Spot tanker crude freight rates, Worldscale

| Crude | Size | | | | Change |
|--------------------------------|------------------|---------------|---------------|---------------|----------------------|
| | <i>1,000 DWT</i> | Mar 16 | Apr 16 | May 16 | May 16/Apr 16 |
| Middle East/East | 230-280 | 73 | 65 | 63 | -2 |
| Middle East/West | 270-285 | 41 | 43 | 38 | -5 |
| West Africa/East | 260 | 72 | 67 | 62 | -6 |
| West Africa/US Gulf Coast | 130-135 | 70 | 79 | 63 | -17 |
| Northwest Europe/US Gulf Coast | 130-135 | 63 | 69 | 63 | -6 |
| Indonesia/East | 80-85 | 147 | 111 | 91 | -20 |
| Caribbean/US East Coast | 80-85 | 115 | 109 | 104 | -5 |
| Mediterranean/Mediterranean | 80-85 | 106 | 87 | 109 | 22 |
| Mediterranean/Northwest Europe | 80-85 | 98 | 80 | 108 | 28 |

Sources: Argus Media and OPEC Secretariat.

Aframax

In May, Aframax was the only vessel size in the dirty tanker segment, which showed enhanced rates, on average, from a month before. Aframax freight rates increased by 6%, as a result of mixed performance for the class, supported by increased rates for tankers trading in both directions of the Mediterranean.

The markets in the North Sea and Mediterranean were balanced at the beginning of the month before some replacement deals were fixed at high premiums. A lighter tonnage list in the Mediterranean, combined with a sudden shortage of vessels, pushed rates up in that region. Freight rates for tankers operating on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes edged up by 25% and 34% to average WS116 and WS109 points, respectively, making Suezmax a viable alternative to Aframax at a certain point, due to its falling rates and weak market.

Spot freight rates went down on the Caribbean-to-US East Coast (USEC) route by 4% from the previous month, despite owners' consistent resistance to lower rates, as tonnage supply outweighed chartering requirements.

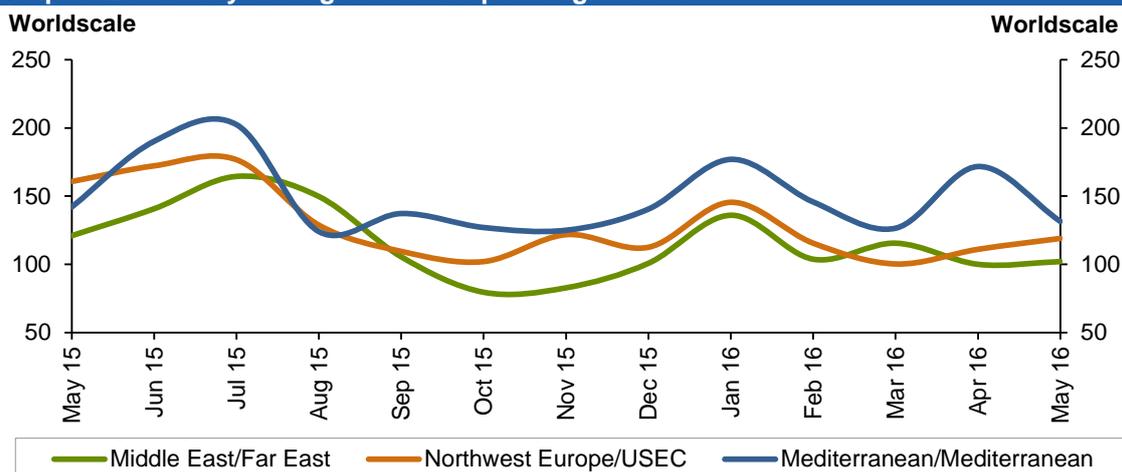
Aframax freight rates to eastern destinations were not an exception, dropping by 18% for tankers trading on the Indonesia-to-East route to average WS91 points.

Clean spot freight rates

Clean tanker market sentiment was weak in May. On average, clean spot tanker freight rates dropped by 11% from the month before to stand at WS125 points.

In the West of Suez, freight rates experienced a large drop on average. Tonnage in the West was affected by the holidays and slow movement in the market. Among the main drivers behind freight rate drops in the West was lower freight rates in the Mediterranean, where they dropped by 23% and 22%, respectively, on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes. Nevertheless, rates for medium-range tankers operating on the NWE-to-US East Coast went up by 7% to average WS119 points as the market was balanced, showing a multi-month high, though the increase remained limited.

Graph 7.2: Monthly average of clean spot freight rates



Sources: Argus Media and OPEC Secretariat.

Similarly, East of Suez average clean spot freight rates dropped by a slight WS1 point on average, as lower rates were registered for tankers trading on the Singapore-to-East route, where a drop of WS3 points was seen in May to average WS132 points. A slight improvement was achieved by tankers operating on the Middle East-to-East route, which increased by 2% from a month before.

Table 7.3: Spot tanker product freight rates, Worldscale

| Products | Size 1,000 DWT | Worldscale | | | Change May 16/ Apr 16 |
|--------------------------------|-------------------|------------|--------|--------|--------------------------|
| | | Mar 16 | Apr 16 | May 16 | |
| Middle East/East | 30-35 | 116 | 100 | 102 | 2 |
| Singapore/East | 30-35 | 140 | 135 | 132 | -4 |
| Northwest Europe/US East Coast | 33-37 | 100 | 111 | 119 | 8 |
| Mediterranean/Mediterranean | 30-35 | 127 | 172 | 132 | -40 |
| Mediterranean/Northwest Europe | 30-35 | 136 | 182 | 142 | -40 |

Sources: Argus Media and OPEC Secretariat.

Oil Trade

Preliminary data shows that US crude oil imports in May declined by 189 tb/d from the previous month, to average 7.6 mb/d on an annual basis. Meanwhile, US crude imports dropped by 375 tb/d from a year earlier. US products imports declined by 68 tb/d, or 3.2%, to average 2.2 mb/d m-o-m, while on a y-o-y basis, they remained at last year's level.

Japan's crude oil imports dropped in April by 93 tb/d, or 3%, to average 3.5 mb/d. On an annual basis, crude imports were 115 tb/d, or 3%, higher in April. Japan's products imports went up in April by 47 tb/d, to average 524 tb/d.

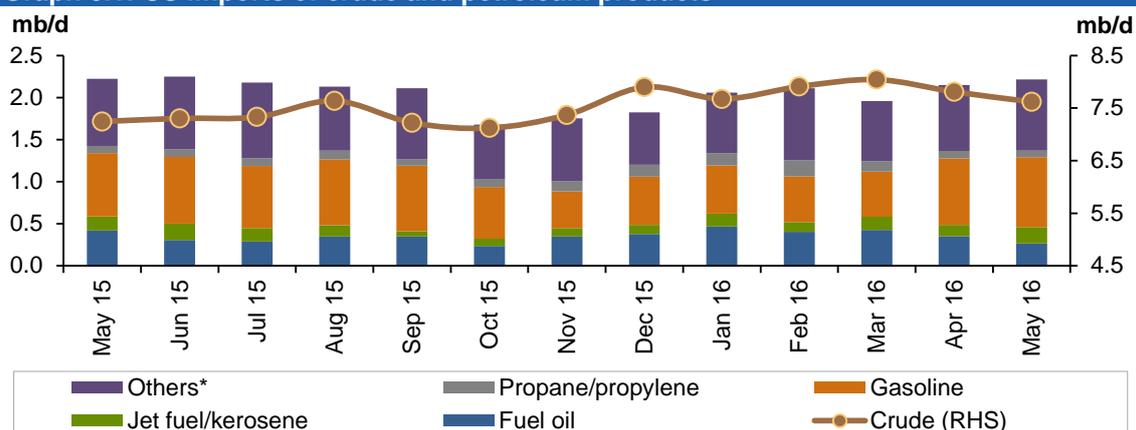
Meanwhile China's crude oil imports increased from the previous month by 249 tb/d, or 3%, maintaining a high level and averaging 7.95 mb/d. On an annual comparison, China's crude imports were up by 559 tb/d or 8%. As to China's product imports, they increased slightly in April by 19 tb/d from the previous month and by 215 tb/d from a year earlier, to average 1.4 mb/d.

In April, India's crude imports stayed at high levels, averaging 4.4 mb/d, which is almost stable from the level seen last month. On an annual basis, this reflects a big gain from last year and is 592 tb/d, or 16%, higher. India's product imports increased by 209 tb/d, or 32%, from a month ago to average 850 tb/d. On a y-o-y basis, this reflects a gain of 293 tb/d or 52%.

US

Preliminary data shows that US crude oil imports in May declined by 189 tb/d from the previous month to average 7.6 mb/d. On an annual basis, US crude imports dropped by 375 tb/d from a year earlier.

Graph 8.1: US imports of crude and petroleum products



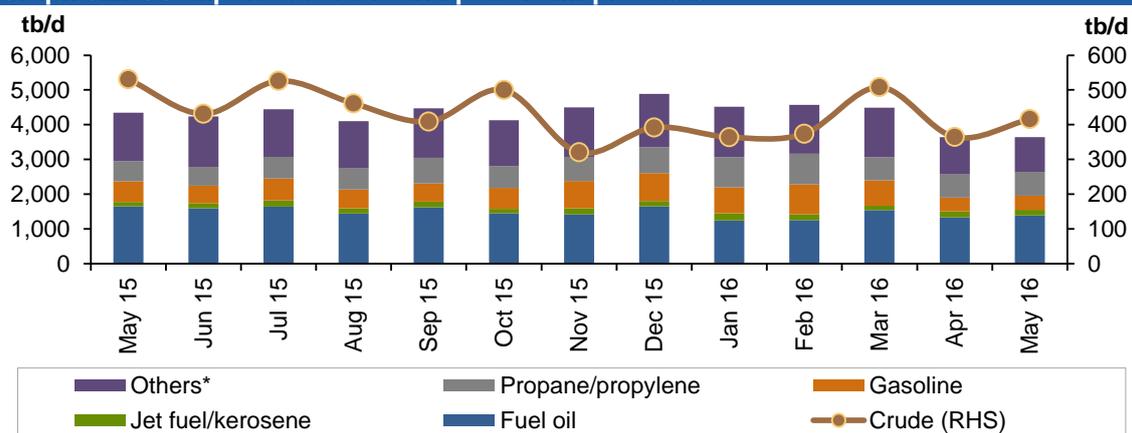
Note: *Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.

Sources: US Energy Information Administration and OPEC Secretariat.

US product imports declined by 68 tb/d, or 3.2%, to average 2.2 mb/d m-o-m, while on a y-o-y basis, they remained at last year's level. On a year-to-date comparison, crude imports were 554 tb/d higher, while product imports dropped by 37 tb/d. As to product exports in May, they fell by 703 tb/d, or 16%, to average 3.6 mb/d from the previous year.

As a result, total **US net imports dropped in May to average 5.8 mb/d**, down by 166 tb/d from the previous month. However, this was up by 1.2 mb/d 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 Secretariat.

In March, Canada remained **top crude supplier**, accounting for 41% of total US crude imports, though Canadian exports to the US in March were down by 258 tb/d from a month before. Saudi Arabia came in as the second supplier to the US, maintaining a share of 16% of total crude imports, while Venezuela came in as the third largest supplier to the US, accounting for 10% of total US crude imports. Imports from both Saudi Arabia and Venezuela increased from a month before by 257 tb/d and 47 tb/d, respectively.

Crude imports from OPEC Member Countries increased in March by 310 tb/d, or 11%, over the previous month. Imports from OPEC Member Countries accounted for 41% of total US crude imports. As to **US product imports from OPEC Member Countries**, these increased from a month earlier to stand at 55 tb/d, maintaining a share of 16% of total products imported by the US. This was 135 tb/d higher than the same month last year. As to the **product supplier** share, Canada and Russia maintained their positions as first and second supplier, respectively, to the US holding a share of 30% and 16%. Algeria came in as the third biggest product supplier to the US with an average import level of 128 tb/d.

