

OPEC

Monthly Oil Market Report

10 February 2016

Feature article:
Review and outlook of global demand

Oil market highlights	1
Feature article	3
Crude oil price movements	5
Commodity markets	11
World economy	16
World oil demand	35
World oil supply	44
Product markets and refinery operations	58
Tanker market	65
Oil trade	69
Stock movements	77
Balance of supply and demand	85





Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

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

Website: www.opec.org

Oil market highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) declined by around 21% to average \$26.50/b in January. Ongoing excess supply, the weakening Chinese economy and lower seasonal heating demand continued to weigh on the market. Crude oil futures prices also declined significantly, with ICE Brent down \$6.98 to average \$31.93/b and Nymex WTI losing \$5.67 to average \$31.66/b. The Brent-WTI spread narrowed to just 15¢/b.

World Economy

World economic growth has been revised down to 2.9% for 2015 and 3.2% for 2016. OECD growth in 2016 has been revised lower to 2.0%, the same pace as in the previous year. In the emerging economies, China's growth in 2016 has been revised down slightly to 6.3% while India's growth has been revised lower to 7.5%. Meanwhile, increasing difficulties in both Brazil and Russia are seen pushing both economies into recession for the second consecutive year.

World Oil Demand

World oil demand growth in 2015 is expected to increase by 1.54 mb/d, unchanged from the previous report, to average 92.96 mb/d. In 2016, world oil demand is expected to grow by 1.25 mb/d, representing a marginal lower adjustment of 10 tb/d from the previous forecast, to average 94.21 mb/d. Non-OECD countries will continue to contribute the bulk of oil demand growth this year.

World Oil Supply

Non-OPEC oil supply growth in 2015 has been revised up by 90 tb/d to 1.32 mb/d, mostly driven by higher-than-expected fourth quarter data. In 2016, non-OPEC oil supply is projected to decline by 0.70 mb/d, following a downward revision of 40 tb/d, mainly due to announced capex cuts by international oil companies, the fall in active drilling rigs in the US and Canada, and a heavy annual decline in older fields. OPEC NGL production is expected to grow by 0.17 mb/d in 2016, up from 0.15 mb/d last year. In January, OPEC crude production increased by 131 tb/d to average 32.33 mb/d, according to secondary sources.

Product Markets and Refining Operations

US refinery margins remained weak, weighed down by the poor performance of the middle distillate market, despite a temporary boost in heating fuel demand from snow storms on the US East Coast. In Europe and Asia, refinery margins edged higher on the recovery seen at the bottom of the barrel due to stronger regional demand.

Tanker Market

Dirty tanker freight rates rose on average in January, supported by higher Suezmax rates on the back of strong tonnage demand and delays in the Turkish straits. Both VLCC and Aframax rates, however, saw declines. In the clean tanker market, freight rates showed significant gains over the previous month, both East and West of Suez, on the back of steady demand.

Stock Movements

OECD commercial oil stocks fell in December to stand at 2,974 mb. At this level, inventories are around 310 mb higher than the latest five-year average. Crude and products showed surpluses of about 249 mb and 61 mb, respectively. In terms of forward cover, OECD commercial stocks stood at 63.7 days in December, unchanged from the previous month and some 6.1 days higher than the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2015 is estimated to average 29.8 mb/d, representing an increase of 0.1 mb/d over the previous year and lower by 0.1 mb/d compared to the previous report. The global oversupply for 2015 is estimated at 2.0 mb/d. In 2016, demand for OPEC crude is expected at 31.6 mb/d, a gain of 1.8 mb/d, higher than last year.

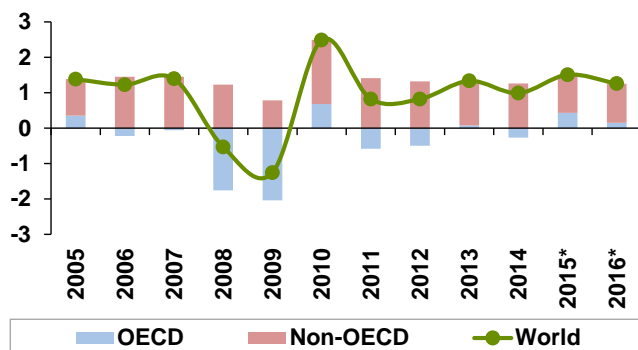
Review and outlook of global oil demand

The year 2015 has been exceptional for oil demand. Oil consumption reached above 1.5 mb/d, the second highest level of growth in the past ten years, with 2010 being the highest. In contrast to 2014, both OECD and non-OECD contributed to this increment, growing by 0.4 mb/d and 1.1 mb/d respectively (**Graph 1**). This growth was propelled by lower oil prices encouraging transportation fuel demand in addition to solid gains in the petrochemical sector in China, US and Asia-Pacific.

For 2016, oil demand is anticipated to grow by around 1.3 mb/d, below last year's growth but still broadly robust. Demand in the OECD countries is projected to grow by 0.2 mb/d, with the US leading growth, while Asia-Pacific is seen declining and Europe is expected to be broadly flat compared to the previous year (**Graph 2**). Positive projected growth in the US economy and continued healthy growth in the road transportation sector are seen outweighing downside assumptions for overall US oil demand, mainly linked to fuel substitution and vehicle efficiencies.

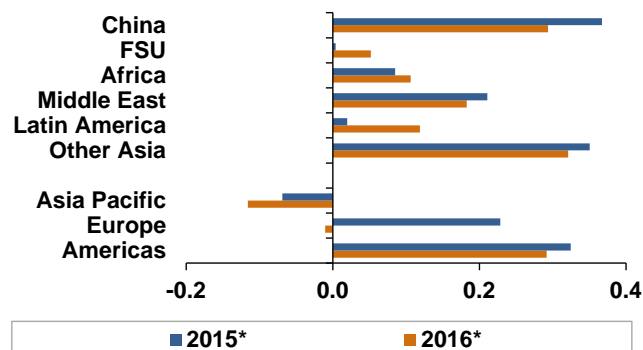
In OECD Europe, the strong demand growth seen in 2015 is not expected to be repeated this year. Significant economic uncertainties, along with ongoing efficiencies and fuel substitution in the road transportation sector, are expected to weigh on oil consumption in the region. However, this could be offset by expanding demand in major economies – particularly Germany and the UK – due to the low oil price environment despite high end-user taxes. In OECD Asia-Pacific, oil demand assumptions for Japan in 2016 are less promising compared to the previous year, mainly as a result of projected slower economic growth and expectations that more than handful of nuclear plants will restart operation.

Graph 1: OECD and non-OECD demand growth, mb/d



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

Graph 2: World oil demand growth by regions, mb/d



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

In the non-OECD, oil demand growth in 2016 is expected to be around 1.1 mb/d, even with slightly lower growth from China. The outlook for China, with GDP growth lower than in 2015, is based on the assumption that transportation and industrial fuels lead the product mix in 2016, despite continued fuel quality programmes targeting lower emissions in the transportation sector.

Oil demand growth is projected to be steady in Other Asia, led by India with growth of 170 tb/d on top of already strong growth of 210 tb/d in the previous year. The impact of subsidy reductions in the Middle East and the economic performance of Latin America will influence oil demand growth in these regions. However, the weaker performance in the economies in both regions and the impact of subsidy reductions could influence oil demand growth.

In terms of Non-OECD product demand, middle distillates are projected to grow the most, followed by transportation fuels, mainly during the summer Olympic Games in Brazil. However, the projected growth in transportation fuels is expected to be less than last year, especially in case of India, with diesel consumption impacted negatively by a temporary government ban limiting the use of diesel vehicles with large engines in big cities. Crude oil for direct use and petrochemical feedstocks are projected to contribute positively to product demand growth.

Any better-than-expected performance of global economic growth, improvement in industrial activities, and a return to normal weather patterns could further support higher oil demand growth in the current year.

