OPEC

Monthly Oil Market Report

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Feature article:

Non-OPEC oil supply developments

Organization of the Petroleum Exporting Countries

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Oil market highlights

Crude Oil Price Movements

The OPEC Reference Basket averaged $37.86/b in April, a gain of $3.21 or 9.3%. This was 40% higher than the lows reached in the beginning of the year, buoyed by expectations for an improving market situation, despite the current persistent oversupply. Oil futures surged more than 8%, with ICE Brent up $3.55 to average $43.34/b, while Nymex WTI rose $3.16 to $41.12/b.

World Economy

World economic growth is forecast at 3.1% in 2016, after estimated growth of 2.9% last year, both unchanged from the previous month. OECD growth in 2016 remains at 1.9%, slightly below the 2.0% seen in 2015. In the emerging economies, India and China continue to expand this year at a considerable level of 7.5% and 6.5%, respectively, with China having been revised up by 0.2 pp after a better-than-expected 1Q16. Brazil and Russia, however, are forecast to remain in recession this year, contracting by 3.4% and 1.1% respectively, with Brazil having been revised down by 0.5 pp.

World Oil Demand

World oil demand in 2015 grew by around 1.54 mb/d, unchanged from last month's report. Total oil consumption averaged 92.98 mb/d. In 2016, world oil demand is projected to rise by 1.20 mb/d to reach 94.18 mb/d, unchanged from last month's projections, despite upward revisions to Other Asia, which were counterbalanced by downward revisions to Latin America and China.

World Oil Supply

Non-OPEC oil supply growth for 2015 has been revised up slightly to 1.47 mb/d for an average of 57.14 mb/d. For 2016, non-OPEC oil supply was adjusted lower to average 56.40 mb/d, contracting by 0.74 mb/d. The estimate for OPEC NGLs and non-conventional oils in 2015 has been revised down by 20 tb/d based on direct communication to show a rise of 0.13 mb/d to average 6.13 mb/d. Growth in 2016 has also been adjusted lower to 0.16 mb/d to average 6.29 mb/d. In April, OPEC crude oil production rose 188 tb/d to average 32.44 mb/d, according to secondary sources.

Product Markets and Refining Operations

Product markets in the US were supported by strong domestic gasoline demand amid tightening sentiment due to some outages and maintenance. In Europe, higher export opportunities for gasoline ahead of the driving season lent support to refinery margins. Meanwhile, Asian margins weakened despite peaking refinery maintenance in the region as the oversupply in middle distillates weighed on product markets.

Tanker Market

Dirty tanker spot freight rates declined on the back of lower VLCC and Aframax freight rates as tonnage availability grew while market activity remains limited. Suezmax spot freight rates improved in April supported by strong sentiment for several destinations combined with an occasionally tight position list. In the clean tanker market, West of Suez activities supported freight rates, while East of Suez rates remained weak.

Stock Movements

OECD commercial oil stocks fell in March to stand at 3,049 mb. At this level, OECD commercial oil stocks are around 361 mb above the latest five-year average. Crude inventories showed a lower surplus of 215 mb, while products were broadly flat at 146 mb. In terms of forward cover, OECD commercial stocks stood at 66.8 days, some 7.5 days higher than the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2015 is estimated to average 29.7 mb/d, unchanged from the previous month and 0.1 mb/d lower than the previous year. In 2016, demand for OPEC crude is projected at 31.5 mb/d, unchanged from the previous report and 1.8 mb/d higher than last year.

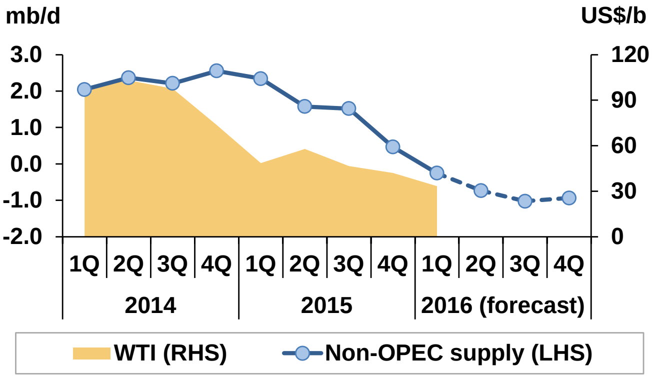
Non-OPEC oil supply developments

Non-OPEC oil producers saw a historically strong expansion of oil supply in 2014, with remarkable growth of 2.3 mb/d. In 2015, non-OPEC oil production showed further strong growth of 1.5 mb/d (***Graph 1***) despite an ongoing decline in oil prices and a 20% cut in global E&P spending. Additional production from already-sanctioned projects coming on-stream was a key driver behind this continued healthy growth.

Last year, total global oil supply increased by 2.7 mb/d to average 95.1 mb/d, at a time when world oil demand averaged 93.0 mb/d. This resulted in an oversupply of 2.1 mb/d. In OECD Americas, US supply showed growth of more than 1 mb/d in 2015, mainly from tight oil developments. An additional 0.1 mb/d came from Canadian oil sands, partially offsetting the 0.2 mb/d decline in Mexico's oil output. OECD Europe registered growth of 0.14 mb/d, which was five times higher than a year earlier, boosted by growth in Norway and the UK.

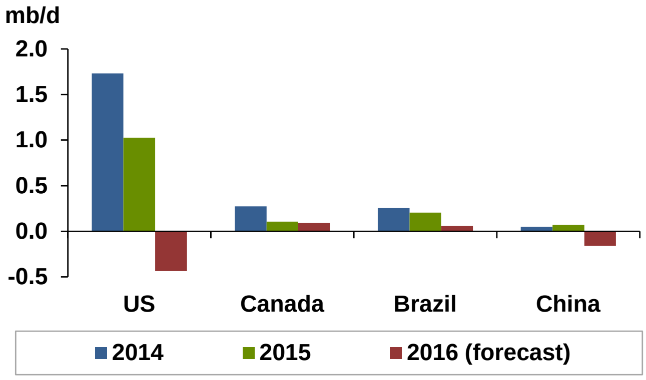
Higher output also came from non-OPEC countries outside the OECD. More exploitation from pre-salt oil fields lifted Brazil's annual output by 0.2 mb/d. Russia increased production by 0.2 mb/d and Chinese companies lifted oil supply by 70 tb/d. The resulting oversupply accelerated the decline in prices, which had a huge negative effect on global upstream oil investments.

Graph 1: Non-OPEC supply growth vs. WTI prices



Source: OPEC Secretariat.

Graph 2: Supply changes in selected countries, y-o-y



Source: OPEC Secretariat.

In 2016, cuts in global capital expenditures (capex) are expected to continue to be significant, negatively impacting the amount of new oil discoveries. Some $290 billion is estimated to be cut from company's capex in 2015/2016. This would continue the declining trend in new discoveries started last year in which less than 3 billion barrels were added to the discovered oil, much less than in past years. Between 2016 and 2018, the industry is expected to invest around US$40 billion per year in exploration and appraisal, less than half its investments during 2012 to 2014. Many pre-final investment decisions (FID) for projects have been deferred over the past year as the economics are no longer justifiable under the current oil price environment. Companies seeking to remain cash-flow positive are likely to continue to cut investments, leading to further project delays or cancellations. For instance, just for the case of the US, oil output is expected to contract by 430 tb/d this year, following strong growth in the previous two years (***Graph 2***).

Overall, non-OPEC supply in 2016 is expected to contract by 0.74 mb/d. In addition to the US, declines are expected in China, Mexico, UK, Kazakhstan and Colombia, while growth is projected in Canada, Brazil, Russia and Malaysia.

It is widely recognised that an adequate return on investment is needed to maintain production levels, as well as to allow for the growth necessary to meet future requirements in a timely fashion. Therefore, a return to balance is a shared interest among consumers and producers alike.

Crude Oil Price Movements

The OPEC Reference Basket (ORB) value rose in April for the third month in a row, increasing by more than 40% from the bottoms reached at the beginning of the year, buoyed by the prospect of an acceleration in the decline of US crude production, a weaker US dollar, supply disruptions and forecasts for a sharp fall in non-OPEC production. Earlier in the month, positive market sentiment also arose from the proposed output freeze plan by major crude exporters. Record bullish bets on higher futures prices by speculators also helped once more this month. Nevertheless, fundamentally, oversupply still persists, and oil output remains high.

The ORB gained $3.21 at $37.86/b for the month, but declined 38.7% y-o-y. The two main oil futures have surged more than 8% to settle above the $40/b level. ICE Brent ended up $3.55 at $43.34/b, while it dropped around 35% on the year. Nymex WTI rose $3.16 to $41.12/b, but also slipped by about 37% y-t-d.

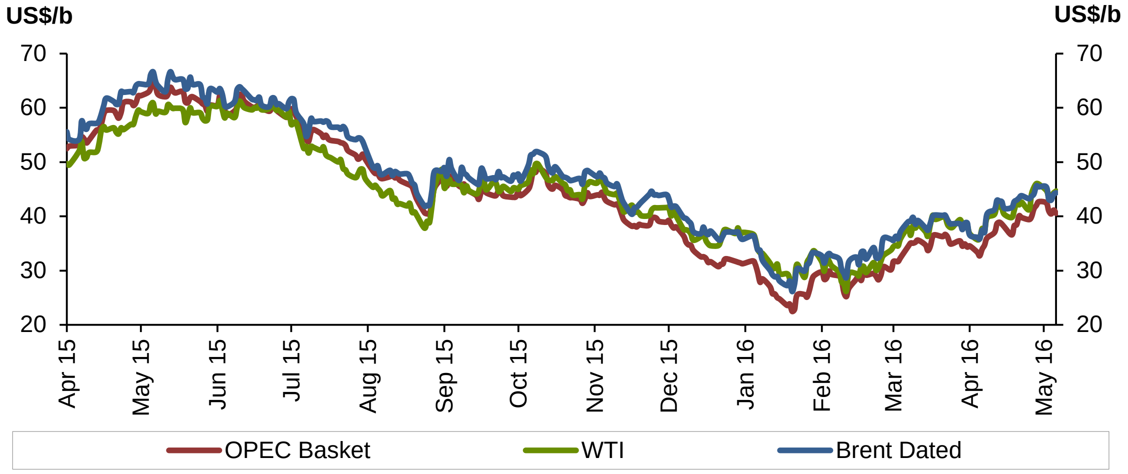
Moreover, money managers raised their bullish bets to fresh ten-month highs, as prices rallied to their highest levels this year on hopes of a balanced market later this year. They held a net long position equivalent to almost 670 mb.

The Brent-WTI spread widened, making US crude imports less attractive, however the sensitivity of imports to the spread can take several weeks to materialize. The ICE Brent-Nymex WTI (transatlantic) spread widened by about 40¢ to $2.20/b.

OPEC Reference Basket

The ORB value rose for the third straight month, improving by more than 40% from the lows reached at the beginning of the year. The Basket was up by more than 9% in April and exceeded the $42/b level by the end of the month, a level last witnessed six months ago. The Basket value was buoyed by an acceleration in the decline of US crude production and a weaker US dollar. Global oil prices have found support from supply disruptions and the prospect of the market rebalancing later this year, following forecasts of a sharp fall in non-OPEC production. Earlier in the month, positive market sentiment also arose from the proposed output freeze plan by major crude exporters. The healthy gasoline market, particularly in the US and Asia, also lent support to crude oil prices. Nevertheless, fundamentally, oversupply still persists and oil output remains high.

Graph 1.1: Crude oil price movement, 2015-2016



Sources: Argus Media, OPEC Secretariat and Platts.

On a monthly basis, the **ORB** increased by $3.21 to $37.86/b, on average, up 9.3%. Compared to the previous year, the ORB value declined by 38.7%, or $19.97, to $32.06/b.

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

			Change	*Year-to-date*	
	Mar 16	Apr 16	Apr/Mar	2015	2016
Basket	**34.65**	**37.86**	**3.21**	**52.03**	**32.06**
Arab Light	34.74	38.22	3.48	52.03	32.15
Basrah Light	33.39	36.62	3.23	50.12	30.59
Bonny Light	38.53	41.51	2.98	56.07	35.80
Es Sider	37.51	40.48	2.97	54.17	34.92
Girassol	38.42	41.25	2.83	56.04	35.61
Iran Heavy	33.23	36.65	3.42	50.88	30.45
Kuwait Export	32.99	36.33	3.34	50.24	30.14
Qatar Marine	35.49	38.97	3.48	53.41	32.84
Merey	25.83	28.84	3.01	45.38	24.29
Minas	34.62	38.52	3.90	53.71	33.42
Murban	40.01	42.47	2.46	56.50	37.19
Oriente	31.45	35.04	3.59	46.93	28.92
Sahara Blend	39.41	42.33	2.92	55.68	36.70
Other Crudes					
Brent	38.51	41.48	2.97	55.33	35.92
Dubai	35.15	39.00	3.85	53.64	32.73
Isthmus	35.45	38.14	2.69	52.16	33.17
LLS	40.04	42.69	2.65	54.85	37.06
Mars	34.48	37.31	2.83	51.33	31.94
Urals	36.87	39.89	3.02	54.87	34.32
WTI	37.77	40.95	3.18	50.03	35.24
Differentials					
Brent/WTI	0.74	0.53	-0.21	5.30	0.69
Brent/LLS	-1.53	-1.21	0.32	0.48	-1.14
Brent/Dubai	3.36	2.48	-0.88	1.69	3.19

Note: As of January 2016, Argus data is being used.
Sources: Argus Media, Direct Communication, OPEC Secretariat and Platts.

ORB component values moved up in line with their prospective major crude oil benchmarks. The major benchmark (WTI, Dated Brent and Dubai) spot prices rose $3.18, $2.97 and $3.85, respectively.

Latin American ORB components continued to outperform other grades, following the US market and raising Asian demand for heavy sour Latin American crudes, particularly from Colombia to China. Venezuelan Merey was up by $3.01, or 11.7%, at $28.84/b, while Oriente improved by $3.59, or 11.4%, to $35.04/b.

Although tighter Nigerian supplies and healthy Chinese and Indian demand supported West African crudes, oversupply in the North Sea light sweet crude markets and the restrained arbitrage to the US limited their performance. **West and Northern African** light sweet Basket component values for Saharan Blend, Es Sider, Girassol and Bonny Light increased by $2.93, or 7.6%, to $41.39/b in April, the first time above $40/b since November.

Despite the ongoing pressure from the increasing Brent/Dubai spread, **Indonesian** Minas was up by $3.90, or 11.3%, at $38.52/b.

Middle Eastern spot component grades, Murban and Qatar Marine, rose on average by $2.97, or 8%, to $40.72/b, and multi-destination grades, Arab Light, Basrah Light, Iran Heavy and Kuwait Export, increased on average by $3.37, or 10%, to $36.96/b. The Middle Eastern crude market continued to be buoyed by strength in international Brent crude futures. Brent's premium to Dubai remained high, boosting demand for crude priced off the Middle East benchmarks. Middle Eastern crudes were also supported by purchases from Chinaoil and Gunvor, as well as the tightening of heavy crude. Firmer Mediterranean medium sour markets amid tighter supplies, shorter loading programmes and firmer regional demand supported the multi-destination grades.

On 12 May, the OPEC Reference Basket was up at $43.31/b, $5.45 above the April average.

The oil futures market

Oil futures surged by more than 8% to above $40/b in April, as market sentiment turned more upbeat amid signs that a persistent global supply glut may be easing. Strong gasoline consumption in the United States, declining production around the world and oilfield outages underpinned a return to investment in the sector.

The oil market was buoyed by signs that it was beginning to rebalance as well as a weaker US dollar, following US Federal Reserve and Bank of Japan decisions to stay put on monetary policy. US production has fallen by 281,000 b/d, according to the US Energy Information Administration (EIA), while the Baker Hughes rig count registered a drop to 332 active rigs by month end, compared with 679 a year ago. Moreover, outside the US, there have been consistent signs of declines in non-OPEC production, which should likely flip the global oil market into a net deficit in 2017. For some countries, the declines could extend into 2017, such as Mexico and Kazakhstan, while others, like Colombia, are experiencing outages that could recover later this year, some analysts expect.

Nevertheless, not much has fundamentally changed as the oversupply remains and global oil inventories are at record highs. But investors hope strong demand, particularly for gasoline, ahead of the US driving season and weaker non-OPEC production will help work down excess supply. Finally, the noticeable increase in speculative positions betting on higher prices reinforce growing optimism that oil and other commodities are back in fashion with institutional investors after a year-long rout.

ICE Brent ended April up $3.55, or 8.9%, at $43.34/b on a monthly average basis, while Nymex WTI rose $3.16, or 8.3%, to $41.12/b. Compared to the same period last year, ICE Brent lost $19.51, or 34.4%, to $37.15/b, while Nymex WTI declined by $14.76, or 29.4%, to $35.37/b y-t-d.

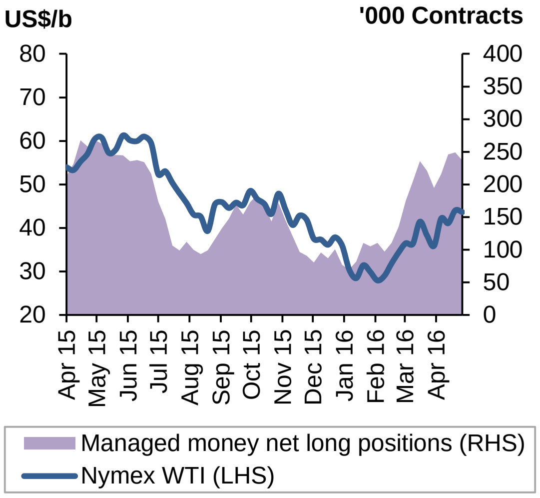
Crude oil futures prices improved in the second week of May, supported by the wildfires in Canada. On 12 May, ICE Brent stood at $48.08/b and Nymex WTI at $46.70/b.

By the end of April, **money managers** raised their bullish bets on crude oil futures and options to fresh ten-month highs, as prices rallied to their highest levels this year on hopes that stronger demand will help deplete record stocks. Adding to their net long positions in March, the speculator group raised its combined futures and options positions in Nymex WTI by 28,107 contracts to 249,123 lots during the period, US Commodity Futures Trading Commission (CFTC) data showed. The data shows the amount of open positions betting on rising US crude prices rose to May 2015, while bets taken out in expectation of declining prices fell to their lowest in 2016.

Speculator bets on higher Brent prices reached record highs in April, their largest monthly advance in seven years, Exchange data from ICE to the end of April showed. There was also a noticeable change in hedge fund positions in ICE Brent crude futures contracts, with money managers having trimmed their short positions to the lowest level since the beginning of 2013. The total number of short positions was cut back by almost 16,000 lots versus the end of the prior month, which, in combination with accumulated long positions, pushed net length in the contract to the highest level ever recorded and elevated the ratio of longs to shorts to more than 14:1. While a share of this net length increase reflects expectations of a wide-ranging supply freeze deal, which has since been cancelled, it is likely also indicative of the tightening crude fundamentals that have formed the basis of crude's run-up to $40/b and the re-emergence of backwardation at the front end of the ICE Brent curve. ICE Brent net length futures and options stood at 419,364 versus 356,997 at the end of the previous month.

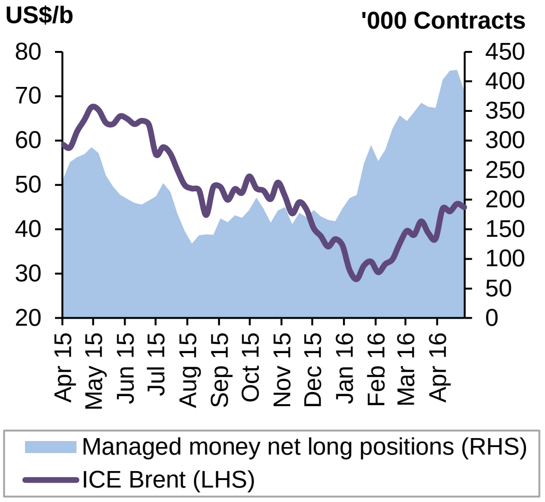
Meanwhile, the total futures and options open interest volume in the two exchanges increased by 2.8%, or 147,046 contracts, since the end of March to 5.34 million contracts at the end of April.

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 April, the **daily average traded volume** for Nymex WTI contracts increased by 74,645 lots, up 7.2% to 1,118,010 contracts, while that of ICE Brent was 108,421 contracts higher, up 14%, at 882,000 lots. The daily aggregate traded volume for both crude oil futures markets increased by 183,066 contracts to around 2.0 million futures contracts, equivalent to around 2 billion b/d. The total traded volume in Nymex WTI was down at 22.36 mn lots due partially to less trading days, while ICE Brent was up at 18.5 mn contracts.

The futures market structure

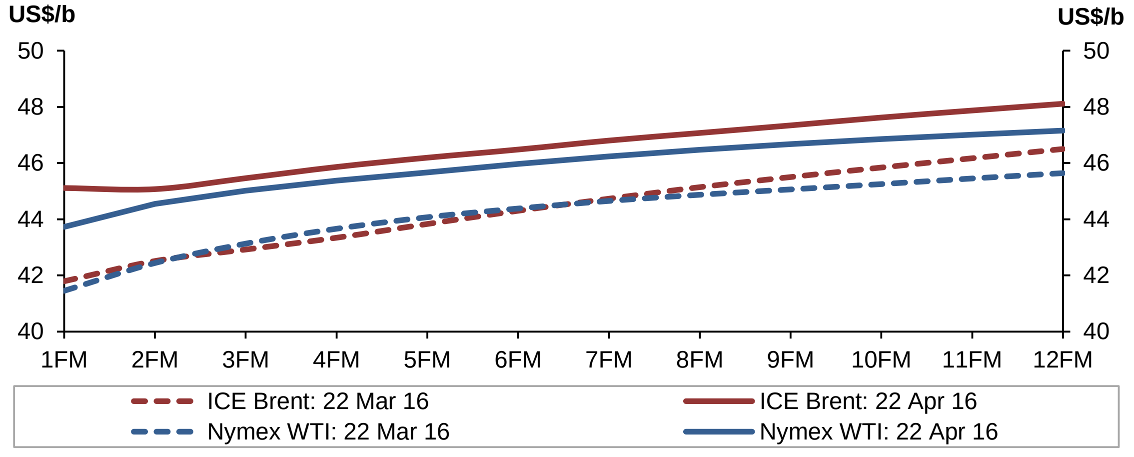
The contango in all three markets eased considerably over the month, particularly in the Brent market, suggesting that the supply-demand balance is swinging the other way, from surplus to tightness between later this year and 2017, even as excess supply remains. Toward the end of the month, the first two months of Brent futures were in backwardation for the first time since January. The backwardation reflects upcoming North Sea oilfield maintenance that will tighten supply and the view that a wider supply glut is easing.

On average, the Brent first forward month 65¢/b contango seen in the previous month flipped into a backwardation of 5¢/b in April, while the third forward month $1.13/b contango eased to only 30¢/b. The rapid tightening of the first versus second month spread can be attributed to a series of short-term output disruptions, tanker loading delays and an oil workers' strike, which have combined to cut near-term crude availability. Beyond the second month, the futures price curve remains in contango, but there too the market shows signs of tightening, with the contango narrowing sharply in recent months.

In the **US**, the first month's WTI crude oil futures discount to the next trading month, or the contango, hit its smallest levels this year at 77¢/b on the last trading session in April, reducing the advantages of storing oil in the US for later delivery. Ten days earlier, the contango was at a near one-month high at $1.55/b. For the monthly average, WTI's first month discount to the second month was reduced to $1.15/b from $1.55/b, while the first versus the third contango narrowed from $2.50/b to $1.90/b.

The **Dubai** market also followed suit, where the contango narrowed to almost $1/b, where the the first month $1.30/b discount to the third month in March dropped to less than 40¢/b. Given this strength in the market structure, one should expect an increase in most official price differentials for crude oil loading in June.

Graph 1.4: Nymex WTI and ICE Brent forward curves, 2015-2016



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

The **Brent-WTI spread** widened in April, making US crude imports less attractive, although the sensitivity of imports to the spread can take several weeks to materialize, as it takes time for loading and delivery. In fact, US and Canadian demand for West African crudes has increased swiftly so far in 2016, and April looks to be the busiest month of the year to date for shipments, as such imports continue to be competitive with domestic grades. Brent outperformed WTI this month as ongoing production outages around the world impacted the Brent market more. This has also caused the

Brent-Dubai spread to stay at a very wide level. The Brent-WTI spread widened by about 40¢ to $2.20/b.

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

	1FM	2FM	3FM	6FM	12FM	12FM-1FM
Nymex WTI						
22 Mar 16	41.45	42.44	43.13	44.38	45.64	4.19
22 Apr 16	43.73	44.54	45.01	45.97	47.16	3.43
Change	**2.28**	**2.10**	**1.88**	**1.59**	**1.52**	**-0.76**
ICE Brent						
	1FM	2FM	3FM	6FM	12FM	12FM-1FM
22 Mar 16	41.79	42.51	42.92	44.30	46.50	4.71
22 Apr 16	45.11	45.07	45.46	46.48	48.11	3.00
Change	**3.32**	**2.56**	**2.54**	**2.18**	**1.61**	**-1.71**

Note: FM = future month.

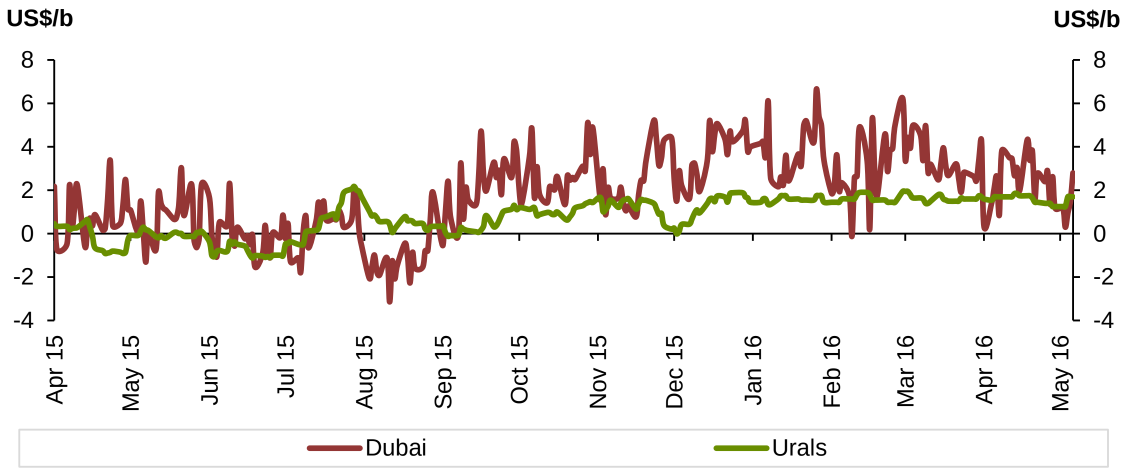
Sources: CME Group and Intercontinental Exchange.

The light sweet/medium sour crude spread

Contrary to the previous month, sweet/sour differentials narrowed in all markets, particularly in Asia.

In **Europe**, the Urals medium-sour crude discount to light-sweet Brent decreased slightly in April as lower exports, good refining margins, keen buying interest and open regional arbitrage windows supported prices for Urals cargoes. Pipeline maintenance is curbing the availability of Russian medium-sour Urals crude in the Mediterranean, encouraging shipments to the region from Baltic ports. Meanwhile, oil pumping via the Kirkuk-Ceyhan pipeline was seen stable at around 540,000 b/d. On the other hand, the light-sweet North Sea market was under pressure from an apparent excess of unwanted barrels in the region. More than 7 million barrels of Forties crude loaded on VLCCs and other smaller ships, that were intended for shipping to Asia, stayed in the North Sea without a home. This is as the Brent-Dubai spread was at close to its strongest since the start of the year, meaning North Sea barrels compete less effectively for Asian buyers. The Dated Brent-Med Urals spread in April narrowed to $1.60/b.

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



Sources: Argus Media, OPEC Secretariat and Platts.

In **Asia**, light-sweet Tapis premium over medium-sour Dubai shrank by around 75¢ to $4.45/b as Asian Pacific regional sweet grades came under pressure amid a slowdown in Chinese demand, coupled with growing competition from cheaper West African sweet crudes and Brent's widening premium against Dubai. Asia-Pacific crude, priced off Brent, becomes less attractive when the spread between Brent and Dubai widens. On the other hand, the wider spread makes Dubai-related sour crudes more attractive, hence supporting their values. Moreover, Dubai strengthened on the return of refineries from spring maintenance, Kuwait output cuts and aggressive partials buying in the Platts window.

In the **US Gulf Coast** (USGC), the Light Louisiana Sweet premium over medium-sour Mars fell by almost 20¢ to $5.40/b, possibly amid short-lived support for Mars from Keystone Pipeline outages. With TransCanada's Keystone Pipeline closure, less volumes of competing Canadian crude made its way to the USGC, supporting regional sour crudes. Refiners in Louisiana and the US midcontinent can substitute Mars from the Capline Pipeline for the Canadian crudes. Other than that, the sour market remained under pressure most of the month on ample supply due to the restart of the above-mentioned pipeline and some refinery hiccups.

Commodity Markets

Commodity prices generally advanced in April, with the energy group supported by a price increase in crude oil in anticipation of a supply freeze and output disruptions in some countries. In the non-energy group, agricultural prices advanced on strong performance by oils and oilseeds, while base metals were mixed, with increases in aluminium and decreases in copper. Precious metals advanced due to increases in platinum and silver.

Trends in selected commodity markets

A further recovery in crude oil prices continued to support commodity market sentiment in April, albeit at a lower rate than during the previous month. Meanwhile, commodity prices also had the support of a weakening US dollar in anticipation of a more gradual path of interest rate increases by the US Federal Reserve. This, in fact, has supported precious metal prices since the beginning of the year. Concurrently, manufacturing prospects weakened slightly in China, the largest consumer, as shown by the Purchasing Managers' Index (PMI) figure of 49.4, versus 49.7 from the previous month, while in the US, the Institute of Supply Management PMI declined to 50.8 in April versus 51.8 the previous month.

Table 2.1: Commodity price data

Commodity	Unit	*Monthly averages*			*% Change*	*Year-to-date*	
		Feb 16	Mar 16	Apr 16	Apr/Mar	2015	2016
World Bank commodity price indices (2010 = 100)							
Energy		41.2	47.4	51.2	8.02	68.50	45.07
Coal, Australia	$/mt	50.7	52.2	51.2	-1.94	60.4	51.0
Crude oil, average	$/bbl	31.0	37.3	40.8	9.13	53.1	34.7
Natural gas, US	$/mmbtu	2.0	1.7	1.9	11.93	2.8	2.0
Non-energy		75.7	78.0	79.8	2.34	86.2	77.0
Agriculture		84.1	86.2	88.6	2.80	92.3	85.6
Food		86.5	88.3	90.9	2.85	95.6	87.7
Soybean meal	$/mt	326.0	325.0	354.0	8.92	422.0	334.5
Soybean oil	$/mt	758.0	761.0	796.0	4.60	768.0	760.5
Soybeans	$/mt	369.0	375.0	393.0	4.80	407.3	376.0
Grains		84.3	84.4	85.7	1.57	94.7	84.7
Maize	$/mt	159.7	159.1	164.4	3.31	173.7	161.1
Wheat, US, HRW	$/mt	187.0	191.2	187.5	-1.95	234.9	189.7
Sugar, world	$/kg	0.3	0.3	0.3	-1.36	0.3	0.3
Base Metal		63.6	66.5	66.7	0.36	79.8	64.5
Aluminum	$/mt	1,531.3	1,531.0	1,571.2	2.63	1,806.4	1,528.7
Copper	$/mt	4,598.6	4,953.8	4,872.7	-1.64	5,885.4	4,724.2
Iron ore, cfr spot	$/dmtu	47.0	56.0	61.0	8.93	60.3	51.5
Lead	$/mt	1,765.8	1,802.2	1,732.3	-3.88	1,859.2	1,736.6
Nickel	$/mt	8,298.5	8,717.3	8,878.9	1.85	14,002.4	8,600.5
Tin	$/mt	15,610.1	16,897.6	17,032.7	0.80	17,752.7	15,837.1
Zinc	$/mt	1,709.9	1,801.7	1,855.4	2.98	2,113.1	1,721.8
Precious Metals							
Gold	$/toz	1,199.5	1,245.1	1,242.3	-0.23	1,213.8	1,196.2
Silver	$/toz	15.2	15.5	16.4	5.79	16.7	15.3

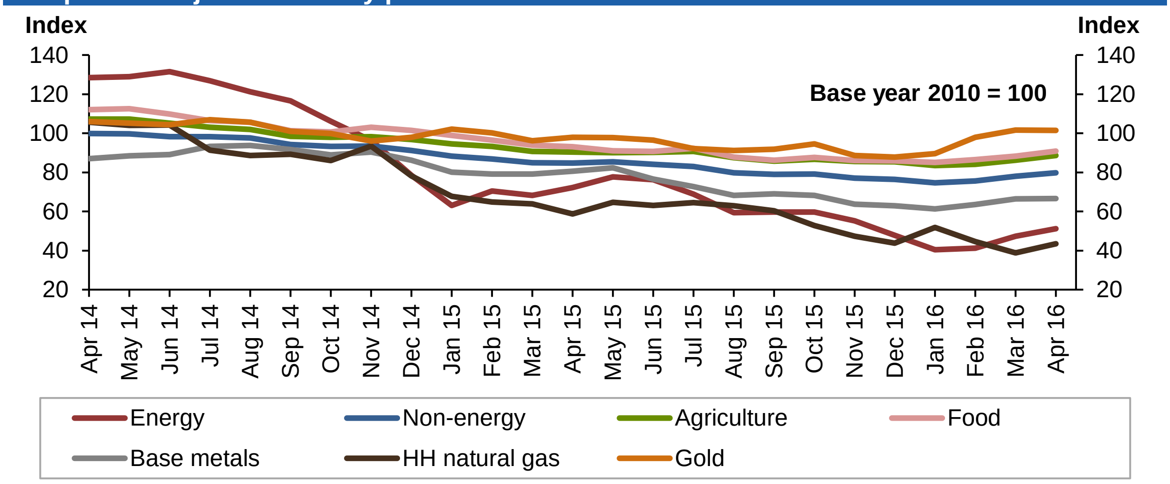
Source: World Bank, Commodity price data.