As to the **US crude imports by region**, in March imports from North America averaged 3.3 mb/d. North America came in as the top region for US crude imports, followed by Latin America, which stood at 2.8 mb/d in March. The Middle East came in as the third largest exporter to the US, with an average of 1.7 mb/d. Imports from Africa, Asia and the FSU all dropped from a month before.

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

| | <u>Mar 16</u> | <u>Apr 16</u> | <u>May 16</u> | <u>Change</u> <u>May 16/Apr 16</u> |
|---------------------------------|---------------|---------------|---------------|---------------------------------------|
| Crude oil | 7,534 | 7,444 | 7,205 | -240 |
| Total products | -2,534 | -1,497 | -1,423 | 74 |
| Total crude and products | 5,000 | 5,947 | 5,781 | -166 |

Sources: US Energy Information Administration and OPEC Secretariat.

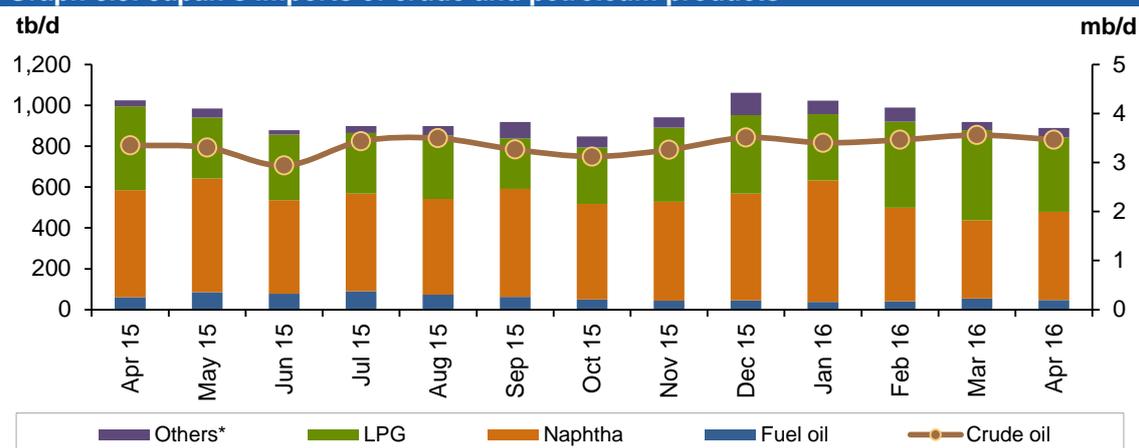
Japan

Japan's **crude oil imports** dropped in April by 93 tb/d, or 3%, to average 3.5 mb/d. On an annual basis, crude imports were higher in April by 115 tb/d or 3%. Also, Japanese refinery throughput dropped from the previous month.

As to the **suppliers' share**, Saudi Arabia maintained their position as the largest crude supplier to Japan, maintaining a 41% share of total crude imports with an increase in volumes from the previous month by 222 tb/d. The UAE came in as the second largest supplier to Japan with a share of 19% of total crude imports, although Japan's imports from the UAE decreased by 265 tb/d in April m-o-m. Qatar came in third place holding a share of 10%. Japan's imports from Qatar were up by 35 tb/d from the previous month.

Japan's **product imports** went up in April by 47 tb/d to average 524 tb/d. At the same time, Japan's **domestic product sales** fell by 3.9% from last year.

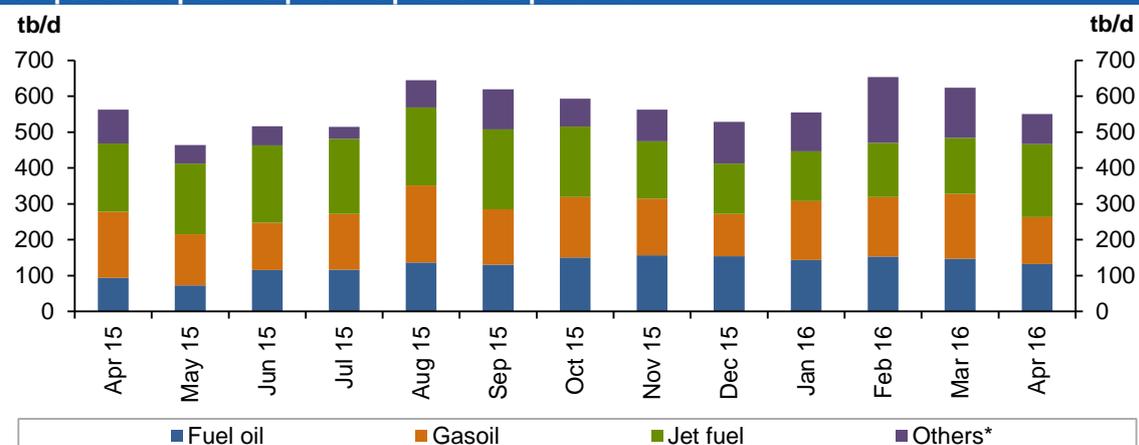
Graph 8.3: Japan's imports of crude and petroleum products



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

As to **product exports**, Japan's exports in April were down from the previous month by 73 tb/d, to average 550 tb/d. Accordingly, **Japan's net imports increased by 27 tb/d in April to average 3.4 mb/d**, reflecting lower monthly and annual imports.

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.

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

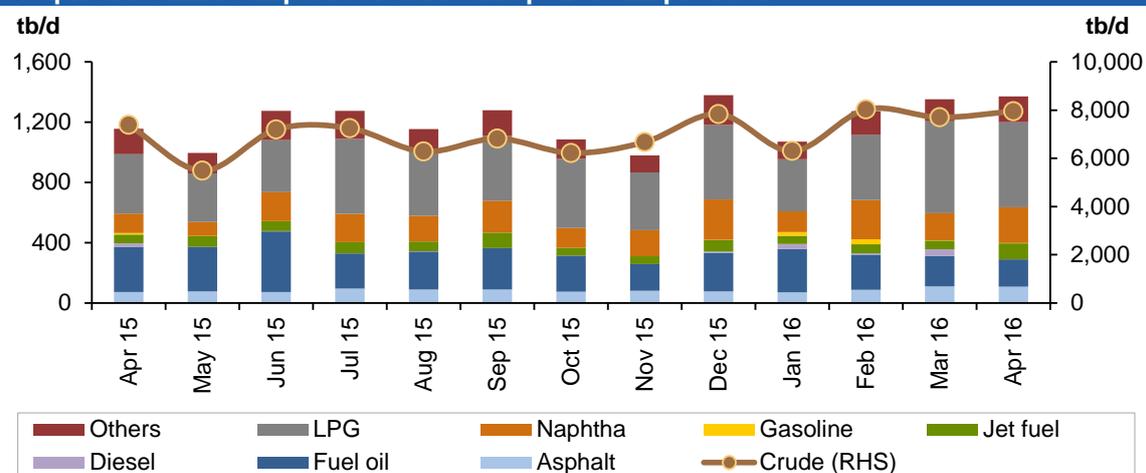
| | <u>Feb 16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>Change</u> <u>Apr 16/Mar 16</u> |
|---------------------------------|---------------|---------------|---------------|---------------------------------------|
| Crude oil | 3,462 | 3,559 | 3,467 | -93 |
| Total products | -85 | -146 | -26 | 120 |
| Total crude and products | 3,377 | 3,414 | 3,441 | 27 |

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

China

China's **crude oil imports** increased from the previous month to maintain their high level. They were up by 249 tb/d, or 3%, from a month ago, averaging 7.95 mb/d. On an annual comparison, China's crude imports were up by 559 tb/d, or 8%. On a year-to-date basis, crude imports were up by 742 tb/d or 11%. Refinery throughput in China was almost 300 tb/d higher in April compared to March.

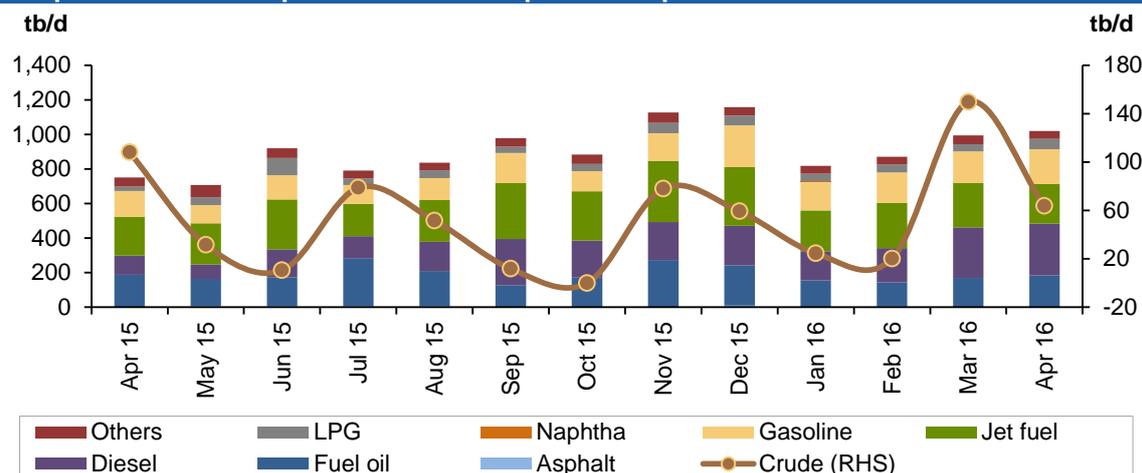
In terms of **supplier share**, Russia, Saudi Arabia and Angola were the top crude suppliers to China in April holding a share of 15% 13% and 12%, respectively. In April, these top suppliers increased their exports to China by 76 tb/d, 65 tb/d and 116 tb/d, respectively, from a month earlier.

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

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

As to China's **product imports**, these increased slightly in April by 19 tb/d from the previous month and by 215 tb/d from a year earlier to average 1.4 mb/d.

China's **crude exports** dropped in April from the high level seen in March to average 64 tb/d, down 57 tb/d from last month's level and by 44 tb/d from the previous year.