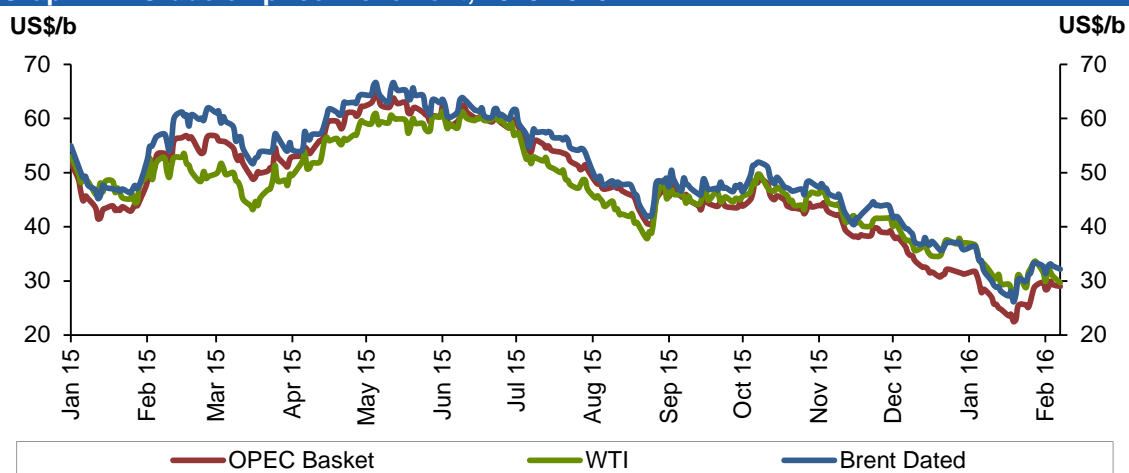
Crude Oil Price Movements

Despite the end of the month's short-lived boost to prices, the OPEC Reference Basket (ORB) value was down by more than 21% in January to its lowest monthly value since September 2003. This comes as oil market oversupply and the slowing Chinese economy continues and has been compounded by an unusual drop of seasonal heating demand amid a continuation of the previous month's mild weather in key consuming regions. For the month, the ORB dropped \$7.14 to \$26.50/b, and sunk about 40% compared to the same month last year. Crude oil futures declined significantly again for the third month in a row, taking prices to 12-year lows. ICE Brent ended down by \$6.98 to \$31.93/b, while Nymex WTI fell by \$5.67 to \$31.66/b. Compared to January 2015, both contracts lost around 35%. In a sign that market sentiment was improving toward the end of the month, hedge funds raised their bullish bets on oil prices, particularly on ICE Brent where net length increased by a hefty 60%. The Brent-WTI spread averaged 27¢/b in January, its narrowest since July 2010.

OPEC Reference Basket

The ORB value deteriorated further in January, dropping by more than 21%, which is the largest m-o-m drop since December 2014 and lowest monthly value since September 2003. This development comes as the oil market supply glut and slowing Chinese economy continues, exacerbated by an unusual drop of seasonal heating demand amid a continuation of the previous month's mild weather in the key consuming regions. Moreover, swelling crude and product inventories also sustained their pressure on the oil complex. Nevertheless, though it was not enough to pull the ORB out of its worst performance in more than 12 years, toward the end of the month, the ORB value was boosted briefly by over 25%.

Graph 1.1: Crude oil price movement, 2015-2016



Source: OPEC Secretariat.

On a monthly basis, the **ORB** dropped by \$7.14 to \$26.50/b, on average, a m-o-m decrease of 21.2%. Compared to January 2015, the ORB value sunk 40.3% versus its \$44.38/b value of last January. This is its lowest beginning-of-the-year value since 2002.

Crude Oil Price Movements

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

Basket	Dec 15	Jan 16	Change	Year-to-date	
	33.64	26.50	Jan/Dec -7.14	2015 44.38	2016 26.50
Arab Light	33.70	26.35	-7.35	44.47	26.35
Basrah Light	32.06	24.73	-7.33	42.58	24.73
Bonny Light	38.16	30.40	-7.76	48.51	30.40
Es Sider	37.16	29.75	-7.41	46.76	29.75
Girassol	37.88	29.95	-7.93	47.98	29.95
Iran Heavy	31.73	24.07	-7.66	42.84	24.07
Kuwait Export	31.49	23.92	-7.57	42.31	23.92
Qatar Marine	34.36	26.95	-7.41	45.51	26.95
Merey	24.42	20.80	-3.62	37.96	20.80
Minas	33.53	30.80	-2.73	46.37	30.80
Murban	39.19	31.57	-7.62	48.41	31.57
Oriente	32.18	24.03	-8.15	42.26	24.03
Sahara Blend	38.59	31.28	-7.31	47.91	31.28
Other Crudes					
Brent	38.16	30.75	-7.41	47.86	30.75
Dubai	34.59	26.81	-7.78	45.57	26.81
Isthmus	37.68	30.03	-7.65	45.52	30.03
LLS	38.86	32.72	-6.14	48.81	32.72
Mars	34.69	27.51	-7.18	44.76	27.51
Urals	36.97	29.15	-7.82	47.03	29.15
WTI	37.23	31.46	-5.77	47.29	31.46
Differentials					
Brent/WTI	0.93	-0.71	-1.64	0.57	-0.71
Brent/LLS	-0.70	-1.97	-1.27	-0.95	-1.97
Brent/Dubai	3.57	3.94	0.37	2.29	3.94

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

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

All **ORB component values** dropped sharply in line with the crude oil outright prices. The major oil spot benchmarks plunged over the month with WTI suffering the least, falling by around 15.5%, or \$5.77. Dated Brent and Dubai prices fell by a significant \$7.41 and \$7.78, respectively.

All **Middle East and multi-destination Basket components** followed the Dubai and Oman benchmarks, plunging by around \$7.50 in January, despite being underpinned by a Chinaoil purchase of about 16 spot cargoes in the month during the Platts Market on Close (MoC) process. Middle Eastern spot component grades, Murban and Qatar Marine, slipped by \$7.52 to average \$29.26/b, while multi-destination grades, Arab Light, Basrah Light, Iran Heavy and Kuwait Export, plunged by \$7.48 to average \$24.77/b.

Meanwhile, the **Brent-related crudes** followed the sharp deterioration in Dated Brent prices, dropping by around 20% for the month. Values of the West and Northern African light sweet Basket components – Saharan Blend, Es Sider, Girassol and Bonny Light – decreased in value by \$7.60 to average \$30.35/b in January.

The newcomer, **Indonesian Minas**, slipped significantly less than the other components as the light sweet crudes continued to be supported by a wider Brent-Dubai spread and healthy refining margins, particularly the naphtha cracks. Minas dropped by \$2.73, or 8.1%, over the month to average \$30.80/b.

As regards the **Latin American ORB components**, Merey was down by \$3.62, or 14.8%, at \$20.80/b, while Oriente declined by about \$8.15, or 25.3%, to average \$24.03/b.

On 9 February, the OPEC Reference Basket stood at \$28.33/b, \$1.83 above the January average.

The oil futures market

In a repeat of the previous months' supply glut exerting pressure on the global oil market, **crude oil futures** declined again significantly for the third month in a row, taking prices to 12-year lows. ICE Brent ended January down by \$6.98, or 17.9%, to average \$31.93/b on a monthly basis, while Nymex WTI fell by \$5.67, or 14.9%, to \$31.66/b.

Both contracts started the year down sharply, diving below \$35/b for the first time since 2004 to its worst January in 12 years. Compared to January 2015, ICE Brent lost \$17.83, or about 36%, while Nymex WTI plunged by \$15.67, or 33%, compared to its value last year. The sell-off in the oil market continued over the month amid deepening concerns about fragile Chinese demand and bearish sentiment in the market. Oil prices also slumped to an over 12-year record low as the market anticipated extra Iranian exports after the lifting of sanctions.