Metals prices were mixed, though they were supported by a pick-up in industrial output in China, which increased in March, by 6.8% vs 5.4% y-o-y the previous month. Moreover, gains in home prices accelerated in March, with the price of new homes increasing in 62 of the 70 largest cities in China, according to the National Bureau of Statistics. Furthermore, although world steel output declined by 0.5% in March, it actually increased in China by 2.9% y-o-y — the first increase of 2016, according to the World Steel Association. Steel prices and iron ore prices have advanced in response. However, a slight weakening in Chinese manufacturing prospects weighed on copper prices.

Agricultural prices increased mainly due to strong gains in oilseeds and vegetable oils, due to the impact of El Niño. Soybean prices were supported by torrential rains in Argentina that could damage the current crop. At the same time, palm oil prices continued to advance, due to expected lower output in Southeast Asia as a result of the El Niño-induced drought. Corn prices also advanced due to fears of crop damage from drought in Brazil. However, the US Department of Agriculture continued to forecast plentiful supplies of corn, soybeans and wheat, which could limit further price appreciation.

Energy price gains were led by crude oil prices, which rose for the third consecutive month on the expectation of a supply freeze and disruptions by key suppliers. Natural gas showed mixed trends in the US and Europe, with some rebound in prices in the US on slightly lower-than-expected inventory buildups at the beginning of the injection season. In Europe, prices declined mainly on the effect of indexing. Inventories in Europe were 35% higher at the end of April than a year ago, according to data from Gas Infrastructure Europe.

Graph 2.1: Major commodity price indices



Source: World Bank, Commodity price data.

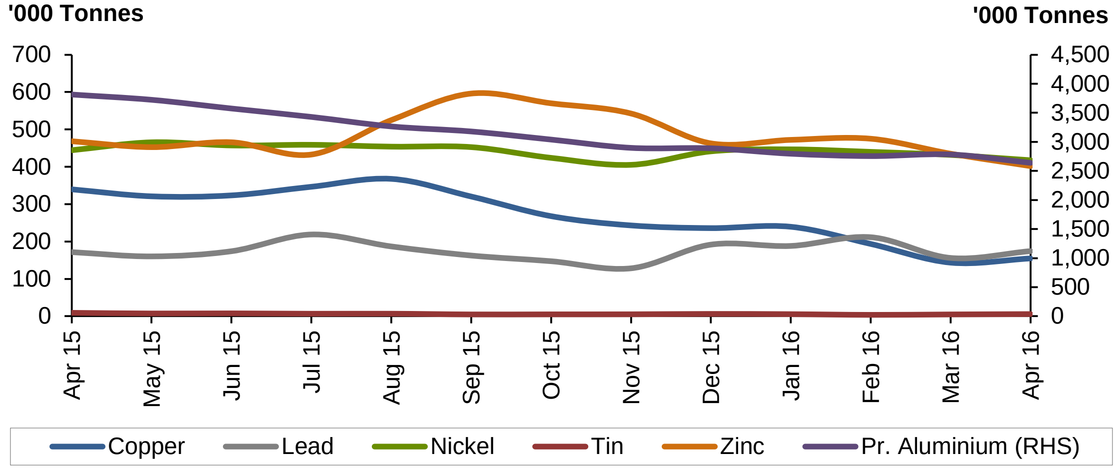
Average **energy prices** in April increased by 8.0% m-o-m due to a 9.1% increase in crude oil prices. Natural gas prices increased in the US by 12% m-o-m, while average prices in Europe declined by 3.1%.

Agricultural prices advanced by 2.8% due to increases in average food, beverage and raw material prices by 2.9%, 1.5% and 3.4%, respectively. Soybeans, soy oil, soy meal and palm oil led the increase in food prices, advancing by 4.8%, 4.6%, 8.9% and 5.4%, respectively.

Average **base metal prices** increased by 0.4%, with mixed price movements. Aluminum advanced by 2.6%. Copper prices were down by 1.6%. Average iron ore prices jumped by 8.9%, following a rally in steel prices.

In the group of **precious metals**, gold prices declined slightly by 0.2%, while silver and platinum prices rose by 5.8% and 2.7% m-o-m, respectively.

Graph 2.2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

In April, the **Henry Hub natural gas** index increased. The average price was up 20¢, or 11.9%, to $1.90 per million British thermal units (mmbtu) after trading at an average of $1.70/mmbtu in the previous month.

The US EIA said utilities added 68 billion cubic feet (bcf) of **gas from storage** during the week ending 29 April. This was broadly in line with the median market expectation of a 67 bcf decrease; however inventories are close to a record high for this time of the year – the last peak was registered in 2012. Total working gas in storage stood at 2,625 bcf, or 48.8% higher than at the same time the previous year and 46.7% higher than the previous five-year average. The EIA noted that temperatures during the reported week were “close to seasonal norms in most of the lower 48 states”.

Investment flows into commodities

Open interest volume (OIV) increased in April for select US commodity markets such as agriculture, copper, natural gas, livestock and precious metals, while decreasing for crude oil. Meanwhile, monthly average speculative net length positions for selected commodity groups increased, with the exception of copper.

Agriculture’s OIV decreased by 5.5% to 5,197,819 contracts in April. Meanwhile, money managers changed their stance to a combined net long position of 220,897 lots, largely because of increasing net length in corn, the soy complex and sugar.

Henry Hub’s natural gas OIV increased by 4.4% m-o-m to 1,12,0471 contracts in April. Money managers decreased their net short positions by 54% to reach 64,784 lots, the least bearish figure since February 2015.

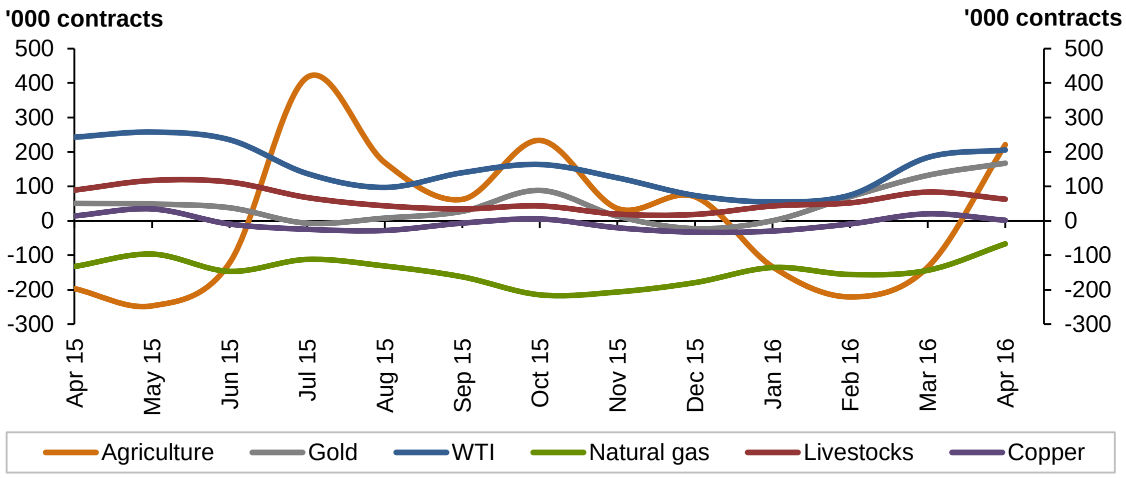
Table 2.2: CFTC data on non-commercial positions, '000 contracts

	Open interest		*Net length*			
	Mar 16	**Apr 16**	**Mar 16**	**% OIV**	**Apr 16**	**% OIV**
Crude oil	1,768	1,752	184	10	206	12
Natural gas	1,074	1,120	-144	-13	-67	-6
Agriculture	4,929	5,198	-134	-3	221	4
Precious metals	657	686	181	28	227	33
Copper	173	192	20	12	2	1
Livestock	552	553	84	15	63	11
Total	**9,153**	**9,502**	**191**	**49**	**651**	**55**

Source: US Commodity Futures Trading Commission.

Copper's OIV increased by 10.9% m-o-m to 192,103 contracts in April. Money managers decreased their net long position almost completely to 1,630 lots on declining momentum in the metals rally of the last three months.

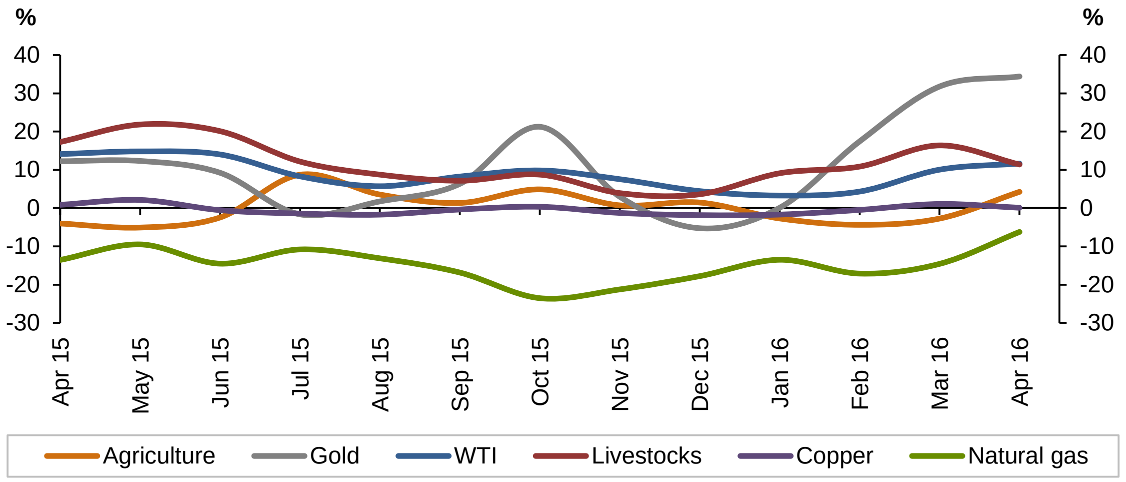
Graph 2.3: Speculative activity in key commodities, net length



Source: US Commodity Futures Trading Commission.

Precious metals' OIV advanced by 4.5% m-o-m to 686,451 contracts in April. Money managers increased their net long positions by 25% due to the expectation of a gradual interest rate increase in the US.

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



Source: US Commodity Futures Trading Commission.

World Economy

Recent data has pointed to some improving momentum in the global economy during the 2Q16, driven especially by an expected recovery in the US, after very low growth in 1Q16. However, many challenges remain. The risk to the global growth forecast is still slightly tilted toward the downside but given some recent positive signals, the forecast remains unchanged this month at 3.1% for 2016, after an estimated growth of 2.9% in 2015.

In the OECD, the US posted only very low 1Q16 growth, while the Euro-zone showed a trend to the upside and Japan seemed to weaken again. These counterbalancing effects have kept 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, and after China's 1Q16 growth was better-than-expected, the 2016 growth forecast for the country has been revised up slightly. Brazil's recession seems to have worsened, but it is expected to probably recover to some extent in the second half of the year. Russia is also forecast to remain in recession this year.

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. Also, central bank policies will 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**	**0.5**	**1.5**	**6.9**	**7.3**	**-3.8**	**-3.7**
Change from previous month	0.0	0.0	0.0	0.0	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	-0.2	-0.2	0.2	0.2	0.0	-0.5	0.0

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

OECD

OECD Americas

US

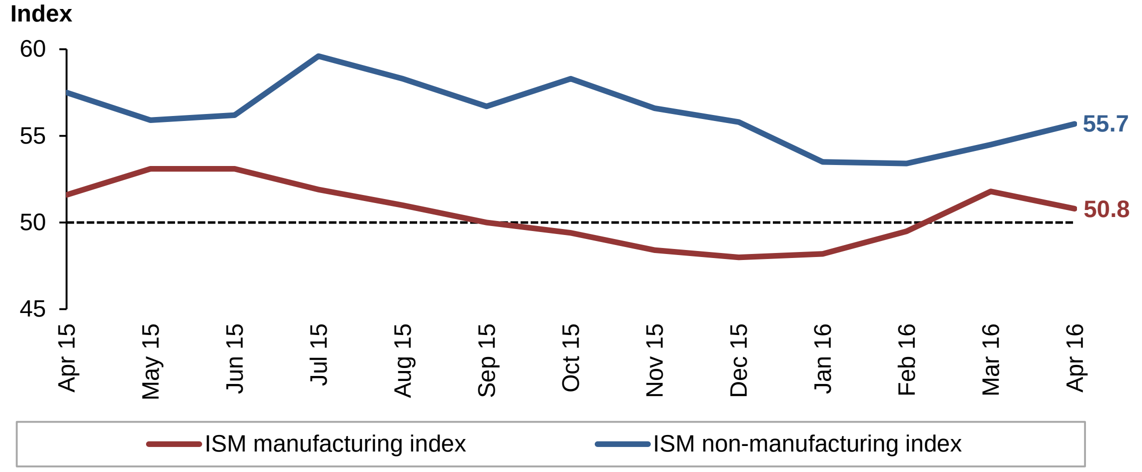
While in general, the US economy seems to be able to better weather the current economic situation, considerable weakness over the last two quarters in GDP growth has again highlighted the fact that important challenges remain. After **GDP growth** of only 1.4% at a q-o-q seasonally adjusted annualized rate (SAAR) in 4Q15, growth even slowed down to stand now at only 0.5% q-o-q SAAR in 1Q16, as reported by the Bureau of Economic Analysis in its first (out of three) estimates. This comes despite the still very low interest rates and the ongoing improvements in the labour market. Given this support, private household spending turned out to still be a solid support at a growth rate of 1.9% q-o-q SAAR. However, the estimated decline in exports (amid a strong US dollar), 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. In fact, weak 1Q growth has been a phenomenon over the past two years. Given the fact that it was followed by a substantial recovery in the following two quarters, this may be assumed also this year. Some lead indicators are pointing at a strengthening during the 2Q16. Consumer sentiment, the Purchasing Manager's Index (PMI) and other business sentiment indices are pointing in this direction, but the magnitude of the improvement remains unclear. Given that the latest labour market improvements have been below expectations, the US Federal Reserve (Fed) will carefully review these developments, but it seems likely that it is envisaging another interest rate hike in coming months. Given that some recovery for the US is expected in 2Q16 and considering also the fact that emerging and developing economies are somewhat improving, there still may be a likelihood of an interest rate hike at the Fed's Open Market Committee meeting in June or July.

Total **industrial production** remains weak due to the ongoing challenges in the energy sector, while manufacturing continues growing, albeit at a slower pace. Total industrial production was declining by 2.0% y-o-y in March. This is now the seventh consecutive month of decline and the second highest in this series. Mining, including oil sector-related output, fell considerably again, dropping 13.0% y-o-y, the largest decline in this data series on record. Positively, within this number, manufacturing held up relatively well at 0.5% y-o-y, following growth of 1.0% y-o-y in February. Ongoing weakness is reflected in manufacturing orders, falling by 4.2% y-o-y in March. This has again also been significantly influenced by the energy sector. New orders for machinery in the mining, oil and gas sectors declined by 41.3% y-o-y in March.

Retail sales continued rising, but at a lower rate in March, when growth stood at 1.6% y-o-y after stronger growth of 3.6% y-o-y in February. Support from the continuously improving situation in the **labour market** remains intact in general. However, the improvements were of a smaller scale in April, compared with the previous month. The unemployment rate stood at 5.0% in April, the same level as in March. The past months' rise in the participation rate came to a temporary halt as it moved down again to 62.8% from the March level of 63%. Non-farm payroll additions grew by 160,000 after a slightly revised down level of 206,000 in March. The Conference Board's Consumer Confidence Index remained solid, but is now hovering around the same level for more than half a year. It fell slightly to 94.2 in April, after 96.1 in March and 94.0 in February.

After a strong recovery of the **Purchasing Manager's Index** (PMI) for the manufacturing sector, as provided by the Institute of Supply Management (ISM), the April level has again retraced to stand now at 50.8, after reaching 51.8 in March. Importantly, the non-manufacturing sector index rose further in April, to stand at a level of 55.7, after 54.5 in March.

Graph 3.1: Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

Given the very low growth in the 1Q and the uncertain recovery in the remainder of the year, the 2016 growth forecast has been revised down from 2.2% to 2.0%. This comes after already sluggish, but even higher, growth of 2.4% in 2015.

Canada

The Canadian economy remains weak and, given the latest challenges from wild-fires and the impact these may have on its oil industry, the situation of the economy remains challenging. Also, the current soft dynamic in the US economy, which constitutes Canada's most important trading partner, may have an influence on the economy. After having shown signs of improvements, exports have declined again in March, when they fell by 5.1% y-o-y. In conjunction with better exports and business sentiment in the first two months of the year, industrial production rose by 1.1% y-o-y in February and by 1.3% y-o-y in January. This came after several months of decline, but it remains to be seen how this will develop in the months ahead, given the challenges to the Canadian economy. Positively, retail trade improved again by 5.6% y-o-y in February, after a rise of 7.3% y-o-y in January. Some positive developments are being reflected in the PMI for manufacturing, which moved higher in April to a level of 52.2, the second consecutive month of a level above 50. Given the challenges ahead and despite some positive momentum up to around March, the GDP forecast for 2016 remains at 1.5%. This is higher than the estimated GDP growth of 1.1% in 2015

OECD Asia Pacific

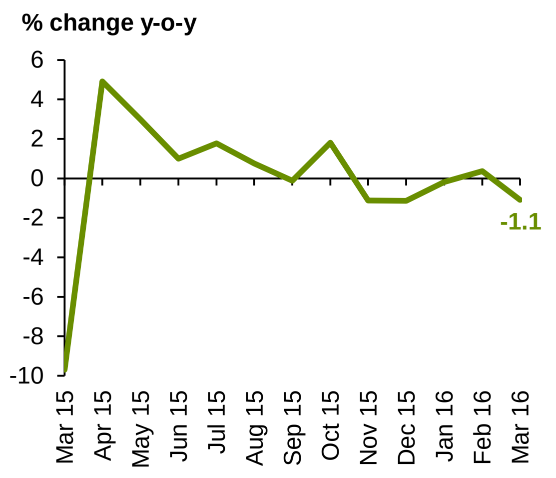
Japan

Despite the year-long stimulus measures, the Japanese economy remains in only a slow or no-growth dynamic. Of the so-called "three arrows" approach that the current government has pursued, fiscal stimulus is almost not an option, given the considerable sovereign debt level. Structural measures as envisaged by the government are only paying of slowly and the effect in the short-term is limited. Monetary stimulus is already at an unprecedented level and has lately not been increased by the Bank of Japan (BoJ) as the latest meeting minutes of Bank's March meeting show. Decision-makers in the central bank are divided over the negative interest rates implemented recently and the negative effect these may have on the economy. In the minutes of the meeting, the bank has also highlighted that the latest rounds of monetary stimulus has created some expectation in the market that these measures will continue. However, at its April meeting, there was no announcement of a further increase in monetary stimulus. This comes despite the fact that the yen has risen significantly over the past months and inflation is still hovering around the rate of 0%, far away from the 2% the BoJ is hoping to achieve. The situation for domestic demand remains challenging and the most recent lead indicators again point at only low growth this year.

After having turned slightly positive in February, **consumer prices** remained stagnant again in March at 0% y-o-y. Interestingly, when excluding the two volatile groups of energy and food, the country's core inflation figure also has come down to 0.6% in March. This is a consecutive decline from 0.9% in November of last year. Some continued support for domestic consumption came from the February 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, with the highest rate of growth in March at 2.0%. This is certainly also supported by the extremely tight labour market, which had an unemployment rate of only 3.2% in March.

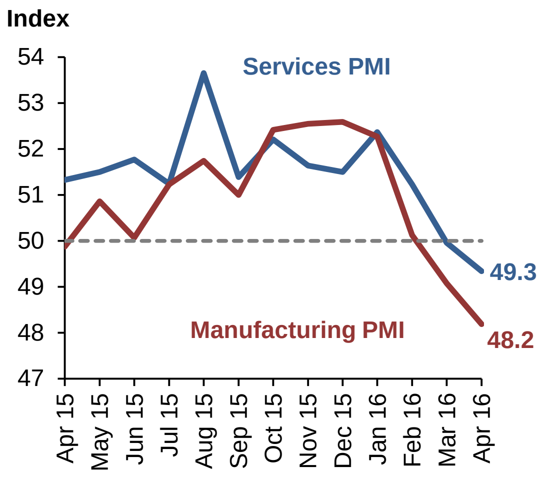
Japanese exports have shown a constant declining trend. They have now declined for the sixth consecutive month in March, falling by 6.8% y-o-y, after declining by 4.4% in February and 12.9% y-o-y in January. The 1Q16 average, therefore, stood at a decline of 7.8% y-o-y. Also, **industrial production** fell again in March by 1.6% y-o-y, after an even sharper decline in February of 5.6% y-o-y, following a decline of 2.6% y-o-y in January. This brings 1Q16 industrial production to a decline of 3.3% y-o-y. **Domestic demand** has also remained weak in the past months. It turned into negative territory again after a slight uptick was seen in February and again declined by 1.1% y-o-y in March, compared to 0.4% y-o-y in February.

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 points again at a slow-down of this sector, dropping to 48.2 in April after reaching 49.1 in March. The momentum of the services sector also suggests a slowdown in activity, falling to 49.3 in April, compared to 50 in March.

Given the slowing trend in the Japanese economy, the growth forecast for 2016 has been revised down to 0.5% from 0.7% in the previous month. However, even with the lower growth forecast, risks remain and the situation will need close monitoring in the coming months. This revised level of growth for 2016 comes after already a relatively sluggish growth of 0.5% in 2015.

South Korea

The economic situation in South Korea is slowing down slightly. The GDP growth rate during the 1Q16 stood at 2.7%, which is in line with expectations. Exports remain weak and in April declined again by 6.1% y-o-y, providing a significant drag to the economy. This comes after a decline in exports of already 5.6% y-o-y in 1Q16. This weakness has been also confirmed to some extent by the PMI numbers for the manufacturing sector over the last months. The latest April number stood at 50 which points to no growth in the in the near-term. After already having taken into consideration some challenges to the economy, the GDP growth forecast remains unchanged at 2.7% for 2016, after an estimated growth of 2.6% in 2015.

OECD Europe

Euro-zone

The Euro-zone had a surprisingly better-than-expected **1Q GDP growth** of 0.6% q-o-q seasonally adjusted rate, despite some lead indicators having pointed at some weakness at the beginning of the year. Positively, the additional monetary stimulus from the European Central Bank (ECB) is showing some positive effect for economic growth in the Euro-zone, but seems to also becoming less effective. However, numerous challenges to the economy remain with ongoing sovereign debt issues in Greece, the UK referendum on exiting the EU, the still weak banking system and the only slow improvements in the Euro-zone's labour market. Given the latest strengthening of the euro, this may also have some negative effects on exports.

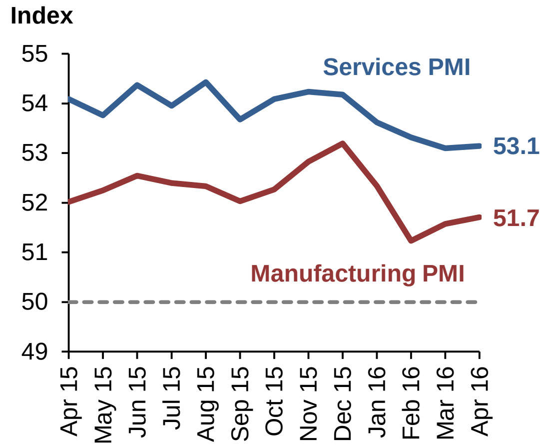
After a strong recovery in January, the latest **industrial production** number for February shows again some softer dynamic. It rose by 0.9% y-o-y, after growth of 3.0% y-o-y in January. Manufacturing growth was again relatively strong with a growth rate of 1.7% y-o-y, compared to 4.0% y-o-y in January. As in other economies, mining and quarrying has declined considerably, amid falling commodity prices in the past months. In January, the mining and quarrying sector declined by 11.7% y-o-y, after a decline of 13.9% y-o-y in January. Moreover, construction continued recovering, rising by 2.4% y-o-y, after 2.5% y-o-y in January.

Retail sales performed well too, however, at a slightly lower growth rate, when compared to previous months. Consumers increased spending in the retail sector by 2.0% y-o-y in March, after 2.5% in February and 2.2% in January. 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 March, a significant improvement from the 10.4% in February.

Despite the latest round of ECB stimulus, **inflation** remained negative. It declined by 0.2% y-o-y in April, after a decline of 0.1% y-o-y in March. The lessening effectiveness of ECB stimulus seems to be also mirrored in the latest figures of credit supply. March's growth stood at only 0.3% y-o-y, after 0.7% y-o-y in February and 0.3% y-o-y in January, considerably lower than the December figure of 0.8% y-o-y and the healthier level of 2.1% y-o-y in November. This may also be the outcome of the ongoing challenges in the banking system, with the volatile developments in the credit supply seen in the past months pointing at some continuing fragility.

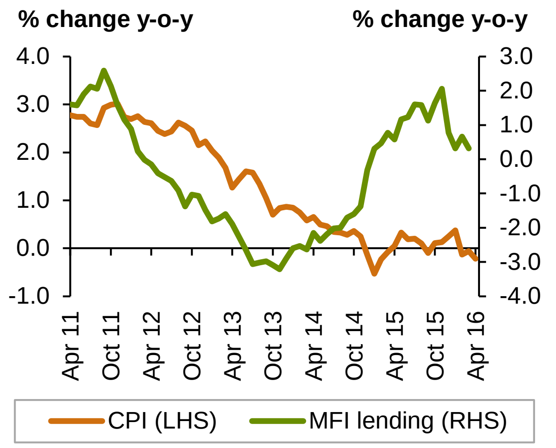
The latest **PMI indicators** are holding up well and point at some stabilisation of the cyclical recovery in the Euro-zone. The manufacturing PMI for January rose slightly to 51.7 in April from 51.6 in March. The services PMI remained at a healthy level of 53.1.

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. However, considering the strong momentum from the 1Q16, the 2016 growth forecast has been revised up to 1.6% from 1.4% in the previous month. This is compared to estimated growth of 1.5% in the past year.

UK

The UK economy continues on a relatively healthy growth trajectory, while some softening in the economy is ongoing. This also seems to be reflected in the upcoming Bank of England meeting, where there may be a decision to continue with an accommodative monetary policy. Industrial production has turned negative again in February with a decline of 0.5% y-o-y, after turning slightly positive again in January, to expand by 0.1% y-o-y. Lead indicators also have pointed at some cooling down in the past months and international trade has continued declining this year. Exports fell again by 0.7% y-o-y in February, after a hefty decline of 5.8% y-o-y in January. This marks the sixth consecutive month of decline. The latest April PMI number for the manufacturing sector also points at a slowdown. It fell below the growth indicating level of 50 to stand at 49.2, after from 50.8 in March. The services sector PMI fell to 52.3 in April, after to 53.7 in March. 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,** the reading of April's consumer confidence index summarizes the negative sentiment triggered by the country's economic and political hurdles. The index registered its lowest reading ever at 64.6. However, if continued, recent improvements in the exchange rate and lower inflation might provide some hope of a gradual recovery in the medium-term. It is expected that GDP would shrink by 3.5% y-o-y in 2016.

In **Russia**, despite the falling trend of inflation in recent months, retail sales continued dropping in the first three months of the year, by an average of 5.4% y-o-y. However, the rate of contraction is notably less than half of what it was in the 4Q15 when retail sales fell by 12.5% y-o-y. GDP is forecast to decline 1.3% y-o-y in 2016.

India's industrial output provided positive indications in February following three months of contraction. Falling global trade and aggressive competition from weaker currency exporters have caused Indian exports to decline in 2015/16. PMI data for India showed a marked slowdown in output expansion during April, as the growth of new work ground to a halt following a robust increase during the prior month.

China's real GDP growth eased slightly to 6.7% y-o-y in the 1Q16 from 6.8% y-o-y in 4Q15 and, surprising, was marginally on the upside. While it is the weakest growth since the 1Q09, signs of a recovery have emerged as fixed asset investments, industrial output, retail sales and new yuan-denominated loans in March were higher than market estimates. It seems China's policy adjustments will continue to have positive effects in the 2Q. Traditional sectors led the March pick-up in activity, including steel, cement and real estate. Overcapacity remains notable in most of these areas and capacity reduction is still underway. Thus, China's GDP growth expectation in 2016 was revised up from 6.3% to 6.5%.

Table 3.2: Summary of macroeconomic performance of BRIC countries

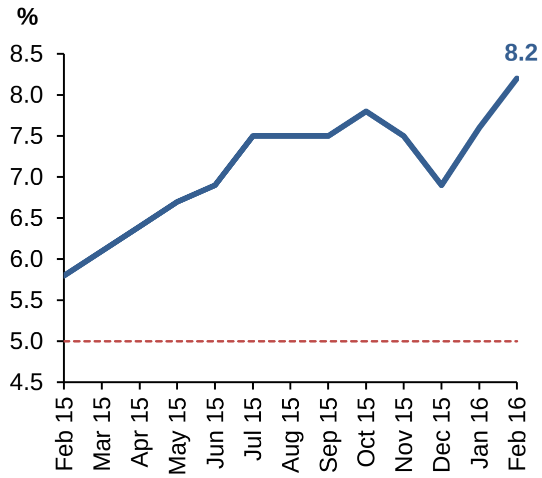
	GDP growth rate		Consumer price index, % change y-o-y		Current account balance, US$ bn		Government fiscal balance, % of GDP		Net public debt, % of GDP	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Brazil	-3.8	-3.4	9.0	7.3	-58.9	-39.8	-10.5	-8.4	66.5	76.5
Russia	-3.7	-1.1	15.5	7.1	66.7	42.2	-2.6	-3.8	10.1	13.9
India	7.3	7.5	4.9	5.1	-20.0	-22.3	-4.0	-3.8	51.8	51.6
China	6.9	6.5	1.5	2.0	293.4	248.7	-3.4	-3.5	18.9	23.4

Note: 2015 = estimate and 2016 = forecast.
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

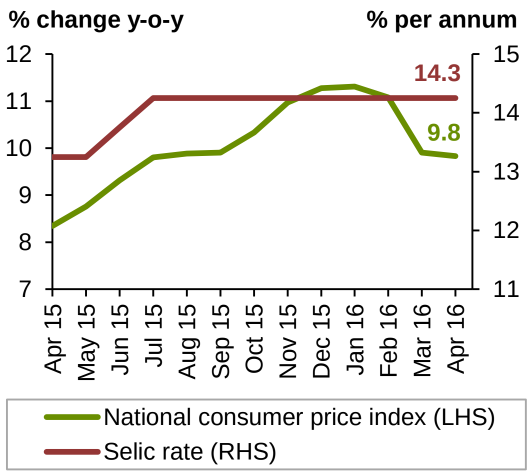
The monthly **economic activity index** published by the central bank showed a contraction of 7.7% and 4.5% y-o-y in January and February, respectively. The **unemployment rate** in Brazil reached 8.2% y-o-y in February, the highest rate in nearly seven years.

Graph 3.6: Brazilian unemployment rate



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

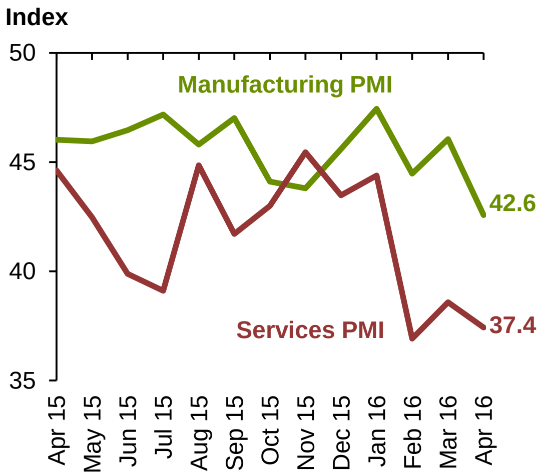
Graph 3.7: Brazilian inflation vs. Interest rate



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

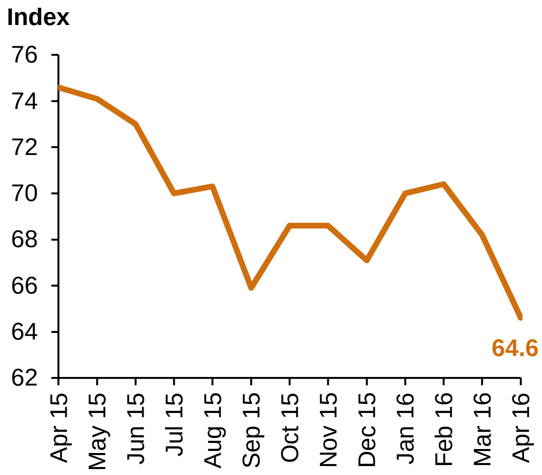
The central bank kept its benchmark **interest rate** at 14.25% for the tenth consecutive month in April, while **inflation** eased to a single digit for the first time in five months. Inflation posted a 9.9% y-o-y increase in March, down from 11.1%. The recent ease in inflation was largely caused by an appreciation in the **real** of more than 12% in the past three months. The downturn in the **manufacturing sector** continued in April. It has been reported that the manufacturing sector cut jobs at its steepest rate in the history of the PMI survey. The manufacturing PMI dropped to 42.6 in April, from 46.0 in March. The survey showed that new businesses fell by the sharpest pace since March 2009 and production declined the most since November 2015.

Graph 3.8: Brazilian manufacturing and services PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.9: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

The reading of the **consumer confidence index** of April summarizes the negative sentiment triggered by the country's economic and political hurdles. The index registered its lowest reading ever at 64.6. It is expected that **GDP** would shrink by 3.4% y-o-y in 2016.