Graph 8.6: China's exports of crude and petroleum products

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

Consequently, **China's net oil imports increased by 328 mb/d, or 4%, from the previous month to average 8.2 mb/d, and 7% from a year ago.**

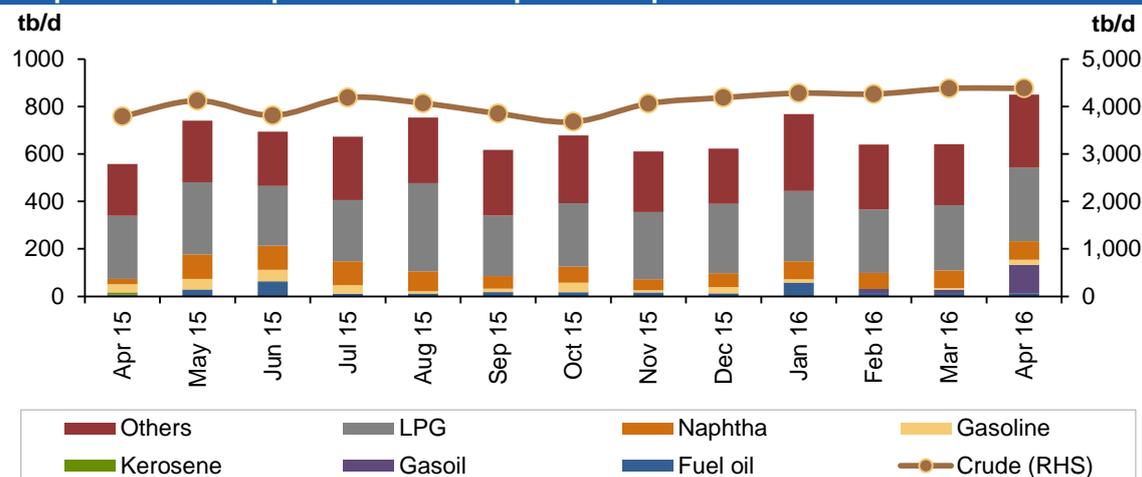
Table 8.3: China's crude and product net imports, tb/d

| | Feb 16 | Mar 16 | Apr 16 | Change Apr 16/Mar 16 |
|---------------------------------|---------------|---------------|---------------|---------------------------------|
| Crude oil | 8,006 | 7,550 | 7,885 | 335 |
| Total products | 401 | 359 | 351 | -7 |
| Total crude and products | 8,408 | 7,908 | 8,236 | 328 |

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

India

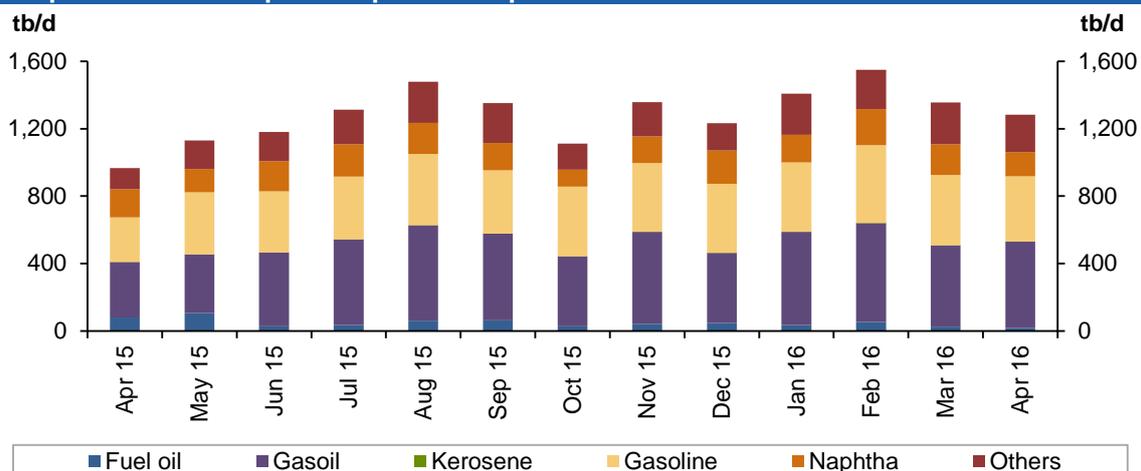
In April, India's **crude imports** stayed at high levels as they averaged 4.4 mb/d despite the country approaching peak maintenance season in May. India's crude imports in April remained almost stable from a month earlier. On an annual basis, this reflected a big gain of 592 tb/d, or 16%, from the previous year. Separately, India's refinery throughput dropped in April from the previous month.

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

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

India's **product imports** increased by 209 tb/d, or 32%, from a month ago to average 850 tb/d. On a y-o-y basis, this reflects a gain of 293 tb/d, or 52%, with the increase in product imports mainly supported by higher imports of diesel.

Graph 8.8: India's exports of petroleum products



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

As to Indian **product exports**, in April they increased by 318 tb/d, or 33%, from a year earlier to average 1.3 tb/d, with exports of diesel and petrol increasing from the previous year.

Consequently, **India's total net imports increased by 284 tb/d to average 4 mb/d.**

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

| | <u>Feb 16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>Change</u> <u>Apr 16/Mar 16</u> |
|---------------------------------|---------------|---------------|---------------|---------------------------------------|
| Crude oil | 4,261 | 4,379 | 4,382 | 3 |
| Total products | -910 | -714 | -434 | 281 |
| Total crude and products | 3,352 | 3,665 | 3,949 | 284 |

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 April, **total crude oil exports from the FSU dropped by 55 tb/d, or 1%, to average 6.85 mb/d.** Crude exports through the Russian pipeline increased by 223 tb/d, or 5%, to average 4.5 mb/d.

Total shipments from the **Black Sea** dropped by 91 tb/d, or 12%, from last month to average 674 tb/d. Total **Baltic Sea** exports increased by 229 tb/d in April as shipments from the Primorsk port terminal went up by 237 tb/d. Total shipments along the **Druzhba pipeline** increased by 27 tb/d to average 1.1 mb/d.

Kozmino shipments increased by 59 tb/d, or 10%, to average 684 tb/d.

Exports through the **Lukoil system** declined from the previous month, particularly in the Barents Sea and the Baltic Sea where exports dropped by 13 tb/d and 7 tb/d, respectively.

Oil Trade

Total exports from the **Russian Far East** were down by 35 tb/d, or 8%, from the previous month.

Total exports from the **Black Sea** dropped by 226 tb/d as a result of lower shipments from the Novorossiysk port terminal, which decreased by 238 tb/d from the month before. In the **Mediterranean Sea**, Baku-Tbilisi-Ceyhan supplies dropped from the previous month by 39 tb/d, or 6%, to average 593 tb/d.

As to products, **total FSU product exports** dropped by 410 tb/d, or 12%, from the previous month to average 3.4 mb/d. This came as a result of a drop in all exports, with the exception of vacuum gas oil.

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

| <u>Transneft system</u> | | <u>2014</u> | <u>3Q15</u> | <u>4Q15</u> | <u>Mar 16</u> | <u>Apr 16</u> |
|------------------------------------|--|--------------|--------------|--------------|---------------|---------------|
| Europe | Black sea total | 605 | 533 | 653 | 765 | 674 |
| | Novorossiysk port terminal - total | 605 | 533 | 653 | 765 | 674 |
| | of which: Russian oil | 438 | 396 | 502 | 583 | 501 |
| | Others | 166 | 137 | 151 | 181 | 173 |
| | Baltic sea total | 1,304 | 1,492 | 1,511 | 1,501 | 1,730 |
| | Primorsk port terminal - total | 842 | 955 | 922 | 893 | 1,130 |
| | of which: Russian oil | 834 | 955 | 922 | 893 | 1,130 |
| | Others | 8 | 0 | 0 | 0 | 0 |
| | Ust-Luga port terminal - total | 462 | 536 | 590 | 607 | 599 |
| | of which: Russian oil | 284 | 323 | 359 | 375 | 432 |
| | Others | 177 | 213 | 231 | 233 | 168 |
| | Druzhba pipeline total | 1,005 | 1,077 | 1,044 | 1,030 | 1,057 |
| | of which: Russian oil | 973 | 1,045 | 1,012 | 998 | 1,026 |
| Others | 32 | 32 | 32 | 32 | 31 | |
| Asia | Pacific ocean total | 507 | 647 | 617 | 626 | 684 |
| | Kozmino port terminal - total | 507 | 647 | 617 | 626 | 684 |
| | China (via ESPO pipeline) total | 342 | 341 | 349 | 349 | 348 |
| China Amur | 342 | 341 | 349 | 349 | 348 | |
| Total Russian crude exports | | 3,763 | 4,090 | 4,174 | 4,270 | 4,493 |
| <u>Lukoil system</u> | | <u>2014</u> | <u>3Q15</u> | <u>4Q15</u> | <u>Mar 16</u> | <u>Apr 16</u> |
| Europe & N. America | Barents sea total | 120 | 136 | 161 | 169 | 156 |
| | Varandey offshore platform | 120 | 136 | 161 | 169 | 156 |
| Europe | Baltic sea total | 12 | 14 | 19 | 19 | 12 |
| | Kalinigrad port terminal | 12 | 14 | 19 | 19 | 12 |
| <u>Other routes</u> | | <u>2014</u> | <u>3Q15</u> | <u>4Q15</u> | <u>Mar 16</u> | <u>Apr 16</u> |
| Asia | Russian Far East total | 275 | 347 | 369 | 418 | 384 |
| | Aniva bay port terminal | 112 | 114 | 118 | 141 | 123 |
| | De Kastri port terminal | 162 | 233 | 251 | 277 | 261 |
| | Central Asia total | 228 | 211 | 199 | 192 | 186 |
| Kenkiyak-Alashankou | 228 | 211 | 199 | 192 | 186 | |
| Europe | Black sea total | 982 | 1,068 | 1,158 | 1,192 | 966 |
| | Novorossiysk port terminal (CPC) | 855 | 961 | 1,029 | 1,066 | 828 |
| | Supsa port terminal | 80 | 96 | 94 | 86 | 89 |
| | Batumi port terminal | 39 | 11 | 35 | 39 | 49 |
| | Kulevi port terminal | 9 | 0 | 0 | 0 | 0 |
| | Mediterranean sea total | 602 | 613 | 485 | 632 | 593 |
| BTC | 602 | 613 | 727 | 632 | 593 | |
| <u>Russian rail</u> | | <u>2014</u> | <u>3Q15</u> | <u>4Q15</u> | <u>Mar 16</u> | <u>Apr 16</u> |
| Russian rail | Russian rail | 46 | 13 | 17 | 12 | 59 |
| | of which: Russian oil | 8 | 9 | 10 | 8 | 55 |
| | Others | 38 | 3 | 7 | 4 | 4 |
| Total FSU crude exports | | 6,028 | 6,492 | 6,582 | 6,903 | 6,849 |
| <u>Products</u> | | <u>2014</u> | <u>3Q15</u> | <u>4Q15</u> | <u>Mar 16</u> | <u>Apr 16</u> |
| | Gasoline | 124 | 145 | 226 | 218 | 178 |
| | Naphtha | 485 | 519 | 514 | 496 | 492 |
| | Jet | 5 | 23 | 25 | 42 | 36 |
| | Gasoil | 933 | 863 | 1,125 | 1,174 | 990 |
| | Fuel oil | 1,487 | 1,204 | 1,079 | 1,169 | 968 |
| | VGO | 245 | 264 | 222 | 285 | 310 |
| Total FSU product exports | | 3,280 | 3,018 | 3,190 | 3,384 | 2,974 |
| Total FSU oil exports | | 9,308 | 9,510 | 9,772 | 10,287 | 9,823 |

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

OECD commercial oil stocks rose slightly in April to stand at 3,046 mb. At this level, they were around 338 mb above the latest five-year average. Crude and product stocks showed a surplus of around 194 mb and 144 mb above the seasonal norm, respectively. In terms of days of forward cover, OECD commercial stocks stood at 66.4 days, 7.1 days higher than the latest five-year average.

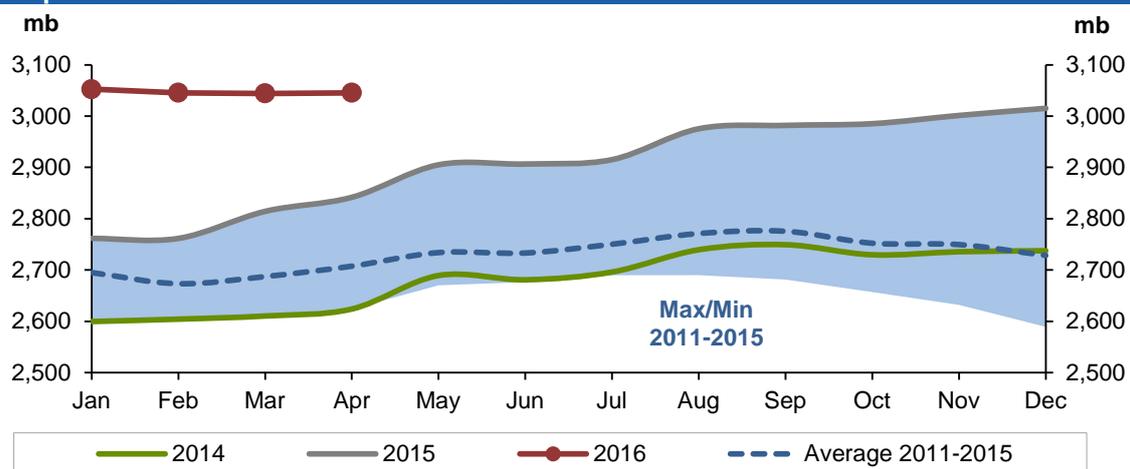
Preliminary data for May shows that total commercial oil stocks in the US fell by 5.7 mb to stand at 1,365 mb. At this level, they were around 100 mb above the same period a year ago and 229 mb higher than the latest five-year average. Within the components, crude stocks fell by 7.7 mb, while products rose by 2.0 mb.