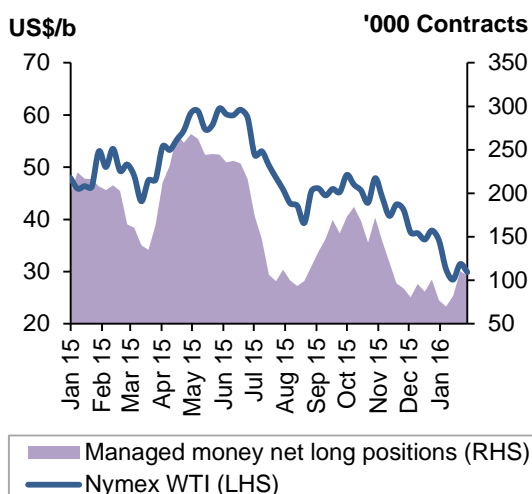
The oil market fell under additional pressure from a firmer US dollar as traders sought safer havens, and signs of a further swell in already record US inventories. Growing stocks of oil in the US stoked market fears about demand. Additionally, concerns about US economic uncertainty amplified demand concerns. The ongoing warmer-than-usual winter in the Northern Hemisphere due to the El Niño weather phenomenon continued to erode demand for heating oil, despite a brief surge in low temperatures in many parts of the US.

At the end of the month, crude oil futures rallied, rebounding more than 25% from 12-year lows hit earlier and cutting losses for the month, on prospects of a deal between major exporters to cut production. Oil also drew support from firmer stock markets and hopes the US Federal Reserve (Fed) may slow any planned interest rate hikes on weak US GDP growth data.

On 9 February, ICE Brent stood at \$30.32/b and Nymex WTI at \$27.94/b.

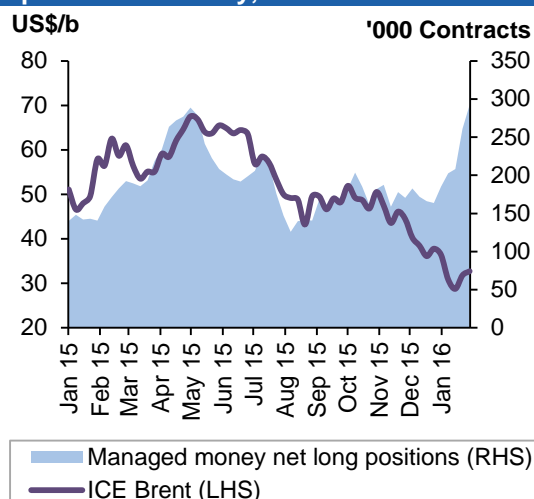
In a sign that market sentiment was improving, by the end of January, hedge funds raised their bullish bets on US crude oil from the low levels seen at the end of the previous month, **US Commodity Futures Trading Commission (CFTC)** data showed. Hedge funds increased their net long positions in Nymex WTI by 9,635 lots to around 110,430 contracts, or 110 mb. On ICE Brent futures, speculators were extremely bullish on higher oil prices as the net long positions increased by a hefty 60% by the end of January compared to the end of December. ICE Brent net long positions increased by 97,282 contracts to 260,954 lots, ICE data showed. Meanwhile, the total futures and options open interest volume in the two markets increased sharply by 8%, or 408,370 lots, to 5.18 million contracts.

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 January, both **oil futures trading volumes** surged to their highest on record. The daily average traded volume during December for Nymex WTI contracts increased by 321,607 lots, up 39%, to average 1,142,648 contracts, while ICE Brent daily traded volume increased by 392,374 contracts, up 57%, to 1,079,309 lots. The daily aggregate traded volume in both crude oil futures markets increased by 713,981 lots to around 2.22 million futures contracts, equivalent to around 2.2 billion barrels per day. The total traded volume in Nymex WTI and ICE Brent were significantly up at 21.71 and 21.59 million contracts, respectively.

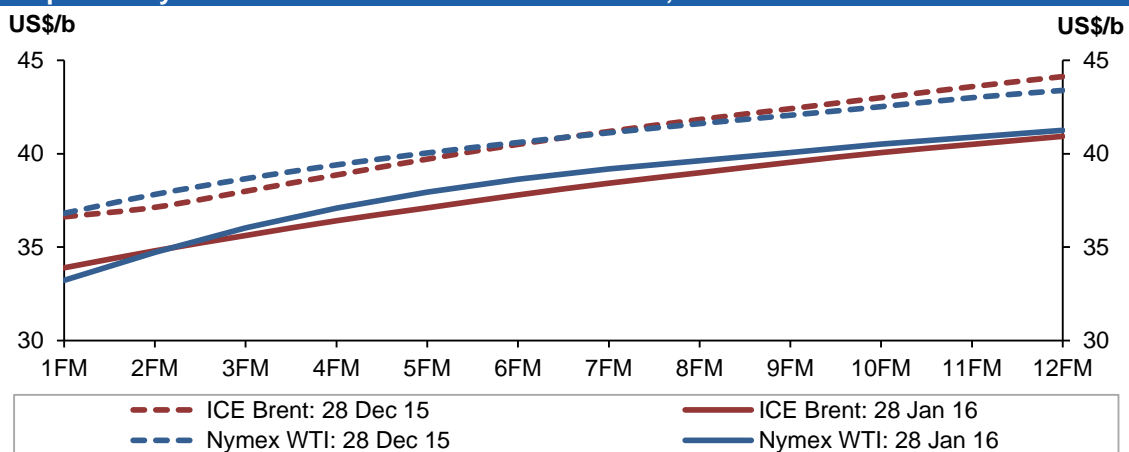
The futures market structure

The three markets remained in contango in January, due to the oversupply in the market.

In **Europe**, Brent first month (M1) discount to the third month (M3) eased slightly amid steady arbitrage flows of Forties to Asia with VLCCs reportedly having been fixed for loading in February. The Brent market contango narrowed further in January by 15¢, with (M1-M3) at \$1.53.

In contrast, the **US** super-contango expanded further amid higher import supplies and lower refinery runs. During the last week of January, US crude stocks rose to their highest level on record, increasing to 502.7 mb, as crude refinery runs fell and imports rose, EIA data showed. For the month, the WTI contango widened and remained steep, where the (M1-M3) spread was at \$2.65, 35¢ wider than in December.

Similarly, the **Dubai** prompt month (M1) weakened further relative to the third forward month (M3), where the M1 discount to M3 increased by almost 15¢. The return of arbitrage volumes to Asia amid easing freight and the Brent-Dubai spread pressured the already oversupplied Dubai market. The month-long buying of Chinaoil in the Platts pricing assessments window helped to limit deterioration in the spot market. For January, the Dubai contango weakened slightly, where M1 \$1.70 discount to M3 in December increased to around \$1.85.

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

Note: FM = future month.

Source: CME Group and Intercontinental Exchange.

The **Brent-WTI spread** continued its narrowing trend that started over the previous months to almost disappear by the end of the month, on average. Most of the month, WTI traded above Brent following the lifting of the ban on US crude exports. This trend continued to help the return of arbitrage barrels from the Atlantic Basin, West Africa and the North Sea, to the US. It even supported the economics of Urals deliveries to the US Gulf Coast, which has not been workable for years due to growing Canadian heavy crude exports to the US, in addition to the then wide Brent-WTI spread. On average, the Brent-WTI spread was reduced further, narrowing by another \$1.45 to 15¢/b in January.

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

Nymex WTI							
	<u>1FM</u>	<u>2FM</u>	<u>3FM</u>	<u>6FM</u>	<u>12FM</u>	<u>12FM-1FM</u>	
28 Dec 15	36.81	37.82	38.66	40.60	43.39	6.58	
28 Jan 16	33.22	34.71	36.03	38.63	41.25	8.03	
Change	-3.59	-3.11	-2.63	-1.97	-2.14	1.45	
ICE Brent							
	<u>1FM</u>	<u>2FM</u>	<u>3FM</u>	<u>6FM</u>	<u>12FM</u>	<u>12FM-1FM</u>	
28 Dec 15	36.62	37.13	37.99	40.50	44.13	7.51	
28 Jan 16	33.89	34.80	35.62	37.79	40.93	7.04	
Change	-2.73	-2.33	-2.37	-2.71	-3.20	-0.47	

Note: FM = future month.