Uncertainty impacting developments in Brazil

Ratings agency Fitch downgraded Brazil's long-term foreign and local currency ratings to BB from BB+, with a negative outlook, reflecting the agency's concerns about the ongoing economic contraction, failure to stabilize government finances, and political gridlock. The agency expects that this year the general government deficit will average 8%, down from 10% in 2015, which will drive the general government debt burden to 80% of GDP by 2017. The downgrade puts Fitch's Brazil rating in line with those of Standard & Poor's and Moody's, and could negatively affect investors' willingness to hold Brazilian debt.

In this month's *MOMR*, the forecast for economic growth in Brazil in 2016 has been revised down by 0.5 percentage points to now show a contraction of 3.4%, which follows a 3.8% decline last year. This revision has been driven mainly by continued negative macroeconomic indicators for the first four months of the year, which have been compounded by domestic political challenges. These have weighed heavily on consumer sentiment which stood at a record low in April and have left the country potentially facing its worst recession in decades.

In this context of economic slowdown and negative outlook, demand for petroleum products in the country is likely to continue to decline this year. Data for the first quarter highlights a steep decline in consumption, with March figures showing a decline of 103 tb/d or 4%. All products performed weaker than expected, except gasoline, which benefited from a lower price, which made the motor fuel cheaper than domestically-produced ethanol.

On the supply side, Brazilian production is forecast to grow by just 60 tb/d to average 3.12 mb/d in 2016, down from growth of 210 tb/d a year earlier. Even this level of growth may be subject to further downward revisions, as projects scheduled to come on-stream may face delays, while domestic challenges and the uncertain political environment could further impact energy sector developments. At the same time, already-sanctioned long-term projects, especially from deep offshore, will eventually be coming on-stream, ensuring a source of new supply.

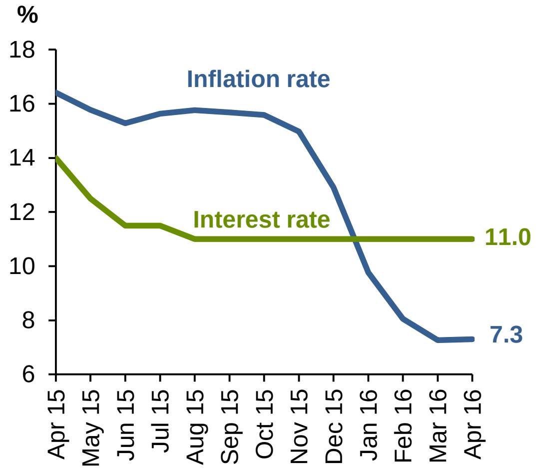
As a result, despite an expected boost from the Olympic Games this summer, the forecast contraction in the Brazilian economy, amid ongoing domestic discord, is likely to weigh further on demand and even supply growth this year.

Russia

The monthly real **GDP** growth published by the Ministry of Economic Development of the Russian Federation showed GDP falling 1.8% y-o-y in March. This brings GDP contraction in the 1Q16 to 1.5% y-o-y.

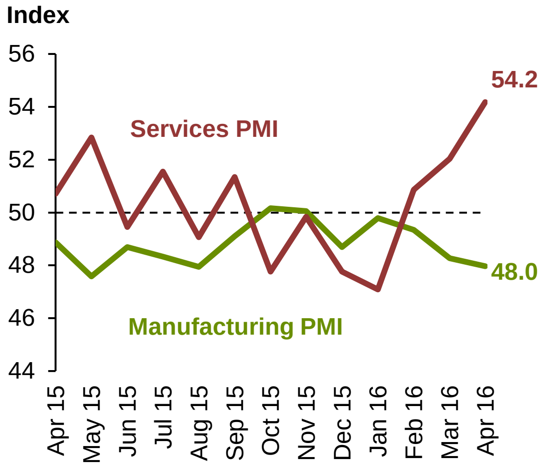
The **ruble** showed its second appreciation so far this year in April and for the second month in a row, increasing 5.2% m-o-m, following 8.7% in March. This has helped **inflation** to continue its downward movement for the seventh month in a row in March, posting 7.3% y-o-y, down from 8.1% in February. While the central bank left its benchmark **interest rate** unchanged at 11.0% for the ninth month in April, falling inflation could allow the central bank to gradually soften the interest rate to support consumption and growth.

Graph 3.10: Russian inflation vs. Interest rate



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

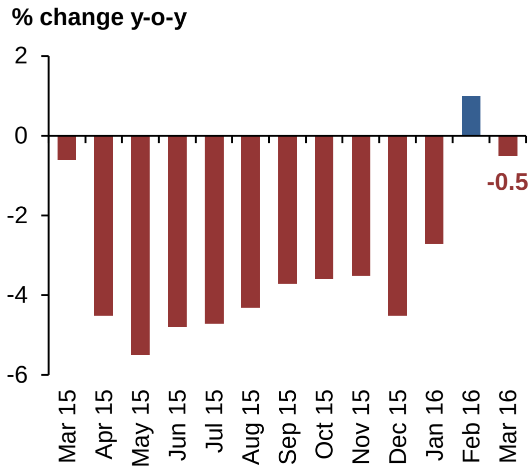
Graph 3.11: Russian PMIs



Sources: HSBC, Markit and Haver Analytics.

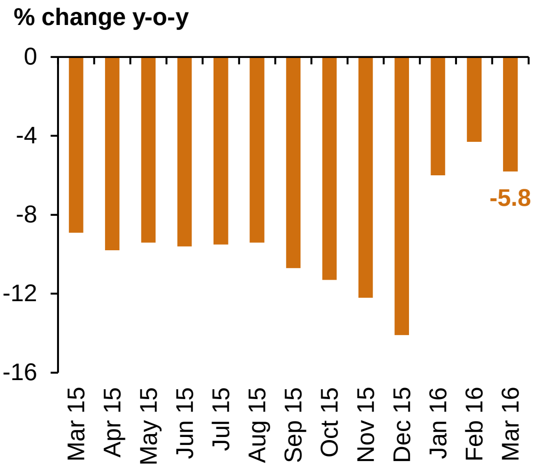
The **manufacturing sector** suffered a broad-based deceleration in new businesses in April that led to a further contraction in production, which shrank at its sharpest pace since May 2009. This led to another decline in employment in the sector. The manufacturing PMI posted its lowest reading in eight months, falling slightly to 48.0 in April from 48.3 in March. Weaknesses in the manufacturing sector also manifested in the contraction of **industrial production** by 0.7% y-o-y in the 1Q16.

Graph 3.12: Russian industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3.13: Russian retail sales



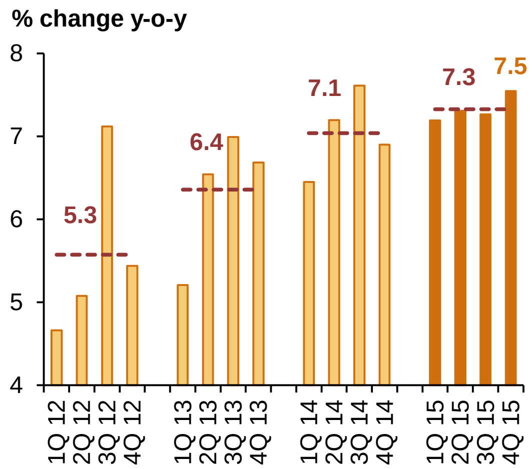
Sources: Federal State Statistics Service and Haver Analytics.

Despite the falling trend of inflation in recent months, **retail sales** continued dropping in the first three months of this year by an average of 5.4% y-o-y. However, the rate of contraction is notable less than half of that in the 4Q15 when retail sales fell by 12.5% y-o-y. The **GDP** is forecast to decline 1.1% y-o-y in 2016.

India

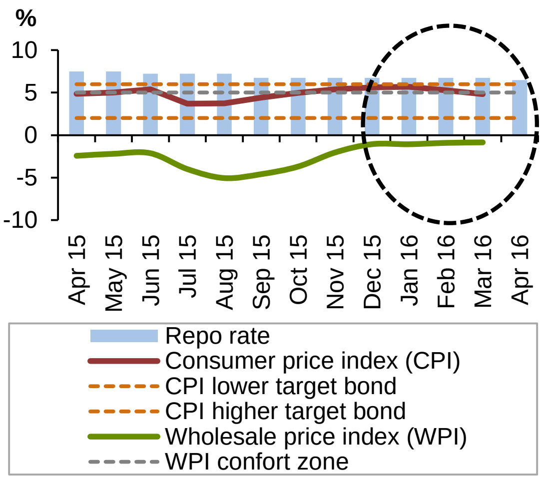
The improvement in India's February **industrial growth** was largely limited to solid growth in electricity output that accelerated to 9.6% y-o-y, the highest since September 2015. However, the remaining industrial sub-sectors indicated much weaker growth, with manufacturing output up by a mere 0.7% 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 3.14: Indian GDP growth



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

Graph 3.15: Indian inflation vs. Repo rate

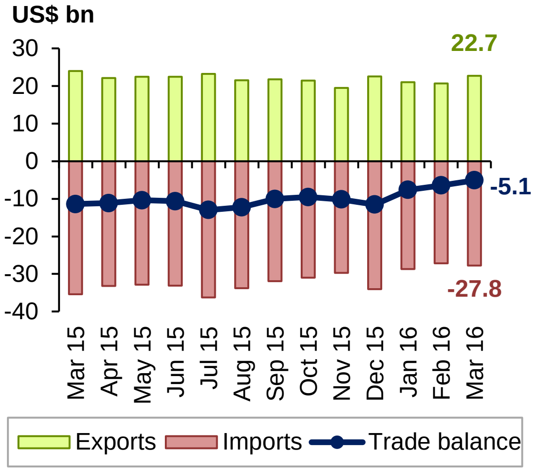


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

March **CPI inflation** dipped below 5.0% to 4.8% y-o-y from an upwardly-revised 5.3% rate in February. For a second month, food prices declined 0.1% m-o-m, seasonally adjusted, pushing annual inflation down further to 5.3% y-o-y from 5.5% in February. The Indian Meteorological Department released its first forecast of the upcoming monsoon and it seems the prospect of a normal/above-normal monsoon season after successive droughts should come as welcome relief to policy-makers. The monsoon forecast has implications for monetary policy. Wholesale prices came in below expectations in March, with deflation of the wholesale price index (WPI) at 0.9% y-o-y, led by a downside surprise in electricity prices, which have a 3.45% weight in the WPI.

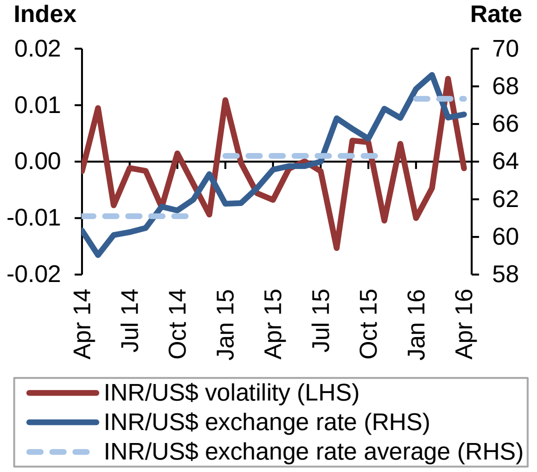
India’s monthly **trade** deficit narrowed to a five-year low of $5.1 billion in March from $6.5 billion in February, helped by seasonality. **Exports** and **imports** excluding oil and gold both stabilized after losing momentum in the 4Q15. India's merchandise imports stood at just $27.8 billion in March, down 21.6% y-o-y. Foreign purchases of gold declined by 80.5% y-o-y to a 28-month low of $973 million. Falling global trade and fierce competition from weaker currency exporters have caused Indian exports to decline in 2015/16, resulting in the country's longest period of exports contraction to date exceeding even that of the financial crisis of 2008-09. Thus, even a slight improvement in March would be unlikely to revive exports in the coming months.

Graph 3.16: Indian net exports



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3.17: INR/US$ exchange rate and volatility

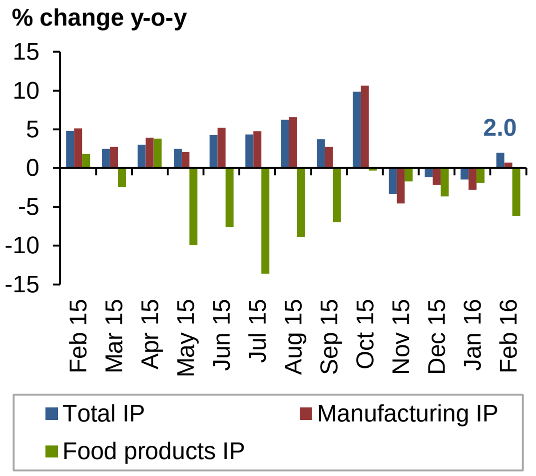


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Net **FDI** inflows have increased sharply in last two years helped by government policy and have supported the macroeconomic backdrop. India has witnessed a sharp rise in net FDI in the last couple of years. According to the latest JP Morgan weekly report, net FDI, after hitting a bottom of 0.5% of GDP in FY 2011 (that is, the year ending March 2011) increased to 1.6% of GDP in FY 2015 and, based on the trends of the past months, it is expected to rise further to 2.4% of GDP in FY 2016.

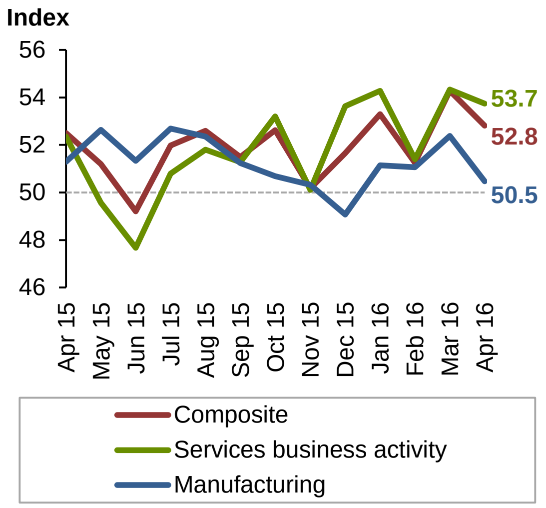
After disappointing results for three successive months, **industrial production** finally offered surprising results in February with a trend to the upside, rising to 2% y-o-y growth, significantly above expectations.

Graph 3.18: Indian industrial production breakdown



Sources: Central Statistical Organisation of India and Haver Analytics.

Graph 3.19: Indian PMIs



Sources: HSBC, Markit and Haver Analytics.

Indian **manufacturing output** growth reached a four-month low in April, indicating no fundamental change in underlying demand. The PMI slowed to 50.5 in April, up from 52.4 in March, as it was pulled down by weak orders. The new orders sub-index stood at 50.2, falling from at 53.9 in March. Growth in export orders also slowed, with the relevant sub-index at 50.9, which is only slightly above the threshold mark that indicates expansion. Manufacturing PMI data continue to reflect the ongoing challenges faced by Indian factories. Recent policy rate cuts and a host of liquidity-boosting measures by the Reserve Bank of India (RBI) should help to ease financing pressures but will not address other relevant issues, indicating that a sustained recovery in India's manufacturing growth remains elusive.

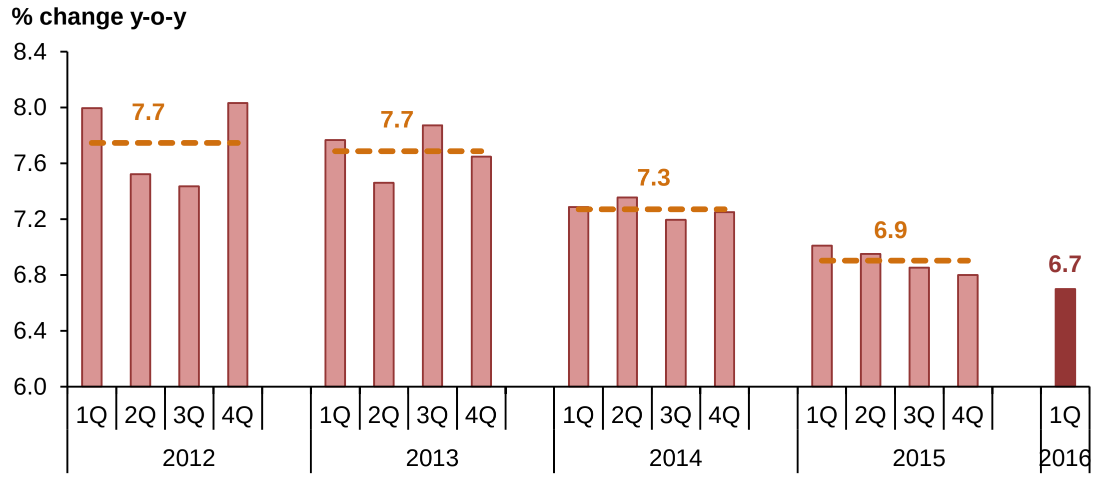
The **GDP growth** expectation for 2016 remains unchanged at 7.5%.

China

China’s **real GDP** growth eased slightly to 6.7% y-o-y in the 1Q16 from 6.8% y-o-y in the 4Q15 and surprising marginally on the upside. While it is the weakest growth since the 1Q09, signs of a recovery have emerged as fixed asset investments, industrial output, retail sales and new yuan-denominated loans in March were higher than market estimates. Also in the 1Q16, **FDI** growth increased to 4.5% y-o-y. Despite the 1Q slowdown in growth, the monthly data pointed to a notable pickup in economic activity in March, likely driven by growth-supportive policies. For instance, state-controlled fixed investment expanded 23.3% y-o-y in the 1Q, accounting for one-third of total fixed investment, while private sector fixed investment rose 5.7% y-o-y. Among the funding sources for fixed investment, budgetary funding increased 16.9% y-o-y and bank loans by 13.9%, while self-raised funds declined by 0.2% and foreign investment fell 25.6% in the 1Q. In addition, new investment projects jumped 40% in the 1Q. It seems China’s policy adjustments will continue to have positive effects in the 2Q. Traditional sectors led the March pickup in activity, including steel, cement, and real estate. Overcapacity remains notable in most of these areas, and capacity reduction is still under way. Hence, the March rebound could have been driven by short-lived re-stocking (following prior inventory cuts) and thus may not be sustainable. For instance, the recovery in real estate investment and new home starts could reflect real estate developers changing strategy – speeding up construction to take advantage of the current benign market conditions.

Housing sales and **prices** have both been picking up again since early 2015.The improvement in real estate investment may continue as the recovery in housing sales persists. However, central and western regions recorded larger improvements in real estate investment, although housing sales and price expansions were concentrated in eastern and tier-one cities. This indicates a risk to the current real estate investment recovery, since western and central regions have 50% of national housing inventory. The divergence between house prices in large and small cities remained remarkable.

Graph 3.20: Chinese GDP growth rate, SAAR



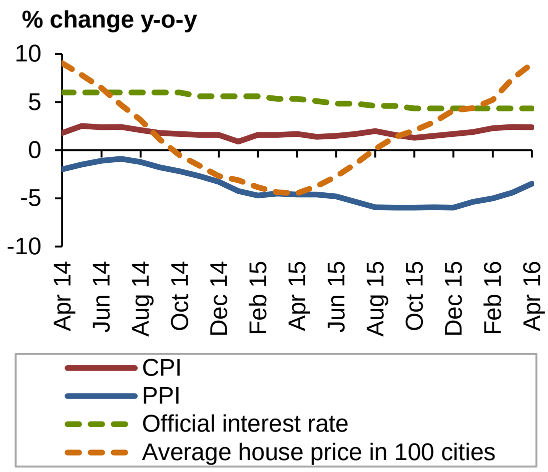
Sources: China's National Bureau of Statistics and Haver Analytics.

China's **M2 money supply** rose 13.4% y-o-y in March, up from 13.3% in February. In addition, the M1 money supply grew 22.1% y-o-y in March, the highest reading since December 2010. Monetary policy will remain accommodative, but the pace of easing will be scaled back in 2H. Despite the firm tone of the March data, it is still too early to conclude that growth has stabilized. Moreover, the uncertainty about external demand remains significant.

China's **CPI inflation** slightly increased to 2.4% y-o-y in March from 2.3% in February. Excluding food and energy prices, the core CPI rose 1.5% y-o-y in March, up from 1.3% in February. China's National Bureau of Statistics (NBS) highlighted a few factors behind the March inflation figures: (1) a reduced supply of vegetables because of the recent cold weather; (2) continuous low pork prices in recent years have reduced farmers' incentives to raise pigs; and (3) for non-food CPI, there has been the usual post-Lunar New Year decline in travel costs and seasonally higher service prices after migrant workers returned to cities from the holiday. Also, the producer price index (PPI) deflation moderated to 4.3% y-o-y in March from 4.9% y-o-y in February. Overall, the PPI deflation has run uninterrupted for 49 months.

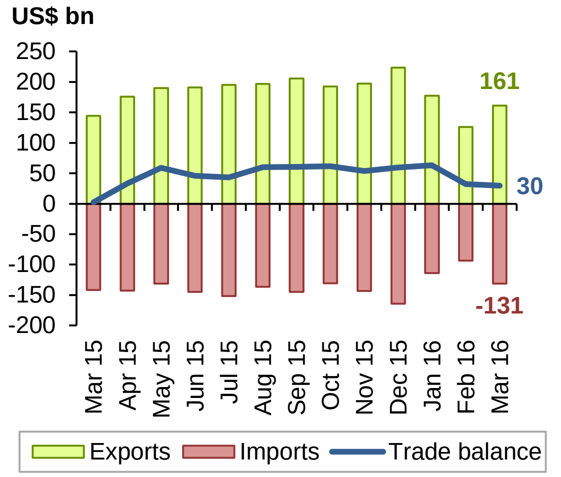
China's **trade** surplus will play a marginally positive role in GDP growth in the 1Q16, but that will also dissipate as 2016 progresses. China's March trade report showed continued sluggishness in external activity despite stronger headline growth, which was helped by a low base effect. March **exports** (in US dollar terms) rose 11.5% y-o-y, after declining 25.4% y-o-y in February. **Imports** (in US dollar terms) dropped 7.6% y-o-y in March, after falling 13.8% in February. As a result, the trade surplus declined to $29.9 billion from February's $32.5 billion. China's weak trade figures are consistent with weak global trade in recent years. According to the WTO, average annual growth in global merchandise trade volume fell from 5.3% in 2001-08 to 3.2% in 2011-15. The weak trade is related to the lacklustre performance in the global economy, weak recoveries in developed countries and a slowdown in emerging markets. But there are also structural changes in global demand, including household balance sheet adjustments in the US.

Graph 3.21: Chinese CPI vs. PPI



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

Graph 3.22: Chinese trade balance



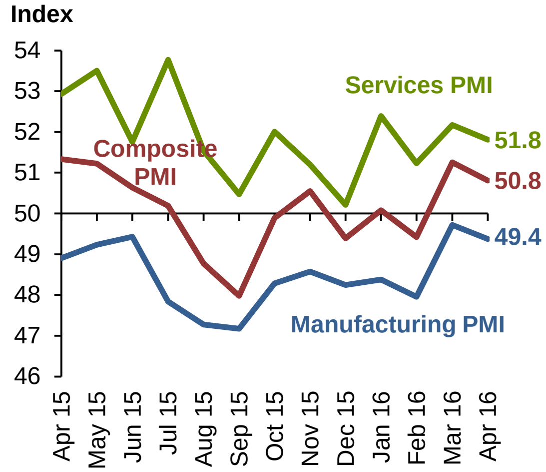
Sources: China Customs and Haver Analytics.

The NBS released data indicating that China's **industrial** profits further accelerated to 7.4% y-o-y in the 1Q16, marking the second expansion during the past year. According to the official announcement, the improvement came from faster growth in manufacturing, rising investment income and non-operating income. Investment income increased 20.4% in March compared with a 3% y-o-y contraction during

February, contributing over 30% of the profit growth combined with a 68.3% y-o-y expansion in non-operating income. Moreover, slower contraction in the PPI and cost-cutting contributed to the improvement. Given the prospect of improvements in industrial inflation and the CPI in 2016, the expansion in China's industrial profits may continue into the 2Q. Moreover, booming house sales and growth in the high-tech sector may contribute to a recovery in downstream demand. Reforms to the country's value-added tax (VAT) and a reduction in the social insurance rate may benefit efforts to improve cost-cutting and the profitability of enterprises. However, the currently rising investment income from a stock-market recovery is unsustainable, adding to the risk of further volatility for profits. Additionally, the possibility of a deceleration in profits will remain in the second half of 2016, given the overall weakness in domestic demand.

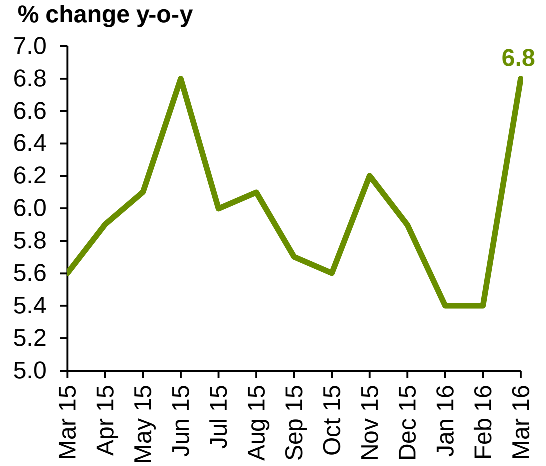
China's official **PMI** was 50.1 in April, easing from March's 50.2 and barely above the 50-point mark has that separated expansion in activity from contraction. All sub-indices worsened relative to a month prior, including the rate of output growth, with one exception: Prices of purchased materials accelerated, growing at the fastest pace since May 2011. The Caixin China General Manufacturing PMI for April came in at 49.4, down 0.3 points from March's reading. All of the index's categories indicated conditions worsened month-on-month, with output slipping back below the 50-point neutral level.

Graph 3.23: Chinese PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.24: Chinese industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

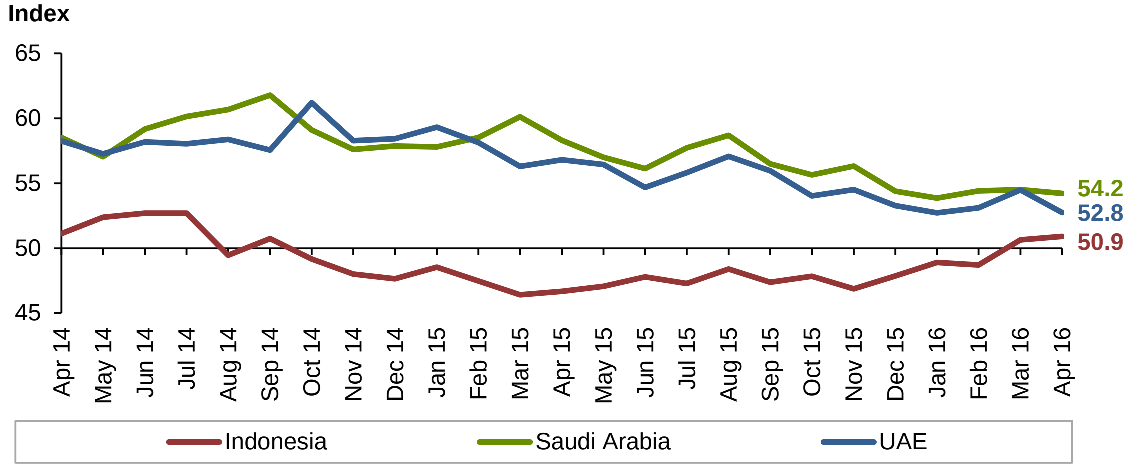
OPEC Member Countries

In **Saudi Arabia**, inflation stood at 4.3% y-o-y in March, from 4.2% in the previous month. The growth in the non-oil producing private sector remained in place last month but at a slower pace, according to the PMI reading of April which stood at 54.2, from 54.5 in March. The survey showed a sharp growth in output, nearly flat job creation and slower growth in new businesses due to the fall in export orders.

In **Indonesia**, consumer price inflation eased to 3.6% y-o-y in April, down from 4.5% in the previous month. Meanwhile, the consumer confidence index posted 109.9 points in March. The manufacturing sector enjoyed an encouraging rise in new orders by the fastest pace since September 2014. As a result, manufacturers scaled up their production in April. The manufacturing PMI registered 50.9 in April, up from 50.6 a month earlier. April's reading of the index is the highest in 21 months.

In the **United Arab Emirates**, inflation registered 1.4% y-o-y in March, from 2.2% in February. The non-oil producing private sector continued growing, though at slightly slower pace in April compared to March. The country's PMI remained in the expansion territory at 52.8 in April, down slightly from 54.5 in the previous month, on slower growth of production and new businesses.

Graph 3.25: PMIs of Indonesia, Saudi Arabia and UAE



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

Other Asia

Industrial production in **Vietnam** increased 7.9% y-o-y last month after growing 6.2% in March. Production in the manufacturing sector had a strong increase by 12.5% y-o-y. The sector's PMI survey showed a notable increase in new orders by the highest rate in nine months. Furthermore, the survey showed an increase in job creation, while input cost inflation accelerated to its highest level in 20 months. The index posted 52.3 in April, up from March's 50.7.

In **Malaysia**, inflation rose 2.6% y-o-y in March, slowing from a 4.2% increase in February. This is the lowest inflation figure since November 2015 and reflects the sharp decline in the cost of transport.

The manufacturing sector sent a negative signal last month with its PMI standing at 47.1 in April from 48.4 in March. The orders received by the sector contracted by their sharpest pace so far this year and production fell by its highest rate since November 2016.

Africa

In **South Africa**, the trade balance shifted to surplus in March from a deficit in February. Exports rose 6.3% y-o-y, while imports increased 2.6%.

In **Egypt**, inflation posted a 9.2% y-o-y increase in March, slightly lower than February's 9.5%, while the Egyptian pound continued losing value against the US dollar, depreciating 4.7% m-o-m in April. Business conditions in the non-oil private sector worsened for the seventh month in a row in April and continued its declining trend last month with the PMI remaining in the contraction territory for the seventh consecutive month at 46.9 in April, slightly higher than 44.5 a month earlier. Notable reductions in output, new businesses and job creation were also reported.

Latin America

The credit rating of **Argentina** was raised from a selective default to 'B' by Standard & Poor's rating agency. Argentina returned into the international bond markets last month, selling $16.5 billion of bonds. The Argentine peso appreciated 3.7% m-o-m against the US dollar in April, following a loss of more than 47% of its value during December-March. The country's foreign reserves were increasing in the past three months, reaching $34.38 billion in April, its highest level since October 2013.

Transition region

In **Poland**, the manufacturing sector kept posting an expansionary PMI in April, though it continued to show some signs of weakening. The manufacturing PMI stood at 51.0 last month, notably lower than March's 53.8, due to slower increases in production and new orders.

In the **Czech Republic**, the koruna appreciated 2.2% m-o-m in April and inflation dropped from 0.5% y-o-y in February to 0.3% in March. Growth in the manufacturing sector slowed in April on lesser growth in production and marginal rise in new business. The index fell for the third consecutive month in April to 53.6 from 54.3 in March.

Oil prices, US dollar and inflation

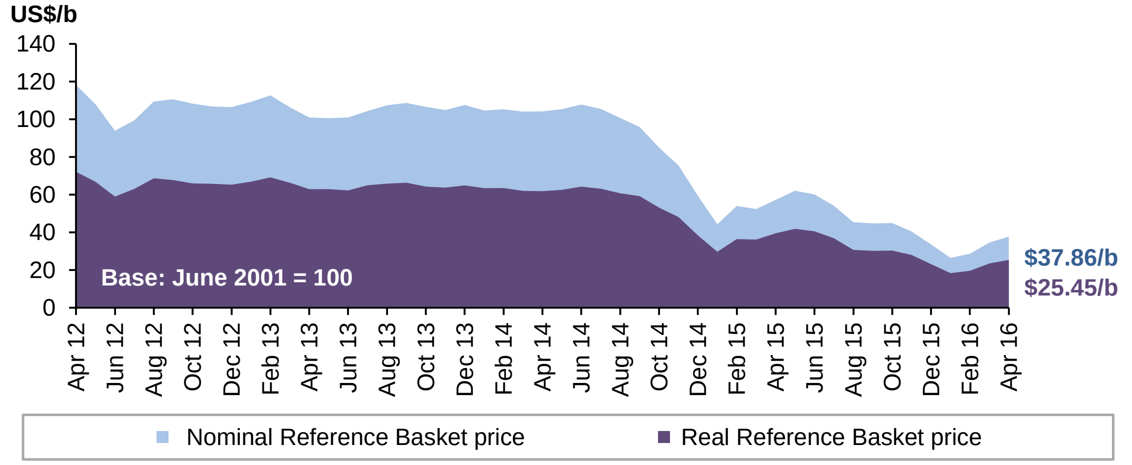
The US dollar generally weakened in April, both against major currencies and emerging market currencies. It fell versus the euro by 2.1% in April and has lost 4.2% since January. It declined by 2.7% versus the yen and has declined for the fifth consecutive month, down by 10.3% since November 2015. It also declined by 0.6% compared to the pound sterling, breaking a four-month ascending trend. Against the Swiss franc, the US dollar declined by 1.9%.

Compared to the Chinese yuan, the US dollar fell by 0.5% m-o-m on average in April, the third consecutive monthly decline. Compared to the Brazilian real, it fell by 3.7% m-o-m on average in April due to political developments in the country and higher commodity prices. Also, versus the Russian ruble, the US dollar fell by 5.2% m-o-m due to rising crude oil prices. Against the Indian rupee, the US dollar weakened by 0.8% m-o-m.

The US Fed kept interest rates unchanged at its April meeting, noting (as in its previous three statements) that “economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate”. Also, market expectations of a slow interest rate increase in the US have continued to weaken the US dollar.

In nominal terms, the price of the OPEC Reference Basket (ORB) rose by a monthly average of $3.21, or 9.3%, from $34.65/b in March to $37.86/b in April. In real terms, after accounting for inflation and currency fluctuations, the ORB rose by 8.0%, or $1.88, to $25.45/b from $23.57/b (base June 2001=100). Over the same period, the US dollar fell by 2.2% against the import-weighted modified Geneva I + US dollar basket*, while inflation declined by 0.7%.