The latest information for China shows a drop of 11.6 mb in total commercial oil inventories for April to stand at 397.0 mb. Within the components, crude and products fell by 8.8 mb and 2.9 mb, respectively.

OECD

Preliminary data for April shows that **total OECD commercial oil stocks** rose by 1.3 mb to stand at 3,046 mb. At this level, OECD commercial oil stocks were around 204 mb higher than the same time one year ago and 338 mb above the latest five-year average. Within the components, crude rose by 11.1 mb, while products fell by 9.8 mb. Weakening refinery runs have pushed OECD crude stocks higher, while heavy maintenance in April contributed to a stock draw in products. Within OECD regions, OECD America and OECD Asia Pacific experienced a build, while OECD Europe witnessed a drop.

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 April at 1,541 mb, standing 81 mb above the same time one year earlier and more than 194 mb higher than the latest five-year average. OECD North America and OECD Europe stocks experienced a build, while OECD Asia Pacific stocks saw a drop.

In contrast, **OECD product inventories** fell in April by 9.8 mb for the third consecutive month to stand at 1,505 mb. At this level, product inventories stood 123 mb higher than a year ago at the same time, and were 144 mb above the seasonal norm. OECD North America and OECD Asia Pacific stocks experienced a drop, while those in OECD Europe saw a build.

In terms of **days of forward cover**, OECD commercial stocks fell in April to stand at 66.4 days. At this level, they were 4.3 days above the previous year in the same period and 7.1 days higher than the latest five-year average. Within the regions, OECD Americas' had 9.2 more days of forward cover than the historical average to stand at 66.3 days in April. OECD Asia Pacific stood 2.8 days above the seasonal average to finish the month of April at 55.4 days. At the same time, OECD Europe indicated a surplus of 5.8 days above the seasonal norm, averaging 72.6 days in April.

Commercial stocks in **OECD Americas** rose by 7.4 mb in April, ending the month at 1,628 mb. At this level, they represented a surplus of 116 mb above a year ago and were 253 mb higher than the seasonal norm. Within components, crude stocks rose by 10.9 mb, while product stocks fell by 3.5 mb.

At the end of April, **crude commercial oil stocks in OECD Americas** rose, ending the month at 865 mb, which was 58 mb above the same time one year ago, and 158 mb above the latest five-year average. The build in crude inventories could be attributed to lower crude runs in the US, combined with higher crude imports. In contrast, **product stocks in OECD Americas** declined by 3.5 mb, ending April at 763 mb. Despite this drop, they indicated a surplus of 58 mb above the same time one year ago, and were 94 mb higher than the seasonal norm. Maintenance shutdowns have limited product output in the US, resulting in stock draws.

OECD Europe's commercial stocks fell by 8.0 mb in April, following a drop of 10.4 mb in March. At 997 mb, they were 58 mb higher than the same time a year ago and 70 mb above the latest five-year average. Crude rose by 1.0 mb, while product stocks fell by 9.0 mb.

OECD Europe's commercial crude stocks rose by 1.0 mb in April, ending the month at 421 mb, slightly above the same period a year earlier and 23 mb higher than the latest five-year average. The build in April's crude oil stocks came despite higher crude runs. In contrast, **OECD Europe's commercial product stocks** fell by 9.0 mb to end April at 576 mb. At this level, OECD Europe's commercial product stocks were 57 mb higher than a year ago at the same time, and 48 mb higher than the seasonal norm. The fall was mainly driven by lower refinery output.

OECD Asia Pacific commercial oil stocks rose by 1.9 mb in April, reversing the trend of the previous three consecutive months. At 421 mb, they were 30 mb higher than a year ago and 16 mb above the five-year average. Within the components, **crude** fell by 0.8 mb, while **product stocks** went up by 2.7 mb. In April, crude inventories ended the month at 255 mb, indicating a surplus of 22 mb above a year ago and 14 mb above the seasonal norm. OECD Asia Pacific's total product inventories ended April at 166 mb, standing 7.8 mb above the same time a year ago, while standing 2.1 mb below the seasonal norm.

Table 9.1: OECD's commercial stocks, mb

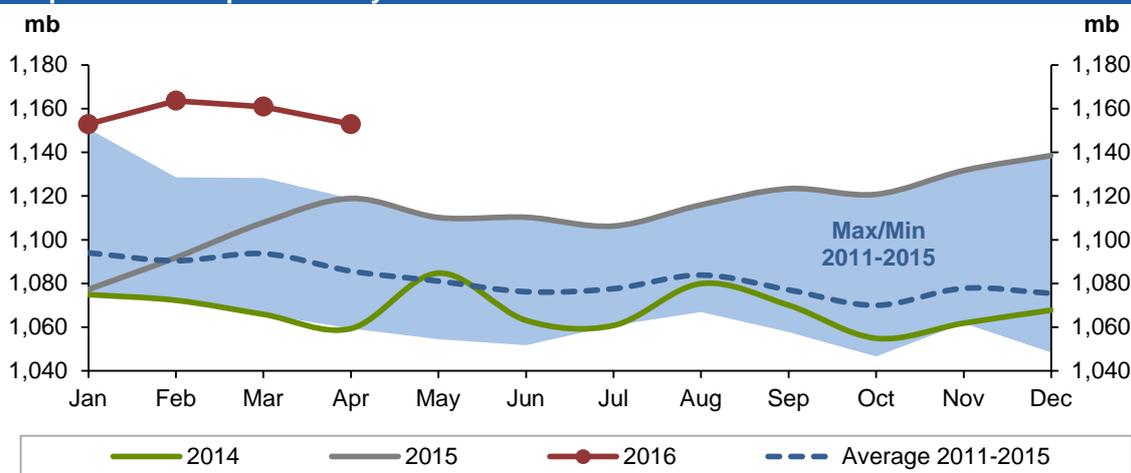
| | <u>Feb 16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>Change</u> <u>Apr 16/Mar 16</u> | <u>Apr 15</u> |
|------------------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| Crude oil | 1,525 | 1,530 | 1,541 | 11.1 | 1,460 |
| Products | 1,520 | 1,514 | 1,505 | -9.8 | 1,382 |
| Total | 3,045 | 3,044 | 3,046 | 1.3 | 2,842 |
| Days of forward cover | 66.6 | 66.7 | 66.4 | -0.3 | 62.1 |

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

EU plus Norway

Preliminary data for April shows the total **European stock** draw at 8.0 mb, leaving inventories to stand at 1,153 mb. At this level, they are 34.0 mb, or 3.0%, above the same time a year ago and 67.2 mb, or 6.2%, higher than the latest five-year average. Crude stocks rose by 1.0 mb, while products fell by 8.0 mb.

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



Source: Euroilstock.

European crude inventories rose in April, reversing the stock draw of the previous month to stand at 485.5 mb. This was 15.7 mb, or 3.1%, below the same period a year ago, but 19.4 mb, or 4.1%, higher than the seasonal norm. The build in April's crude oil stocks came despite refinery crude runs increasing by 100 tb/d to average 10.1 mb/d. However, throughput levels stood at about 90 tb/d below the previous year at the same time.

In contrast, **European product stocks** fell by 9.0 mb to end April at 665.4 mb. At this level, they were 49.7 mb, or 8.1%, above the same time a year ago, and 47.8 mb, or 7.7%, above the seasonal norm. Within products, all stocks experienced a draw, with the exception of naphtha.

Gasoline stocks fell by 1.5 mb in April to stand at 121.1 mb. Despite this stock draw, they were 3.1 mb, or 2.6%, above a year earlier, and 8.8 mb, or 7.8%, higher than the seasonal norm. The fall in gasoline stocks could be driven by higher demand in the region, along with higher exports to the US ahead of the driving season.

Distillate stocks also fell by 6.0 mb to end April at 441.8 mb. At this level, they were 44.9 mb, or 11.3%, higher than the same time one year ago and 52.7 mb, or 13.5%, above the latest five-year average. The fall in distillate stocks came from lower distillate yields in favour of gasoline. Higher distillate demand, especially for jet fuel, also contributed to the stock draw.

Residual fuel oil stocks fell by 2.4 mb in April to stand at 77.4 mb. At this level, they stood 1.5 mb, or 2.0%, above the same month a year ago, but remained 8.4 mb, or 9.7%, lower than the latest five-year average. The fall in residual fuel oil stocks was a result of increases in residual bunker demand. In contrast, naphtha stocks rose by 0.9 mb to stand at 25.1 mb, which is 0.2 mb, or 0.8%, higher than the same time a year ago, but 5.3 mb, or 17.4%, lower than the seasonal average.

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

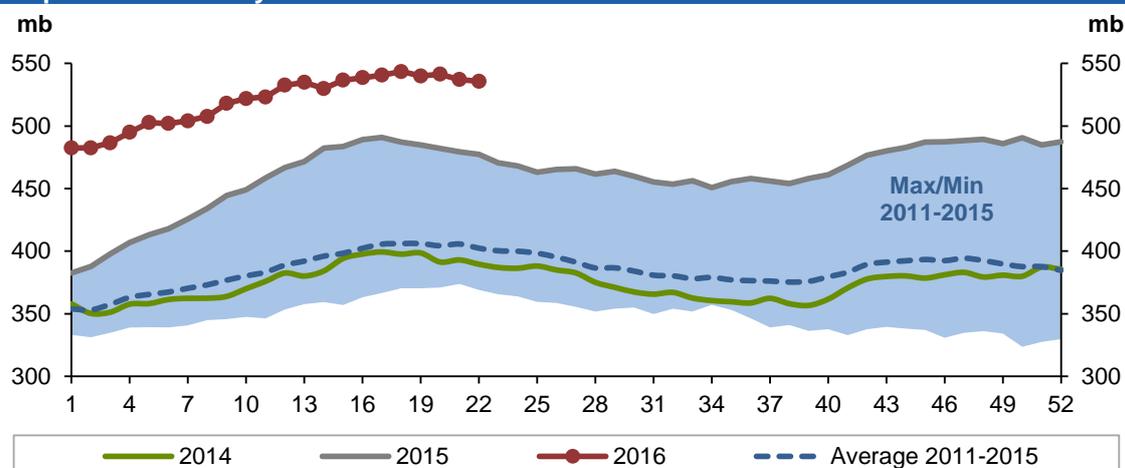
| | Feb 16 | Mar 16 | Apr 16 | Change Apr 16/Mar 16 | Apr 15 |
|-----------------------|----------------|----------------|----------------|---------------------------------|----------------|
| Crude oil | 489.4 | 486.5 | 487.5 | 1.0 | 503.2 |
| Gasoline | 125.7 | 122.6 | 121.1 | -1.5 | 118.0 |
| Naphtha | 24.7 | 24.2 | 25.1 | 0.9 | 24.9 |
| Middle distillates | 441.6 | 447.8 | 441.8 | -6.0 | 396.9 |
| Fuel oils | 82.2 | 79.8 | 77.4 | -2.4 | 75.9 |
| Total products | 674.2 | 674.4 | 665.4 | -9.0 | 615.7 |
| Total | 1,163.6 | 1,160.9 | 1,152.9 | -8.0 | 1,118.9 |

Sources: Argus and Euroilstock.