Sources: CME Group and Intercontinental Exchange.

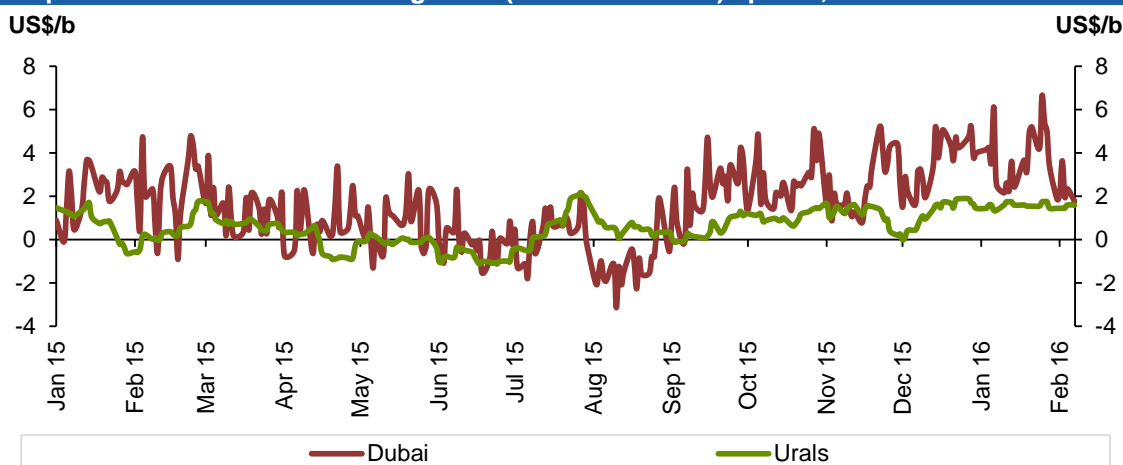
The light sweet/medium sour crude spread

Sweet/sour differentials narrowed in Asia, after having widened significantly since the beginning of last year. Meanwhile, differentials widened in Europe and the USGC.

Despite strong demand for light sweet crudes in **Asia** over the month amid robust refining margins, a higher supply of light sweet oil put pressure on the Malaysian crude premium, causing the Tapis-Dubai spread to narrow. Regional light sweet crude grades were supported last month by freight rates that were at the highest levels seen in years. But falling costs of sending tankers from the Middle East and West Africa to Asia put pressure on shorter-haul grades. Refining margins in the Singapore hub have averaged above \$10/b most of the month, up from around \$8.60/b the previous month. Demand for spot crude in the Asia-Pacific crude market was affected slightly as refiners prepared for spring maintenance even as profit margins remained robust. Meanwhile, the Middle East sour crude benchmark Dubai was somewhat supported by robust demand from Chinaoil in the Platts crude oil price assessment window, as it purchased 16 cargoes over the month. Light sweet Tapis premium over medium sour Dubai decreased by 90¢ to \$6.30/b.

In **Europe**, the Urals medium sour crude discount to Brent increased in January back to the record-highs witnessed during most of 2H15 as a healthy loading programme and the likely return of Iranian crude to European markets put Russia's main export grade under further pressure in Europe. On the other hand, North Sea light sweet crude differentials were supported by stronger demand and arbitrage opportunities to Asia. Shipments of Forties by VLCCs out of Europe, most often to South Korea, are a regular feature of the North Sea market and tend to support differentials and the wider Brent market. The Dated Brent to Med Urals spread in January widened from \$1.20/b in December to \$1.60/b, 40¢ wider.

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



Source: OPEC Secretariat.

In the **US Gulf Coast**, the Light Louisiana Sweet (LLS) premium over medium sour Mars surged to \$5.20/b, increasing about \$1.05, amid softer heavy conversion or complex refinery demand for sour crudes due to maintenance. In contrast, unseasonably cold weather in West Texas curtailed production and tightened the market for local light sweet crudes, supporting similar USGC crudes such as LLS. Meanwhile, as observed over the previous month, most of the US Gulf Coast grade differentials weakened as the Brent-WTI spread continued to narrow, particularly after the United States lifted the ban on crude exports.

Commodity Markets

Commodity prices in average terms broadly declined in January, with a larger drop affecting energy commodities on the sharp fall in crude oil prices, amid increased volatility in global financial markets. In the group of non-energy commodities, base metals were weak due to concerns about slowing demand from China, while agricultural prices were down, due to improving supply outlook for some crops.

Trends in selected commodity markets

During the month, further US dollar appreciation against emerging market currencies generally pressured commodity prices. In particular, concerns about deceleration of the Chinese industrial sector after lower-than-expected manufacturing PMI readings and further depreciation of the Chinese yuan by the People's Bank of China triggered sell-offs in global stock and commodity markets during the first half of the month. Nonetheless, both markets recovered some lost ground in the second half of the month after the European Central Bank president hinted at additional monetary stimulus at its upcoming March meeting. Amid a market sell-off and rising volatility, the expectation for the pace of interest rate increases by the US Federal Reserve (Fed) appeared to have fallen, which supported gold prices.

Table 2.1: Commodity price data, 2015-2016

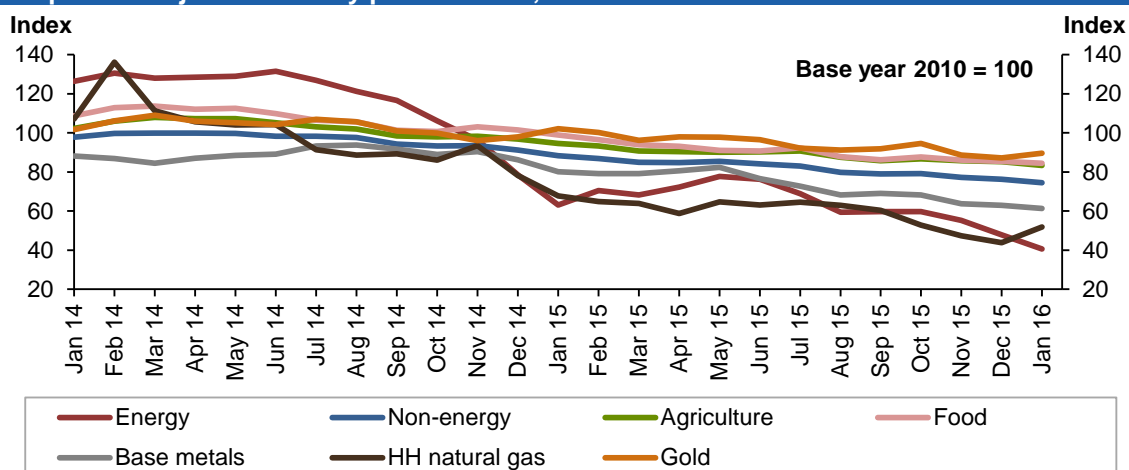
Commodity	Unit	Monthly averages			% Change	Year-to-date	
		Nov 15	Dec 15	Jan 16	Jan/Dec	2015	2016
<i>World Bank commodity price indices (2010 = 100)</i>							
Energy		55.2	47.9	40.5	-15.29	63.1	40.5
Coal, Australia	\$/mt	52.6	52.1	49.8	-4.4	62.1	49.8
Crude oil, average	\$/bbl	43.1	36.6	29.8	-18.6	47.1	29.8
Natural gas, US	\$/mmbtu	2.1	1.9	2.3	18.3	3.0	2.3
Non-energy		77.2	76.3	74.5	-2.3	88.4	74.5
Agriculture		85.7	85.2	83.3	-2.2	94.7	83.3
Food		86.1	85.4	84.5	-1.1	98.9	84.5
Soybean meal	\$/mt	356.0	338.0	333.0	-1.5	452.0	333.0
Soybean oil	\$/mt	726.0	761.0	726.0	-4.6	802.0	726.0
Soybeans	\$/mt	368.0	372.0	367.0	-1.3	424.0	367.0
Grains		83.6	82.4	82.1	-0.4	96.8	82.1
Maize	\$/mt	166.2	163.9	161.0	-1.8	174.7	161.0
Wheat, US, HRW	\$/mt	176.9	173.7	173.7	0.0	248.5	173.7
Sugar, world	\$/kg	0.3	0.3	0.3	-4.0	0.3	0.3
Base Metal		63.8	62.9	61.4	-2.5	80.1	61.4
Aluminum	\$/mt	1,467.9	1,497.2	1,481.1	-1.1	1,814.7	1,481.1
Copper	\$/mt	4,799.9	4,638.8	4,471.8	-3.6	5,830.5	4,471.8
Iron ore, cfr spot	\$/dmtu	47.0	41.0	42.0	2.4	68.0	42.0
Lead	\$/mt	1,618.4	1,706.6	1,646.2	-3.5	1,843.1	1,646.2
Nickel	\$/mt	9,244.3	8,707.8	8,507.3	-2.3	14,849.2	8,507.3
Tin	\$/mt	14,745.3	14,691.7	13,808.1	-6.0	19,454.1	13,808.1
Zinc	\$/mt	1,583.3	1,527.8	1,520.4	-0.5	2,113.1	1,520.4
Precious Metals							
Gold	\$/toz	1,086.4	1,068.3	1,097.9	2.8	1,250.8	1,097.9
Silver	\$/toz	14.5	14.1	14.1	0.1	17.2	14.1