Graph 3.26: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price*



Source: OPEC Secretariat.

* *The ‘modified Geneva I+US$ basket’ includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the basket.*

World Oil Demand

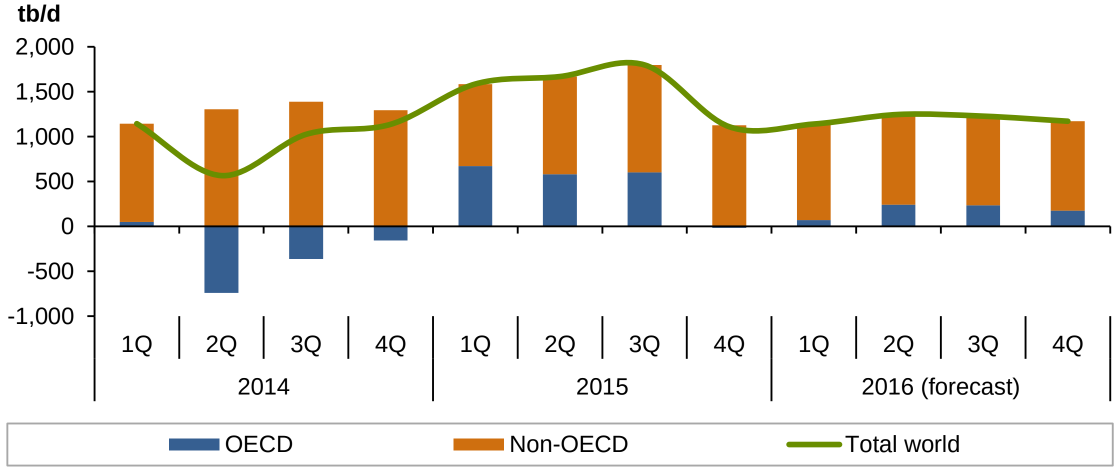
World oil demand for 2015 was left unchanged from the previous month, with growth at 1.54 mb/d to average 92.98 mb/d. In 2016, world oil demand is anticipated to grow at a similar pace to the previous month's projections, rising by 1.20 mb/d, despite some upward revisions to Other Asia, which were offset by equivalent downward revisions to Latin America and China. Total oil consumption in 2016 is anticipated to be around 94.18 mb/d.

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

							Change 2015/14	
	2014	1Q15	2Q15	3Q15	4Q15	2015	Growth	%
Americas	24.14	24.24	24.12	24.76	24.37	24.37	0.24	0.98
of which US	*19.41*	*19.62*	*19.54*	*20.02*	*19.68*	*19.71*	*0.30*	*1.56*
Europe	13.45	13.47	13.57	14.14	13.68	13.71	0.26	1.94
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**	**46.53**	**46.33**	**46.18**	**0.46**	**1.00**
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**	**92.01**	**93.93**	**94.00**	**92.98**	**1.54**	**1.69**
Previous estimate	91.44	92.00	92.03	93.87	93.98	92.98	1.54	1.69
Revision	0.00	-0.06	-0.02	0.06	0.01	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 growth



Source: OPEC Secretariat.

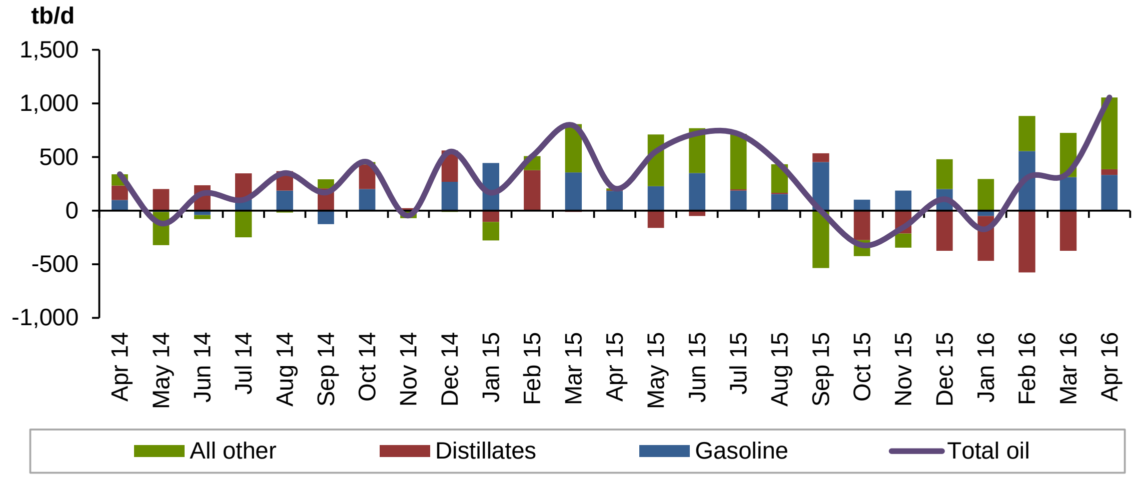
OECD Americas

The most recent monthly US oil demand data for February provides grounds for optimism, as it indicates solid growth compared with the same month of the previous year of approximately 0.3 mb/d, or 1.6%.

February gasoline demand grew by a remarkable 0.56 mb/d y-o-y, registering the highest monthly growth since May 1978, supported by bullish vehicle sales and a continuing lower oil price environment. Distillates, jet fuel, residual fuel and propane/propylene requirements fell, however, y-o-y, mainly as a result of warmer weather and fuel substitution, thus partly offsetting gains in gasoline.

Overall oil demand developments in February 2016 are very much in line with weak 1Q16 economic developments in the country, as seen particularly in soft demand for industrial fuels. Preliminary March and April data, based on average weekly figures, show a continuation of the current upward trend regarding road transportation fuels, notably motor gasoline, which accounts for the bulk of these increases. While 2016 US oil demand remains strongly dependent on developments in the economy, upside and downside risks were balanced compared with the previous month's publication, with the low oil price environment playing a significantly influential role. Trends in vehicle sales highlight the return of the dominance of sport utility vehicles (SUVs) and pickups in year-to-date car sales in the country.

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



Source: US Energy Information Administration.

In **Mexico**, March was another disappointing month for oil demand, characterized by falling needs in the majority of main petroleum product categories. Substantial decreases in demand were seen particularly for residual fuel oil and gasoline, while jet/kerosene and gasoil requirements remained flat y-o-y.

The latest February data for **Canada** showed overall declines in oil demand, particularly for gasoil and LPG. Residual fuel oil was the only product category with increasing demand y-o-y. Projections for Canadian oil demand for the year remain unchanged from those reported the previous month, reflecting careful optimism.

In 2015, **OECD Americas' oil demand** grew by 0.24 mb/d compared with a year earlier. In 2016, OECD Americas' oil demand is projected to grow by 0.26 mb/d, compared with the previous year.

OECD Europe

The upward movement of European oil demand during the whole of 2015 does not seem to have continued during the first three months of 2016. The main reasons behind these bearish developments, which took place despite improving economic conditions over large parts of the continent, are warmer weather during the first quarter of 2016, high growth during 2015 and the fading out of oil price reduction effects.

In March, Big 4 total oil demand data indicated a decrease of around 0.08 mb/d, more than 1%, y-o-y. Gains in LPG and gasoline demand of around 16% and 2% y-o-y, respectively, have largely dominated increases, while gasoil, residual fuel oil and naphtha requirements fell y-o-y. Factors which could enhance European oil demand in the short term include improving industrial production and an auto market which is strongly positive for the 31st consecutive month in a row, showing gains in March of around 6% y-o-y.

However, downside risks are also substantial and continue to be of a economic nature – including unsolved debt issues in a number of countries in the region and a still soft labour market. Additional caps include high taxes, especially in the transportation sector, in combination with strongly rising sales of alternatively fueled vehicles. General expectations for the region's oil demand during 2016 have slightly deteriorated since the previous month's projections.

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

Table 4.2: Europe Big 4* oil demand, tb/d

	Mar 16	Mar 15	Change from Mar 15	Change from Mar 15, %
LPG	505	436	69	15.8
Naphtha	704	713	-9	-1.2
Gasoline	1,055	1,037	18	1.7
Jet/Kerosene	702	733	-31	-4.2
Gas/Diesel oil	3,113	3,214	-101	-3.1
Fuel oil	276	283	-7	-2.6
Other products	564	584	-20	-3.4
Total	**6,919**	**7,000**	**-81**	**-1.2**

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

OECD Asia Pacific

March **Japanese** oil demand decreased by around 3% y-o-y, more than 0.1 mb/d, with total consumption pegged at 3.95 mb/d. Product demand was categorized by falling requirements in all main categories, with the only exceptions being LPG, gas, diesel oil and jet fuel. Oil requirements for crude and fuel oil for electricity generation continued to fall, as a result of warmer weather in combination with fuel substitution by other primary energy commodities.

Declining March oil demand is very much in line with the overall oil demand picture during 1Q16 and economic developments. The outlook risks for 2016 continue to be skewed to the downside as a result of less optimistic economic forecasts and the real likelihood of some nuclear plants restarting in the country.

Table 4.3: Japanese domestic sales, tb/d

	Mar 16	Change from Mar 15	Change from Mar 15, %
LPG	454	18	4.1
Gasoline	906	5	0.5
Naphtha	771	-40	-4.9
Jet fuel	102	-2	-2.0
Kerosene	410	43	11.6
Gasoil	613	24	4.1
Fuel oil	547	-47	-7.9
Other products	67	-8	-10.3
Direct crude burning	80	-99	-55.3
Total	**3,949**	**-106**	**-2.6**

Source: Ministry of Economy Trade and Industry of Japan.

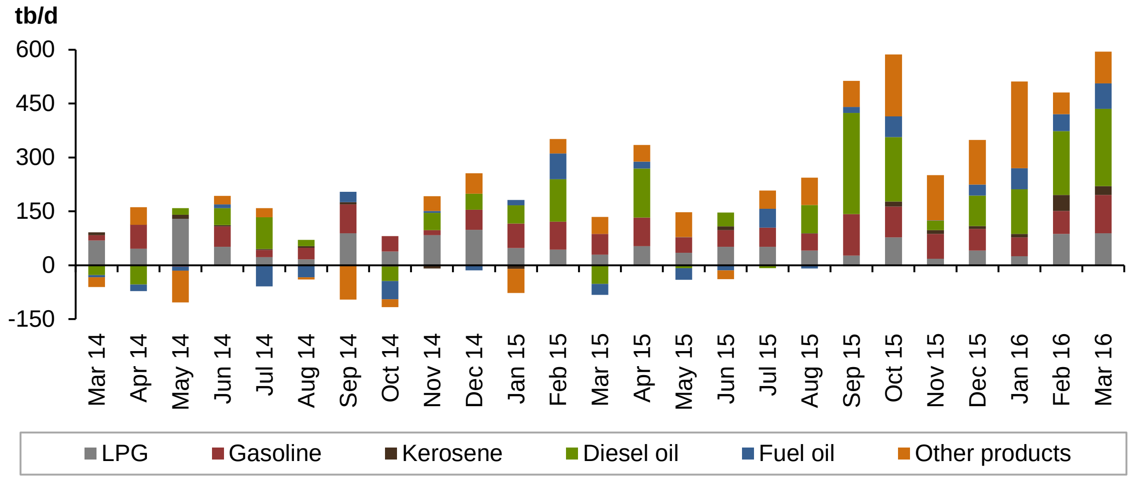
In **South Korea**, February oil demand was bullish, rising by around 0.20 mb/d, or roughly 7%, y-o-y. Flourishing petrochemical activities, which called for strongly increasing LPG and naphtha requirements, have resulted in increased consumption for feedstock. LPG gained around 7% y-o-y and naphtha around 11% y-o-y. This was accompanied by strong demand for petroleum products in the industrial and transportation sectors, notably residual fuel oil and jet/kerosene. With two months of data, demand in South Korea appears to be very solid, exceeding the 0.18 mb/d mark y-o-y, with total demand in the country reaching 2.85 mb/d on a cumulative basis. The risk for South Korea's oil demand outlook in 2016 is skewed more to the upside, compared with the previous month's projections.

OECD Asia Pacific oil consumption in 2015 shrank by 0.04 mb/d. This downward trend will continue in 2016 to a larger degree, by 0.09 mb/d.

Other Asia

Oil demand in **India** continued to exhibit substantial positive performance in 1Q16, with March data illustrating solid growth yet again. Record levels were registered during the month, rising by around 0.6 mb/d, or more than a remarkable 15% y-o-y, higher than average growth levels for January and February by around 0.1 mb/d. Total consumption reached nearly 4.56 mb/d in March, the second-highest level ever recorded. Demand was strong across all products, with significant growth registered for fuel oil and gasoline, which added around 29% and 21% y-o-y, respectively.

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



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

Diesel oil and LPG also noted healthy growth, registering a rise of around 15% and 14% y-o-y, respectively. Demand for fuel oil received support from the steel sector, as the country's overall macroeconomic indicators developed further, as well as from the power sector, which is being affected by drought conditions. Reservoir water levels were impacted by the El Niño phenomena, which affected power generation from hydroelectricity. As a result, the National Thermal Power Corporation, one of the largest power generation companies in the country, halted operations at its Farakka plant due to a shortage of cooling water. India generates around 15% of its electricity via hydroelectricity.

Additionally, gasoline sales increased by around a solid 0.11 mb/d y-o-y, supported by lower retail prices, in addition to healthy sales of two-wheelers. According to the Society of Indian Automobile Manufacturers (SIAM), passenger car sales registered a slight decline of around 0.3%, while two-wheeler sales gained around 11% y-o-y to reach a total of 1.47 million units, with all sub-segments – including scooters, motorcycles and mopeds – recording notable increases.

Diesel oil also recorded significant positive gains, rising by around 0.22 mb/d y-o-y as an improvement in overall economic activities lent strong support. LPG was supported by continuous development in the residential sector and an increase in the number of subsided cylinders. LPG rose by 89 tb/d y-o-y, the highest growth level since December 2016.

Table 4.4: Indian oil demand by main products, tb/d

	Mar 16	Mar 15	Change	Change, %
LPG	719	630	89	14.2
Gasoline	601	495	106	21.4
Kerosene	303	278	24	8.8
Diesel oil	1,642	1,426	215	15.1
Fuel oil	313	242	71	29.4
Other products	981	893	88	9.9
Total oil demand	**4,559**	**3,965**	**595**	**15.0**

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

The latest available February data for **Indonesia** indicates an overall increase of around 26 tb/d, or just below 2%, y-o-y. Demand growth was led by jet/kerosene, LPG and gasoline, while fuel oil consumption experienced a massive decline. Total consumption in the country reached 1.59 mb/d in February.

In line with the previous month's expectations going forward, risks for oil demand in Other Asia for 2016 remain pointing to the upside, as a result of overall economic improvement in the biggest oil consumer in the region, India, and steady general economic performance in other countries.

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

Latin America

In **Brazil**, 1Q16 data – with March data incorporated – now illustrates a steep decline in consumption of around 0.15 mb/d, or more than 6%, compared with 1Q15. The decline apparently reflects weak economic momentum. Focusing on March data, oil demand shed more than 4%, compared with the same period in 2015. All products performed far worse than expected, with the exception of gasoline, which grew by more than 66 tb/d, or 10%, y-o-y. Demand for gasoline was driven by economics, as the fuel became cheaper than ethanol for vehicles. Fuel oil demand decreased the most, dipping by around 38% y-o-y, mainly a result of progress in hydropower generation negatively impacting consumption. Additionally, the baseline was higher in 2015 because demand surged due to drought, encouraging fuel oil to be additionally used as a power generation fuel.

Table 4.5: Brazilian inland deliveries, tb/d

	Mar 16	Mar 15	Change	Change, %
LPG	226	228	-2	-0.9
Gasoline	757	691	66	9.5
Jet/Kerosene	116	127	-11	-8.3
Diesel	962	1,017	-55	-5.4
Fuel oil	59	97	-37	-38.5
Alcohol	229	294	-64	-21.9
Total	**2,351**	**2,454**	**-103**	**-4.2**

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

February oil consumption in **Argentina** reversed January's positive trend, showing negative figures. Oil demand decreased by around 25 tb/d, or 4%, y-o-y. All products were either flat or slightly declining. Total oil demand in the country reached 0.68 mb/d, compared with 0.65 mb/d in February 2015.

Going forward, risks for 2016 oil demand growth in Latin America point to the downside, mainly due to expectations of an economic slowdown in Brazil. On the other hand, positive input should arise from the upcoming Olympic Games boosting transportation fuel consumption. Unforeseen weather conditions may also support oil demand.

In 2015, **Latin American oil demand** shrank by 50 tb/d, while oil demand in 2016 is projected to decline as well, by around 10 tb/d.

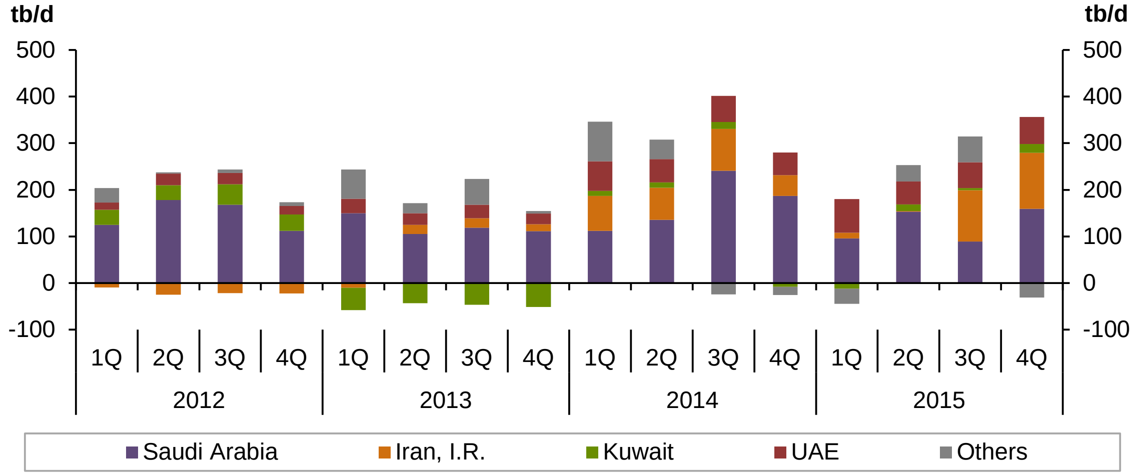
Middle East

In March, oil demand in **Saudi Arabia** reversed the previous month's trend, increasing y-o-y by a strong 0.3 mb/d, or around 17%. Most of this growth is driven by fuel oil and jet/kerosene, which grew by more than 57% and 29%, respectively. Fuel oil in Saudi Arabia feeds into two major sectors and is ultimately used as a power generation fuel. The largest portion feeds utility requirements, generating power mainly in the western part of the country, while the other portion feeds into industrial sector requirements, more specifically to run boilers and power generation units at mega sites. Both sectors contributed positively, as demand for power generation increased due to weather conditions and power generation fuel demand rose for new refineries in the country.

Jet/kerosene demand growth also rose substantially during the month, receiving support from the aviation sector. Gasoline increased by around 13% y-o-y, despite government reductions in subsidies at the beginning of the year. Overall demand in 1Q16 has been largely positive, rising roughly by around 6% y-o-y, with volatile movement throughout the quarter. Jet/kerosene led demand growth, followed by fuel oil and gasoline. Total product consumption was pegged at 2.20 mb/d during the first quarter, compared with 2.13 mb/d for 1Q15.

Other countries in the region showed a mixed performance. While oil demand in **Iraq** declined marginally by 15 tb/d, consumption in the **UAE**, **Kuwait** and **Qatar** was on the rise. Going forward, Middle East oil demand is subject to the performance of various economies in the region, with lower oil prices impacting spending plans. However, weather conditions will play a major role in oil consumption during the summer, should the weather turn out to be warmer than currently expected.

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



Sources: Direct communication, JODI and OPEC Secretariat.

Middle East oil demand in 2015 increased by 0.26 mb/d, and is projected to increase by 0.15 mb/d in 2016.

China

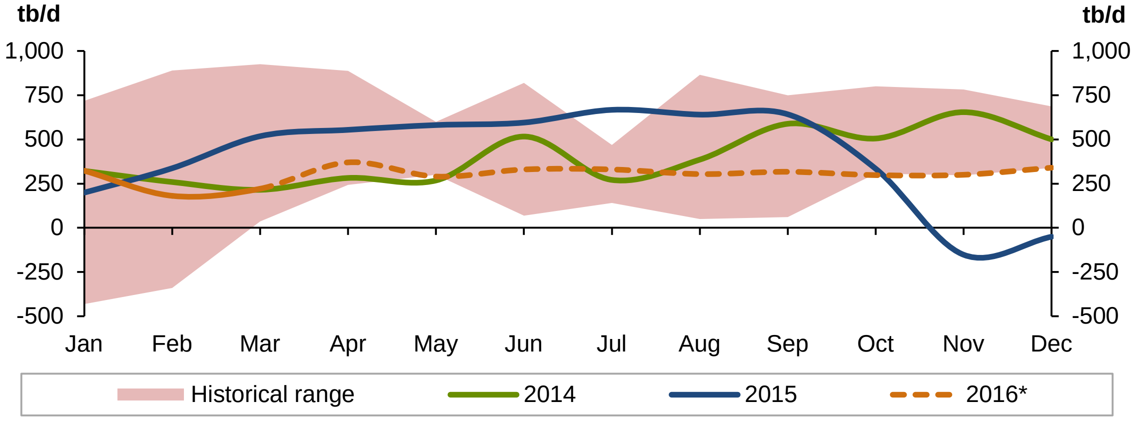
During the month of March, oil demand growth in **China** increased steadily y-o-y, registering more than 0.2 mb/d, or more than 2%, based on preliminary data. Similar to the trend of the previous month, most of this growth was the result of an expanding petrochemical sector calling for more consumption of LPG, as well as further development in the transportation sector, encouraging additional consumption of gasoline.

LPG demand led the product mix this month, rising by more than 20% y-o-y; demand for propane as a feedstock for petrochemicals remained the driving factor behind LPG demand growth. Gasoline also continued to see solid growth, rising by more than 0.2 mb/d, or around 8%, y-o-y. Total consumption of gasoline reached around 2.8 mb/d, a historical level. Support was driven by vehicle sales data as reported by the China Association of Automobile Manufacturers (CAAM). For the first two months of 2016, sales of vehicles reached more than 4 million units, which is more than 4% compared with the same period a year earlier. Jet fuel demand surged during the month, rising by around 30 tb/d or more than 5% y-o-y.

On the other hand, macroeconomic data that slowed more than initially anticipated impacted the consumption of diesel oil, which dropped by around 0.1 m/b y-o-y. Consumption of fuel oil followed a similar trend, dropping by around 0.15 mb/d, which equates to more than 24% y-o-y, as initial data seems to suggest. Slower industrial output – along with a reduction in intake from teapot refineries – seem to be the largest contributors to this slowdown.

Going forward, the oil consumption outlook in China for the rest of 2016 is somewhat balanced. Uncertainties to the downside are linked to slower economic activity, as the rebalancing of the Chinese economy gathers more speed, in addition to the further enforcement of policies geared at controlling emissions. On the other hand, the ongoing expansion of projects in the petrochemical and refinery sectors supports upside potential.

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.

For 2015, **Chinese oil demand** grew by 0.37 mb/d, while oil demand in 2016 is projected to increase by 0.28 mb/d.

Table 4.6: World oil demand in 2016, mb/d

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	24.37	24.39	24.43	25.08	24.64	24.64	0.26	1.09
of which US	*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	13.73	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**	**46.53**	**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
of which India	*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	93.15	93.30	95.07	95.16	94.18	1.20	1.29
Revision	0.00	-0.07	-0.04	0.09	0.01	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 2015 is estimated to grow by 1.47 mb/d, showing a slight upward revision of 10 tb/d from the previous *MOMR*, to average 57.14 mb/d. Non-OPEC oil supply for 2016 is forecast to contract by 0.74 mb/d, seeing a minor downward revision of 10 tb/d from the previous report, to average 56.40 mb/d. This downward revision is mainly based on lower expectations for Chinese, Brazilian, Vietnamese and Indian oil output, outpacing several upward revisions, mainly in Russia and the UK in 1Q16. However, this forecast is subject to many uncertainties.

OPEC NGLs and non-conventional oil production growth in 2015 was revised down by 20 tb/d to 0.13 mb/d, based on direct communication, to average 6.13 mb/d. NGLs production growth in 2016 also saw a downward revision of 10 tb/d over the previous month, to stand at 0.16 mb/d and average 6.29 mb/d.

In April, OPEC crude oil production increased by 0.19 mb/d to average 32.44 mb/d, according to secondary sources. As a result, preliminary data indicates that the global oil supply increased by 0.02 mb/d in April to average 95.34 mb/d.

Non-OPEC supply

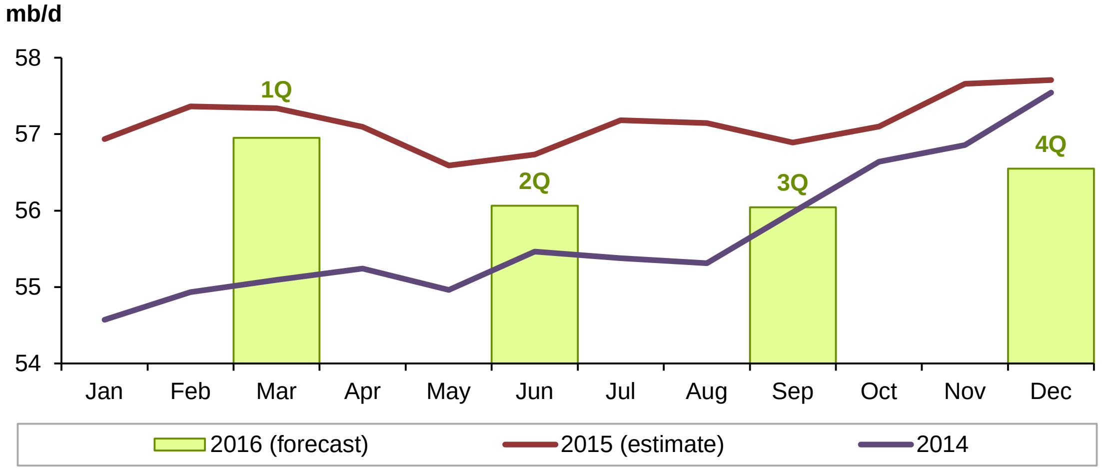
According to the latest update to historical data, total **non-OPEC oil supply for 2015** was revised up by 10 tb/d to average 57.14 mb/d. This includes upward changes for 4Q15 for the UK and Russia, and a minor downward revision in 3Q15 output data from FSU others. The 4Q15 was revised up by 60 tb/d, while a downward revision of 10 tb/d was seen in 3Q15. Non-OPEC oil supply growth in 2015 saw an upward revision by 10 tb/d, to average 1.47 mb/d over the previous year.

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

Source: OPEC Secretariat.

Non-OPEC supply for 2016 is forecast to contract by 0.74 mb/d, indicating a downward revision of 10 tb/d compared with a month earlier, to average 56.40 mb/d due to lower expectations for crude oil production from China, Brazil, India and Vietnam, which outweighs total upward revisions in the UK and Russia. The first decline in US oil production – following the shale boom in North America and deferring of major new projects due to reduced cash flow in 2016 after global oil prices fell – has been the main reason for a contraction in the current year. Non-OPEC oil supply in 2016 is subject to many uncertainties from economical and technical, to geopolitical.

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



Source: OPEC Secretariat.

Updating of data for 1Q16 led to non-OPEC oil supply in this quarter being revised down by 100 tb/d to average 56.95 mb/d. This includes upward changes in the UK and Russia, and downward revisions in China, Brazil, India, Vietnam and Oman. Moreover, 3Q16 and 4Q16 supply figures were revised up by 70 tb/d each to 56.04 mb/d and 56.54 mb/d, respectively.

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

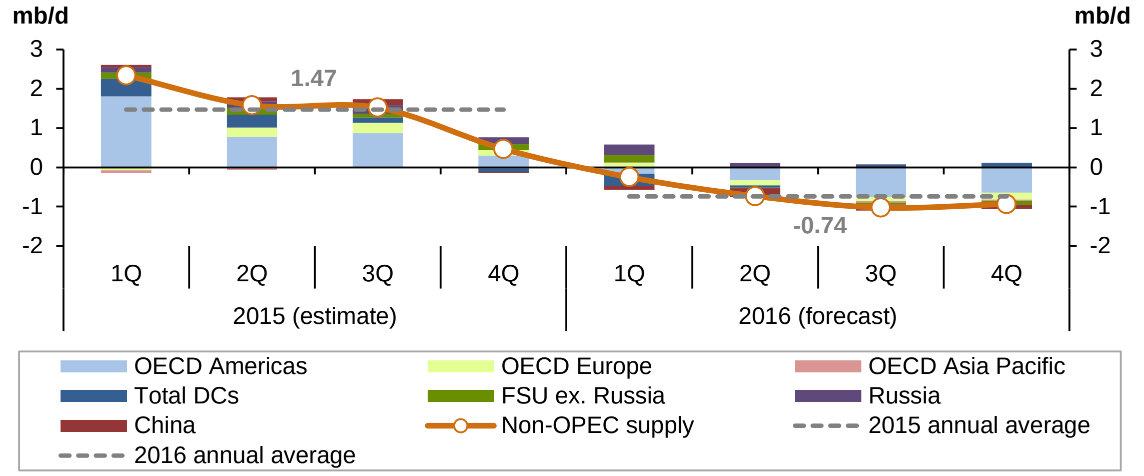
	2014	1Q15	2Q15	3Q15	4Q15	2015	Change 2015/14 Growth	%
Americas	20.08	21.04	20.69	21.14	21.19	21.01	0.93	4.64
of which US	*12.96*	*13.78*	*14.05*	*14.06*	*14.05*	*13.99*	*1.03*	*7.92*
Europe	3.61	3.69	3.77	3.68	3.89	3.76	0.14	4.01
Asia Pacific	0.51	0.43	0.45	0.50	0.47	0.46	-0.05	-9.15
Total OECD	**24.20**	**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	57.08	57.42	57.13	1.46	2.62
Revision	0.00	0.00	0.00	-0.01	0.06	0.01	0.01	0.02

Source: OPEC Secretariat.

On a regional 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 0.47 mb/d. OECD Europe's oil supply growth in 2015 reached 0.14 mb/d and is expected to contract by 80 tb/d to average 3.68 mb/d, while OECD Asia Pacific also will see a lower decline of 10 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

							Change 2016/15	
	2015	1Q16	2Q16	3Q16	4Q16	2016	Growth	%
Americas	21.01	20.88	20.35	20.39	20.55	20.54	-0.47	-2.25
of which US	*13.99*	*13.73*	*13.49*	*13.42*	*13.56*	*13.55*	*-0.43*	*-3.10*
Europe	3.76	3.80	3.64	3.57	3.71	3.68	-0.08	-2.11
Asia Pacific	0.46	0.45	0.46	0.46	0.44	0.45	-0.01	-2.27
Total OECD	**25.23**	**25.12**	**24.45**	**24.42**	**24.69**	**24.67**	**-0.56**	**-2.23**
Other Asia	2.70	2.73	2.69	2.72	2.75	2.72	0.02	0.71
Latin America	5.18	4.98	5.17	5.21	5.32	5.17	-0.01	-0.23
Middle East	1.27	1.27	1.24	1.23	1.23	1.24	-0.03	-2.12
Africa	2.37	2.34	2.36	2.34	2.33	2.34	-0.03	-1.16
Total DCs	**11.53**	**11.32**	**11.46**	**11.51**	**11.62**	**11.48**	**-0.05**	**-0.41**
FSU	13.69	13.96	13.66	13.55	13.62	13.70	0.00	0.01
of which Russia	*10.85*	*11.10*	*10.93*	*10.85*	*10.90*	*10.94*	*0.10*	*0.89*
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**	**18.31**	**17.96**	**17.92**	**18.03**	**18.05**	**-0.14**	**-0.78**
Total non-OPEC production	**54.95**	**54.76**	**53.87**	**53.85**	**54.35**	**54.20**	**-0.75**	**-1.37**
Processing gains	2.19	2.20	2.20	2.20	2.20	2.20	0.01	0.59
Total non-OPEC supply	**57.14**	**56.95**	**56.06**	**56.04**	**56.55**	**56.40**	**-0.74**	**-1.29**
Previous estimate	57.13	57.06	56.07	55.98	56.48	56.39	-0.73	-1.28
Revision	0.01	-0.10	0.00	0.07	0.07	0.01	-0.01	-0.01

Source: OPEC Secretariat.

Developing countries' supply growth averaged 200 tb/d in 2015, and is forecast to decline to contract by 50 tb/d in 2016. With regard to the regional breakdown, Other Asia's supply growth in 2016 saw a downward revision of 10 tb/d, to 20 tb/d, compared with 100 tb/d of growth in the previous year, while Latin America will see a contraction of 10 tb/d, revised down this month by 20 tb/d, due to lower expectations in Brazil 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 30 tb/d each, compared with the previous year's negative growth of 70 tb/d and 10 tb/d, respectively. FSU's output, is anticipated to be broadly unchanged in 2016, 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 contract by 0.14 mb/d in 2016, as higher annual declines outpaced added volumes coming from project ramp-ups. 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 and Malaysia will experience the greatest growth.

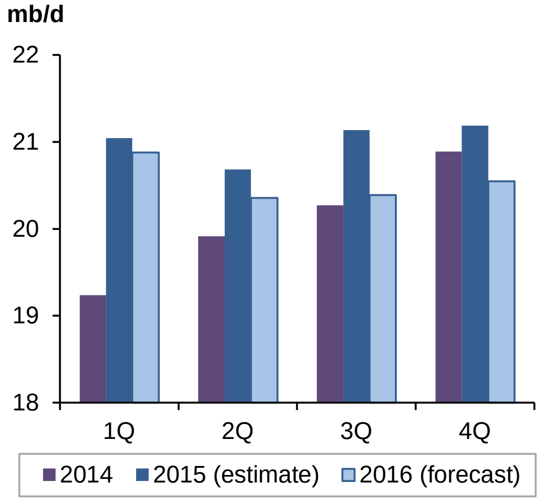
OECD

Total **OECD oil supply** for 2016 is projected to decline by 0.56 mb/d over the previous year, unchanged from the previous *MOMR,* to average 24.67 mb/d. An upward revision for OECD Europe and downward revision for OECD Americas offset each other. Overall, the OECD supply profile remains relatively unchanged, due to higher output in 1Q16 in Canada and the UK, which offset declines in the US and Mexico. OECD supply growth in 2015 was revised up by 20 tb/d to 1.03 mb/d, due to an upward revision for Canadian and UK oil production in 4Q15 of 58 tb/d.