US

Preliminary data for May shows that **total commercial oil stocks** in the US fell by 5.7 mb to stand at 1,365 mb. At this level, they were around 100 mb, or 7.9%, above the same period a year ago and 229 mb, or 20%, higher than the latest five-year average. Within the components, crude stocks fell by 7.7 mb, while products rose by 2.0 mb.

Graph 9.3: US weekly commercial crude oil stocks

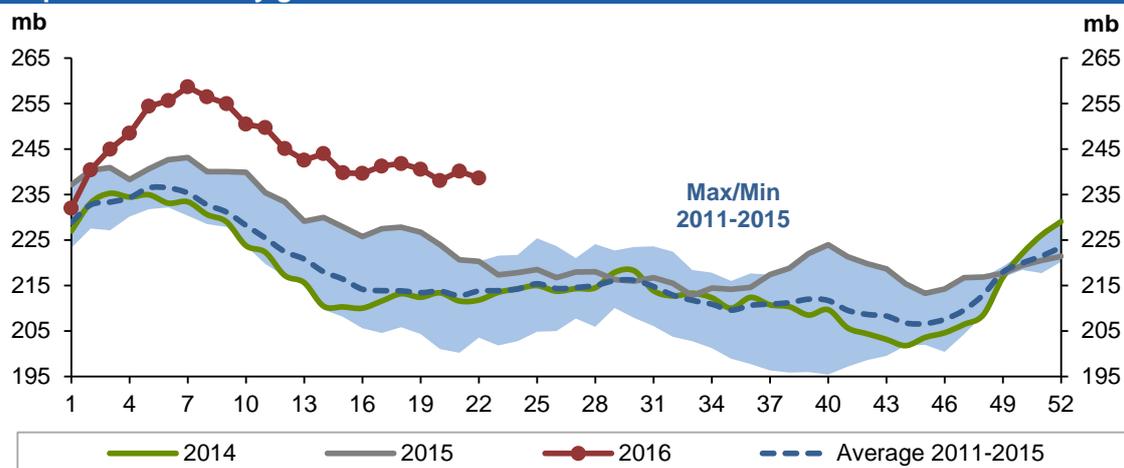


Sources: US Energy Information Administration and OPEC Secretariat.

Stock Movements

US commercial crude stocks fell in May, reversing the build of the previous four consecutive months to stand at 535.7 mb. At this level, they were 56.4 mb, or 11.8%, above the same time one year ago and 131 mb, or 32.4%, above the latest five-year average. The fall in crude oil came from lower imports, which declined by around 190,000 b/d to stand at 7.6 mb/d. Higher crude runs also contributed to a stock draw in the US. Indeed, US crude oil refinery inputs averaged 16.3 mb/d in May, around 200,000 b/d higher than the previous month. This corresponds to a refinery utilization rate of around 91%, or about 1.1 percentage points (pp) higher than the previous month. In May, crude commercial inventories at Cushing, Oklahoma, stood at 65.6 mb, around 0.7 mb lower than the previous month.

Graph 9.4: US weekly gasoline stocks



Sources: US Energy Information Administration and OPEC Secretariat.

In contrast, **total product stocks** rose by 2.0 mb in May to stand at 829.4 mb. At this level, US product stocks were around 43.1 mb, or 5.5%, above the level seen at the same time a year ago, showing a surplus of 97.5 mb, or 13.4%, above the seasonal norm. Within products, the picture was mixed. Gasoline and distillate stocks went down, while other unfinished product inventories witnessed a stock draw.

Gasoline stocks fell by 3.2 mb in May to stand at 238.6 mb, but remained 16.1 mb or 7.2% higher than the same period a year ago, and 22.6 mb, or 10.4%, above the latest five-year average. The drop in gasoline stocks came mainly from higher gasoline demand, which increased by about 200,000 b/d to stand at 9.6 mb/d. However, higher gasoline output limited a further drop in gasoline stocks.

Distillate stocks also fell by 7.4 mb in May, ending the month at 149.6 mb. At this level, they indicated a surplus of 15.6 mb, or 11.6%, from the same period a year ago, and stood 20.8 mb, or 16.2%, above the latest five-year average. The fall in middle distillate stocks was mainly driven by higher demand, leading them to stand above 4.0 mb/d.

Residual fuel oil inventories fell by 1.4 mb to 41.0 mb, slightly above the same period a year ago, and 3.4 mb, or 9.0%, above the seasonal norm. In contrast, **jet fuel** stocks rose by 0.2 mb, ending May at 42.3 mb. At this level, jet fuel stocks stood slightly below the same period one year ago and were 1.7 mb, or 4.2%, higher than the latest five-year average.

Table 9.3: US onland commercial petroleum stocks, mb

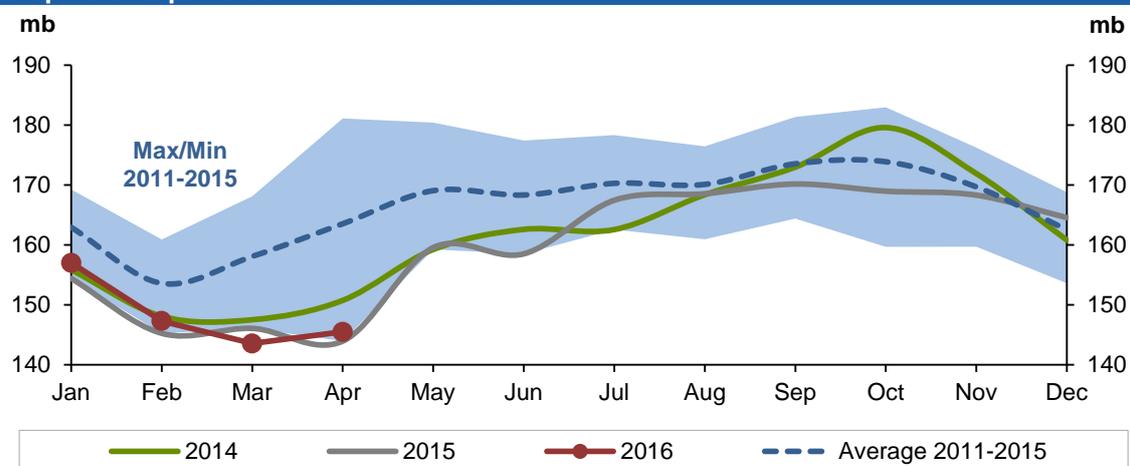
| | Mar 16 | Apr 16 | May 16 | Change May 16/Apr 16 | May 15 |
|-------------------|----------------|----------------|----------------|---------------------------------|----------------|
| Crude oil | 532.5 | 543.4 | 535.7 | -7.7 | 479.3 |
| Gasoline | 243.3 | 241.8 | 238.6 | -3.2 | 222.5 |
| Distillate fuel | 160.6 | 157.0 | 149.6 | -7.4 | 134.0 |
| Residual fuel oil | 44.5 | 42.4 | 41.0 | -1.4 | 41.0 |
| Jet fuel | 43.8 | 42.2 | 42.3 | 0.2 | 42.5 |
| Total | 1,357.4 | 1,370.8 | 1,365.1 | -5.7 | 1,265.6 |
| SPR | 695.1 | 695.1 | 695.1 | 0.0 | 692.3 |

Source: US Energy Information Administration.

Japan

In Japan, total **commercial oil stocks** rose by 1.9 mb in April, reversing the sixth consecutive month of draws. At 145.5 mb, Japanese commercial oil inventories stood at 1.5 mb, or 1.1%, above a year ago at the same time, and were 18.1 mb or 11.1% below the five-year average. Within the components, crude stocks went down by 0.8 mb, while products experienced a stock build of 2.7 mb.

Graph 9.5: Japan's commercial oil stocks



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

In April, Japanese commercial **crude oil stocks** fell, ending the month at 87.7 mb, which is 3.0 mb or 3.6 mb above a year ago at the same time, but 9.0 mb or 9.3% below the seasonal norm. The fall in crude stocks came on the back of lower crude oil imports, which declined by 3.0% to stand at 3.5 mb/d.

In contrast, Japan's **total product inventories** rose by 2.7 mb in April, ending the month at 57.8 mb. At this level, product stocks stood 1.5 mb, or 2.5%, below the same time a year ago, and showed a deficit of 9.1 mb, or 13.6%, with the five-year average. Within products, the picture was mixed; gasoline, distillates and residual fuel stocks experienced builds, while naphtha oil inventories witnessed a drop.

Distillate stocks rose by 0.5 mb in April to stand at 24.0 mb. At this level, they were 0.5 mb, or 1.9%, below the same period a year ago and 3.0 mb, or 10.9%, less than the seasonal average. Within distillate components, jet fuel, kerosene and gasoil inventories rose by 14.0%, 16.6% and 20%, respectively. The build in distillate stocks was driven by lower domestic sales.

Stock Movements

Gasoline stocks rose by 0.5 mb to end April at 11.3 mb. At this level, they were 0.1 mb or 1.0% above the same time a year ago, but 2.2 mb or 16.3% below the latest five-year average. This build in gasoline stocks was mainly driven by lower gasoline demand, which declined by more than 6%. Lower gasoline output limited a further gasoline stock build.

Total residual **fuel oil stocks** also rose by 0.3 mb in April, to stand at 13.3 mb, which was 0.5 mb, or 3.3%, below a year ago and 2.7 mb, or 17.0%, lower than the latest five-year average. Within fuel oil components, fuel oil A and fuel B.C rose by 4.4% and 1.2%, respectively. The build in fuel oil stocks came from lower domestic sales, which declined by more than 15% from the previous month.

In contrast, **naphtha inventories** fell by 1.6 mb in April to stand at 9.3 mb, which was 0.7 mb, or 7.0%, lower than a year ago at the same time, and 1.3 mb, or 12.1%, lower than the seasonal norm. This fall was driven mainly by lower output, which declined by nearly 2%. Higher domestic sales, which increased by 2.7%, also contributed to the stock draw of naphtha.

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

| | <u>Feb 16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>Change</u> <u>Apr 16/Mar 16</u> | <u>Apr 15</u> |
|-----------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| Crude oil | 87.0 | 88.5 | 87.7 | -0.8 | 84.6 |
| Gasoline | 10.9 | 10.7 | 11.3 | 0.5 | 11.1 |
| Naphtha | 12.5 | 10.9 | 9.3 | -1.6 | 9.9 |
| Middle distillates | 23.9 | 20.5 | 24.0 | 3.5 | 24.5 |
| Residual fuel oil | 12.9 | 13.0 | 13.3 | 0.3 | 13.8 |
| Total products | 60.3 | 55.1 | 57.8 | 2.7 | 59.3 |
| Total** | 147.3 | 143.6 | 145.5 | 1.9 | 143.9 |

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 11.6 mb in **total commercial oil inventories** in April to stand at 397.0 mb. At this level, Chinese commercial oil inventories were 12.4 mb lower than the previous year at the same time. Within the components, crude and products fell by 8.8 mb and 2.9 mb, respectively.

In April, **commercial crude stocks** fell to 229.1 mb, which is 22.0 mb below the previous year at the same time. The fall in crude oil commercial stocks could be attributed to lower domestic crude production, as crude imports rose m-o-m.

Total **product stocks** in China also fell by 2.9 mb in April, ending the month at 167.9 mb. At this level, product stocks were 9.6 mb higher than a year ago at the same time. Within products, gasoline witnessed builds, while diesel and kerosene stocks dropped.