Source: World Bank, Commodity price data.

Agricultural prices declined, with larger drops observed in the group of beverages (coffee, cocoa and tea). Cocoa prices dropped sharply following the sell-off in financial markets at the beginning of the month and improving market expectations for the output in West Africa. Coffee prices were down after the Brazilian National Food Supply Agency upgraded its output forecast due to favourable weather. Rains in Brazil have also translated into higher forecasts for soybean output in that country. Meanwhile, the US Department of Agriculture continued to forecast record global ending stocks for corn and wheat, which could prevent the upward movement of these prices.

Metal prices dropped sharply in the first half of the month, following the depreciation of the yuan and the sell-off observed in global financial markets. Readings of the manufacturing Purchasers Managers Index' (PMI) in China improved slightly to 48.4 in January from 48.2 the previous in month, but continued to signal a contraction in activities as it has for the past eight months. Meanwhile, iron ore prices advanced due to a Brazilian court ruling that suspended operations in one of Vale's – the world largest iron ore miner – main export ports, due to an investigation on breaches of environmental regulations.

Graph 2.1: Major commodity price indices, 2014-2016



Source: World Bank, Commodity price data.

In the group of **energy commodities**, crude oil declined sharply on weak sentiment in global financial markets, and continuing inventory build-ups. Meanwhile, natural gas markets have been generally weak as the impact of El Niño has limited demand growth. In the US, prices advanced after larger-than-expected withdrawals from inventories due to winter storms during the month. Meanwhile in Europe, forecasts for warm weather and the effect of oil indexing in term contracts were behind price declines, in spite of EU-28 total natural gas inventories falling to 49.7 bcm at the end of January from 65.3 bcm the previous month, according to Gas Infrastructure Europe.

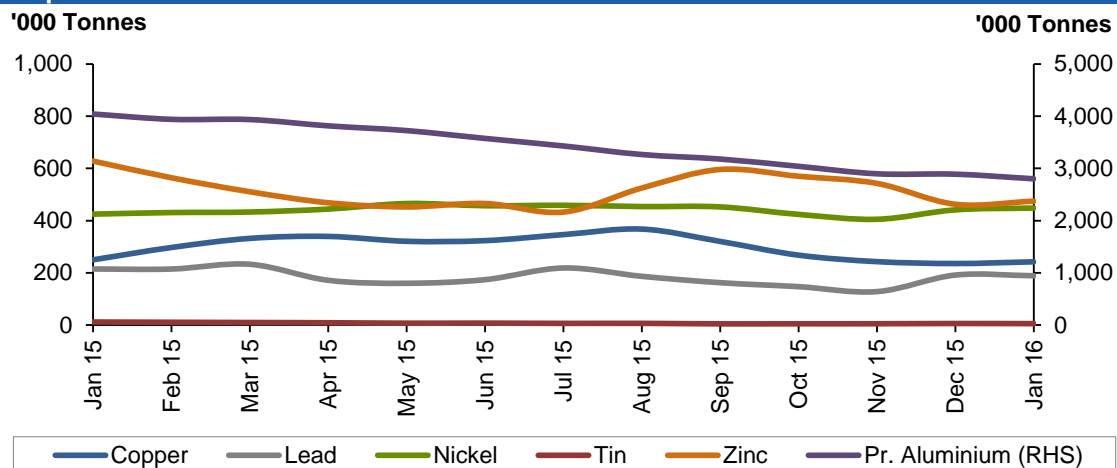
Average **energy prices** declined by 15.9%, mainly due to a 18.6% decline in crude oil prices. Natural gas prices rebounded in the US by 18.3% m-o-m, while average prices in Europe were down by 12.3%.

Agricultural prices dropped by 2.2%, with large declines of 7.5% in the group of beverages, while food and raw material prices were down by 1.1% and 1.9%, respectively. Cocoa prices were down by 11.8% on better expectation regarding harvest performance in West Africa. Meanwhile, the price of sugar was down by 4.0% on higher-than-expected output in Brazil in December, as reported by the sugarcane industry association, UNICA.

Average **base metal prices** declined by 2.5%, with copper and nickel prices down by 3.6% and 2.3%, respectively, on a signal of slowing manufacturing activity in China. Meanwhile, aluminium prices declined on average by 1.1% m-o-m, but prices recovered at the end of the month on lower estimated output in December.

Precious metals recovered from previous month's lows, with gold prices advancing by 2.8% on average on the impact of a global market sell-off that reduced market expectations for interest rates increases by the Fed during the year. Meanwhile, silver advanced marginally by 0.1%, while platinum declined by 0.6%.

Graph 2.2: Inventories at the LME



Sources: London Metal Exchange and Thomson Reuters.

In January, the **Henry Hub natural gas** index increased. The average price was up 35¢, or 18.3%, to \$2.27 per million British thermal units (mmbtu) after trading at an average of \$1.92/mmbtu the previous month.

The US Energy Information Administration (EIA) said utilities withdrew 152 billion cubic feet (bcf) of **gas from storage** during the week ending 29 January. This was close to the market expectation of a 154 bcf decrease. Total working gas in storage stood at 2,934 bcf, which was 20% higher than at the same time the previous year and 17.9% higher than the previous five-year average. The EIA noted that temperatures during the reported week were “warmer than normal”.