OECD Americas

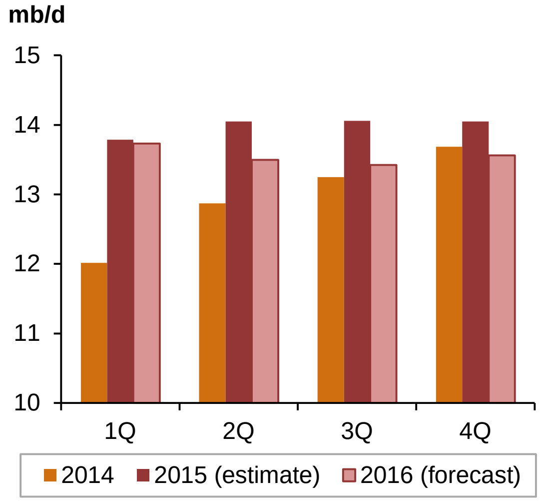
Oil supply growth for 2015 was revised up this month by 10 tb/d, to average 0.93 mb/d. However, in 2016 this region is expected to see the greatest decline, contracting by 0.47 mb/d, revised down by 10 tb/d m-o-m, mainly due changes in output from the US and Mexico, which partially offset an upward revision in Canada for 1Q16.

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



Source: OPEC Secretariat.

Graph 5.5: US quarterly oil supply, 2014-2016



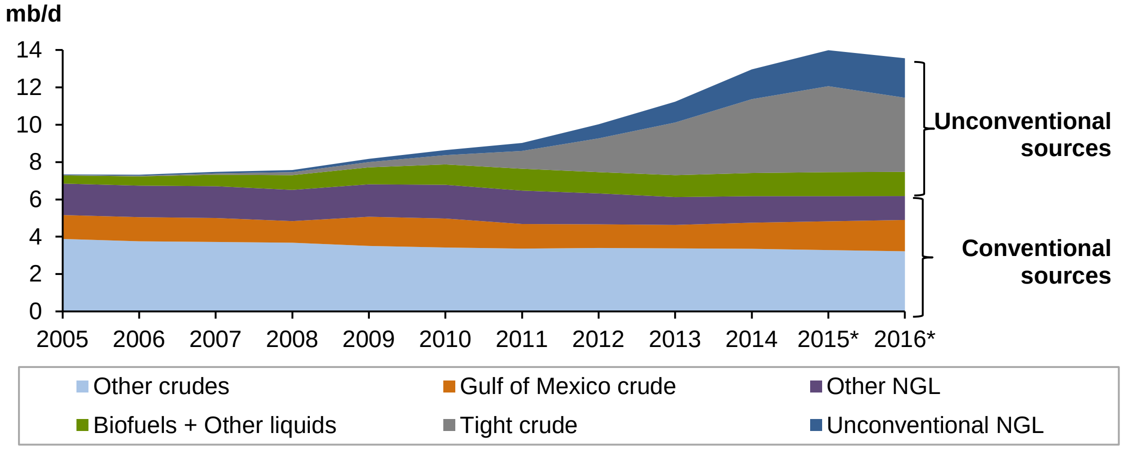
Source: OPEC Secretariat.

US

US crude oil production averaged 9.13 mb/d in February, down by 51 tb/d from January's estimate, which was basically in line with preliminary weekly data reported for February. Nevertheless, the estimated decline is less than the EIA projected in December 2015. This could be due to the effect of hedging, which allows producers to better maintain production. The EIA's methodology for prediction of future crude output does not take hedging into account. It is based purely on rig count and other factors.

On the other hand, NGL output increased by 26 tb/d, to average 3.33 mb/d, in February and the EIA expects higher production in the coming months. Total US liquids production, excluding processing gains, was pegged at 13.71 mb/d in February 2016, more or less equal with January output.

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



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

In 2015, of 9.43 mb/d of total US crude oil production, 4.60 mb/d came from tight oil sources, including condensate, 1.54 mb/d from GoM and 3.29 mb/d from conventional crude. For 2016, tight crude and onshore conventional crude is forecast to decline by 0.64 mb/d and 54 tb/d, respectively, while oil production from GoM is expected to increase by 0.14 mb/d. Moreover, unconventional NGL production in the US will grow by 0.19 mb/d in 2016, compared with 0.33 mb/d a year earlier.

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

	2014	2015 *	Change	2016 *	Change
Tight crude	3,954	4,602	*648*	3,968	*-635*
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***	**13,557**	***-431***

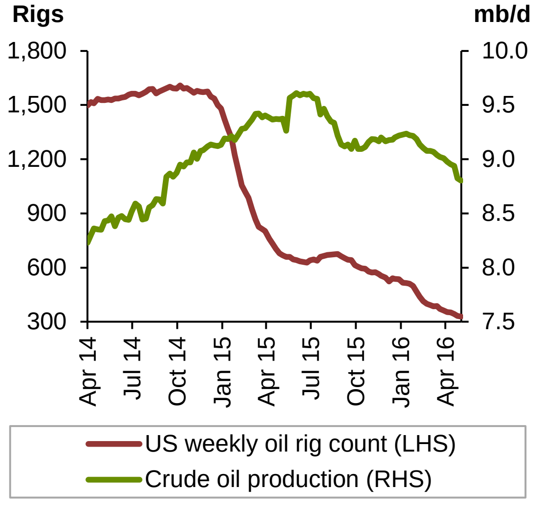
*Note: * 2015 = estimate and 2016 = forecast.*
Source: OPEC Secretariat.

Total US liquids output is expected to decline by 0.43 mb/d in 2016, to average 13.55 mb/d, broadly unchanged from the previous report. Crude oil production declines came primarily from a drop in tight crude production in different regions of the US in February, which led to a downward revision by 20 tb/d in 1Q16, to average 13.73 mb/d. The slowdown came mainly from Texas, which is down by 40 tb/d, and the Gulf of Mexico (GoM), down by 34 tb/d, while oil production in North Dakota and New Mexico increased by 25 tb/d and 26 tb/d in February, respectively.

According to the EIA's Drilling Productivity Report for April issue, **new well oil production per rig** in the Bakken region of North Dakota was 757 b/d for the month, though oil production from this region is expected to decline by 31 tb/d to average 1.05 mb/d in May, due to higher legacy production of 55 tb/d, while production from new wells is expected to only reach 24 tb/d. Thus, the net change would be negative at 31 tb/d, m-o-m. New well oil production per rig in the Eagle Ford, Niobrara and Permian regions in May will reach 852 b/d, 885 b/d and 462 b/d, respectively. Legacy production in all these regions is similar to that of the Bakken, tending more to be negative; the net change will be minus 62 tb/d, 16 tb/d and 4 tb/d, respectively. Total average production is expected to decline in May in all these producing regions, despite improvements in productivity, even the Permian region, the result of lower rig counts and higher legacy production.

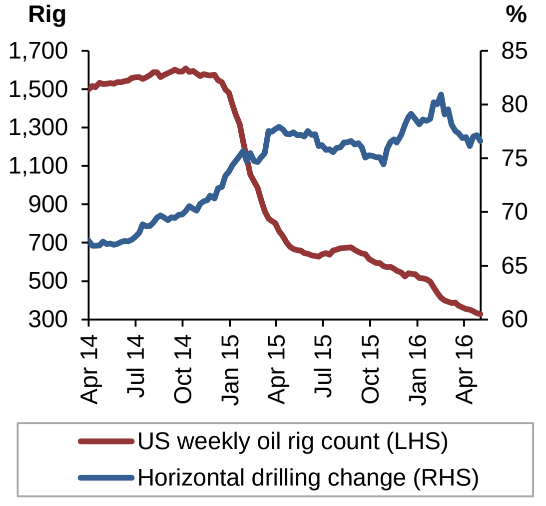
According to Baker Hughes' survey for the week ending 29 April, the **US oil rig count** fell to 332, the lowest point since October 2009, while the gas rig count dropped to 87. Based on this, total rigs amounted to 420 at the end of the final week of April. The US total average rig count in April declined by 539 rigs, or 55%, to average 437 rigs, y-o-y, of which 26 were active in offshore regions. Moreover, within the total US rig count figure, the total horizontal rig count fell to 346 from 799, y-o-y. The greatest number of active rigs were in Texas at 192 in April, down by 229 (-54%), y-o-y. In comparison, there were 27 rigs active in North Dakota, down by 58 (-68%), 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.

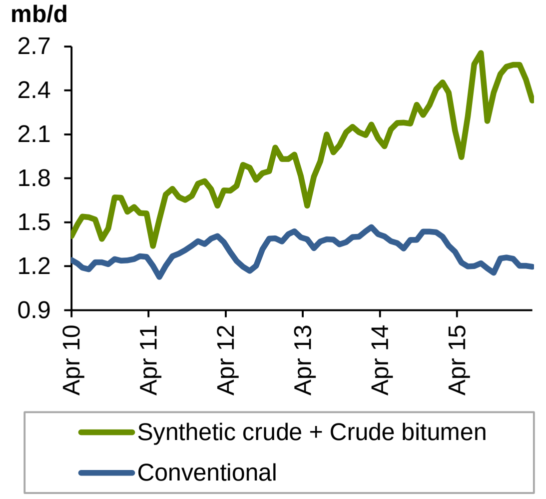
Canada and Mexico

Canada's **2015** oil supply growth was lower than expected at 110 tb/d, down from 0.27 mb/d in 2014, to average 4.42 mb/d. Despite remarkable growth in oil sands output of 200 tb/d, half was offset by a strong decline from conventional oil production over the year. Canadian oil supply growth was revised up by 10 tb/d to 0.1 mb/d in 2015, based on updated national source historical data in 4Q15.

Canadian oil production in **2016** – despite an upward revision by 20 tb/d in 1Q16 – remains at growth of 90 tb/d y-o-y, to average 4.51 mb/d, unchanged from the previous *MOMR*. Oil sands output in January increased to 2.61 mb/d, 10 tb/d higher than in December. NGLs production in January recorded highest-ever levels at 0.85 mb/d, 15 tb/d higher than a month earlier. Nevertheless, conventional crude production in

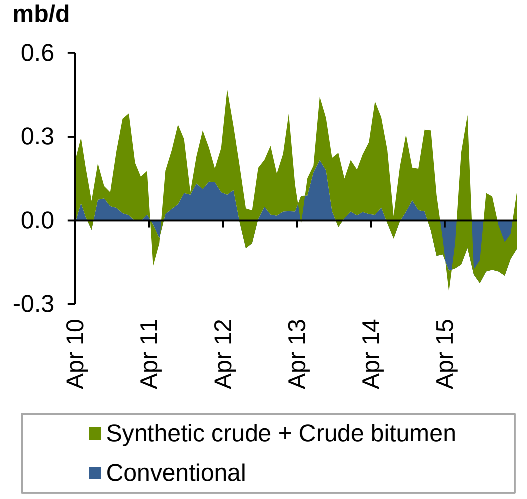
January declined by 9 tb/d to 1.25 mb/d, m-o-m. January total output increased by 20 tb/d, to average 4.71 mb/d, also the highest figure ever recorded. However, upgrader maintenance is scheduled for the coming months, during which lower output is expected.

Graph 5.9: Canada production by crude type



Source: OPEC Secretariat.

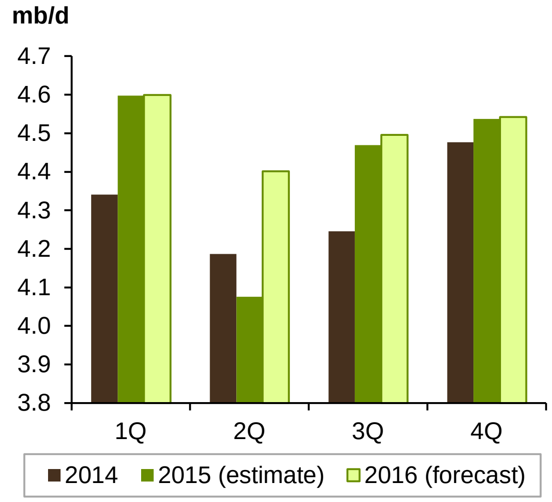
Graph 5.10: Canada production by crude type, y-o-y change



Source: OPEC Secretariat.

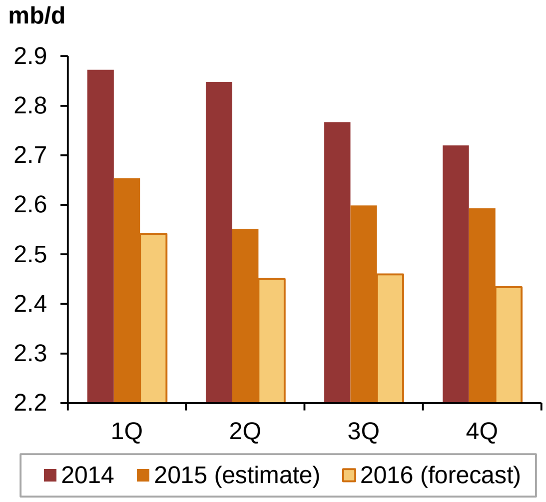
There were 41 rotary rigs in April (10 oil rigs and 31 gas rigs) based on Baker Hughes' weekly report from 29 April 2016, down by 46 rigs (-53%), y-o-y. Of these, 30 are active in Alberta, eight in British Colombia and two in Saskatchewan. Moreover, one offshore rig was active in the province of Newfoundland.

Graph 5.11: Canada quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.12: Mexico quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

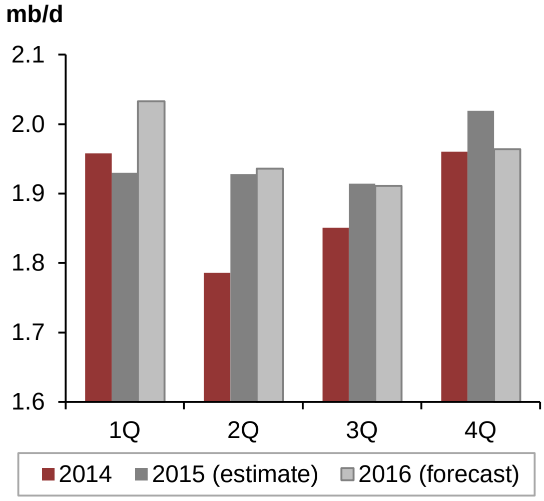
Mexico's oil supply is estimated to have declined by 0.2 mb/d to average 2.60 mb/d in 2015, unchanged from the previous month. Annual oil production for 2016 is expected to decline at a slower pace of 0.13 mb/d, with average supply anticipated to be at 2.47 mb/d. Mexican liquids production in March was stagnant m-o-m, to average 2.52 mb/d, while oil output in 1Q16 was pegged at 2.54 mb/d, dragged down by 0.11 y-o-y. In March, crude oil saw a minor increase, while NGLs declined to 0.29 mb/d compared with a month earlier. Crude oil output from the KMZ complex was 0.85 mb/d lower in March, or 10 tb/d y-o-y, while production in Cantarell was down by 65 tb/d, compared with a year earlier at 0.18 mb/d.

OECD Europe

OECD Europe's 2015 oil supply growth was revised up by 10 tb/d to average 0.14 mb/d, due to an upward revision of the UK's oil production figures in 4Q15, for total supply to stand at 3.76 mb/d. Europe's oil supply in 2016 is estimated to be revised upward by 10 tb/d this month, leading to a total contraction of 80 tb/d, to average 3.68 mb/d.

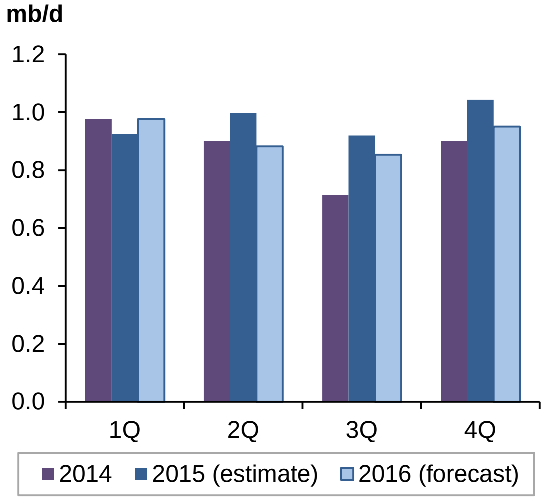
Preliminary March total liquids output figures for **Norway** indicate a decrease of 51 tb/d m-o-m, to average 2.01 mb/d. Of this, 1.59 mb/d was crude oil, with the remainder consisting of 0.38 mb/d of NGLs and 0.04 mb/d of condensate, according to the Norwegian Petroleum Directorate (NPD). Nevertheless, oil production is about 4% above that of March one year earlier. 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 crude oil production for March increased by 0.18 mb/d, compared with February, to stand at 1.08 mb/d. According to Energy Aspects, the unplanned outages that blocked the Kinneil terminal, restricting flows through the Forties Pipeline System from December to February, eased. Crude oil production rose by 0.18 mb/d to 0.98 mb/d m-o-m while NGLs output was more or less steady in April; 1Q16 liquids production declined by 60 tb/d, compared with 4Q15. Hence, it is expected that total liquids supply will contract by 60 tb/d to average 0.92 mb/d in 2016, considering an upward revision of 10 tb/d over the previous month's forecast, following upward revisions in all quarters by 20 tb/d. National updating of historical production data led to an upward revision by 10 tb/d for 2015 supply growth, compared with the previous month's estimation, to average 0.10 mb/d.

OECD Asia Pacific

Oil production in the **OECD Asia Pacific** region was seen to decrease by 50 tb/d in 2015 to average 0.46 mb/d, unchanged compared with the previous *MOMR*. OECD Asia Pacific's total oil supply in 2016 is anticipated to decline by 10 tb/d, to average 0.45 mb/d.

Developing Countries

Total oil production in **developing countries** (**DCs)** grew by 0.20 mb/d in 2015 to average 11.53 mb/d, unchanged from the previous *MOMR*. In 2016, it is expected that total output will decline by 50 tb/d to average 11.48 mb/d. Predicted supply for 2016 was dragged down in this month's assessment by 50 tb/d, due to weak output in 1Q16 in different regions. The expected contraction in Africa, Middle East and Latin America will be partially offset by minor growth in Other Asia.

Other Asia

Other Asia's oil supply shows growth of 100 tb/d y-o-y to average 2.70 mb/d in 2015. Expected growth for this year will be lower at only 20 tb/d, revised down by 10 tb/d following a reduction in upstream spending and deferring of costly projects to the future. Total oil supply is forecast to reach 2.72 mb/d in 2016.

India, which is set to replace Japan as the world's third-largest consumer in 2016, produced just 742 tb/d of crude in 1Q16, 32 tb/d, or 4.2%, less than in 1Q15, according to official data. Oil production in India has been declining since 2012, as mature fields reach the end of their lifespan and state-owned Oil and Natural Gas Corp. and Oil India haven't brought any new major discoveries on stream. This has led to a jump in oil imports, which fill four-fifths of Indian oil demand, by 6.7% y-o-y to 4.06 mb/d, according to Energy Intelligence. India's oil output is expected to decline by 20 tb/d to average 0.84 mb/d in 2016.

Oil production is expected to increase mainly in Malaysia, and to a lesser degree in Asia others and Thailand, in the current year.

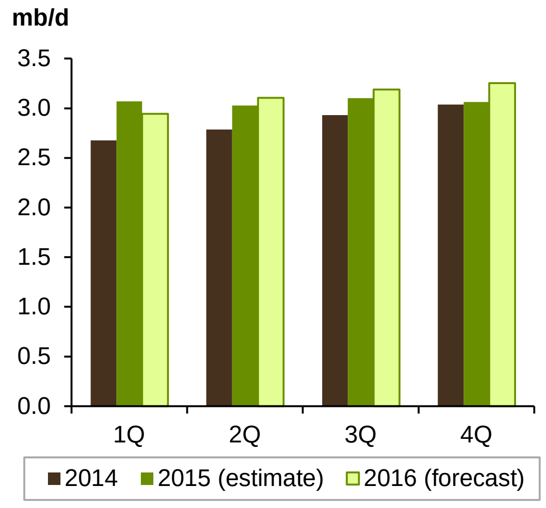
Latin America

Latin America's oil supply grew by 0.18 mb/d in 2015, but production is not expected to be strong enough to repeat this performance in 2016. Therefore, oil supply for the year is expected to contract by 10 tb/d, revised down by 20 tb/d compared with the previous month's prediction due to lower-than-expected 1Q16 output in Brazil. Total output for Latin America will reach an average of 5.17 mb/d, with growth coming only from Brazil.

Brazil's liquids output was more or less stagnant at 2.96 mb/d in February; of this 2.34 mb/d was crude oil. Partial production disruptions due to heavy maintenance at main platforms was compensated for by new volume output coming from the Cidade de Maricá floating production storage and offloading terminal (FPSO)'s start-up in the Lula area. Two more FPSOs are due to start up later this year at the pre-salt layer of the Lula Central project (Cidade de Saquarema) and the Lapa project (Cidade de Caraguatatuba). In 2016, the addition of 0.38 mb/d at peak capacity will be implemented through these three new FPSO terminals, all in the Santos Basin. Nevertheless, growth in 2016 is not expected to be more than 60 tb/d to average 3.12 mb/d, revised down by 20 tb/d from the previous month's forecast.

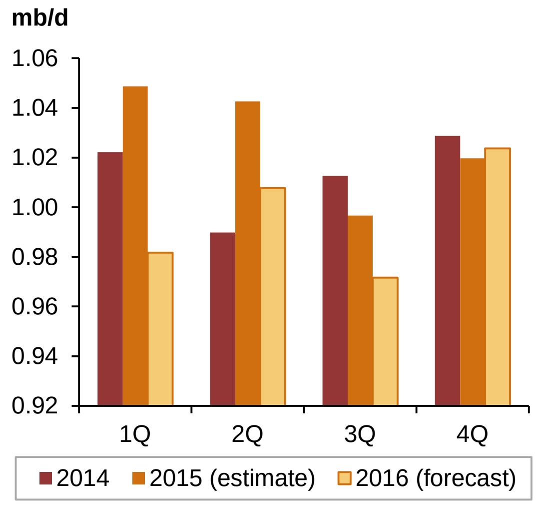
Due to the low oil price environment, oil companies are looking for an effective solution to better ensure survival. Brazil's state-owned oil company Petrobras will sell $15.1 billion of assets from mature onshore fields this year as part of a massive divestment programme. This includes 98 concessions producing a total of 35 tb/d, representing less than 2% of the company's production.

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 grew by 10 tb/d to average 1.03 mb/d in 2015. For 2016, the growth expectation is negative, due to a lack of appropriate investment and necessary spending. Hence, Colombia's total oil output will contract by 30 tb/d – unchanged compared with the previous month's forecast – to average 1.0 mb/d. Oil production in March declined by 40 tb/d m-o-m to 0.94 mb/d; this is 70 tb/d less than January's output. The fall was driven by pipeline attacks and shut-ins.

Middle East

The **Middle East's** oil supply declined by 70 tb/d y-o-y to average 1.27 mb/d in 2015, with the biggest decline coming from Yemen. Syrian and Yemeni production for 2016 is likely to remain weak due to conflict in both countries. Meanwhile, it is expected that Omani oil production will see a downward revision this month of 10 tb/d, to reach 0.99 mb/d in 2016, up by 10 tb/d y-o-y. Therefore, total Middle Eastern oil output, including a downward revision of 10 tb/d, is expected to fall by 30 tb/d to 1.24 mb/d in 2016.

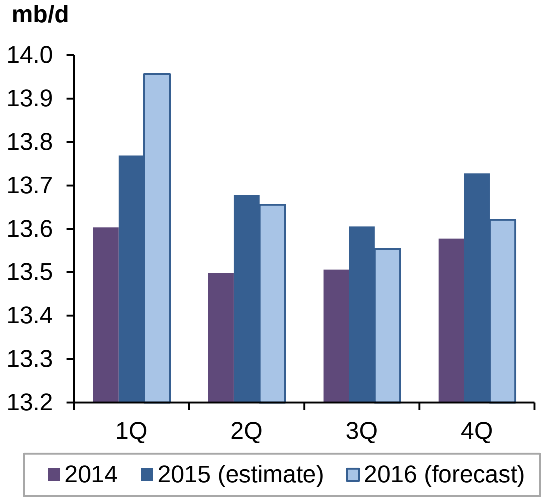
Africa

Africa's oil supply decreased by 10 tb/d y-o-y to average 2.37 mb/d in 2015 and is expected to see a further contraction of 30 tb/d in 2016, to average 2.34 mb/d. Declines are expected from Egypt, Equatorial Guinea, Gabon and the Sudans, while production in the Congo and some other African countries is expected to grow, though oil production in Chad and South Africa will be unchanged in the current year.

FSU, other regions

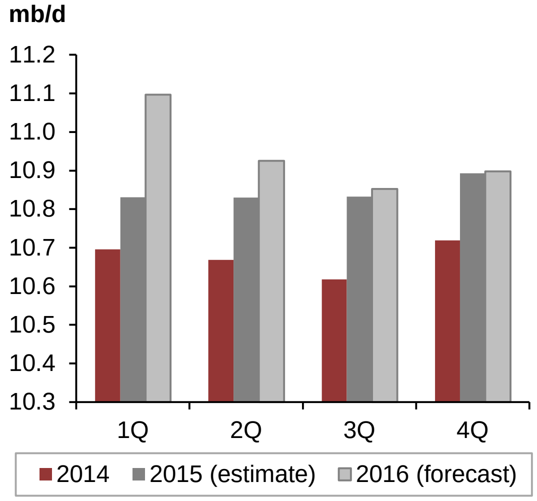
Total FSU oil production averaged 13.69 mb/d in 2015, an increase of 0.15 mb/d over a year earlier and unchanged compared with the previous *MOMR*. FSU's total supply in 2016 is now forecast at 13.70 mb/d, showing no growth from the previous year. Growth has been revised up by 0.12 mb/d, from a contraction in the previous *MOMR*, as more production is now estimated from Russia in 1Q16. Kazakhstan and Azerbaijan are expected to contract by 40 tb/d each, followed by FSU others.

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

Russian oil production is estimated to have grown by 0.17 mb/d in 2015, to average 10.85 mb/d, unchanged from the previous *MOMR.* Russia's oil supply in March reached 11.12 mb/d, up by 20 tb/d m-o-m. Gazprom Neft was planning to start full-year production from the giant Arctic field Novy Port in April. Sources close to the company, however, recently stated the launch has been delayed for an unspecified period of time, due to weather conditions. Nevertheless, according to the latest review of the most prolific fields in Russia and supported by the remarkable growth seen in the first three months of the year, averaging 11.10 mb/d in 1Q16, higher production by 0.21 mb/d over 4Q15 is indicated. Oil supply in 2016 is expected grow by 0.1 mb/d to average 10.94 mb/d, revised up by 0.12 mb/d, due to higher-than-expected output in 1Q16.

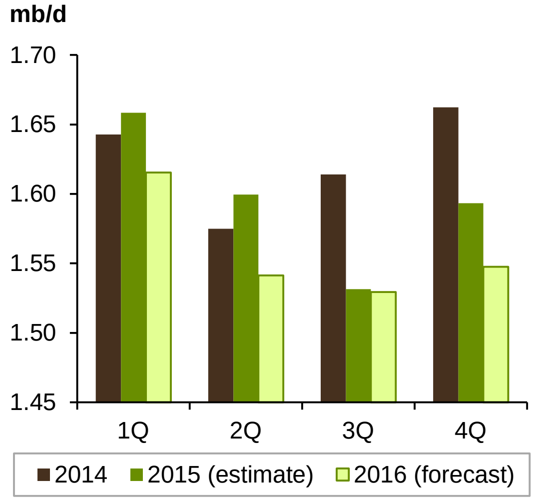
Caspian

Kazakhstan's oil production in 2015 declined by 30 tb/d to average 1.60 mb/d. Crude oil production in March has been revised down by 10 tb/d – mainly due to a decline in crude oil output – to average 1.34 mb/d. This is lower than the 1.61 mb/d production recorded in both February and January. According to the China National Petroleum Corp. (CNPC), oil production from the delayed Kashagan oil field is expected to start with phase 1 with a capacity of 0.18 mb/d in June 2017. A further supply contraction of 40 tb/d is anticipated for Kazakhstan in 2016, to reach 1.56 mb/d.

In **Azerbaijan**, total oil supply declined by 10 tb/d to average 0.86 mb/d in 2015. March 2016 production was 0.84 mb/d – lower by 10 tb/d and 20 tb/d compared with January and February, respectively. An average oil supply of 0.85 mb/d in 1Q16 was registered. Average annual output is expected to decline by 40 tb/d to reach 0.82 mb/d.

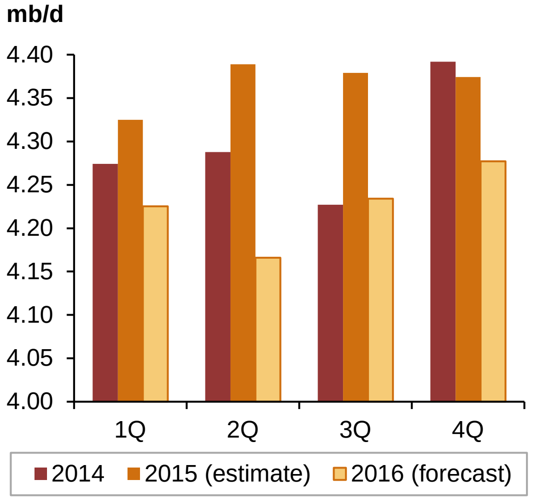
Other Europe's supply is expected to remain steady, averaging 0.13 mb/d in 2015 as well as in 2016.

Graph 5.19: Kazakhstan quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

Graph 5.20: China quarterly oil supply, 2014-2016



Source: OPEC Secretariat.

China

China's oil supply is forecast to decline by 0.14 mb/d to average 4.23 mb/d in 2016, revised down by 90 tb/d from the previous *MOMR* following weak crude output in January and February. March production has been lowered by 40 tb/d m-o-m to average 4.19 mb/d. Low oil prices are increasingly affecting Chinese oil production, leading to a decline in 1Q16 of 0.10 mb/d compared with 1Q15 and down by 0.14 mb/d over 4Q15, to average 4.23 mb/d. This lower output estimate has been supported by official statements from Chinese companies such as the China National Offshore Oil Corporation (CNOOC), China National Petroleum Corporation (CNPC) and Sinopec. Investment in production fell from a peak of $54.4 billion in 2014 to $39.4 billion (-27.6% y-o-y) in 2015 and $33.5 billion (-15.1%) this year. In 2014, China invested more than $54 billion in upstream developments, but this number fell to about $39 billion in 2015 and again to less than $34 billion this year. Other proof of impacted output in China lies in numbers from Matt Smith of Clipper Data, who notes that Chinese crude imports are on track to reach a new record in April.

Uncertainties ahead for 2016 projections

The forecast for non-OPEC supply for 2016 is subject to many uncertainties. Parts of these factors are relevant to price movements – partially due to policies and regulation, some related to operational activities – including technical bottle necks, some due to weather, investments and, of course, cuts in spending.

Indeed, there are several factors which may influence any oil supply forecasts, and each factor has a different degree of impact. In countries with dynamic economies, planned projects could be implemented sooner than expected, leading to volumes coming on stream ahead of schedule. Moreover, in a bullish oil market with high oil prices or lower breakeven compared to the sale price, actual oil supply can turn out to be considerably higher-than-predicted. Technical improvements – such as in-well drilling and completion, new methods of fracking, Enhanced Oil Recovery (EOR), or reservoir combination – stimulation – can bring about more oil recovery and an increase in planned output in different countries from the North Sea to North America. With the use of secondary and tertiary EOR during exploitation, not only will more production be achieved, but also the annual decline rate can be reduced. All of the above can create a suitable environment to produce more oil than forecast.

At the same time, there are also other fundamental factors that can have a negative effect on production. These include a low oil price environment, accelerated declines, unplanned shutdowns, and delays in start-ups or ramp-ups, as well as geopolitical factors and natural disasters. Examples can be seen in the Kashagan field, which was originally scheduled to come on-stream in 2015 with a capacity of 0.18 mb/d in the first phase; however, this has been pushed off to 2017. In past years, hurricanes in the Gulf of Mexico have led to a cut of as much as 500 tb/d over a period of two months. Accelerated annual declines, such as in the Cantarel offshore field in Mexico, are another negative factor impacting output, as are unplanned field or well shutdowns due to blowouts, or fires.

In 2016, uncertainties affecting non-OPEC supply include weather and unexpected disasters, such as the recent wildfire in Canada. More than 1.5 mb/d of the region's 2.5 mb/d capacity is now offline. Delays in field startups or ramp-ups, such as for the Bigfoot and KMZ fields in the Gulf of Mexico – have also unexpectedly impacted 2016 non-OPEC supply. Changes in rig counts, the high number of drilled, but uncompleted, wells (DUCs) in US tight oil fields that will be activated from inventories, and the impact of hedging are also likely to influence oil supply developments for US onshore production. Fires have affected expected production from the ACG platform in Azerbaijan and the Abkatun platform in Mexico. Investments in currently producing non-OPEC oil fields are forecast to fall to levels last seen in 2005. As a result, deferred projects and production shutdowns in several oil fields, as well as sizeable cuts in planned ramp-ups for new production in most regions are also likely. Finally, geopolitics and unrest in countries such as Syria, the Sudans, Yemen, Colombia, Brazil and elsewhere have also increased the uncertainty surrounding non-OPEC supply in 2016.

OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids production in 2015 was revised down this month by 20 tb/d to grow by 0.13 mb/d, and average 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, with expected growth revised down by 10 tb/d to reach 0.16 mb/d, y-o-y.

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

			Change						*Change*		*Change*
	2013	**2014**	14/13	1Q15	2Q15	3Q15	4Q15	**2015**	15/14	**2016**	16/15
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 April averaged 32.44 mb/d, an increase of 188 tb/d over the previous month. Crude oil output increased mostly from Iran and Iraq, while production decreased in Kuwait and Nigeria.

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

	2014	2015	3Q15	4Q15	1Q16	Feb 16	Mar 16	Apr 16	Apr/Mar
Algeria	1,151	1,109	1,109	1,108	1,084	1,084	1,082	1,074	*-8.0*
Angola	1,660	1,752	1,762	1,786	1,757	1,760	1,770	1,788	*17.8*
Ecuador	542	546	541	547	549	553	554	547	*-7.2*
Indonesia	696	695	695	706	717	717	726	731	*5.0*
Iran, I.R.	2,766	2,837	2,860	2,880	3,114	3,148	3,253	3,451	*198.2*
Iraq	3,265	3,924	4,153	4,238	4,260	4,173	4,200	4,354	*154.0*
Kuwait	2,774	2,728	2,721	2,718	2,768	2,772	2,772	2,640	*-132.0*
Libya	473	404	381	402	379	388	355	345	*-10.0*
Nigeria	1,911	1,845	1,846	1,851	1,743	1,754	1,694	1,637	*-56.8*
Qatar	716	668	659	666	664	670	672	669	*-2.8*
Saudi Arabia	9,683	10,108	10,259	10,106	10,130	10,128	10,133	10,125	*-7.4*
UAE	2,761	2,853	2,880	2,878	2,802	2,767	2,723	2,780	*56.8*
Venezuela	2,373	2,369	2,368	2,365	2,323	2,327	2,318	2,298	*-19.4*
Total OPEC	**30,771**	**31,839**	**32,234**	**32,249**	**32,289**	**32,241**	**32,251**	**32,440**	***188.2***

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

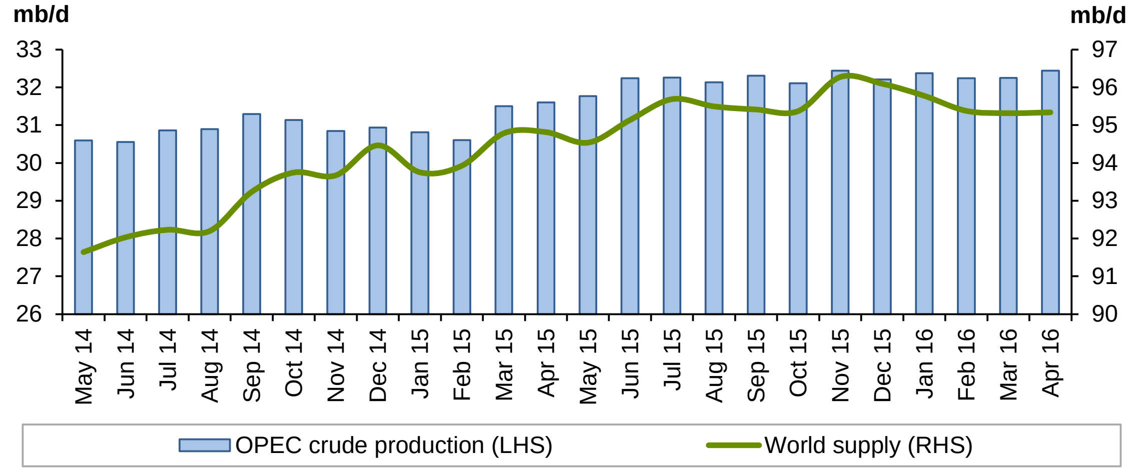
	2014	2015	3Q15	4Q15	1Q16	Feb 16	Mar 16	Apr 16	Apr/Mar
Algeria	1,193	1,157	1,159	1,179	1,128	1,125	1,137	1,141	*4.0*
Angola	1,654	1,767	1,777	1,742	1,773	1,767	1,782	1,733	*-49.0*
Ecuador	557	543	538	536	548	559	552	555	*3.6*
Indonesia	..	690	695	693	739	740	747	726	*-21.3*
Iran, I.R.	3,117	3,152	3,170	3,313	3,385	3,385	3,400	..	*..*
Iraq	3,110	3,504	3,744	3,846	4,598	4,458	4,553	4,521	*-32.0*
Kuwait	2,867	2,859	2,870	2,876	3,000	3,000	3,000	2,900	*-100.0*
Libya	480	..	..	..	..	..	..	..	*..*
Nigeria	1,807	1,748	1,790	1,778	1,667	1,744	1,505	1,787	*282.8*
Qatar	709	656	640	651	675	692	699	625	*-73.8*
Saudi Arabia	9,713	10,193	10,285	10,202	10,225	10,220	10,224	10,262	*37.6*
UAE	2,794	2,989	3,030	2,999	2,944	2,780	2,909	2,827	*-82.2*
Venezuela	2,683	2,654	2,631	2,587	2,534	2,529	2,515	2,490	*-24.7*
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	***..***

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 increased by 0.02 mb/d in April compared with the previous month to average 95.34 mb/d. Non-OPEC supply increased by 0.17 mb/d, while OPEC production increased by 0.19 mb/d. The share of OPEC crude oil in total global production increased to 34% in April 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

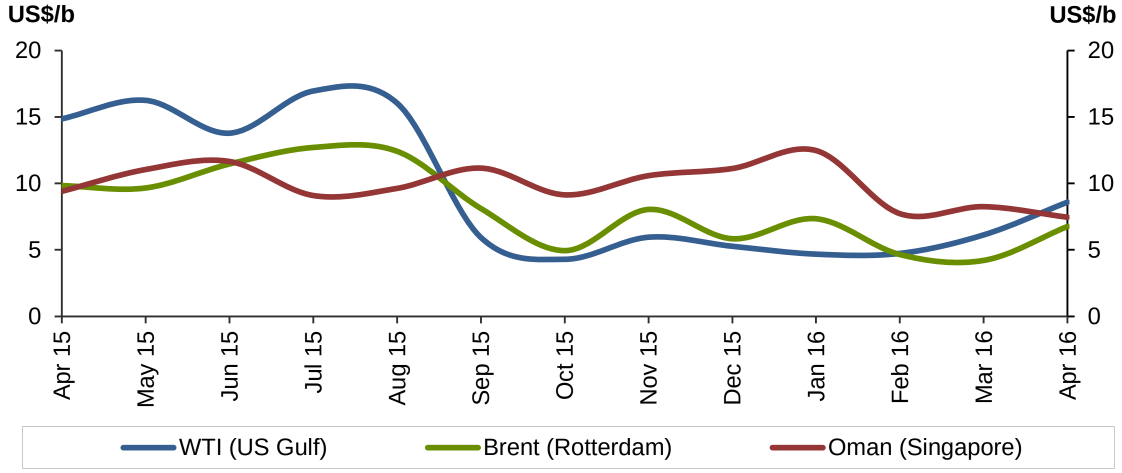


Source: OPEC Secretariat.

Product Markets and Refinery Operations

US product markets were supported by strong domestic gasoline demand in April amid tightening sentiment fueled by some outages and maintenance, which allowed refinery margins to strengthen. In Europe, higher export opportunities for gasoline ahead of the driving season amid strong domestic demand at the top of the barrel lent support to the refinery margins. Meanwhile, Asian margins weakened despite the peaking refinery maintenance in the region, due to the oversupply environment weighing on the market.

Graph 6.1: Refinery margins, 2015-2016



Sources: Argus Media and OPEC Secretariat.

US product markets exhibited a positive performance, supported by stronger domestic gasoline demand during April and tightening sentiment, fueled by some FCC unit outages and some refineries in maintenance. In addition, the expectations of increasing demand with the onset of the summer driving season continued lending support to the market and allowed gasoline crack spreads to exhibit a sharp gain of more than $4/b, while USGC refinery margins for WTI crude gained more than $2 versus the previous month's levels, to average around $8/b in April.

Product markets in **Europe** reversed their downward trend and despite continued weakening seen at the middle of the barrel, they exhibited a vibrant recovery during April on the back of strong support coming from the top of the barrel with the gasoline crack spread strengthening sharply due to strong domestic demand amid higher export opportunities. The refinery margin for Brent crude in Northwest Europe (NWE) showed a sharp increase of more than $2 versus the previous month to average $6.6/b in April.

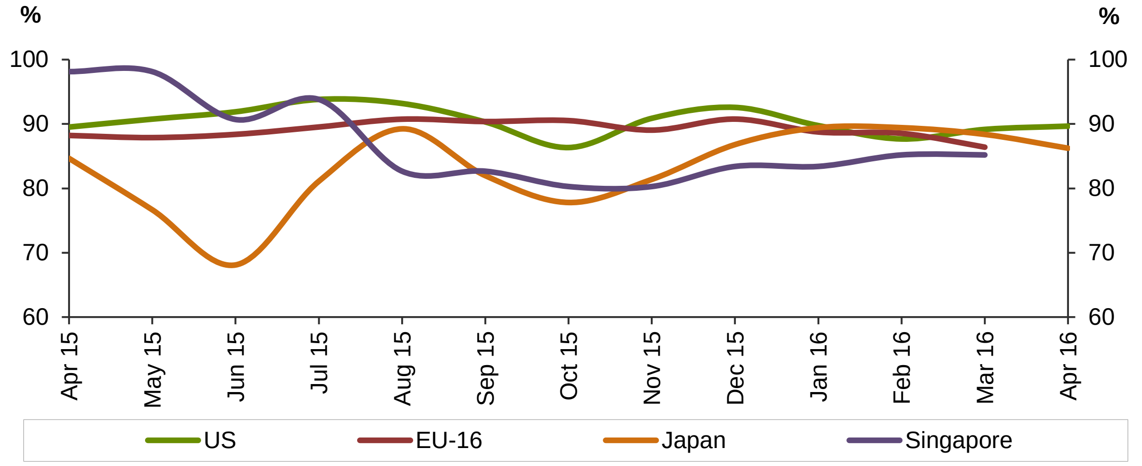
Asian product markets weakened during April due to losses across the barrel caused by plentiful supplies and some seasonal lower demand, which were pressuring the market despite the peak in refinery maintenance in the region. Increases seen in crude oil prices also played a role in the decreased margins. Refinery margins in Singapore lost around $1 to average $7/b in April.

Refinery operations

Refinery utilization rates have been ramped up in some areas of the US following the peak of maintenance season. However, the sector has been impacted by several FCC and refinery outages, affecting mainly the USGC and midcontinent, fueling some tightening sentiment and opening import opportunities from Europe.

Refinery utilization in the **US** averaged around 90% in April, corresponding to 16.1 mb/d, which is 90 tb/d higher than a month earlier. The refinery level continued being impacted by some unscheduled shutdowns and peak maintenance in some areas.

Graph 6.2: Refinery utilisation rates, 2015-2016



Sources: Argus Media and OPEC Secretariat.

European refinery runs averaged around 86% of capacity in March, corresponding to a throughput of 10.1 mb/d, some 250 tb/d lower than in the previous month and around 110 tb/d lower than the same month a year ago. European refinery throughputs continued to be impacted by maintenance amid moderated runs to face the product overhang.

Asian refinery utilization has been on the rise during the last months, despite the heavy maintenance season with Chinese teapot refineries contributing to the record-high level as new rules allowed them to process imported crude. Meanwhile, maintenance is impacting runs in South Korea and Japan. Refinery runs in Singapore for March averaged around 85%, a similar level to a month earlier. Meanwhile, Japanese throughputs remained at around 86.2% of capacity in April, 2 pp lower than the previous month as some maintenance in the country continued.

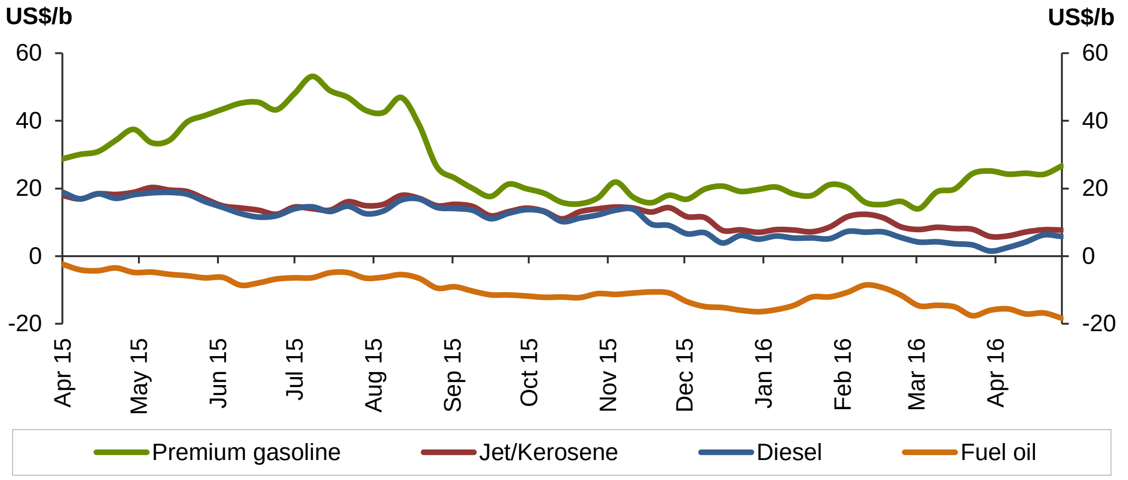
US market

US **gasoline** demand stood at around 9.5 mb/d in April , approximately 100 tb/d higher than in the previous month and more than 100 tb/d higher than in the same month a year earlier.

Stronger domestic gasoline demand, amid falling inventories, has been fueling bullish sentiment to the market. This strengthening has been boosted further by temporary tightening due to some FCC unit outages and refinery maintenance.

Expectations of increasing demand with the onset of the summer driving season continued to lend support to the market and have allowed the gasoline crack spread to gain more than $4 versus the previous month's level to average $24/b in April.

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



Sources: Argus Media and OPEC Secretariat.

Middle distillate demand stood at around 4.0 mb/d in April, some 370 tb/d higher than in the previous month and around 50 tb/d higher than in the same month a year earlier.

The middle distillate market continued to exhibit weak fundamentals. However, domestic demand, which had been hitting multi-year lows during previous months, has started to show signs of recovery since the middle of April. Another supporting factor has been increasing exports to Latin America.

The USGC gasoil crack averaged around $4/b in April, gaining around $1 from the previous month. The uptick was limited by pressure from persistently high inventories.

At the **bottom of the barrel**, the fuel oil market continued weakening due to the oversupply environment with lower bunker demand in the USGC amid increasing volumes coming into the region from Europe and the Black Sea. Meanwhile, lower requirements have been reported from South American countries.

The USGC high-sulphur fuel oil crack lost more than 50¢ to average around minus $16.3/b in April.

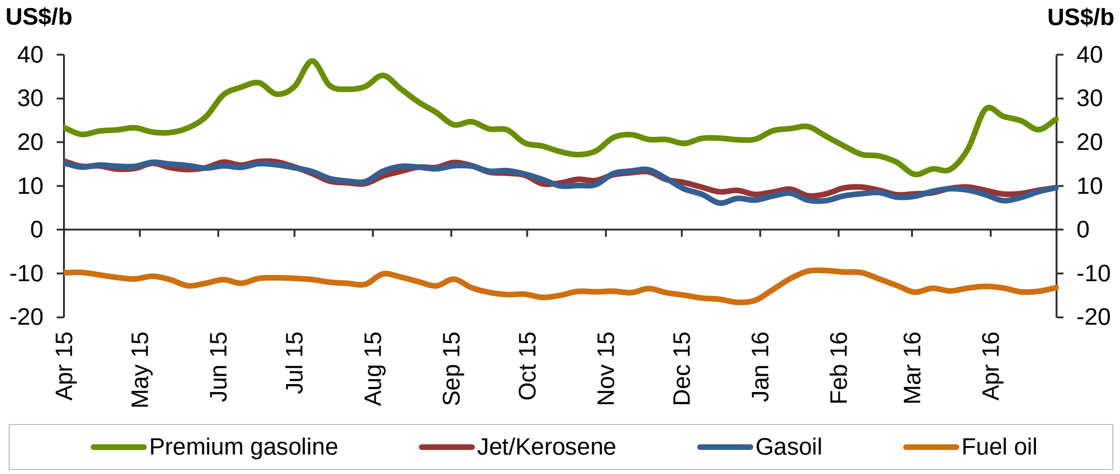
European market

Product markets in Europe saw a recovery during April on the back of strong support coming from the top of the barrel with the gasoline crack spread sharply strengthening on the back of strong domestic demand amid higher export opportunities.

The **gasoline** market recovered during April. The NWE gasoline crack spread strengthened, exhibiting a sharp recovery of the downward trend seen in the last three months. This came on the back of higher export opportunities, not only to the US, with requirements on the rise ahead of the driving season, but also to West Africa, with Nigeria increasing gasoline import volumes in recent weeks to meet the shortage suffered in the previous month. Another bullish factor has been strong domestic demand seen in the last weeks. The gasoline crack spread against Brent saw a sharp gain of more than $8 to average around $25/b April.

The light distillate **naphtha** crack continued strengthening on the back of healthy domestic demand with steady purchases from the petrochemical sector. However, the uptick was limited by increasing inventories amid lower arbitrage to Asia.

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



Sources: Argus Media and OPEC Secretariat.

The European **gasoil** market continued to be oversupplied during April, as it has been since the end of last year. Higher inflows have continued hitting the oversupplied market. In addition to the volumes coming from the US and Russia, increasing volumes are arriving from India and also from the Middle East as the switch to summer grade diesel opened the opportunity for higher volumes from Saudi Arabian refineries.

The gasoil crack spread against Brent crude at Rotterdam averaged around $8/b in April, losing around $1 versus the previous month's level. The potential recovery in the crack spreads, associated with increasing domestic demand, has been outweighed by floating storage outside several European ports, thus keeping the pressure on the gasoil market.

At the **bottom of the barrel**, the fuel oil market continued under pressure from seasonal lower domestic demand amid a lack of arbitrage to Singapore. On the other hand, the expected demand for summer air conditioning and tourist cruises has not yet materialized.

The NWE fuel oil crack lost 20¢ versus the previous month, to average around minus $14/b in April, hitting the lowest level seen this year.

Asian market

The Asian market weakened slightly in April due to plentiful supplies amid some lower seasonal demand, pressuring the market and causing losses across the barrel despite the onset of refinery maintenance in the region. The increases seen in crude oil prices also played a role in the falling product crack spreads.

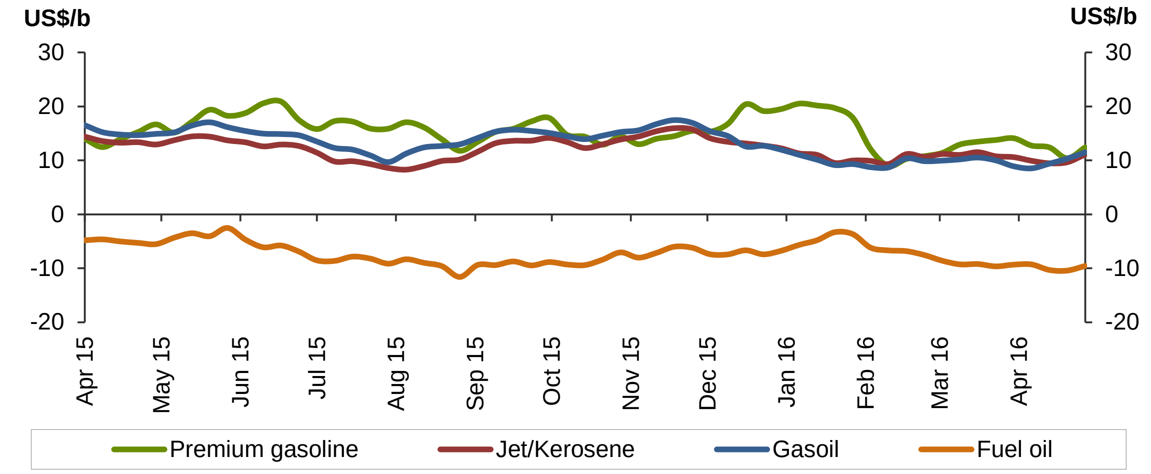
Despite the heavy maintenance season in the region, the **gasoline** market once again showed signs of weakening, due to a persistently oversupplied market.

Within the region, the supply pressure coming from higher exports seen from China, South Korea and Japan has outweighed the higher regional demand being reported from India, Pakistan and Taiwan.

The gasoline crack spread against Oman crude in Singapore averaged $12/b in April, losing around $1 versus the previous month's level. Losses were capped by the expectations that support could come from the West of Suez over the summer.

The Singapore **naphtha** crack continued its downward trend, losing around 50¢ over the month due to reduced demand on the back of seasonal steam cracker maintenance peaking within the region. Further switching to LPG feedstock also pressured the market, although the losses were capped by the expectations of lower western arbitrage.

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 to remain relatively steady despite the high level of inventories in Singapore. Some support came from the expectations of lower inflows from the Middle East on the back of rising seasonal local demand amid concerns over supplies from Kuwait.

Demand in the region was mixed, remaining strong in several countries, mainly India and Pakistan, while China and Indonesia saw lower requirements.

The gasoil crack spread in Singapore against Oman remained at the previous month's level of around $10/b.

The Asian **fuel oil** market continued to weaken during April, as crack spreads remained pressured by seasonal declining demand amid ample regional supplies. The fuel oil crack spread in Singapore against Oman lost almost $1 to average about minus $10/b in April. Losses were capped by some reports on rising bunker demand in Singapore.

Table 6.1: Refined product prices, US$/b

		Mar 16	Apr 16	Change Apr/Mar	Year-to-date 2015	Year-to-date 2016
US Gulf (Cargoes FOB):						
Naphtha*		42.18	43.96	1.78	63.77	39.01
Premium gasoline	*(unleaded 93)*	58.01	65.83	7.82	76.25	55.58
Regular gasoline	*(unleaded 87)*	51.56	59.30	7.74	68.09	48.51
Jet/Kerosene		45.41	48.07	2.66	69.75	43.54
Gasoil	*(0.2% S)*	41.06	45.60	4.54	69.78	40.18
Fuel oil	*(3.0% S)*	23.85	26.15	2.30	45.40	22.42
Rotterdam (Barges FoB):						
Naphtha		38.53	41.69	3.16	53.16	36.92
Premium gasoline	*(unleaded 98)*	54.82	66.41	11.59	73.86	56.03
Jet/Kerosene		47.43	50.30	2.87	72.07	44.61
Gasoil/Diesel	*(10 ppm)*	47.13	49.57	2.44	71.06	43.81
Fuel oil	*(1.0% S)*	24.83	27.82	2.99	44.70	23.49
Fuel oil	*(3.5% S)*	21.32	23.66	2.34	45.32	19.49
Mediterranean (Cargoes FOB):						
Naphtha		37.76	40.39	2.63	49.86	35.64
Premium gasoline**		47.68	58.04	10.36	69.12	48.93
Jet/Kerosene		45.96	48.01	2.05	68.96	42.78
Diesel		48.28	50.56	2.28	72.50	45.05
Fuel oil	*(1.0% S)*	24.63	28.01	3.38	46.85	24.10
Fuel oil	*(3.5% S)*	23.44	26.30	2.86	45.10	22.31
Singapore (Cargoes FOB):						
Naphtha		39.20	42.52	3.32	54.89	38.12
Premium gasoline	*(unleaded 95)*	52.68	54.49	1.81	69.32	50.46
Regular gasoline	*(unleaded 92)*	49.58	51.45	1.87	66.28	47.34
Jet/Kerosene		47.40	49.51	2.11	69.75	43.96
Gasoil/Diesel	*(50 ppm)*	46.34	49.33	2.99	70.41	43.28
Fuel oil	*(180 cst 2.0% S)*	28.20	31.02	2.82	51.32	27.98
Fuel oil	*(380 cst 3.5% S)*	27.07	29.17	2.10	49.18	25.57

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

Table 6.2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Feb 16	Mar 16	Apr 16	Change Apr/Mar	Feb 16	Mar 16	Apr 16	Change Apr/Mar
US	15.72	15.99	16.08	0.09	87.68	89.17	89.68	0.51
France	1.15	1.12	-	-	81.44	79.59	-	-
Germany	1.86	1.86	-	-	85.15	85.01	-	-
Italy	1.27	1.24	-	-	62.12	60.41	-	-
UK	0.99	0.97	-	-	75.40	73.20	-	-
Euro-16	10.37	10.11	-	-	88.56	86.41	-	-
Japan	3.50	3.46	3.38	-0.08	89.44	88.39	86.25	-2.14

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

Tanker Market

Dirty tanker market sentiment weakened in general in April, as average spot freight rates dropped on many routes in different regions. On average, dirty tanker freight rates declined by 6%, compared with the previous month. For the VLCC sector, average spot freight rates for reported routes dropped by 5% in April, compared with the previous month and Aframax spot rates dropped by 17%, while Suezmax freight rates turned positive, on average higher by 12% from the month before. Relatively light activity during the month, versus a prolonged tonnage list in addition to reduced delays at the Turkish Straits, were partially behind the drop in rates, along with other factors in April. Clean tanker sentiment strengthened over the previous month, pushed mostly by higher rates in West of Suez on the back of stronger rates in the Mediterranean Sea.

Spot fixtures

Global fixtures dropped by 8% to stand at 16.28 mb/d in April. OPEC spot fixtures dropped as well in April by 4.4% to stand at 11.65 mb/d. The decline came mainly as a result of a fall in Middle East-to-West fixtures and Outside Middle East fixtures, which were down 5.6% and 13%, respectively, compared to the previous month.

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

	Feb 16	Mar 16	Apr 16	*Change* Apr 16/Mar 16
Spot Chartering				
All areas	16.32	17.68	16.28	-1.40
OPEC	11.65	12.19	11.65	-0.54
Middle East/East	6.16	5.22	5.36	0.14
Middle East/West	2.11	3.23	3.05	-0.18
Outside Middle East	3.39	3.74	3.24	-0.50
Sailings				
OPEC	24.12	24.08	24.21	0.12
Middle East	17.52	17.50	17.60	0.10
Arrivals				
North America	10.01	10.00	9.97	-0.03
Europe	12.18	12.57	12.42	-0.15
Far East	8.29	8.52	8.46	-0.06
West Asia	4.78	4.62	4.71	0.09

Source: Oil Movements.

Sailings and arrivals

OPEC sailings increased by 0.5% from the previous month to average 24.21 mb/d in April. Arrivals in West Asia were up, while those in North America, Europe and the Far East dropped from the previous month by 0.3%, 1.2% and 0.7%, to stand at 9.97 mb/d, 12.42 mb/d and 8.46 mb/d, respectively. Despite higher monthly arrivals in West Asia, they were lower by 0.05 mb/d compared with the same month the previous year.

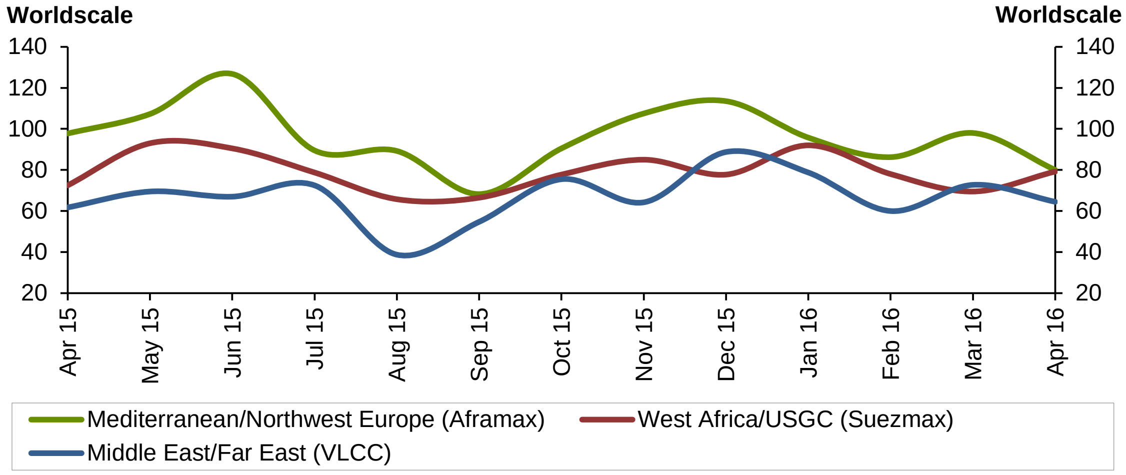
Spot freight rates

VLCC

VLCC freight rates experienced a dramatic fluctuation at the beginning of April; higher freight rates were seen earlier in the month as the market exhibited limited supply following loading delays in Middle Eastern ports from the previous month. However, VLCC freight rates dropped afterwards as market fundamentals proved to be balanced and tonnage demand eased. VLCC freight rates continued to be volatile, fluctuating in the Middle East and West Africa, despite relatively stable activity.

Middle East-to-East spot freight rates declined by 11%, and West Africa-to-East rates dropped by 6% in April, to stand at WS65 points and WS67 points, respectively, compared with the previous month. Rates in West Africa were supported by the flow of cargoes, though this was corrected downward once activities thinned. VLCC loadings and fixtures to western destinations maintained higher levels and ended the month showing a gain of WS2 points. April activity was light and firm cargo requirements were on the low side. The anticipation of higher requirements for loading in May did not materialize and the total number of fixtures remained on the low side.

Graph 7.1: Monthly averages of crude oil spot freight rates



Sources: Argus and Platts.

Suezmax

Suezmax vessels were the only ones in the dirty tanker segment to show positive returns in April. Suezmax average spot freight rates edged up by 12% in April from the previous month as a result of higher freight rates achieved on both reported routes.

West Africa-to-US spot freight rates rose from a month ago by 14%, while Northwest Europe (NWE)-to-US rates increased by 10% in April compared with the month before. Suezmax spot freight rates were supported in the beginning of April by strong sentiment to the east. A tight positions list and flow of cargoes for end-April loadings supported rates before they were corrected down, as May loading requirements were lighter than expected. Tonnage availability in the Mediterranean and Black Sea was limited, though freight rates remained mostly flat. At the same time, delays in the Turkish Straits were minimal, while delays at Mediterranean ports tightened vessel supply.

Table 7.2: Spot tanker crude freight rates, Worldscale

	Size *1,000 DWT*	Feb 16	Mar 16	Apr 16	*Change* Apr 16/Mar 16
Crude					
Middle East/East	230-280	60	73	65	-8
Middle East/West	270-285	35	41	43	3
West Africa/East	260	67	72	67	-5
West Africa/US Gulf Coast	130-135	78	70	79	10
Northwest Europe/US Gulf Coast	130-135	67	63	69	6
Indonesia/East	80-85	111	147	111	-36
Caribbean/US East Coast	80-85	132	115	109	-6
Mediterranean/Mediterranean	80-85	91	106	87	-19
Mediterranean/Northwest Europe	80-85	86	98	80	-18

Sources: Argus Media and OPEC Secretariat.

Aframax

Aframax spot freight rates ended the month showing a drop of 17%, on average, compared with the previous month. Negative performance was seen in April on all selected routes, although the rate drop amount varied from one region to another.

The decline of Aframax spot freight rates came on the back of lower tonnage demand seen in several regions. Freight rates declined as the positions list kept growing and the size of requirements was not enough to absorb tonnage availability. At the same time, charterers took the opportunity represented by lower rates to complete fixtures in the month.

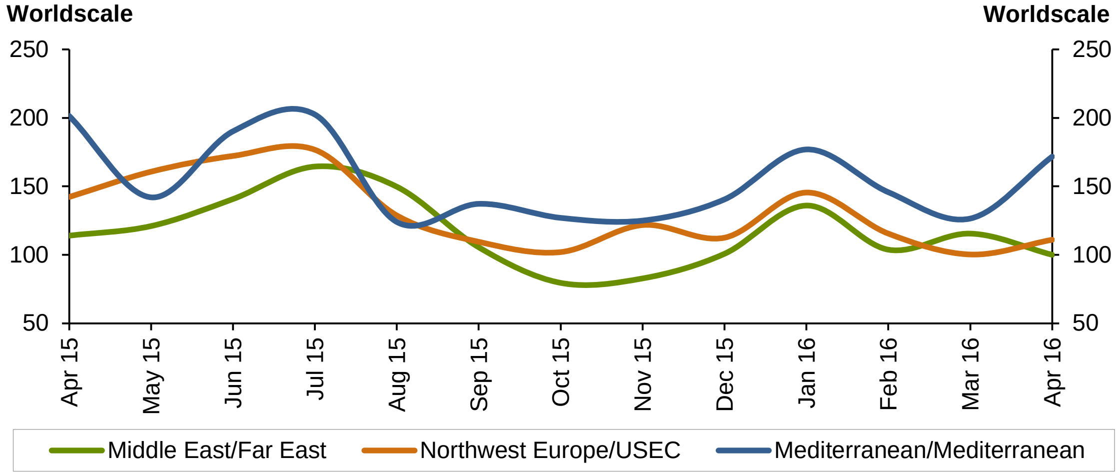
In the Aframax Mediterranean market, rates stayed flat before dropping, as tonnage demand in the Black Sea and the Mediterranean was thin. Thus spot freight rates for Aframax operating on Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes declined by 18% each in April compared with the previous month.

The Caribbean Aframax market saw a short flow of activity in the middle of the month, combined with some replacements, but this was not enough to prevent average monthly spot freight rates from dropping; rates on the Caribbean-to-US route fell by 5% from the previous month to stand at WS109 points. Aframax freight rates in the East were no exception; they also underwent a downward trend in the market, down by 24% from the previous month as freight rates for tankers trading on the Indonesia-to-East route averaged WS111 points in April, losing the gains achieved the previous month.