Gasoline stocks went up by 6.8 mb, ending the month of April at 69.6 mb. This build was driven mainly by higher gasoline output, combined with lower demand. In contrast, diesel stocks fell further by 9.5 mb in April, following a drop in March. At 80.3 mb, Chinese diesel stocks were 9.2 mb lower than a year ago in the same period. This fall was driven by higher diesel demand on the back of cultivation in spring and the resumption of construction and infrastructure projects. Kerosene stocks fell slightly by

0.1 mb, ending April at 18.1 mb, which is 3.4 mb higher than the previous year at the same time.

Table 9.5: China's commercial oil stocks, mb

| | <u>Feb 16</u> | <u>Mar 16</u> | <u>Apr 16</u> | <u>Change</u> <u>Apr 16/Mar 16</u> | <u>Apr 15</u> |
|-----------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| Crude oil | 238.8 | 237.9 | 229.1 | -8.8 | 251.1 |
| Gasoline | 56.6 | 62.8 | 69.6 | 6.8 | 54.2 |
| Diesel | 95.8 | 89.8 | 80.3 | -9.5 | 89.5 |
| Jet kerosene | 17.2 | 18.2 | 18.1 | -0.1 | 14.6 |
| Total products | 169.6 | 170.8 | 167.9 | -2.9 | 158.3 |
| Total | 408.4 | 408.7 | 397.0 | -11.6 | 409.4 |

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of April, **product stocks in Singapore** fell by 0.8 mb for the second consecutive month. At 52.4 mb, they were 7.6 mb, or 17.0%, above the same period a year ago. Within products, the picture was mixed; light distillates and fuel oil stocks saw a build, while middle distillate inventories experienced drops.

Light distillate stocks rose by 0.7 mb to end April at 15.5 mb which was 2.9 mb, or 23.3%, above the previous year at the same time. **Residual fuel oil stocks** also rose by 2.5 mb, ending March at 27.9 mb, which was 6.4 mb, or 29%, higher than at the same time a year ago. This build came on the back of lower demand in the region.

In contrast, **middle distillate** stocks fell by 4.0 mb, ending the month of April at 9.0 mb, which was 1.7 mb, or 16%, below the same time a year ago. The decline in middle distillate stocks was mainly driven by higher demand in the region. Higher exports also contributed to this stock draw.

Product stocks in Amsterdam-Rotterdam-Antwerp (ARA) fell by 2.9 mb in April to end the month at 47.11 mb. Despite this drop, product stocks were 9.5 mb, or 25.3%, higher than at the same time a year ago. All products showed stock draws.

Gasoil fell by 1.7 mb in April, ending the month at 24.4 mb, which was 4.7 mb, or 23.7%, above the previous year at the same time. The decline in middle distillate stocks was mainly driven by higher arrivals to the region. **Gasoline** also fell by 0.3 mb to end April at 9.5 mb, which was 3.5 mb, or more than 50% above the same month the previous year. Fuel oil stocks fell by 0.7 mb to stand at 6.5 mb, which was 1.6 mb, or 31%, higher than a year ago. This fall was mainly driven by higher exports to Asia.

Balance of Supply and Demand

Demand for OPEC crude in 2015 remained unchanged from the previous report to stand at 29.7 mb/d, which is 0.1 mb/d less than the 2014 level. In 2016, demand for OPEC crude is projected to be 31.5 mb/d, unchanged from the last *MOMR* and 1.8 mb/d higher than last year.

Estimate for 2015

Demand for OPEC crude for 2015 remained unchanged from the previous month to stand at 29.7 mb/d, representing a decline of 0.1 mb/d from the 2014 level. All quarters remained unchanged. 1Q15 fell by 0.8 mb/d, while 2Q15 and 3Q15 remained flat versus the same quarters last year. 4Q15 rose by 0.4 mb/d y-o-y.

Table 10.1: Summarized supply/demand balance for 2015, mb/d

| | <u>2014</u> | <u>1Q15</u> | <u>2Q15</u> | <u>3Q15</u> | <u>4Q15</u> | <u>2015</u> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| (a) World oil demand | 91.44 | 91.94 | 92.02 | 93.93 | 94.00 | 92.98 |
| Non-OPEC supply | 55.67 | 57.20 | 56.80 | 57.07 | 57.48 | 57.14 |
| OPEC NGLs and non-conventionals | 6.00 | 5.97 | 6.15 | 6.23 | 6.17 | 6.13 |
| (b) Total non-OPEC supply and OPEC NGLs | 61.67 | 63.17 | 62.95 | 63.29 | 63.65 | 63.27 |
| Difference (a-b) | 29.77 | 28.77 | 29.07 | 30.64 | 30.34 | 29.71 |
| OPEC crude oil production | 30.79 | 31.05 | 31.92 | 32.24 | 32.28 | 31.88 |
| Balance | 1.02 | 2.29 | 2.86 | 1.60 | 1.94 | 2.17 |

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Forecast for 2016

Demand for OPEC crude for 2016 remained unchanged from the previous *MOMR* and is projected to increase by 1.8 mb/d to average 31.5 mb/d. Within the quarters, both 1Q16 and 4Q16 were revised down by 0.2 mb/d and 0.1 mb/d, respectively, while 2Q16 was revised up by 0.1 mb/d. 3Q16 remained unchanged. 1Q16 and 2Q16 are expected to increase by 1.0 mb/d and 2.1 mb/d, respectively, while 3Q16 and 4Q16 are both projected to increase, rising by 2.2 mb/d and 1.8 mb/d, respectively.

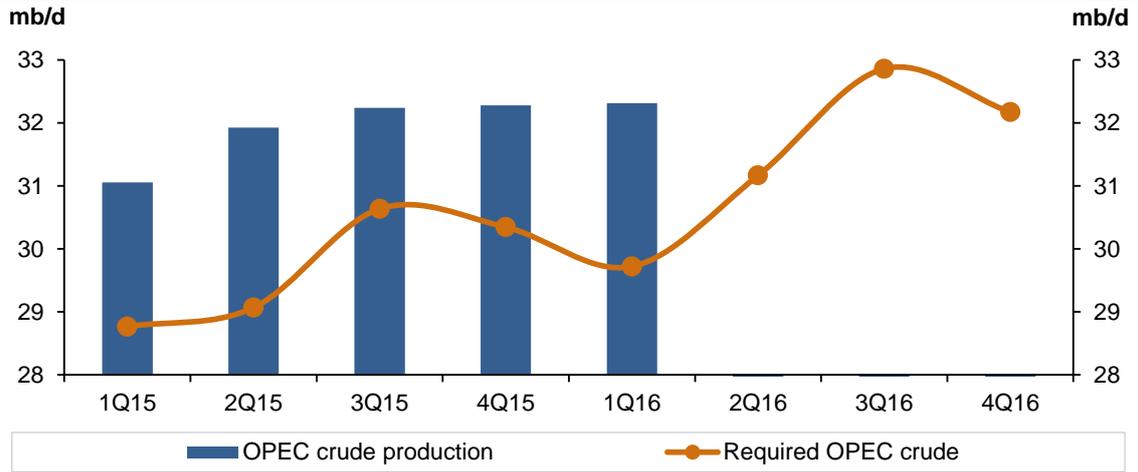
Table 10.2: Summarized supply/demand balance for 2016, mb/d

| | <u>2015</u> | <u>1Q16</u> | <u>2Q16</u> | <u>3Q16</u> | <u>4Q16</u> | <u>2016</u> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| (a) World oil demand | 92.98 | 93.08 | 93.26 | 95.16 | 95.17 | 94.18 |
| Non-OPEC supply | 57.14 | 57.12 | 55.83 | 56.01 | 56.66 | 56.40 |
| OPEC NGLs and non-conventionals | 6.13 | 6.24 | 6.27 | 6.29 | 6.34 | 6.29 |
| (b) Total non-OPEC supply and OPEC NGLs | 63.27 | 63.36 | 62.10 | 62.30 | 63.00 | 62.69 |
| Difference (a-b) | 29.71 | 29.72 | 31.17 | 32.86 | 32.17 | 31.49 |
| OPEC crude oil production | 31.88 | 32.31 | | | | |
| Balance | 2.17 | 2.59 | | | | |

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

| | 2012 | 2013 | 2014 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 2015 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 2016 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| World demand | | | | | | | | | | | | | |
| OECD | 45.9 | 46.0 | 45.7 | 46.4 | 45.4 | 46.5 | 46.3 | 46.2 | 46.5 | 45.6 | 46.8 | 46.5 | 46.4 |
| Americas | 23.6 | 24.1 | 24.1 | 24.2 | 24.1 | 24.8 | 24.4 | 24.4 | 24.4 | 24.4 | 25.1 | 24.6 | 24.6 |
| Europe | 13.8 | 13.6 | 13.5 | 13.5 | 13.6 | 14.1 | 13.7 | 13.7 | 13.5 | 13.6 | 14.1 | 13.7 | 13.7 |
| Asia Pacific | 8.5 | 8.3 | 8.1 | 8.7 | 7.7 | 7.6 | 8.3 | 8.1 | 8.6 | 7.6 | 7.5 | 8.2 | 8.0 |
| DCs | 28.4 | 29.2 | 30.0 | 29.9 | 30.6 | 31.4 | 30.8 | 30.7 | 30.7 | 31.3 | 32.0 | 31.4 | 31.4 |
| FSU | 4.4 | 4.5 | 4.6 | 4.5 | 4.3 | 4.7 | 5.0 | 4.6 | 4.5 | 4.4 | 4.7 | 5.0 | 4.7 |
| Other Europe | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 0.7 |
| China | 9.7 | 10.1 | 10.5 | 10.4 | 11.1 | 10.7 | 11.1 | 10.8 | 10.7 | 11.3 | 11.0 | 11.4 | 11.1 |
| (a) Total world demand | 89.1 | 90.5 | 91.4 | 91.9 | 92.0 | 93.9 | 94.0 | 93.0 | 93.1 | 93.3 | 95.2 | 95.2 | 94.2 |
| Non-OPEC supply | | | | | | | | | | | | | |
| OECD | 21.1 | 22.2 | 24.2 | 25.2 | 24.9 | 25.3 | 25.5 | 25.2 | 25.3 | 24.4 | 24.4 | 24.7 | 24.7 |
| Americas | 16.7 | 18.2 | 20.1 | 21.0 | 20.7 | 21.1 | 21.2 | 21.0 | 21.0 | 20.2 | 20.4 | 20.5 | 20.5 |
| Europe | 3.8 | 3.6 | 3.6 | 3.7 | 3.8 | 3.7 | 3.9 | 3.8 | 3.9 | 3.7 | 3.6 | 3.7 | 3.7 |
| Asia Pacific | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 |
| DCs | 11.0 | 11.1 | 11.3 | 11.6 | 11.5 | 11.4 | 11.5 | 11.5 | 11.3 | 11.2 | 11.4 | 11.6 | 11.4 |
| FSU | 13.4 | 13.6 | 13.5 | 13.8 | 13.7 | 13.6 | 13.7 | 13.7 | 14.0 | 13.7 | 13.6 | 13.7 | 13.8 |
| Other Europe | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| China | 4.2 | 4.2 | 4.3 | 4.3 | 4.4 | 4.4 | 4.4 | 4.4 | 4.2 | 4.2 | 4.2 | 4.3 | 4.2 |
| Processing gains | 2.1 | 2.1 | 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 | 51.9 | 53.4 | 55.7 | 57.2 | 56.8 | 57.1 | 57.5 | 57.1 | 57.1 | 55.8 | 56.0 | 56.7 | 56.4 |
| OPEC NGLs + non-conventional oils | 5.7 | 5.8 | 6.0 | 6.0 | 6.2 | 6.2 | 6.2 | 6.1 | 6.2 | 6.3 | 6.3 | 6.3 | 6.3 |
| (b) Total non-OPEC supply and OPEC NGLs | 57.6 | 59.2 | 61.7 | 63.2 | 62.9 | 63.3 | 63.7 | 63.3 | 63.4 | 62.1 | 62.3 | 63.0 | 62.7 |
| OPEC crude oil production (secondary sources) | 32.0 | 31.0 | 30.8 | 31.1 | 31.9 | 32.2 | 32.3 | 31.9 | 32.3 | | | | |
| Total supply | 89.6 | 90.2 | 92.5 | 94.2 | 94.9 | 95.5 | 95.9 | 95.1 | 95.7 | | | | |
| Balance (stock change and miscellaneous) | 0.5 | -0.3 | 1.0 | 2.3 | 2.9 | 1.6 | 1.9 | 2.2 | 2.6 | | | | |
| OECD closing stock levels (mb) | | | | | | | | | | | | | |
| Commercial | 2,683 | 2,589 | 2,738 | 2,814 | 2,907 | 2,982 | 3,015 | 3,015 | 3,044 | | | | |
| SPR | 1,547 | 1,584 | 1,580 | 1,583 | 1,585 | 1,579 | 1,587 | 1,587 | 1,592 | | | | |
| Total | 4,230 | 4,174 | 4,318 | 4,397 | 4,492 | 4,561 | 4,602 | 4,602 | 4,636 | | | | |
| Oil-on-water | 879 | 909 | 924 | 864 | 916 | 924 | 1,017 | 1,017 | 1,055 | | | | |
| Days of forward consumption in OECD | | | | | | | | | | | | | |
| Commercial onland stocks | 58.3 | 56.6 | 59.3 | 62.0 | 62.5 | 64.4 | 64.8 | 65.0 | 66.7 | | | | |
| SPR | 33.6 | 34.7 | 34.2 | 34.9 | 34.1 | 34.1 | 34.1 | 34.2 | 34.9 | | | | |
| Total | 91.9 | 91.3 | 93.5 | 96.8 | 96.5 | 98.4 | 98.9 | 99.3 | 101.6 | | | | |
| Memo items | | | | | | | | | | | | | |
| FSU net exports | 8.9 | 9.0 | 8.9 | 9.3 | 9.4 | 8.9 | 8.7 | 9.1 | 9.5 | 9.4 | 8.9 | 8.7 | 9.1 |
| (a) - (b) | 31.5 | 31.3 | 29.8 | 28.8 | 29.1 | 30.6 | 30.3 | 29.7 | 29.7 | 31.2 | 32.9 | 32.2 | 31.5 |