Investment flows into commodities

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

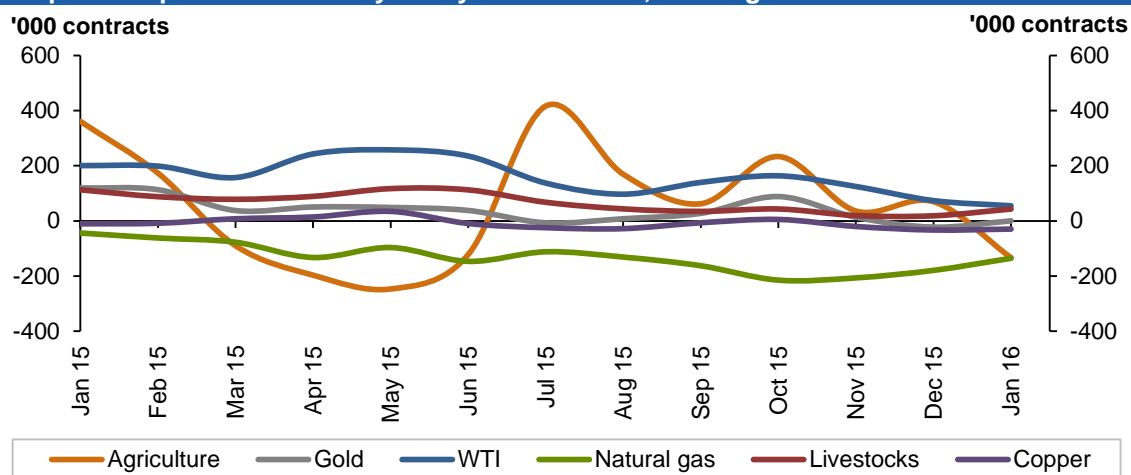
Table 2.2: CFTC data on non-commercial positions, '000 contracts

	Open interest		Net length			
	Dec 15	Jan 16	Dec 15	% OIV	Jan 16	% OIV
Crude oil	1,670	1,727	74	4	55	3
Natural gas	1,005	911	-179	-18	-135	-15
Agriculture	4,792	4,936	70	1	-134	-3
Precious metals	560	563	-14	-3	15	3
Copper	175	192	-33	-19	-30	-15
Livestock	473	481	19	4	43	9
Total	8,675	8,810	-65	-29	-186	-18

Source: US Commodity Futures Trading Commission.

Agriculture's OIV advanced by 3.0% m-o-m to 4,935,756 contracts in January. Meanwhile, money managers switched to a combined net short position of 133,554 lots, largely because of decreasing net length among the majority of group components.

Graph 2.4: Speculative activity in key commodities, net length

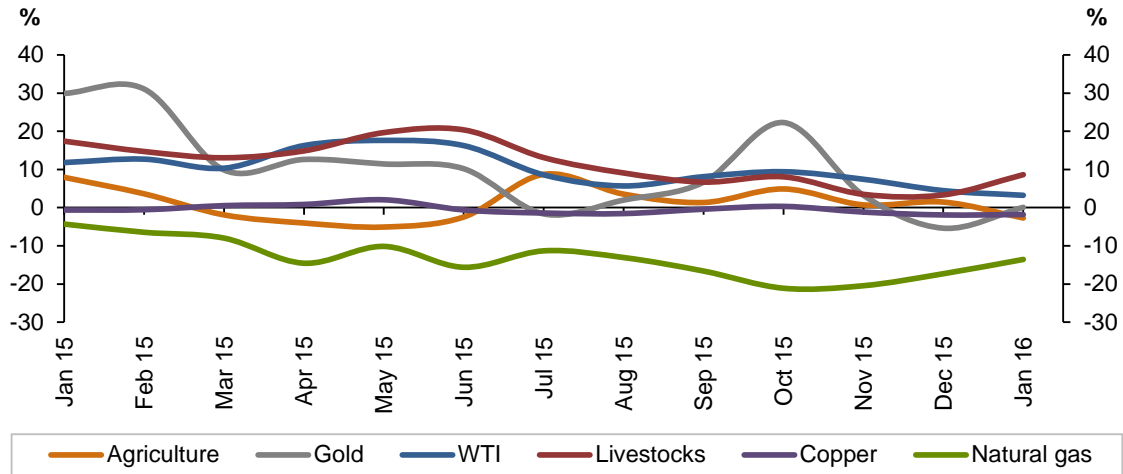


Source: US Commodity Futures Trading Commission.

Henry Hub's natural gas OIV slightly decreased by 9.3% m-o-m to 911,051 contracts in January. Money managers decreased their net short positions by 24% to reach 135,947 lots, after winter storms hit the US northeast. Money managers remain generally bearish.

Copper's OIV advanced by 9.4% m-o-m to 191,812 contracts in January. Money managers cut their net short positions by 10% to 29,591 lots after the yuan stabilized in the second half of the month.

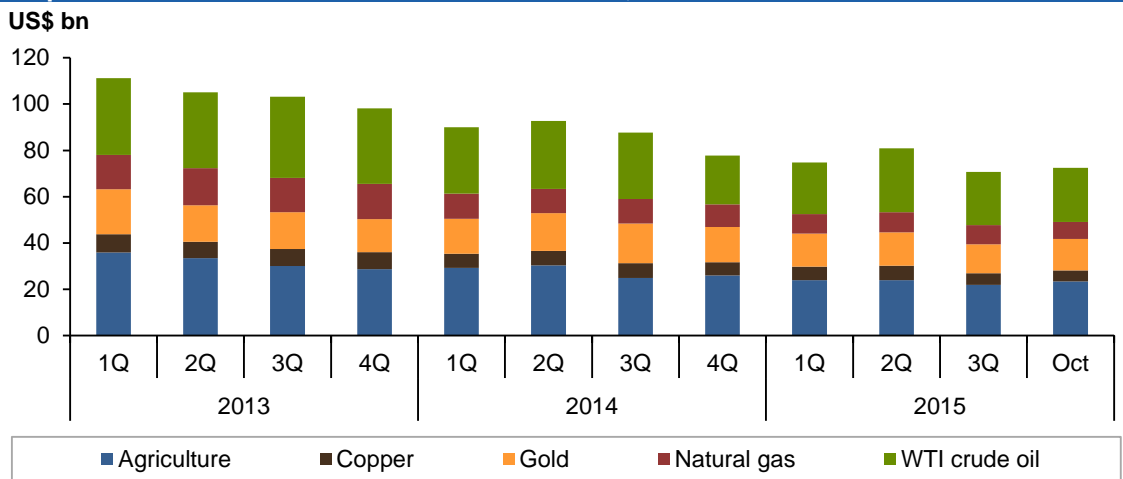
Graph 2.5: Speculative activity in key commodities, as% of open interest



Source: US Commodity Futures Trading Commission.

Precious metals’ OIV advanced slightly by 0.5% m-o-m to 563,347 contracts in January. Money managers switched to a net long position of 14,923 lots from a net short of 14,281 lots on the expectation of flatter path of rate increases in the US.

Graph 2.6: Inflow of investment into commodities, 2013-2015



Source: US Commodity Futures Trading Commission.

World Economy

The global economy has slowed in the past several months, leading to downward revisions in both the estimates of global GDP growth for 2015 and in the forecast for 2016. The growth of global GDP in 2015 is now estimated at 2.9% compared to the estimate of 3.0% in the previous month. Similarly, the growth forecast for 2016 was lowered to 3.2% from 3.4%. Revisions have occurred across geographic regions, with the exception of the Euro-zone. While growth in the US remains at a healthy 2.4% for 2015, factors such as the weak 4Q15 GDP estimate, declining industrial production and a somewhat slowing momentum in the labour market have led to a downward revision of 0.3 percentage points (pp) in 2016 growth to 2.2%. Japan's 2016 growth has also been lowered to 0.9% from 1.2%. Growth rates in China and India for 2016 have only been slightly adjusted, to 6.3% and 7.5%, respectively. Meanwhile, the deepening recessions of Brazil and Russia have led to major revisions in the outlooks for both economies, with both now seen to be in recession this year, after already declining in 2015. An important reason for the latest GDP adjustments was the impact of lower oil prices on the global economy, with producer countries facing lower output levels and significantly slowing investments. Both have eaten into global GDP growth levels. Positive effects for the consumer are limited due to the after-effects of the 'Great Recession'. Despite these adjustments, the risk to global economic growth remains tilted toward the downside. Many country-specific economic challenges remain, and geopolitical issues and their potential spill-over into the real economy may add to this risk. 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	0.7	1.5	6.9	7.3	-3.5	-3.7
Change from previous month	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0	-0.5	-0.5
2016*	3.2	2.0	2.2	0.9	1.5	6.3	7.5	-2.2	-0.3
Change from previous month	-0.2	-0.1	-0.3	-0.3	0.0	-0.1	-0.1	-1.2	-0.6

Note: * 2015 = estimate and 2016 = forecast.