Clean spot freight rates

Sentiment in the **clean tanker** market generally strengthened in April as trading on many routes reflected higher spot freight rates than seen the previous month. Higher average rates came mainly on the back of a healthier West of Suez market, where clean spot freight rates registered a strong increase of 28%, while East of Suez rates edged down by 8% in April, compared with the previous month.

Graph 7.2: Monthly average of clean spot freight rates



Sources: Argus Media and OPEC Secretariat.

The medium-range tanker market firmed in April, mainly in the Mediterranean, as tighter vessel supply – particularly for prompt loadings – pushed freight rates up. Firm sentiment was also supported by weather and port delays. Consequentially, spot freight rates on the Mediterranean-to-Mediterranean and Mediterranean-to-NWE routes went up by 36% and 33%, respectively. Clean spot freight rates on the NWE-to-US route increased by 11% from the previous month, as the market was supported by gasoline shipments. Contrarily, clean tanker spot freight rates heading east showed only negative developments. Spot freight rates registered on the Middle East-to-East and Singapore-to-East routes showed declines of 13% and 4% in April over the previous month to stand at WS100 points and WS135 points, respectively.

Table 7.3: Spot tanker product freight rates, Worldscale

	Size *1,000 DWT*	**Feb 16**	**Mar 16**	**Apr 16**	***Change*** **Apr 16/Mar 16**
Products					
Middle East/East	30-35	104	116	100	-16
Singapore/East	30-35	129	140	135	-5
Northwest Europe/US East Coast	33-37	116	100	111	11
Mediterranean/Mediterranean	30-35	146	127	172	45
Mediterranean/Northwest Europe	30-35	156	136	182	45

Sources: Argus Media and OPEC Secretariat.

Oil Trade

Preliminary data shows that US crude oil imports averaged of 7.8 mb/d in April, broadly unchanged from last month and up by 606 tb/d from last year. US monthly product imports were higher from the previous month by 289 tb/d, and up by 52 tb/d from the previous year.

Japan's crude oil imports rose in March from the previous month by 97 tb/d, or 3%, to average 3.6 mb/d, while y-o-y, they dropped by 127 tb/d or 3%. Japan's product imports dropped in March to the lowest level since April 2010, down by 90 tb/d to average 478 tb/d, y-o-y, product imports were down by 153 tb/d.

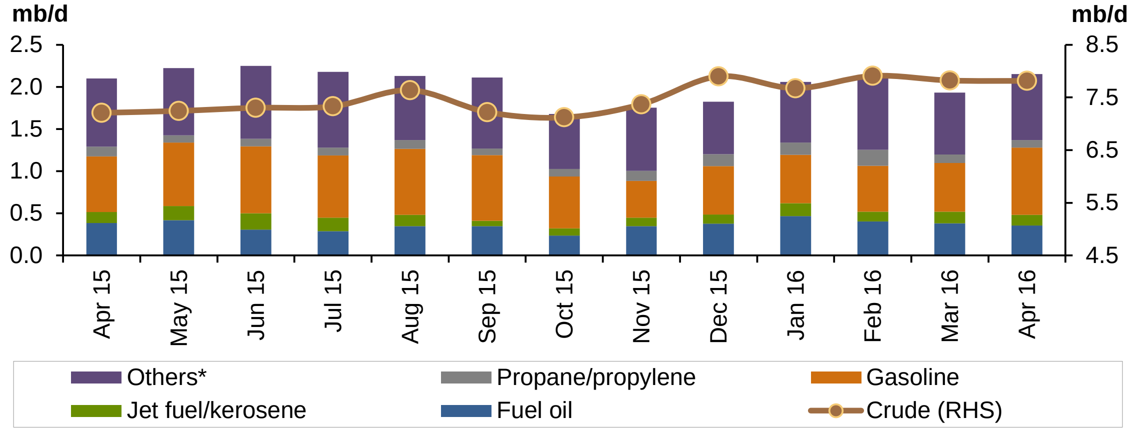
China crude imports dropped in March to average 7.7 mb/d. China's crude oil imports dropped by 327 tb/d, or 5%, in March from the previous month, however they remained higher from last year by a remarkable 1.4 mb/d. China's product imports went up by 81 tb/d and 203 tb/d from the previous year and previous month, respectively.

India's crude oil imports dropped in March from the previous month by 48 tb/d, or 1%, while y-o-y, they increased by 320 tb/d, or 8%, to average 4.2 mb/d. India's product imports were stable from the previous month, averaging 361 tb/d in March.

US

In April, preliminary data shows that **US crude oil imports** averaged 7.8 mb/d, broadly unchanged from last month and up by 606 tb/d from last year. On a y-t-d basis, US crude imports in April were 579 tb/d higher.

Graph 8.1: US imports of crude and petroleum products

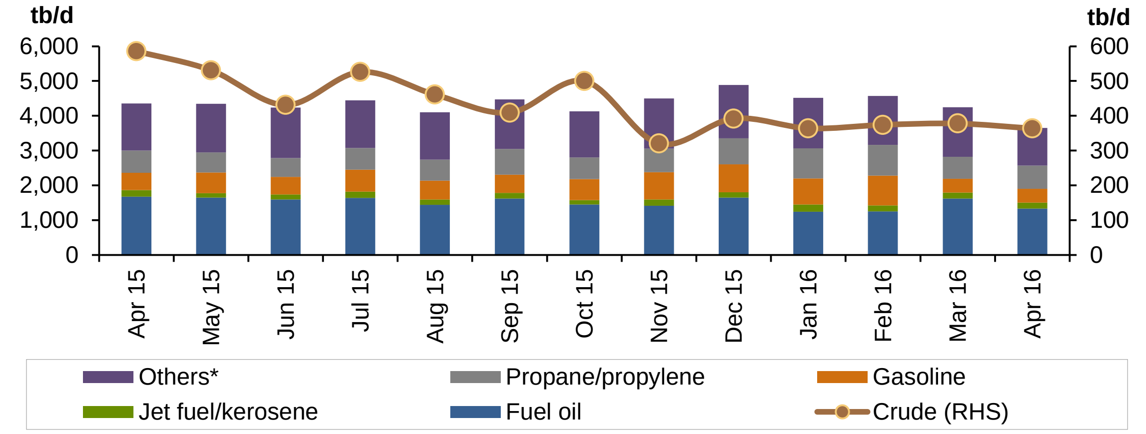


*Note: *Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.*
Sources: US Energy Information Administration and OPEC Secretatiat.

US product imports were 289 tb/d higher than the previous month and 52 tb/d higher than the previous year. In April, **US product exports** were 737 tb/d lower than a month ago, to average 3.6 mb/d. On an annual comparison, product exports were lower than a year before by 710 tb/d. As a result, **US total net imports rose in April by 905 tb/d, or 17%, to average 6 mb/d.**

In February, the **top first and second suppliers** to the US maintained the same order as previously seen. Canada was the premier crude supplier to the US, accounting for 45% of total US crude imports. Crude imports from Canada were higher by 112 tb/d from January and averaged 3.6 mb/d. Saudi Arabia came in as the second largest supplier to the US in February and had lower crude exports to the US from the previous month by 46 tb/d. Venezuela was the third top supplier accounting for 10% of total US crude imports as it increased its exports to the US by 76 tb/d from the previous month.

Graph 8.2: US exports of crude and petroleum products



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

Total **crude imports from OPEC Member Countries** were higher in February from the previous month, up by 145 tb/d, or 5%, accounting for 37% of total US crude imports. **US product imports from OPEC Member Countries** were up slightly by 14 tb/d, or 5%, from the previous month, while they remained 30 tb/d, or 11%, lower than the previous year.

Looking at the **product supplier share**, Canada and Russia maintained their positions as first and second suppliers to the US, accounting for 30% and 20%, respectively. Algeria came in as the third supplier to the US, holding a share of 7%, up by 11 tb/d from the previous month.

The **imports by regions** remained with no major changes. In February 2015, the US' largest crude import volumes were sourced from North America, averaging 3.6 mb/d. North America came in as the top region for US crude imports followed by Latin America, which averaged 2.1 mb/d in February. The Middle East came in as the third region with an average of 1.5 mb/d. Imports from Africa, Asia and FSU all increased from one month before to average 547 tb/d, 70 tb/d and 45 tb/d, respectively, in February.

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

	Feb 16	Mar 16	Apr 16	*Change* Apr 16/Mar 16
Crude oil	7,536	7,572	7,451	-121
Total products	-2,464	-2,522	-1,495	1,026
Total crude and products	**5,072**	**5,050**	**5,956**	**905**

Sources: US Energy Information Administration and OPEC Secretatiat.

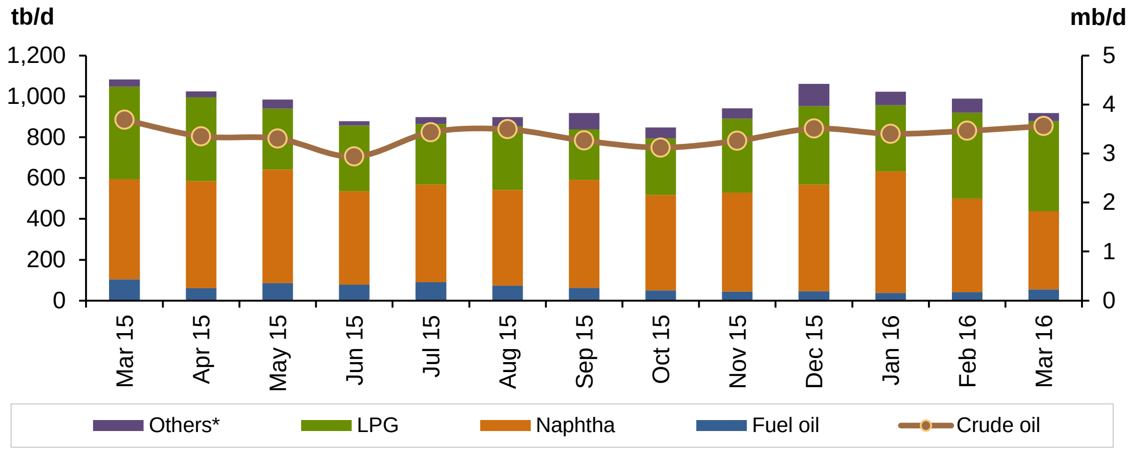
Looking into the imports of each **PADD**, crude imports by PADD-1 East Coast came from Africa, mainly followed by Latin America and the Middle East to average 323 tb/d, 276 tb/d and 146 tb/d, respectively. Imports from PADD 2 were mostly sourced from North America and stood at 2.5 mb/d, up by 190 tb/d from January. PADD 3 sourced its largest imports from Latin America, however, as seen in the past month, imports from Latin America were down by 23 tb/d to average 1.6 mb/d, while imports from the Middle East were higher by 44 tb/d from last month to average 935 tb/d. PADD 4 only imported from North America and averaged 245 tb/d in February, a decrease of 26 tb/d from the month before. In PADD 5 West Coast, the highest imports came from the Middle East, averaging 490 tb/d in February, followed by Latin America and North America.

Japan

Japan's **crude oil imports** rose in March from the previous month by 97 tb/d, or 3%, to average 3.6 mb/d, while on a y-o-y comparison, they showed a drop from last year by 127 tb/d, or 3%. At the same time, Japan's refinery throughput was down from the month before.

Looking at the **crude suppliers' share**, Saudi Arabia, as in previous month, came as the first crude supplier to Japan, holding a share of 38% of total crude exports to Japan, up by 90 tb/d from a month before. The UAE came in as the second largest supplier to Japan with a share of 26% of total crude imports, as it also increased its volumes from a month before by 182 tb/d. Kuwait came as the third supplier in March with a share of 9% as the volumes imported from Kuwait were up from the previous month by 53 tb/d.

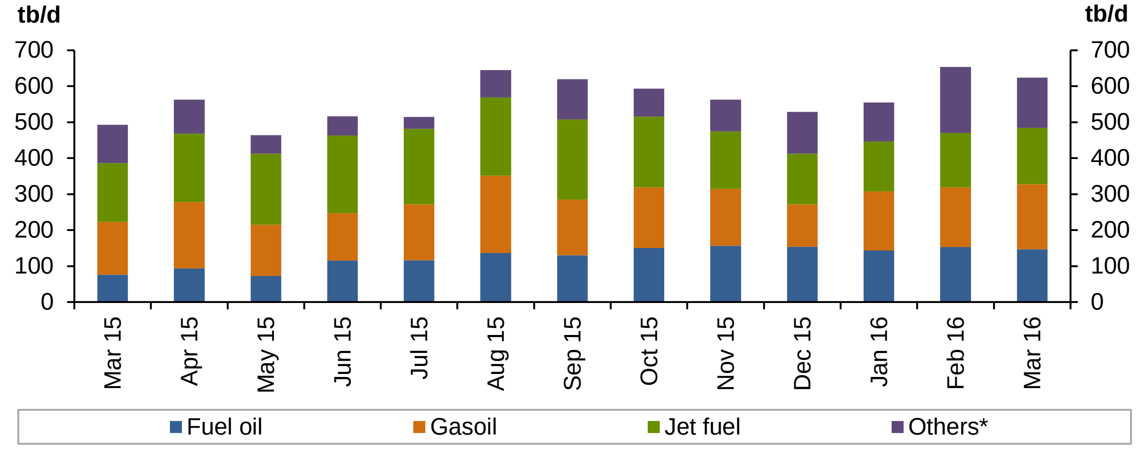
Graph 8.3: Japan's imports of crude and petroleum products



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

Japan's **product imports** dropped in March to the lowest level since April 2010, down by 90 tb/d to average 478 tb/d, while y-o-y, they were down by 153 tb/d. Meanwhile, Japan's **domestic product sales** fell by 1.1% y-o-y.

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.

As for **product exports**, Japan's exports in March remained at high levels despite a drop of 30 tb/d to average 624 tb/d, while y-o-y, they showed an increase of 131 tb/d, or 27%. Accordingly, **Japan's net imports increased in March by 57 tb/d to average 3.9 mb/d**.

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

	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16
Crude oil	3,402	3,462	3,559	97
Total products	143	-85	-146	-60
Total crude and products	**3,545**	**3,377**	**3,414**	**37**

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

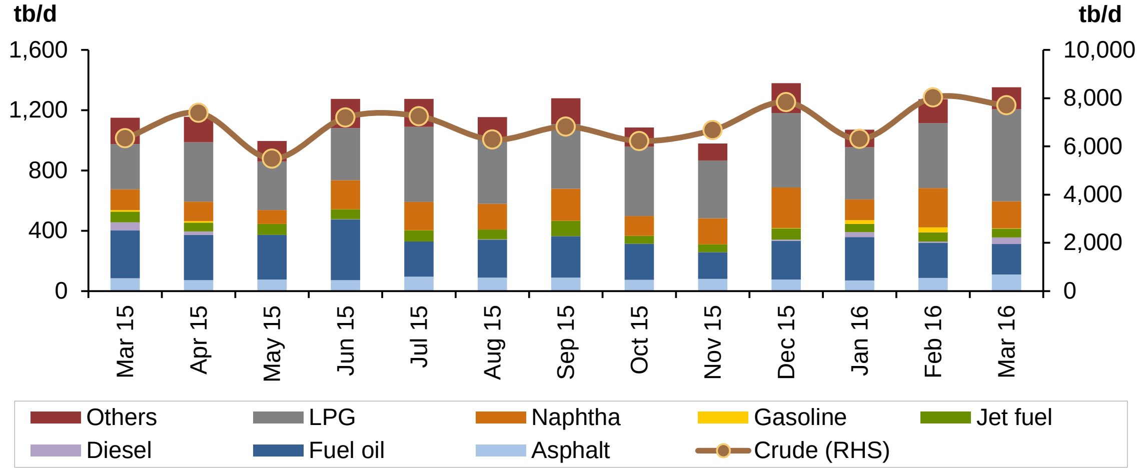
China

Following the record-high levels reached in February, China's **crude imports** dropped by 327 tb/d, or 4%, in March from the previous month to average 7.7 mb/d, however they remained higher from last year by a remarkable 1.4 mb/d. On a y-t-d basis, the figures reflect an increase of 804 tb/d or 12%.

As for the **crude oil supplier share**, Russia ,Saudi Arabia and Angola were the top suppliers to China in March, accounting for 14%, 12% and 11%, respectively. Crude imports from Russia increased from a month before by 61 tb/d to average 1.1 mb/d. Imports from Saudi Arabia and Angola were lower from the month before by 443 tb/d and 352 tb/d, respectively. In March, China's refinery runs showed an increase from a month before by 75 tb/d.

China's **product imports** went up by 81 tb/d and 203 tb/d from the previous year and previous month, respectively.

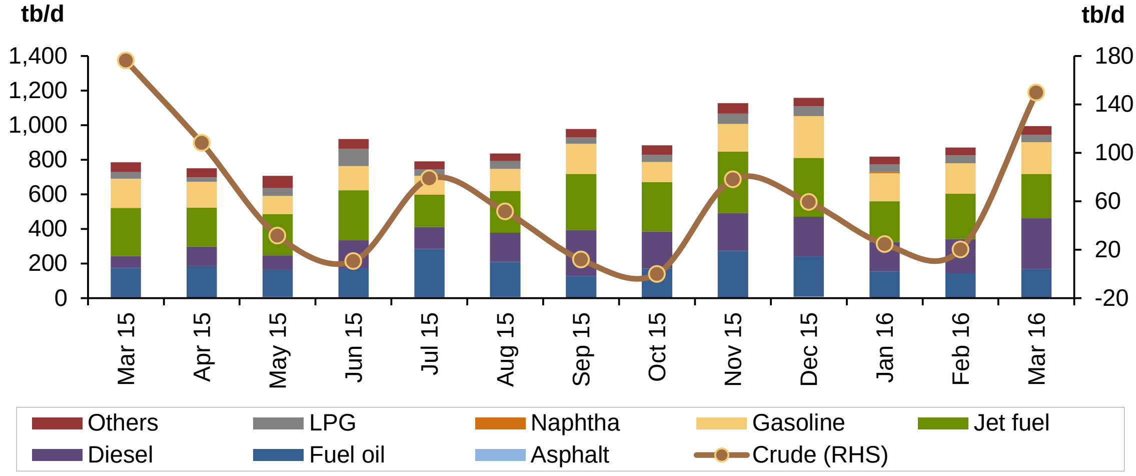
Graph 8.5: China's imports of crude and petroleum products



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

In March, China **exported** 994 tb/d of **products**, up by 14% from February, while **crude oil exports** reached the level of 150 tb/d, the highest since March 2016.

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



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

As a result, **China's net oil imports dropped by 499 tb/d from the previous month to average 7.9 mb/d**, while remaining above last year's level by 1.4 mb/d.

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

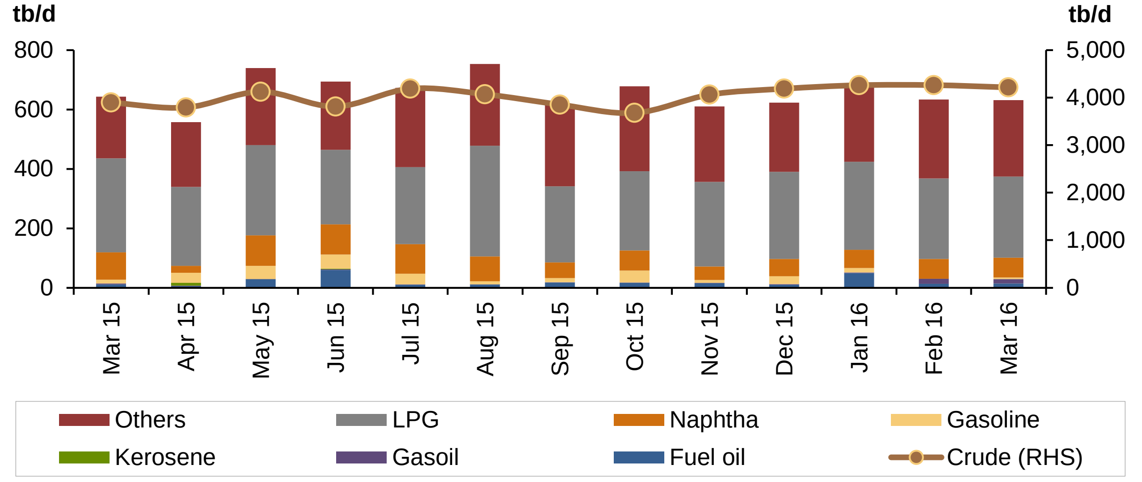
	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16
Crude oil	6,278	8,006	7,550	-457
Total products	252	401	359	-42
Total crude and products	**6,530**	**8,408**	**7,908**	**-499**

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

India

India's **crude oil imports** dropped in March from the previous month by 48 tb/d, or 1%, while on a y-o-y comparison, they increased by 320 tb/d, or 8%, to average 4.2 mb/d. India's **product imports** were stable from the previous month, averaging 361 tb/d in March. India's **product exports** declined in March from the previous month by 169 tb/d, or 10%, while they showed a rise from a year earlier by the same amount.

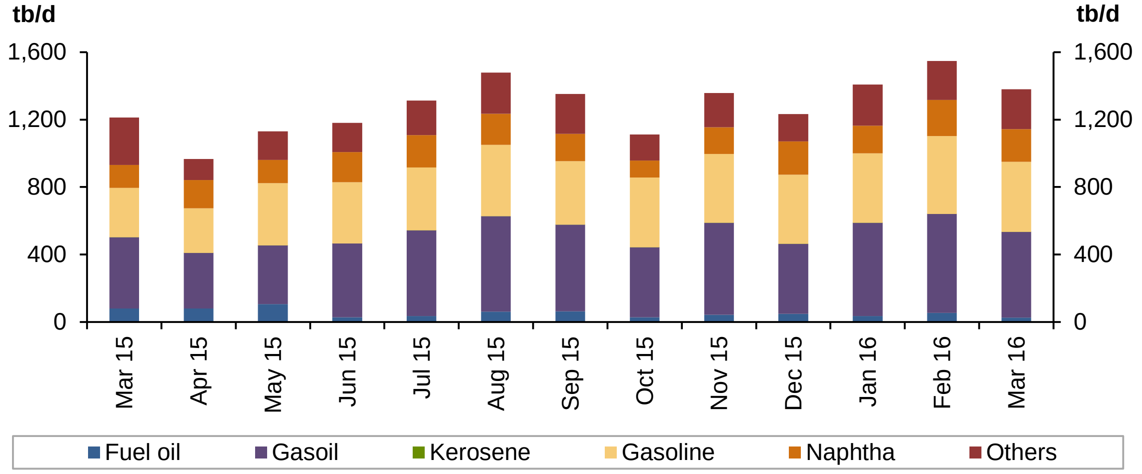
Graph 8.7: India's imports of crude and petroleum products



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

In March, India's **product exports** reached the lowest level seen since the beginning of the year, mainly as exports of diesel, petrol and fuel oil were lower than during the previous month.

Graph 8.8: India's exports of petroleum products



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

Therefore, **India's net imports increased by 118 tb/d, or 4%, m-o-m and by 140 tb/d, or 4%, from last year to average 3.5 mb/d**.

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

	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16
Crude oil	4,259	4,261	4,213	-48
Total products	-733	-914	-748	166
Total crude and products	**3,526**	**3,347**	**3,465**	**118**

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 March, **total crude oil exports from the Former Soviet Union (FSU) dropped by 548 tb/d, or 8%, to average 6.3 mb/d.** On the other hand, crude exports through Russian pipelines increased by 146 tb/d, or 3.5%, to average 4.3 mb/d.

Total shipments from the **Black Sea** rose by 229 tb/d, or 43%, to average 765 tb/d. Total **Baltic Sea** exports dropped by 76 tb/d in March as shipments from the Primorsk port terminal declined, while the drop was offset by increased exports from Ust Luga port terminal, which increased by 32 tb/d from the previous month. The **Druzhba pipeline** total shipment dropped by 60 tb/d to average 1,030 tb/d and **Kozmino** shipments increased by 54 tb/d, or 9%, to average 626 tb/d.

Exports through the **Lukoil system** went up slightly by 7 tb/d from the previous month in the Barents Sea, while it stayed almost flat in Baltic Sea. The other routes showed mostly a drop in March from a month before as exports from the Mediterranean Sea dropped significantly from a month before, decreasing by 768 tb/d.

Russia's **Far East total exports** were up by 74 tb/d, or 22%, from the previous month as exports from the De Kastri port terminal and the Aniva Bay port terminal increased by 31 tb/d and 43 tb/d, respectively.

FSU's total product exports increased by 334 tb/d, or 11%, from last month to average 3.3 mb/d. This gain came mainly as a result of higher exports of fuel oil, which increased by 355 tb/d from the previous month, while exports of gasoline and naphtha dropped from a month before by 66 tb/d and 38 tb/d, respectively.

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

		2014	3Q15	4Q15	Feb 16	Mar 16
Transneft system						
Europe	**Black sea total**	**605**	**533**	**653**	**536**	**765**
	Novorossiysk port terminal - total	605	533	653	536	765
	of which: Russian oil	438	396	502	432	583
	Others	166	137	151	104	181
	Baltic sea total	**1,304**	**1,492**	**1,511**	**1,577**	**1,501**
	Primorsk port terminal - total	842	955	922	1,002	893
	of which: Russian oil	834	955	922	1,002	893
	Others	8	0	0	0	0
	Ust-Luga port terminal - total	462	536	590	575	607
	of which: Russian oil	284	323	359	350	375
	Others	177	213	231	225	233
	Druzhba pipeline total	**1,005**	**1,077**	**1,044**	**1,090**	**1,030**
	of which: Russian oil	973	1,045	1,012	1,058	998
	Others	32	32	32	32	32
Asia	**Pacific ocean total**	**507**	**647**	**617**	**572**	**626**
	Kozmino port terminal - total	507	647	617	572	626
	China (via ESPO pipeline) total	**342**	**341**	**349**	**349**	**349**
	China Amur	342	341	349	349	349
Total Russian crude exports		**3,763**	**4,090**	**4,174**	**4,124**	**4,270**
Lukoil system		**2014**	**3Q15**	**4Q15**	**Feb 16**	**Mar 16**
Europe & N. America	**Barents sea total**	**120**	**136**	**161**	**162**	**169**
	Varandey offshore platform	120	136	161	162	169
Europe	**Baltic sea total**	**12**	**14**	**19**	**20**	**19**
	Kalinigrad port terminal	12	14	19	20	19
Other routes		**2014**	**3Q15**	**4Q15**	**Feb 16**	**Mar 16**
Asia	**Russian Far East total**	**275**	**347**	**369**	**344**	**418**
	Aniva bay port terminal	112	114	118	99	141
	De Kastri port terminal	162	233	251	246	277
	Central Asia total	**228**	**211**	**199**	**205**	**192**
	Kenkiyak-Alashankou	228	211	199	205	192
Europe	**Black sea total**	**982**	**1,068**	**1,158**	**1,182**	**1,192**
	Novorossiysk port terminal (CPC)	855	961	1,029	1,031	1,066
	Supsa port terminal	80	96	94	109	86
	Batumi port terminal	39	11	35	42	39
	Kulevi port terminal	9	0	0	0	0
	Mediterranean sea total	**602**	**613**	**485**	**768**	**0**
	BTC	602	613	727	768	0
Russian rail		**2014**	**3Q15**	**4Q15**	**Feb 16**	**Mar 16**
	Russian rail	**46**	**13**	**17**	**14**	**12**
	of which: Russian oil	8	*9*	*10*	*10*	*8*
	Others	38	3	7	5	4
Total FSU crude exports		**6,028**	**6,492**	**6,582**	**6,820**	**6,271**
Products		**2014**	**3Q15**	**4Q15**	**Feb 16**	**Mar 16**
	Gasoline	124	145	226	284	218
	Naphtha	485	519	514	501	463
	Jet	5	23	25	28	42
	Gasoil	933	863	1,125	1,138	1,208
	Fuel oil	1,487	1,204	1,079	829	1,184
	VGO	245	264	222	206	205
Total FSU product exports		**3,280**	**3,018**	**3,190**	**2,986**	**3,320**
Total FSU oil exports		**9,308**	**9,510**	**9,772**	**9,806**	**9,591**

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

OECD commercial oil stocks fell in March to stand at 3,049 mb. At this level, they are around 361 mb above the latest five-year average. Crude and products indicate a surplus of around 216 mb and 146 mb above the seasonal norm respectively. In terms of days of forward cover, OECD commercial stocks stand at 66.8 days, 7.5 days higher than the latest five-year average.

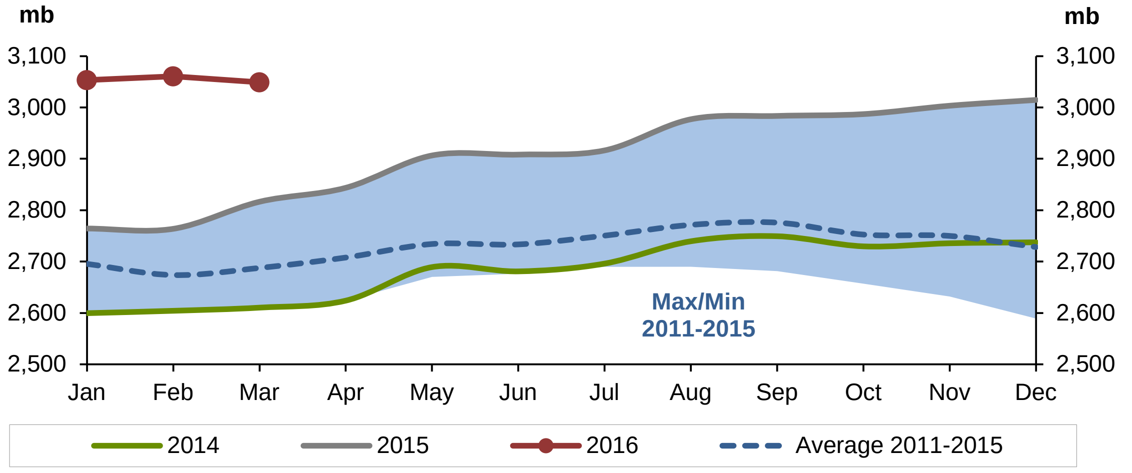
Preliminary data for April shows that total commercial oil stocks in the US rose by 13.8 mb to stand at 1,370.8 mb. At this level, they were 255 mb higher than the latest five-year average. Within the components, the bulk of the build came from crude as they rose by 13.5 mb, while products rose only by 0.3 mb.

The latest information for China showed a slight build of 0.3 mb in in total commercial oil inventories in March to stand at 408.7 mb. Within the components, crude fell by 0.9 mb, while product stocks rose by 1.2 mb.

OECD

Preliminary data for March shows that **total OECD commercial oil stocks** fell by 11.5 mb to stand at 3,049 mb. At this level, OECD commercial oil stocks are around 232 mb higher than the same time one year ago and 361 mb above the latest five-year average. Within the components, crude rose by 6.6 mb, while products fell by 18.1 mb. All the OECD regions experienced a drop with the bulk coming from OECD Europe. It should be mentioned that the rate of OECD stock build has slowed down in 1Q16 compared to the same period last year. Indeed, last year during 1Q15, OECD inventories experienced build of 79 mb compared to 34 mb this quarter. OECD Americas and OECD Europe added extra barrels of 37 mb and 55 mb between January and March 2015, while this year, both regions added only 28 mb and 22 mb, respectively.

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 rose by 6.6 mb ending March at 1,544 mb, standing 102 mb above the same time one year earlier and nearly 215 mb higher than the latest five-year average. OECD North America and OECD Asia Pacific experienced a build, while OECD Europe stocks saw a drop.

In contrast, OECD product inventories fell in March by 18.1 mb for the second month to stand at 1,505 mb. At this level, product inventories stood 130 mb higher than a year ago at the same time, and were 146 mb above the seasonal norm. All OECD regions witnessed stock-draws.

In terms of days of forward cover, OECD commercial stocks remained unchanged in March ending the month at 66.8 days. At this level, they are 4.8 days above the previous year in the same period and 7.5 days higher than the latest five-year average. Within the regions, OECD Americas' days of forward cover were 9.4 days higher than the historical average to stand at 66.3 days in March. OECD Asia Pacific stood 3.4 days above the seasonal average to finish the month of March at 55.1 days. At the same time, OECD Europe indicated a surplus of 6.5 days above the seasonal norm, averaging 74.2 days in March.

Commercial stocks in **OECD Americas** fell slightly by 0.5 mb in March, ending the month at 1,619 mb. At this level, they represented a surplus of 136 mb above a year ago and 263 mb higher than the seasonal norm. Within components, crude stocks rose by 10.2 mb, while products fell by 10.7 mb.

At the end of March, **crude commercial oil stocks** in **OECD Americas** rose, ending the month at 861 mb, which was 72 mb above the same time one year ago, and 168 mb above the latest five-year average. The build in crude inventories was mainly driven by lower crude runs in the US, combined with higher crude imports. In contrast, **product stocks in OECD Americas** declined by 10.7 mb, ending March at 758 mb. Despite this drop, they indicated a surplus of 63 mb above the same time one year ago, and were 94 mb higher than the seasonal norm. The drop in product stocks came mainly from lower refinery output.

OECD Europe's commercial stocks fell by 7.3 mb in March, reversing the build of the last seven months. At 1,011 mb, they were 70 mb higher than the same time a year ago and they were 78 mb above the latest five-year average. Crude and product stocks fell by 5.1 mb and 2.2 mb, respectively.

OECD Europe's commercial crude stocks fell in March ending the month at 422 mb. At this level, they are 6.6 mb above the same period a year earlier and 25 mb above the latest five-year average. The decline in March's crude oil stocks came mainly from lower production in the region outpacing the declined in refinery runs as some refiners carried out planned maintenance. **OECD Europe's commercial product stocks** also fell by 2.2 mb to end March at 589 mb. At this level, OECD Europe's commercial product stocks were 63 mb higher than a year ago at the same time, and 53 mb higher than the seasonal norm. This fall was mainly driven by lower refinery output.