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

| | 2012 | 2013 | 2014 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 2015 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 2016 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| World demand | | | | | | | | | | | | | |
| OECD | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Americas | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Europe | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Asia Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DCs | - | - | - | - | - | - | - | - | - | - | - | - | - |
| FSU | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - |
| China | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (a) Total world demand | - | - | - | - | - | - | - | - | - | - | - | - | - |
| World demand growth | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Non-OPEC supply | | | | | | | | | | | | | |
| OECD | - | - | - | - | - | - | - | - | 0.1 | -0.1 | - | - | - |
| Americas | - | - | - | - | - | - | - | - | 0.1 | -0.1 | - | - | - |
| Europe | - | - | - | - | - | - | - | - | 0.1 | 0.1 | - | - | - |
| Asia Pacific | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DCs | - | - | - | - | - | - | - | - | - | -0.2 | -0.1 | - | -0.1 |
| FSU | - | - | - | - | - | - | - | - | - | 0.1 | - | 0.1 | 0.1 |
| Other Europe | - | - | - | - | - | - | - | - | - | - | - | - | - |
| China | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Processing gains | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total non-OPEC supply | - | - | - | - | - | - | - | - | 0.2 | -0.2 | - | 0.1 | - |
| Total non-OPEC supply growth | - | - | - | - | - | - | - | - | 0.2 | -0.2 | - | 0.1 | - |
| OPEC NGLs + non-conventionals | - | - | - | - | - | - | - | - | - | - | - | - | - |
| (b) Total non-OPEC supply and OPEC NGLs | - | - | - | - | - | - | - | - | 0.2 | -0.2 | - | 0.1 | - |
| OPEC crude oil production (secondary sources) | - | - | - | 0.1 | 0.1 | - | - | - | - | - | - | - | - |
| Total supply | - | - | - | 0.1 | 0.1 | - | - | - | 0.2 | - | - | - | - |
| Balance (stock change and miscellaneous) | - | - | - | 0.1 | - | - | - | - | 0.2 | - | - | - | - |
| OECD closing stock levels (mb) | | | | | | | | | | | | | |
| Commercial | - | - | - | -2 | -2 | -2 | 1 | 1 | -5 | - | - | - | - |
| SPR | - | - | - | - | - | - | - | - | 1 | - | - | - | - |
| Total | - | - | - | -2 | -2 | -2 | 1 | 1 | -4 | - | - | - | - |
| Oil-on-water | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Days of forward consumption in OECD | | | | | | | | | | | | | |
| Commercial onland stocks | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SPR | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Memo items | | | | | | | | | | | | | |
| FSU net exports | - | - | - | - | - | - | - | - | - | 0.1 | - | 0.1 | 0.1 |
| (a) - (b) | - | - | - | - | - | - | - | - | -0.2 | 0.2 | - | -0.1 | - |

Note: * This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the May 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 | 2Q14 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 1Q16 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Closing stock levels, mb | | | | | | | | | | | | |
| OECD onland commercial | 2,683 | 2,589 | 2,738 | 3,015 | 2,681 | 2,749 | 2,738 | 2,814 | 2,907 | 2,982 | 3,015 | 3,044 |
| Americas | 1,365 | 1,316 | 1,446 | 1,591 | 1,387 | 1,416 | 1,446 | 1,483 | 1,537 | 1,572 | 1,591 | 1,621 |
| Europe | 912 | 881 | 886 | 989 | 889 | 898 | 886 | 939 | 940 | 966 | 989 | 1,005 |
| Asia Pacific | 405 | 392 | 405 | 435 | 405 | 436 | 405 | 392 | 430 | 445 | 435 | 419 |
| OECD SPR | 1,547 | 1,584 | 1,580 | 1,587 | 1,580 | 1,578 | 1,580 | 1,583 | 1,585 | 1,579 | 1,587 | 1,592 |
| Americas | 696 | 697 | 693 | 697 | 692 | 693 | 693 | 693 | 696 | 697 | 697 | 697 |
| Europe | 436 | 470 | 470 | 473 | 469 | 469 | 470 | 470 | 471 | 467 | 473 | 476 |
| Asia Pacific | 415 | 417 | 417 | 416 | 419 | 417 | 417 | 420 | 418 | 415 | 416 | 419 |
| OECD total | 4,230 | 4,174 | 4,318 | 4,602 | 4,261 | 4,328 | 4,318 | 4,397 | 4,492 | 4,561 | 4,602 | 4,636 |
| Oil-on-water | 879 | 909 | 924 | 1,017 | 914 | 952 | 924 | 864 | 916 | 924 | 1,017 | 1,055 |
| Days of forward consumption in OECD | | | | | | | | | | | | |
| OECD onland commercial | 58 | 57 | 58 | 57 | 58 | 59 | 59 | 62 | 62 | 64 | 65 | 67 |
| Americas | 55 | 55 | 57 | 54 | 57 | 58 | 60 | 61 | 62 | 64 | 65 | 66 |
| Europe | 68 | 66 | 67 | 65 | 64 | 67 | 66 | 69 | 66 | 71 | 73 | 74 |
| Asia Pacific | 48 | 46 | 49 | 48 | 53 | 52 | 46 | 51 | 56 | 54 | 50 | 55 |
| OECD SPR | 34 | 33 | 34 | 35 | 34 | 34 | 34 | 35 | 34 | 34 | 34 | 35 |
| Americas | 30 | 29 | 29 | 29 | 28 | 28 | 29 | 29 | 28 | 29 | 29 | 29 |
| Europe | 30 | 31 | 32 | 35 | 34 | 35 | 35 | 35 | 33 | 34 | 35 | 35 |
| Asia Pacific | 50 | 49 | 50 | 51 | 54 | 50 | 48 | 54 | 55 | 50 | 48 | 55 |
| OECD total | 92 | 90 | 92 | 91 | 93 | 93 | 93 | 97 | 97 | 98 | 99 | 102 |

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

| | 2012 | 2013 | 2014 | 3Q15 | 4Q15 | 2015 | Change | | | | | 2016 | Change 16/15 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| | | | | | | | 15/14 | 1Q16 | 2Q16 | 3Q16 | 4Q16 | | |
| US | 10.0 | 11.2 | 13.0 | 14.1 | 14.0 | 14.0 | 1.0 | 13.8 | 13.5 | 13.4 | 13.6 | 13.6 | -0.4 |
| Canada | 3.8 | 4.0 | 4.3 | 4.5 | 4.5 | 4.4 | 0.1 | 4.7 | 4.2 | 4.5 | 4.5 | 4.5 | 0.1 |
| Mexico | 2.9 | 2.9 | 2.8 | 2.6 | 2.6 | 2.6 | -0.2 | 2.5 | 2.5 | 2.5 | 2.4 | 2.5 | -0.1 |
| OECD Americas* | 16.7 | 18.2 | 20.1 | 21.1 | 21.2 | 21.0 | 0.9 | 21.0 | 20.2 | 20.4 | 20.5 | 20.5 | -0.5 |
| Norway | 1.9 | 1.8 | 1.9 | 1.9 | 2.0 | 1.9 | 0.1 | 2.0 | 1.9 | 1.9 | 2.0 | 2.0 | 0.0 |
| UK | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 0.1 | 1.0 | 0.9 | 0.9 | 1.0 | 0.9 | 0.0 |
| Denmark | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 |
| Other OECD Europe | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 0.0 |
| OECD Europe | 3.8 | 3.6 | 3.6 | 3.7 | 3.9 | 3.8 | 0.1 | 3.9 | 3.7 | 3.6 | 3.7 | 3.7 | 0.0 |
| Australia | 0.5 | 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 Asia Pacific | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| OECD Asia Pacific | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.0 |
| Total OECD | 21.1 | 22.2 | 24.2 | 25.3 | 25.5 | 25.2 | 1.0 | 25.3 | 24.4 | 24.4 | 24.7 | 24.7 | -0.6 |
| Brunei | 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 |
| India | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.0 |
| Malaysia | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.1 | 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 | 0.3 | 0.3 | 0.4 | 0.4 | 0.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0 |
| Asia others | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.0 |
| Other Asia | 2.6 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 0.1 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 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 | 2.6 | 2.9 | 3.1 | 3.1 | 3.1 | 0.2 | 2.9 | 3.0 | 3.2 | 3.3 | 3.1 | 0.0 |
| Colombia | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.0 |
| 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 | 4.7 | 4.8 | 5.0 | 5.2 | 5.2 | 5.2 | 0.2 | 5.0 | 5.0 | 5.2 | 5.4 | 5.1 | 0.0 |
| 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 | 0.9 | 1.0 | 1.0 | 1.0 | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.0 |
| Syria | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yemen | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Middle East | 1.5 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | -0.1 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 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 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0 |
| 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 |
| Gabon | 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 |
| South Africa | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| Sudans | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.0 |
| Africa other | 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 |
| Africa | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 0.0 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | -0.1 |
| Total DCs | 11.0 | 11.1 | 11.3 | 11.4 | 11.5 | 11.5 | 0.2 | 11.3 | 11.2 | 11.4 | 11.6 | 11.4 | -0.1 |
| FSU | 13.4 | 13.6 | 13.5 | 13.6 | 13.7 | 13.7 | 0.1 | 14.0 | 13.7 | 13.6 | 13.7 | 13.8 | 0.1 |
| Russia | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 | 10.8 | 0.2 | 11.1 | 11.0 | 10.9 | 10.9 | 11.0 | 0.1 |
| Kazakhstan | 1.6 | 1.6 | 1.6 | 1.5 | 1.6 | 1.6 | 0.0 | 1.6 | 1.5 | 1.5 | 1.5 | 1.6 | 0.0 |
| Azerbaijan | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 0.0 | 0.9 | 0.8 | 0.8 | 0.9 | 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 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |
| China | 4.2 | 4.2 | 4.3 | 4.4 | 4.4 | 4.4 | 0.1 | 4.2 | 4.2 | 4.2 | 4.3 | 4.2 | -0.1 |
| Non-OPEC production | 49.8 | 51.2 | 53.5 | 54.9 | 55.3 | 55.0 | 1.4 | 54.9 | 53.6 | 53.8 | 54.5 | 54.2 | -0.8 |
| Processing gains | 2.1 | 2.1 | 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 | 51.9 | 53.4 | 55.7 | 57.1 | 57.5 | 57.1 | 1.5 | 57.1 | 55.8 | 56.0 | 56.7 | 56.4 | -0.7 |
| OPEC NGL | 5.5 | 5.6 | 5.7 | 5.9 | 5.9 | 5.8 | 0.1 | 5.9 | 6.0 | 6.0 | 6.0 | 6.0 | 0.1 |
| OPEC non-conventional | 0.2 | 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) | 5.7 | 5.8 | 6.0 | 6.2 | 6.2 | 6.1 | 0.1 | 6.2 | 6.3 | 6.3 | 6.3 | 6.3 | 0.2 |
| Non-OPEC & OPEC (NGL+NCF) | 57.6 | 59.2 | 61.7 | 63.3 | 63.7 | 63.3 | 1.6 | 63.4 | 62.1 | 62.3 | 63.0 | 62.7 | -0.6 |