Source: OPEC Secretariat.

Recent interactions between the oil market and the global economy

On previous occasions of oil price declines, it was relatively easy to explain that lower oil prices were supportive of the global economy. On the positive side, consumers in advanced economies enjoyed greater spending ability and central banks were able to lower interest rates to stimulate their economies. On the negative side, the GDP shortfall in oil producing economies was usually only relative, given that the size of these economies was small. Thus, on a global level, their GDP shortfall was much less than the positive impact on the GDP of larger oil consuming nations. This time, however, it seems that the overall negative effect from the sharp decline in oil prices since mid-2014 has outweighed benefits in the short-term and there seems to be a 'contagious' effect taking place across many aspects of the global economy.

Due to the after-effects from the 'great recession', the potential that consumer spending ability could rise, is limited. Additionally, the major central banks are not able to significantly lower interest rates further. Investments in the oil sector have become a considerable factor for GDP growth in the past years and, consequently, recent shortfalls have caused an important negative impact – not only for emerging market producers but also for producer economies such as the US, Canada, the UK and others. As long as uncertainty persists, investments will be held back, continuing to impact global GDP negatively. Moreover, tax regimes and currency developments in many advanced economies are offsetting the positive effects from lower oil prices. Even more so, as new oil-related taxes in the US and the EU are being discussed, the benefits of lower oil prices for consumers might be further diluted, while the negative GDP effects for producers persists. Contagious deflation, although probably temporary, is having a negative effect on income growth and consequently spending ability across all economies. The considerable decline in oil prices is also affecting a wide range of important sectors, including manufacturing or agriculture, further accentuating the trend of low inflation in major economies.

Most recently, additional contagious effects from low oil prices have become obvious. Already fragile economies have to now deal with severe financial strain. They are either in need of emergency funding, or have started to sell assets in order to meet their spending needs, a factor that is likely to have contributed to the most recent volatility in equity markets. The consequences on their sovereign debt ratings and currency valuations are obvious and may include potential spill-over effects on the global economy. The book value of oil-related investments has also been eroded over the course of the past 18 months, especially since oil has become an important asset class for investors. In addition, the exposure of banks to the oil industry – in the form of loans granted to small- and medium-sized oil companies – and the relatively large share of junk bonds from shale producers has added to concerns in the financial industry.

OECD

OECD Americas

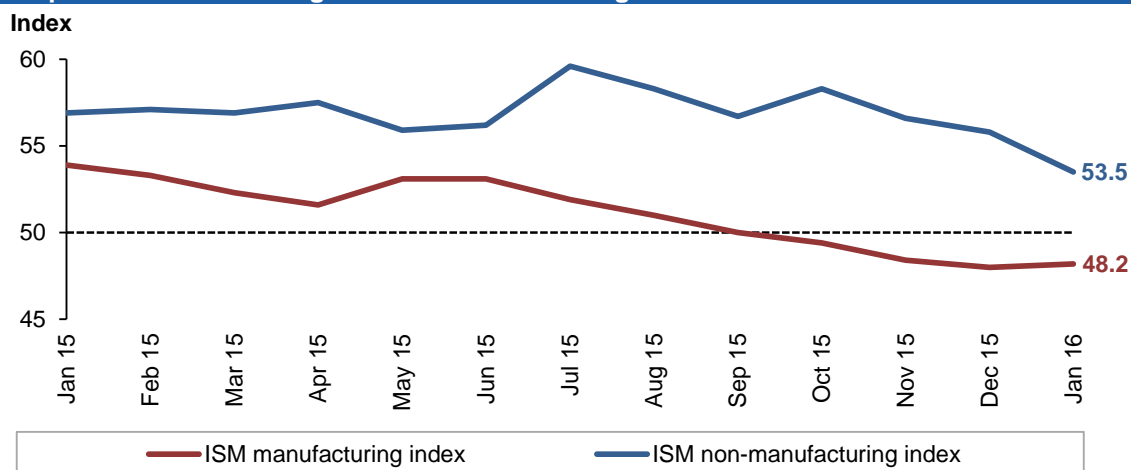
US

Slowing growth in **US GDP** in the 4Q15 has again highlighted the fact that challenges to the US economy remain, despite labour market improvements, healthy growth in consumption and the benefits of lower oil prices. Growth in the 4Q15 has been reported at only 0.7% at a seasonally adjusted annualised rate (SAAR), putting full year 2015 growth at 2.4%. While personal consumption expenditures remained healthy at 2.2% q-o-q SAAR, even in this lacklustre 4Q, other factors have continued to serve as a drag on economic growth. Importantly, the energy sector was a considerable factor. Lower oil prices and a reduction in capital expenditures, in combination with rising oil inventories, put some strain on the economy. This was also visible in the latest labour market numbers. Due to this impact from the energy sector, **industrial production** also fell considerably in December, to decline by 1.8% y-o-y. Within this number, manufacturing held up relatively well at 0.8% y-o-y, although clearly decelerating. But mining, including oil-sector related output, fell considerably by 11.3% y-o-y. The output of electricity and gas utilities also declined, falling by 6.8% y-o-y.

When reviewing the sectoral contribution to US GDP and recent labour market improvements, it becomes clear that, like in many other economies, it is currently the services sector that is primarily supporting the economy. In light of the past year's positive developments, the **US Federal Reserve** (Fed) decided to lift interest rates by 0.25 pp at its mid-December meeting. However, it remains to be seen how the anticipated trend of rising interest rates will develop. For the Fed's March meeting, it currently seems that a further interest rate hike in this upcoming meeting is relatively unlikely, given both the current US economic environment and recent global developments. A slow-down in hiking interest rates could lead to some softening of the US dollar, which could also be beneficial for US exports. Exports declined by 2.5% q-o-q SAAR in the 4Q15 and net exports impacted GDP growth negatively by 0.5 pp in the same period.

Retail sales increased by 2.2% y-o-y in December, picking up from November and October. A major driver for the supportive consumption trend is the continuously improving situation in the **labour market**. The unemployment rate fell below 5.0% in January, when it was reported to be 4.9%. However, while still increasing, non-farm payroll additions grew by only 151,000 after 262,000 in December. While the ongoing improvements in the labour market continue, **consumer confidence** increased again in January. The Conference Board's Consumer Confidence Index rose to 98.1 in January from 96.3 in December.

Some weakening signs are apparent from the **Purchasing Manager's Index** (PMI) for the manufacturing sector, as provided by the Institute of Supply Management (ISM). The ISM remained below the growth-indicating level of 50 for the second consecutive month in January and stands now at only 48.2, after reaching 48.0 in December. This area will need continued monitoring in the near-term. The services sector index retraced in January to 53.5, after posting 55.8 in December. While this is still a healthy level, it is the lowest in almost a year.

Graph 3.1: Manufacturing and non-manufacturing ISM indices

Sources: Institute for Supply Management and Haver Analytics.

As signs emerge that the US economy is again slowing down somewhat from last year's growth of 2.4%, and taking into consideration the softening momentum in the 4Q15 and weaker labour market developments, US GDP for the current year has been revised down to 2.2%, compared to 2.5% previously.

Canada

In general, the Canadian economy remains relatively weak, as it has been negatively impacted not only by low oil prices and the decline in investments in the oil industry, but also by the challenges of the global economy. Industrial production remained negative, contracting 2.1% y-o-y in November, after already declining 2.9% y-o-y in October. Also, the weak trend of the PMI for manufacturing continues. In January, it reached 49.3, which is below the growth-indicating level of 50. Given the latest developments, the GDP estimate for 2015 remains unchanged at 1.1%, while the forecast for 2016 has been lowered to 1.6%, from 1.9% previously.