OECD Asia Pacific commercial oil stocks fell by 3.7 mb in March for the third consecutive month. At 419 mb, they were 27 mb higher than a year ago and 20 mb above the five-year average. Within the components, crude rose by 1.5 mb, while product stocks went down by 5.2 mb. In March, crude inventories ended the month at 262 mb, and indicated a surplus of 23 mb higher than a year ago and 22 mb above the seasonal norm. OECD Asia Pacific's total product inventories ended March at 157 mb, standing at 4.6 mb above the same time a year ago, while they stood 1.7 mb below the seasonal norm.

Table 9.1: OECD's commercial stocks, mb

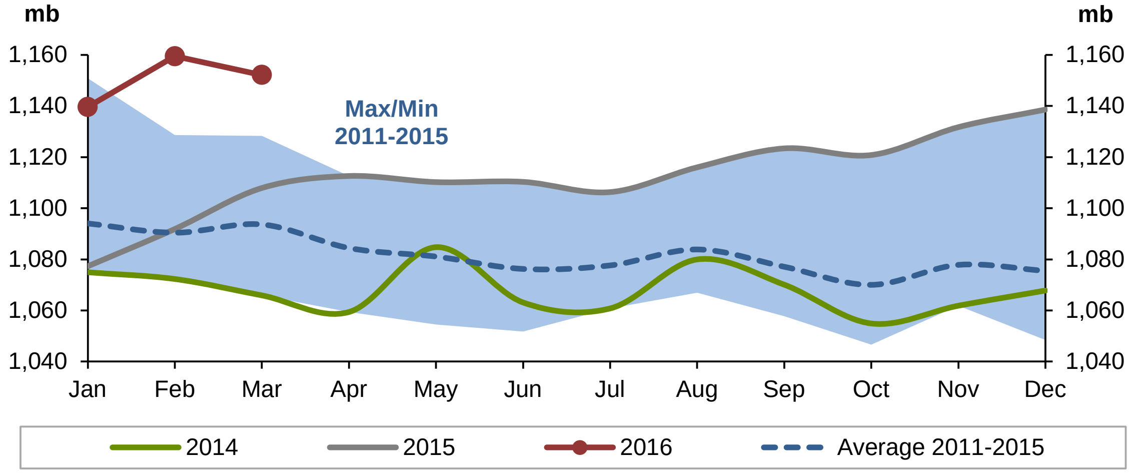
	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16	Mar 15
Crude oil	1,519	1,538	1,544	6.6	1,443
Products	1,534	1,523	1,505	-18.1	1,374
Total	**3,053**	**3,060**	**3,049**	**-11.5**	**2,816**
Days of forward cover	**65.5**	**66.8**	**66.8**	**0.0**	**62.0**

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

EU plus Norway

Preliminary data for March shows that total **European stocks** drew by 7.3 mb to stand at 1,152 mb. At this level, European stocks are 44.2 mb or 4.0% above the same time a year ago and 58.5 mb or 5.3% higher than the latest five-year average. Crude and products fell by 5.1 mb and 2.2 mb, respectively.

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



Source: Euroilstock .

European crude inventories fell in March, reversing the build of last month to stand at 485.7 mb. This was 5.1 mb or 8.4% below the same period a year ago, but 17.5 mb higher than the seasonal norm. The decline in March's crude oil stocks came mainly from lower production in the region as refinery runs decreased on the back of some refiners carrying out planned maintenance.

European product stocks also fell by 2.2 mb to end March at 666.4 mb. At this level, European product stocks were 51.5 mb above the same time a year ago, and 41 mb or 6.5% above the seasonal norm. Within products, all product stocks experienced a draw, with the bulk coming from residual fuel stocks.

Gasoline stocks fell by 0.7 mb in March to stand at 119.6 mb. With this stock-draw, gasoline stocks are 5.1 mb, or 4.1%, below a year earlier, but they are 3.6 mb, or 3.1%, higher than the seasonal norm. The fall in gasoline stocks could be driven by higher demand in the region and lower refinery output in the region.

Distillate stocks also fell slightly, by 0.1 mb, to end March at 443.1 mb. At this level, distillate stocks were 50.3 mb, or 12.8%, higher than the same time last year and 53.4 mb, or 13.7%, above the latest five-year average. Residual fuel oil stocks also fell by 1.4 mb in March, to stand at 79.5 mb. At this level, residual fuel oil stocks stood at 5.8 mb, or 7.9%, above the same month a year ago, but remained 5.5 mb, or 6.4%, lower than the latest five-year average. The fall in residual fuel oil stocks reflects mainly the increase in bunker fuel demand. Naphtha stocks remained unchanged at 24.0 mb, which 5.8 mb, or 7.9%, higher than the same time a year ago and 5.5 mb, or 6.4%, lower than the seasonal average.

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

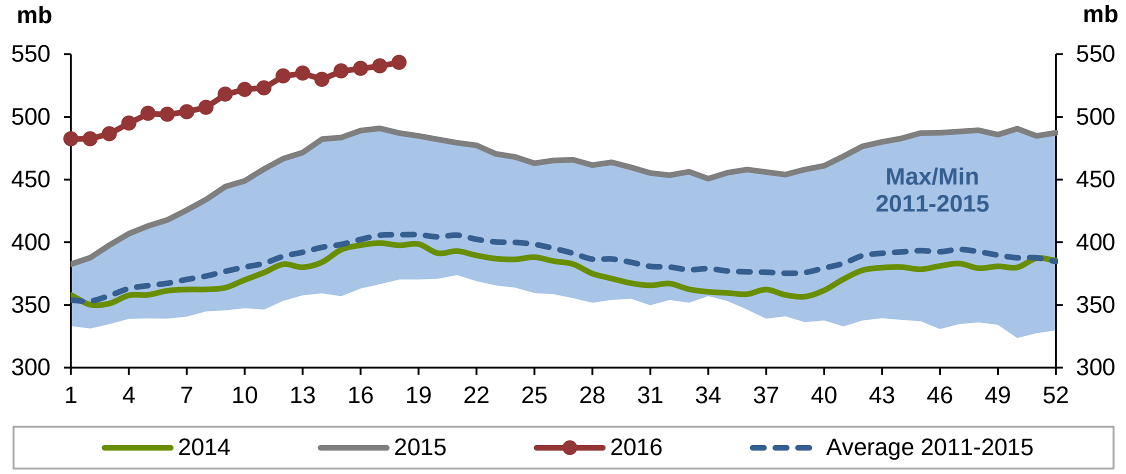
	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16	Mar 15
Crude oil	**482.9**	**490.9**	**485.7**	**-5.1**	**493.0**
Gasoline	112.5	120.3	119.6	-0.7	124.7
Naphtha	22.4	24.2	24.2	0.0	23.8
Middle distillates	443.3	443.3	443.1	-0.1	392.8
Fuel oils	78.4	80.9	79.5	-1.4	73.7
Total products	**656.7**	**668.6**	**666.4**	**-2.2**	**614.9**
Total	**1,139.6**	**1,159.4**	**1,152.1**	**-7.3**	**1,107.9**

Sources: Argus and Euroilstock.

US

Preliminary data for April shows that **total commercial oil stocks** in the US rose by 13.8 mb to stand at 1370.8 mb. At this level, they were 126.4 mb, or 10.2%, above the same period a year ago and 255 mb, or 22.8%, higher than the latest five-year average. Within the components, the bulk of the build came from crude, which rose by 13.5 mb, while products rose only by 0.3 mb.

Graph 9.3: US weekly commercial crude oil stocks

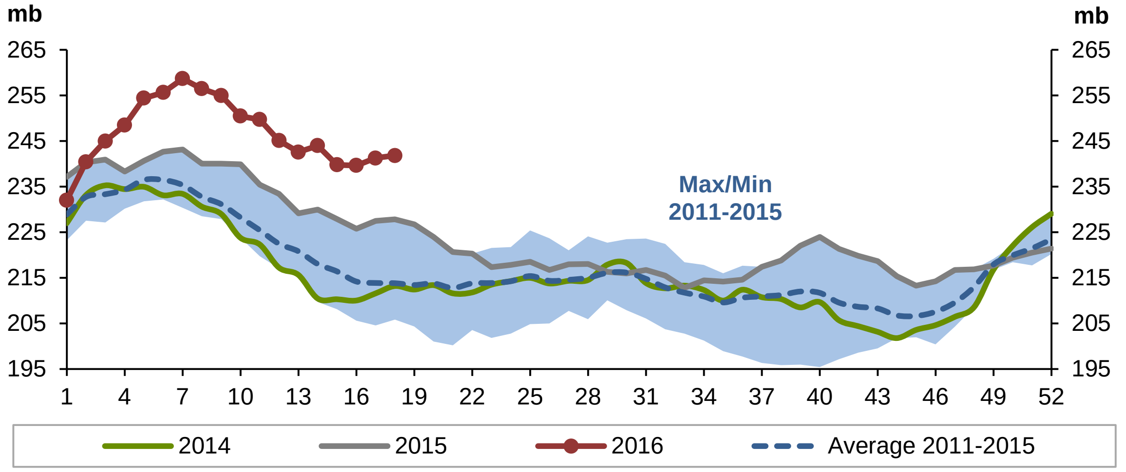


Sources: US Energy Information Administration and OPEC Secretariat.

US commercial crude stocks rose in April for the fourth consecutive month to reach 543.4 mb. Over the last four months, US commercial crude stocks accumulated nearly 49 mb, and stood at 66 mb, or 12.4%, above the same time one year ago and 138 mb, or 34.2%, above the latest five-year average. The build in crude oil came despite broadly unchanged imports, averaging 7.8 mb/d. Higher crude runs further limited the build in crude oil stocks. Crude runs rose by 90,000 b/d to stand at 16.1 mb/d. This corresponds to a refinery utilization rate of around 90%, or around 0.5 percentage points (pp) higher than the previous month. In April, crude commercial inventories at Cushing, Oklahoma, stood at 66.3 mb, almost the same level as the previous month.

Total product stocks also rose by 0.3 mb in April to stand at 827.4 mb. At this level, US product stocks were around 66.4 mb, or 8.7 %, above the level seen at the same time a year ago, showing a surplus of 116.2 mb, or 15.8 %, above the seasonal norm.

Graph 9.4: US weekly gasoline stocks



Sources: US Energy Information Administration and OPEC Secretariat.

Within products, the picture was mixed. **Gasoline stocks** fell by 22 mb in April to stand at 241.8 mb, but remained 13.4 mb or 5.8% higher than the same period a year ago, and 25.7 mb, or 11.9%, above the latest five-year average. The drop in gasoline stocks came mainly from higher gasoline demand, which increased by about 100,000 b/d to stand at 9.5 mb/d.

Distillate stocks also fell by 6.0 mb in April, ending the month at 157.0 mb. At this level, they indicated a surplus of 28.0 mb, or 22%, from the same period a year ago, and stood 30.5 mb, or 24.2%, above the latest five-year average. The fall in middle distillate stocks was mainly driven by higher demand, which increased by 370,000 b/d to stand at nearly 4.0 mb/d.

Residual fuel oil inventories fell by 1.8 mb to 42.2 mb, which was 2.5 mb, or 8.5%, higher than the previous year over the same period and 4.5 mb, or 12.0%, above the seasonal norm. **Jet fuel** stocks also fell by 2.5 mb, ending April at 42.2 mb. At this level, jet fuel stocks stood 3.7 mb, or 10%, higher than the same month a year ago, and were 2.8 mb, or 7.0%, higher than the latest five-year average.

Table 9.3: US onland commercial petroleum stocks, mb

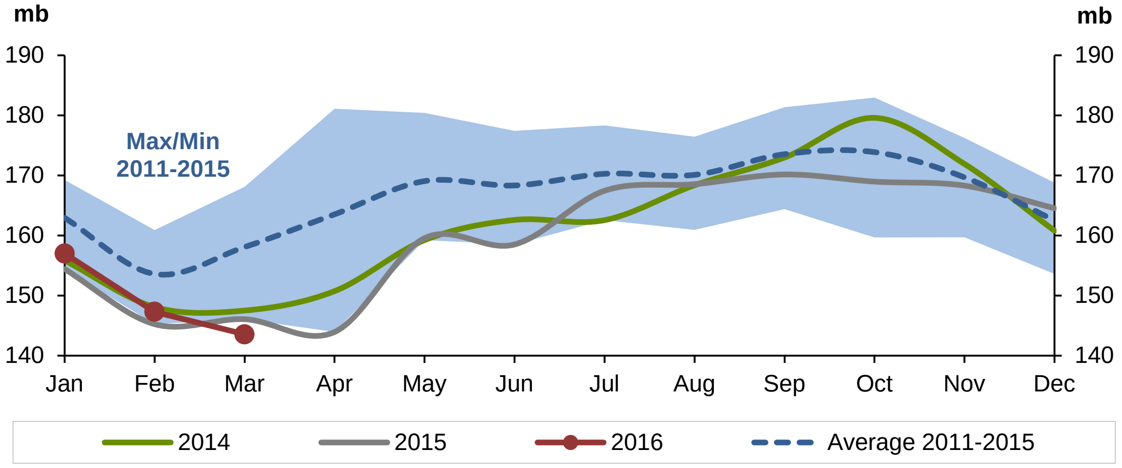
				Change	
	Feb 16	**Mar 16**	**Apr 16**	**Apr 16/Mar 16**	**Apr 15**
Crude oil	519.7	529.9	543.4	13.5	483.4
Gasoline	255.6	244.0	241.8	-2.2	228.4
Distillate fuel	162.7	163.0	157.0	-6.0	129.0
Residual fuel oil	46.0	44.2	42.4	-1.8	39.1
Jet fuel	42.2	44.6	42.2	-2.5	38.4
Total	**1,349.5**	**1,357.0**	**1,370.8**	**13.8**	**1,244.4**
SPR	695.1	695.1	695.1	0.0	690.9

Source: US Energy Information Administration.

Japan

In Japan, total **commercial oil stocks** fell by 3.7 mb in March for the sixth consecutive month to stand at 143.6 mb. At this level, Japanese commercial oil inventories stood at 2.5 mb, or 1.7%, lower than a year ago at the same time, but were 14.5 mb or 9.2% below the five-year average. Within the components, crude stocks went up by 1.5 mb, while products experienced a stock draw by 5.2 mb.

Graph 9.5: Japan's commercial oil stocks



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

In March, Japanese commercial **crude oil stocks** rose, ending the month at 88.5 mb, 0.4 mb above a year ago at the same time, but remained 7.0 mb or 7.3% below the seasonal norm. The build in crude stocks came on the back of higher crude oil imports, which increased by about 97,000 b/d or 2.8% to stand at 3.6 mb/d. The fall in crude runs also contributed to the build in crude oil stocks. Indeed, Japanese crude throughput averaged 3.4 mb/d, a decline of 30,000 b/d from the previous month. This corresponds to refinery run rate at 86.2%, 2.0 pp less than last month.

In contrast, Japan's **total product inventories** fell by 5.2 mb in March, ending the month at 55.1 mb. At this level, product stocks stood 2.9 mb, or 5.0%, below the same time a year ago, and showed a deficit of 7.6 mb, or 12.1%, with the five-year average. The fall was mainly driven by lower product imports, which decreased by more than 90,000 b/d, to average 0.5 mb/d. However, the fall in oil product sales - a continued decline in the use of fuel oil for power generation - limited a further oil product stocks draw. Japanese oil product sales fell by 150,000 b/d or 4.5% versus the previous month to stand at 3.4 mb/d. Within products, the picture was mixed; gasoline, distillates and naphtha experienced draws, while residual fuel oil witnessed a slight build.

Distillate stocks fell by 3.4 mb in March to stand at 20.5 mb. At this level, distillate stocks were 3.1 mb, or 13.1%, below the same period a year ago and 4.2 mb, or 16.9%, less than the seasonal average. Within distillate components, Jet fuel, kerosene and gasoil inventory fell by 7.1%, 16.6% and 17.8% respectively. The fall in distillate components stocks was driven by lower output, combined with a decline in imports.

Gasoline stocks fell slightly by 0.1 mb, ending March at 10.7 mb. At this level, they indicated a deficit of 0.1 mb, or 0.6%, with the same time a year ago, and they were 2.0 mb or 15.5% below the latest five-year average. This fall in gasoline stocks was mainly driven by higher gasoline demand, which increased by 10.8%. Higher gasoline output limited a further gasoline stock draw.

Naphtha inventories also fell by 1.7 mb in March to stand at 10.9 mb, which was 0.4 mb, or 4.2%, higher than a year ago at the same time, and 0.6 mb, or 6.0%, higher than the seasonal norm. This fall was driven mainly by lower output, which declined by nearly 10%.

In contrast, total residual **fuel oil stocks** rose slightly, by 0.1 mb in March, to stand at 13.0 mb, which was 0.2 mb, or 1.2%, below a year ago and 2.0 mb, or 13.5%, lower than the latest five-year average. Within the fuel oil components, fuel oil A rose by 2.2%, while fuel oil B.C fell by 2.5% The build in fuel oil A was driven by higher production, which increased by 3.5%, while the fall in fuel oil B.C stocks reflect higher domestic sales, which increased by 6.0%.

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

	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16	Mar 15
Crude oil	**91.2**	**87.0**	**88.5**	**1.5**	**88.1**
Gasoline	11.3	10.9	10.7	-0.1	10.8
Naphtha	10.8	12.5	10.9	-1.7	10.5
Middle distillates	29.7	23.9	20.5	-3.4	23.6
Residual fuel oil	14.0	12.9	13.0	0.1	13.2
Total products	**65.8**	**60.3**	**55.1**	**-5.2**	**58.0**
Total**	**157.0**	**147.3**	**143.6**	**-3.7**	**146.1**

*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 slight build of 0.3 mb in in **total commercial oil inventories** in March following a massive build of 27.5 mb in February. At 408.7 mb, Chinese commercial oil inventories were 2.2 mb lower than the previous year at the same time. Within the components, crude fell by 0.9 mb, while product stocks rose by 1.2 mb.

In March, **commercial crude stocks** fell to 237.9 mb reversing the build during last month. At this level, they are 12.0 mb below last year at the same time. The fall in crude oil commercial stocks is mainly attributed to higher crude throughput which increased by 7.6%. Lower crude oil imports also contributed to the crude stock draw.

In contrast, total **product stocks** in China rose by 1.2 mb in March, ending the month at 170.8 mb. At this level, products stocks were 9.8 mb higher than a year ago at the same time. Within products, gasoline and kerosene witnessed builds, while diesel stocks dropped.

Gasoline stocks went up by 6.2 mb, ending the month of March at 62.8 mb. This build was driven by higher gasoline output, combined with lower demand as the traditional festivals ended. Kerosene stocks also rose by 0.9 mb, ending March at 18.2 mb, which is 3.0 mb higher than last year at the same time. Diesel stocks fell by 6.0 mb in March, reversing the considerably in February. At 89.8 mb, Chinese diesel stocks are 3.8 mb higher than a year ago at the same period. This fall was driven by the restart of plant and infrastructure projects after holiday's period pushing more diesel demand.

Table 9.5: China's commercial oil stocks, mb

	Jan 16	Feb 16	Mar 16	*Change* Mar 16/Feb 16	Mar 15
Crude oil	**234.6**	**238.8**	**237.9**	**-0.9**	**249.9**
Gasoline	61.0	56.6	62.8	6.2	52.3
Diesel	69.3	95.8	89.8	-6.0	93.6
Jet kerosene	16.0	17.2	18.2	0.9	15.2
Total products	**146.3**	**169.6**	**170.8**	**1.2**	**161.0**
Total	**380.8**	**408.4**	**408.7**	**0.3**	**410.9**

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of March, **product stocks in Singapore** fell by 4.1 mb, reversing the massive build of 10.4 mb in February. At 53.2 mb, product stocks in Singapore were 9.5 mb, or 21.7%, above the same period a year ago. Within products, the picture was mixed; light distillates and fuel oil stocks saw a drop, while middle distillate inventories experienced builds.

Middle distillate stocks rose by 0.5 mb, finishing the month of March at 13.0 mb, which was 2.6 mb, or 24%, above the same time a year ago. The increase in middle distillate stocks is mainly driven by lower demand in the region. Higher arrivals from Europe also contributed to this build. In contrast, **light distillate** stocks fell by 0.8 mb to stand at 14.8 mb, which was 1.4 mb or 10.3% above the previous year at the same time. **Residual fuel oil stocks** also fell by 3.9 mb, ending March at 25.4 mb, which was 5.6 mb, or 28%, higher than at the same time a year ago. Residual fuel oil stocks were higher during the first two weeks of the month reflecting higher arrivals from Europe, before drawing sharply over the last two weeks.

Product stocks in Amsterdam-Rotterdam-Antwerp (ARA) fell by 1.2 mb in March to end the month at 50.0 mb. At this level, product stocks were 7.2 mb, or 16.9%, higher than at the same time a year ago. Within products, all products showed stock draws, with the exception of gasoil.

Gasoil rose by 1.1 mb in March ending the month at 26.1 mb, which was 4.5 mb, or 20.6%, above last year at the same time. The increase in middle distillate stocks is mainly driven by lower demand in the region. In contrast, **gasoline** fell by 0.7 mb ending March at 9.7 mb, which was 1.1 mb, or 13.2%, above the same month last year. Fuel oil stocks also fell by 0.7 mb to stand at 7.3 mb, which was 1.0 mb, or 16%, higher than a year ago. This fall was mainly driven by higher exports towards the Singapore hub.

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 level a year earlier. In 2016, the demand for OPEC crude is projected at 31.5 mb/d, unchanged from the last report and 1.8 mb/d higher than the previous 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 level a year earlier. Within the quarters, both 1Q15 and 3Q15 remained unchanged, while 2Q15 was revised down by 0.1 mb/d and 4Q15 revised up by 0.1 mb/d. 1Q15 fell by 0.8 mb/d, while 2Q15 remained flat. 3Q15 and 4Q15 rose by 0.1 mb/d and 0.5 mb/d, respectively, versus the same quarter last year.

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

	2014	1Q15	2Q15	3Q15	4Q15	2015
(a) World oil demand	**91.44**	**91.94**	**92.01**	**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**	**30.63**	**30.34**	**29.71**
OPEC crude oil production	30.77	30.99	31.87	32.23	32.25	31.84
Balance	1.00	2.21	2.80	1.60	1.91	2.13

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

Forecast for 2016

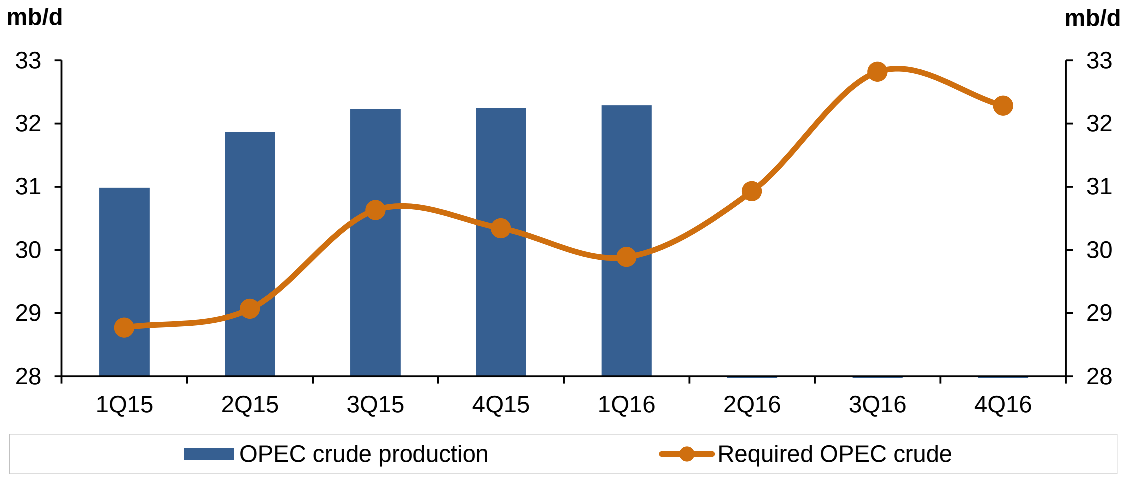
Demand for OPEC crude for 2016 remained unchanged from the previous report and is projected to increase by 1.8 mb/d, to average 31.5 mb/d. Within the quarters, both the 2Q16 and 4Q16 remained unchanged, while 1Q16 and 3Q16 were revised up by 0.1 mb/d each. 1Q16 and 2Q16 are expected to increase by 1.1 mb/d and 1.9 mb/d, respectively, while 3Q16 and 4Q16 are projected to increase by 2.2 mb/d and 1.9 mb/d, respectively.

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

	2015	1Q16	2Q16	3Q16	4Q16	2016
(a) World oil demand	**92.98**	**93.08**	**93.26**	**95.16**	**95.17**	**94.18**
Non-OPEC supply	57.14	56.95	56.06	56.04	56.55	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**	**63.20**	**62.33**	**62.34**	**62.89**	**62.69**
Difference (a-b)	**29.71**	**29.89**	**30.93**	**32.82**	**32.28**	**31.49**
OPEC crude oil production	31.84	32.29				
Balance	2.13	2.40				

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	46.5	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	25.1	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	20.9	20.4	20.4	20.5	20.5
Europe	3.8	3.6	3.6	3.7	3.8	3.7	3.9	3.8	3.8	3.6	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	0.5	0.5	0.4	0.5
DCs	11.0	11.1	11.3	11.6	11.5	11.4	11.5	11.5	11.3	11.5	11.5	11.6	11.5
FSU	13.4	13.6	13.5	13.8	13.7	13.6	13.7	13.7	14.0	13.7	13.6	13.6	13.7
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	57.0	56.1	56.0	56.5	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**	**63.2**	**62.3**	**62.3**	**62.9**	**62.7**
OPEC crude oil production (secondary sources)	31.9	31.0	30.8	31.0	31.9	32.2	32.2	31.8	32.3				
Total supply	89.6	90.2	92.4	94.2	94.8	95.5	95.9	95.1	95.5				
Balance (stock change and miscellaneous)	0.5	-0.3	1.0	2.2	2.8	1.6	1.9	2.1	2.4				
OECD closing stock levels (mb)													
Commercial	2,683	2,589	2,738	2,816	2,908	2,984	3,015	3,015	3,049				
SPR	1,547	1,584	1,580	1,583	1,585	1,579	1,587	1,587	1,591				
Total	4,230	4,174	4,318	4,399	4,493	4,563	4,601	4,601	4,639				
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	66.8				
SPR	33.6	34.7	34.2	34.9	34.1	34.1	34.1	34.2	34.8				
Total	91.9	91.3	93.5	96.9	96.6	98.5	98.9	99.2	101.7				
Memo items													
FSU net exports	8.9	9.0	8.9	9.3	9.4	8.9	8.7	9.1	9.5	9.3	8.8	8.6	9.0
(a) - (b)	**31.5**	**31.3**	**29.8**	**28.8**	**29.1**	**30.6**	**30.3**	**29.7**	**29.9**	**30.9**	**32.8**	**32.3**	**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	-	-	-	-0.1	-0.1	-	-	-	-	-0.1	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	-0.1	-	0.1	-	-	-0.1	-	0.1	-	-
World demand growth	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC supply													
OECD	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
FSU	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-0.1	-0.1	-	-	-0.1
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	0.1	-	-0.1	-	0.1	0.1	-
Total non-OPEC supply growth	-	-	-	-	-	-	0.1	-	-0.1	-	0.1	-	-
OPEC NGLs + non-conventionals	-	-	-	-0.1	-	-	-0.1	-	-0.1	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-0.1	-	-	-0.1	-	-0.2	-	-	-	-
OPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	-				
Total supply	-	-	-	-0.1	-	-	-0.1	-	-0.2				
Balance (stock change and miscellaneous)	-	-	-	-	-	-	-0.1	-	-0.1				
OECD closing stock levels (mb)													
Commercial	-	-	-	-	-	-	1	1	-				
SPR	-	-	1	1	1	1	1	1	-				
Total	-	-	1	1	1	1	2	2	-				
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	-	-	-	0.1	0.1	0.1	0.1
(a) - (b)	-	-	-	-	-0.1	-	0.1	-	0.1	-	0.1	-	-

*Note: * This comparesTable 10.3 in this issue of the MOMR with Table 10.3 in the April 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**	**2,816**	**2,908**	**2,984**	**3,015**	**3,049**
	Americas	1,365	1,316	1,446	1,591	1,387	1,416	1,446	1,483	1,537	1,572	1,591	1,619
	Europe	912	881	886	989	889	898	886	941	941	967	989	1,011
	Asia Pacific	405	392	405	434	405	436	405	392	430	445	434	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**	**1,591**
	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	418
OECD total		**4,230**	**4,174**	**4,318**	**4,601**	**4,261**	**4,328**	**4,318**	**4,399**	**4,493**	**4,563**	**4,601**	**4,639**
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	62	62	64	65	66
	Europe	68	66	67	65	64	67	66	69	67	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 15/14	1Q16	2Q16	3Q16	4Q16	2016	Change 16/15
US	10.0	11.2	13.0	14.1	14.0	14.0	1.0	13.7	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	4.6	4.4	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**	**20.9**	**20.4**	**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	-0.1
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**	**3.8**	**3.6**	**3.6**	**3.7**	**3.7**	**-0.1**
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**	**0.5**	**0.5**	**0.4**	**0.5**	**0.0**
Total OECD	**21.1**	**22.2**	**24.2**	**25.3**	**25.5**	**25.2**	**1.0**	**25.1**	**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	0.3	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**	**2.8**	**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	3.1	3.2	3.3	3.1	0.1
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**	**5.2**	**5.2**	**5.3**	**5.2**	**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**	**2.4**	**2.3**	**2.3**	**2.3**	**0.0**
Total DCs	**11.0**	**11.1**	**11.3**	**11.4**	**11.5**	**11.5**	**0.2**	**11.3**	**11.5**	**11.5**	**11.6**	**11.5**	**0.0**
FSU	**13.4**	**13.6**	**13.5**	**13.6**	**13.7**	**13.7**	**0.1**	**14.0**	**13.7**	**13.6**	**13.6**	**13.7**	**0.0**
Russia	10.5	10.6	10.7	10.8	10.9	10.8	0.2	11.1	10.9	10.9	10.9	10.9	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	0.8	0.8	0.0
FSU others	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	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**	**54.8**	**53.9**	**53.8**	**54.3**	**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**	**57.0**	**56.1**	**56.0**	**56.5**	**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**	**63.2**	**62.3**	**62.3**	**62.9**	**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* 15/14	2Q15	3Q15	4Q15	1Q16	Mar 16	Apr 16	*Change* Apr/Mar
US	1,919	1,761	1,862	977	-885	909	866	754	551	477	436	-41
Canada	364	354	380	192	-188	99	191	169	172	88	41	-47
Mexico	106	106	86	52	-34	59	42	39	36	27	23	-4
Americas	2,390	2,221	2,327	1,221	-1,107	1,067	1,098	962	759	592	500	-92
Norway	17	20	17	17	1	18	18	15	18	19	17	-2
UK	18	17	16	14	-2	14	13	12	9	10	8	-2
Europe	119	135	145	117	-28	116	109	110	104	96	90	-6
Asia Pacific	24	27	26	17	-9	17	16	15	10	8	6	-2
Total OECD	**2,533**	**2,383**	**2,499**	**1,355**	**-1,144**	**1,200**	**1,222**	**1,087**	**873**	**696**	**596**	**-100**
Other Asia	172	180	194	175	-19	175	177	167	157	156	156	0
Latin America	180	166	172	145	-27	143	149	128	83	75	66	-9
Middle East	136	102	108	102	-6	98	100	106	98	94	90	-4
Africa	7	16	28	11	-16	12	8	3	2	1	0	-1
Total DCs	**494**	**465**	**502**	**433**	**-69**	**428**	**435**	**404**	**340**	**326**	**312**	**-14**
Non-OPEC rig count	**3,027**	**2,848**	**3,000**	**1,788**	**-1,213**	**1,628**	**1,657**	**1,492**	**1,213**	**1,022**	**908**	**-114**
Algeria	36	47	48	51	3	52	51	49	52	54	55	1
Angola	9	11	15	11	-4	12	8	11	9	8	9	1
Ecuador	20	26	24	12	-12	15	12	4	3	3	3	0
Indonesia	45	38	34	27	-7	28	24	24	19	19	17	
Iran**	54	54	54	54	0	54	54	54	57	57	57	0
Iraq**	58	83	79	52	-27	53	47	51	49	48	43	-5
Kuwait**	31	32	38	47	8	49	44	42	41	41	40	-1
Libya**	9	15	10	3	-8	3	1	1	1	1	1	0
Nigeria	36	37	34	30	-4	29	28	28	27	27	25	-2
Qatar	8	9	10	8	-3	8	7	6	7	6	7	1
Saudi Arabia	112	114	134	155	21	155	154	158	157	158	154	-4
UAE	24	28	34	42	8	39	41	52	50	50	50	0
Venezuela	117	121	116	110	-6	105	114	112	111	113	111	-2
OPEC rig count	**557**	**614**	**630**	**602**	**-29**	**602**	**585**	**590**	**583**	**585**	**572**	**-13**
Worldwide rig count*	**3,584**	**3,462**	**3,631**	**2,389**	**-1,241**	**2,231**	**2,242**	**2,082**	**1,796**	**1,607**	**1,480**	**-127**
of which:												
Oil	2,594	2,611	2,795	1,727	-1,068	1,616	1,606	1,471	1,268	1,128	1,057	-71
Gas	886	746	743	563	-180	516	536	509	422	374	318	-56
Others	106	109	95	100	5	98	99	102	106	105	105	0

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.*

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Disclaimer

OPEC Basket average price

US$/b

up 3.21 in April	April 2016	37.86
	March 2016	34.65
	Year-to-date	**32.06**

April OPEC crude production

mb/d, according to secondary sources

up 0.19 in April	April 2016	32.44
	March 2016	32.25

Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
2015	2.9	2.0	2.4	0.5	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

	Jan 16	Feb 16	Mar 16	Mar 16/Feb 16	Mar 15
Crude oil	1,519	1,538	1,544	6.6	1,443
Products	1,534	1,523	1,505	–18.1	1,374
Total	**3,053**	**3,060**	**3,049**	**–11.5**	**2,816**
Days of forward cover	65.5	66.8	66.8	0.0	62.0

Next report to be issued on 13 June 2016.