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 | | | | 1Q16 | Apr 16 | May 16 | Change May/Apr |
|-----------------------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|
| | | | | | 15/14 | 2Q15 | 3Q15 | 4Q15 | | | | |
| US | 1,919 | 1,761 | 1,862 | 977 | -885 | 909 | 866 | 754 | 551 | 436 | 407 | -29 |
| Canada | 364 | 354 | 380 | 192 | -188 | 99 | 191 | 169 | 172 | 41 | 41 | 0 |
| Mexico | 106 | 106 | 86 | 52 | -34 | 59 | 42 | 39 | 36 | 23 | 22 | -1 |
| Americas | 2,390 | 2,221 | 2,327 | 1,221 | -1,107 | 1,067 | 1,098 | 962 | 759 | 500 | 470 | -30 |
| Norway | 17 | 20 | 17 | 17 | 1 | 18 | 18 | 15 | 18 | 17 | 17 | 0 |
| UK | 18 | 17 | 16 | 14 | -2 | 14 | 13 | 12 | 9 | 8 | 9 | 1 |
| Europe | 119 | 135 | 145 | 117 | -28 | 116 | 109 | 110 | 104 | 90 | 95 | 5 |
| Asia Pacific | 24 | 27 | 26 | 17 | -9 | 17 | 16 | 15 | 10 | 6 | 7 | 1 |
| Total OECD | 2,533 | 2,383 | 2,499 | 1,355 | -1,144 | 1,200 | 1,222 | 1,087 | 873 | 596 | 572 | -24 |
| Other Asia | 172 | 180 | 194 | 175 | -19 | 175 | 177 | 167 | 157 | 156 | 164 | 8 |
| Latin America | 180 | 166 | 172 | 145 | -27 | 143 | 149 | 128 | 83 | 66 | 62 | -4 |
| Middle East | 136 | 102 | 108 | 102 | -6 | 98 | 100 | 106 | 98 | 90 | 94 | 4 |
| Africa | 7 | 16 | 28 | 11 | -16 | 12 | 8 | 3 | 2 | 0 | 1 | 1 |
| Total DCs | 494 | 465 | 502 | 433 | -69 | 428 | 435 | 404 | 340 | 312 | 321 | 9 |
| Non-OPEC rig count | 3,027 | 2,848 | 3,000 | 1,788 | -1,213 | 1,628 | 1,657 | 1,492 | 1,213 | 908 | 893 | -15 |
| Algeria | 36 | 47 | 48 | 51 | 3 | 52 | 51 | 49 | 52 | 55 | 55 | 0 |
| Angola | 9 | 11 | 15 | 11 | -4 | 12 | 8 | 11 | 9 | 9 | 9 | 0 |
| Ecuador | 20 | 26 | 24 | 12 | -12 | 15 | 12 | 4 | 3 | 3 | 2 | -1 |
| Indonesia | 45 | 38 | 34 | 27 | -7 | 28 | 24 | 24 | 19 | 17 | 19 | |
| Iran** | 54 | 54 | 54 | 54 | 0 | 54 | 54 | 54 | 57 | 57 | 57 | 0 |
| Iraq** | 58 | 83 | 79 | 52 | -27 | 53 | 47 | 51 | 49 | 43 | 43 | 0 |
| Kuwait** | 31 | 32 | 38 | 47 | 8 | 49 | 44 | 42 | 41 | 40 | 43 | 3 |
| Libya** | 9 | 15 | 10 | 3 | -8 | 3 | 1 | 1 | 1 | 1 | 1 | 0 |
| Nigeria | 36 | 37 | 34 | 30 | -4 | 29 | 28 | 28 | 27 | 25 | 25 | 0 |
| Qatar | 8 | 9 | 10 | 8 | -3 | 8 | 7 | 6 | 7 | 7 | 7 | 0 |
| Saudi Arabia | 112 | 114 | 134 | 155 | 21 | 155 | 154 | 158 | 157 | 154 | 154 | 0 |
| UAE | 24 | 28 | 34 | 42 | 8 | 39 | 41 | 52 | 50 | 50 | 50 | 0 |
| Venezuela | 117 | 121 | 116 | 110 | -6 | 105 | 114 | 112 | 111 | 111 | 102 | -9 |
| OPEC rig count | 557 | 614 | 630 | 602 | -29 | 602 | 585 | 590 | 583 | 572 | 567 | -5 |
| Worldwide rig count* | 3,584 | 3,462 | 3,631 | 2,389 | -1,241 | 2,231 | 2,242 | 2,082 | 1,796 | 1,480 | 1,460 | -20 |
| of which: | | | | | | | | | | | | |
| Oil | 2,594 | 2,611 | 2,795 | 1,727 | -1,068 | 1,616 | 1,606 | 1,471 | 1,268 | 1,057 | 1,038 | -19 |
| Gas | 886 | 746 | 743 | 563 | -180 | 516 | 536 | 509 | 422 | 318 | 309 | -9 |
| Others | 106 | 109 | 95 | 100 | 5 | 98 | 99 | 102 | 106 | 105 | 113 | 8 |

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.

Contributors to the OPEC Monthly Oil Market Report

Editor-in-Chief

Omar S. Abdul-Hamid, Director, Research Division
email: oabdul-hamid@opec.org

Editor

Hojatollah Ghanimi Fard, Head, Petroleum Studies Department
email: h.ghanimifard@opec.org

Analysts

Crude Oil Price Movements

Eissa Alzerma
email: ealzerma@opec.org

Commodity Markets

Hector Hurtado
email: hhurtado@opec.org

World Economy

Afshin Javan
email: ajavan@opec.org
Imad Al-Khayyat
email: ial-khayyat@opec.org
Joerg Spitzzy
email: jspitzzy@opec.org

World Oil Demand

Hassan Balfakeih
email: hbalfakeih@opec.org

World Oil Supply

Mohammad Ali Danesh
email: mdanesh@opec.org

Product Markets and Refinery Operations

Elio Rodriguez
email: erodriguez@opec.org

Tanker Market *and* Oil Trade

Anisah Almadhayyan
email: aalmadhayyan@opec.org

Stock Movements

Aziz Yahyai
email: ayahyai@opec.org

Technical and editorial team

Aziz Yahyai
email: ayahyai@opec.org
Douglas Linton
email: dlinton@opec.org

Data services

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

Editing, production, design and circulation

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

Disclaimer

The data, analysis and any other information contained in the Monthly Oil Market Report (the "MOMR") is for informational purposes only and is not intended as a substitute for advice from your business, finance, investment consultant or other professional. The views expressed in the MOMR are those of the OPEC Secretariat and do not necessarily reflect the views of its Governing Bodies and/or individual OPEC Member Countries.

Whilst reasonable efforts have been made to ensure the accuracy of the MOMR's content, the OPEC Secretariat makes no warranties or representations as to its accuracy, currency reference or comprehensiveness, and assumes no liability or responsibility for any inaccuracy, error or omission, or for any loss or damage arising in connection with or attributable to any action or decision taken as a result of using or relying on the information in the MOMR.

The MOMR may contain references to material(s) from third parties whose copyright must be acknowledged by obtaining necessary authorization from the copyright owner(s). The OPEC Secretariat shall not be liable or responsible for any unauthorized use of third party material(s). All rights of the Publication shall be reserved to the OPEC Secretariat, including every exclusive economic right, in full or per excerpts, with special reference but without limitation, to the right to publish it by press and/or by any communications medium whatsoever, including Internet; translate, include in a data base, make changes, transform and process for any kind of use, including radio, television or cinema adaptations, as well as sound-video recording, audio-visual screenplays and electronic processing of any kind and nature whatsoever.

Full reproduction, copying or transmission of the MOMR is not permitted in any form or by any means by third parties without the OPEC Secretariat's written permission, however the information contained therein may be used and/or reproduced for educational and other non-commercial purposes without the OPEC Secretariat's prior written permission, provided that OPEC is fully acknowledged as the copyright holder.

OPEC Basket average price

US\$/b



up 5.35 in May

| | |
|---------------------|--------------|
| May 2016 | 43.21 |
| April 2016 | 37.86 |
| Year-to-date | 34.35 |

May OPEC crude production

mb/d, according to secondary sources



down 0.10 in May

| | |
|------------|-------|
| May 2016 | 32.36 |
| April 2016 | 32.46 |

Economic growth rate

per cent

| | World | OECD | US | Japan | Euro-zone | China | India |
|-------------|-------|------|-----|-------|-----------|-------|-------|
| 2015 | 2.9 | 2.0 | 2.4 | 0.6 | 1.5 | 6.9 | 7.3 |
| 2016 | 3.1 | 1.9 | 2.0 | 0.5 | 1.6 | 6.5 | 7.5 |

Supply and demand

mb/d

| 2015 | | 15/14 | 2016 | | 16/15 |
|-------------------|-------------|--------------|-------------------|-------------|--------------|
| World demand | 93.0 | 1.5 | World demand | 94.2 | 1.2 |
| Non-OPEC supply | 57.1 | 1.5 | Non-OPEC supply | 56.4 | -0.7 |
| OPEC NGLs | 6.1 | 0.1 | OPEC NGLs | 6.3 | 0.2 |
| Difference | 29.7 | -0.1 | Difference | 31.5 | 1.8 |

OECD commercial stocks

mb

| | Feb 16 | Mar 16 | Apr 16 | Apr 16/Mar 16 | Apr 15 |
|-----------------------|---------------|---------------|---------------|----------------------|---------------|
| Crude oil | 1,525 | 1,530 | 1,541 | 11.1 | 1,460 |
| Products | 1,520 | 1,514 | 1,505 | -9.8 | 1,382 |
| Total | 3,045 | 3,044 | 3,046 | 1.3 | 2,842 |
| Days of forward cover | 66.6 | 66.7 | 66.4 | -0.3 | 62.1 |

Next report to be issued on 12 July 2016.