OECD Asia Pacific

Japan

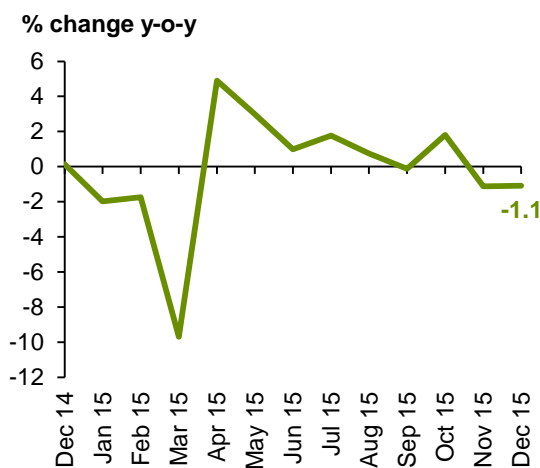
The situation in Japan has softened again and while monetary stimulus continues – and may possibly be expanded – its additional benefits have not materialised yet. Moreover, the weakness in the country's external trade and the continued 'soft development' of domestic consumption poses a challenge to the economy. Domestic demand is again weakening amid low inflation and declining real income. The domestic services sector, however, remains an important area that is supporting the economy. At the same time, the challenges facing the economy of neighbouring China continue to have some effect on Japan's exports.

Importantly, the Bank of Japan (BoJ) recently announced that it continues to pursue a 2% inflation target and highlighted that there is no limit on monetary easing to reach such a target. These comments came after the BoJ already pushed down interest rates into negative territory of -0.1%. This has added some credibility to its inflation-fighting measures. However, **low inflation** still constitutes a drag on domestic consumption. Inflation stood at only 0.2% in December, lower than even the low November level of 0.3% y-o-y. Excluding the two volatile groups of energy and food, the country's inflation figures have performed better, rising 0.8% in December. But this, too, is lower than the 0.9% level in November. Amid low inflation, real income is declining further. Average monthly earnings fell by 1.4% y-o-y in December, after already falling 0.6% y-o-y in

November. This comes despite a very tight labour market, with an unemployment rate of only 3.3% in December.

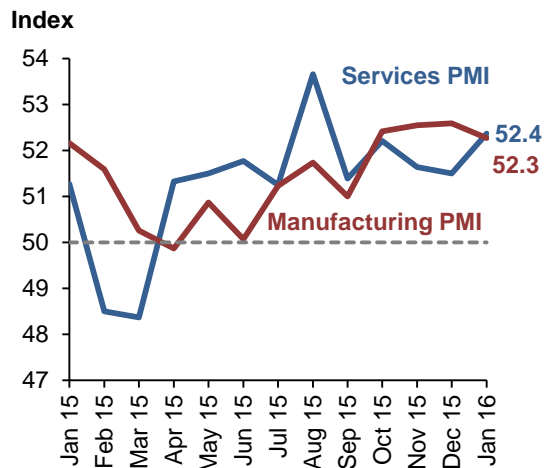
Japanese exports have slowed down again significantly. They declined for a third consecutive month in December, falling by 8.0% y-o-y on a non-seasonally adjusted base, after a decline of 3.3% y-o-y in November. Also, after having turned positive in November, **industrial production** fell again significantly in December, when it declined by 1.6% y-o-y on a non-seasonally adjusted base. **Domestic demand** has remained weak in the past months, as retail sales remained in negative territory in December, when they declined by 1.1% y-o-y, the same decline as a month earlier.

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.

Amid signals in the past months of a slowdown in the Japanese economy, the **latest PMI numbers** provided by Markit point at a continued recovery in manufacturing activity. January’s manufacturing PMI remained at around the same healthy levels as in the previous months. It stood at 52.3 in January. The momentum of the important services sector also remained intact. The PMI for the services sector even increased to 52.3 compared to 51.5 in December.

Given the most recent slow-down in output activity, the growth forecast for this year has been revised down to 0.9% from 1.2%. This is only a slight improvement from last year’s growth of 0.7%. While some upside for the economy might come from rising wages, numerous challenges remain.

South Korea

The economic performance of South Korea continues to face challenges from the recent global slow-down. While domestic consumption remains healthy, exports are in considerable decline. After having turned positive in September 2015, exports have continued their considerable decline in January, when they fell 9.9% y-o-y. One positive sign is that industrial production rose by 2.2% y-o-y in December, after posting 2.3% y-o-y in November. Retail sales also increased by 2.7% y-o-y in December, putting the whole 4Q15 growth at 4.5% y-o-y. Given some slight improvements on the domestic side of the economy and slightly higher-than-anticipated 2015 growth of 2.6%, the forecast for next year’s economic growth has been revised upwards slightly by 0.1 pp to 2.8%

OECD Europe

Euro-zone

While the cyclical recovery in the Euro-zone is ongoing, some parts of the economy have started to slow down. Industrial production, retail sales and some lead indicators are all at somewhat lower levels than in previous months, while exports seem to have recovered slightly. The relatively low euro exchange rate remains a beneficial factor for exports, particularly for the two largest Euro-zone exporters, Germany and France. The labour market continues improving, but the unemployment rate remains high at a double-digit level, adding some fragility to the economic development of the Euro-zone. Also, the ongoing support of the European Central Bank (ECB), and its most recent statement that it will continue to provide enough necessary monetary stimulus to push up inflation to its target of around 2%, is adding support to the Euro-zone's economy. Although most indicators point at a continuation of the current positive trend, numerous challenges remain. These include the still uncertain economic situation in some peripheral economies, the soft balance sheet situation of many large banking institutions (which will continue to keep debt-financed growth from rising quickly) and discussions about the re-imposition of border controls amid the continuing influx of refugees. In addition, the British referendum on a possible "EU exit" will surely have an impact.

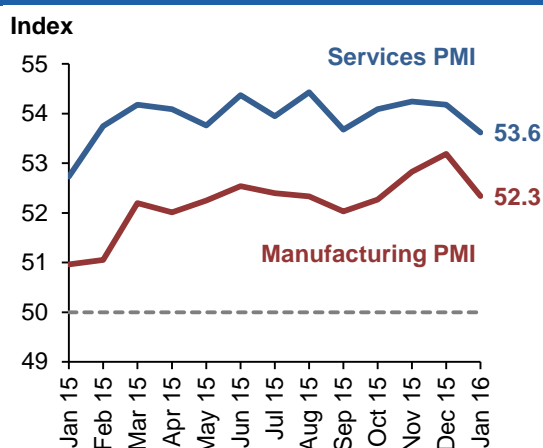
While still healthy, the latest **industrial production** numbers show a decelerating trend reaching the lowest level within seven months with December's growth at only 1.1% y-o-y. Within industrial production, construction seems to be recovering, which may be taken as a positive sign as this is an important sector. It was reported at 1.6% y-o-y, in contrast to the negative growth that has been seen in most months since 2009. It is also important to note that mining and quarrying has declined considerably, amid falling commodity prices in the past months. In November, the mining and quarrying declined by 23.7% y-o-y.

Retail sales performed well, with a yearly growth rate of 1.6% in December. This was, however, the lowest rate of expansion in 2015. This may also be the outcome of growing uncertainties about the development of the Euro-zone's economy in combination with ongoing challenges in the labour market. The unemployment rate stood at 10.4% in December, compared to 10.4% in November.

Supported by the latest round of ECB stimulus, **inflation** has risen slightly to 0.4% in January. Core inflation (excluding energy and food) stood at a relatively healthier level of 1.0% y-o-y in January, also slightly higher than in December, when it reached 0.9% y-o-y. The stimulus of the ECB has been positive for the credit supply as well. The latest available number for credit growth was, however, again softening. December's growth stood at 0.7% y-o-y, after reaching a healthy 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 past months' somewhat volatile developments in credit supply also pointing at some ongoing fragility.

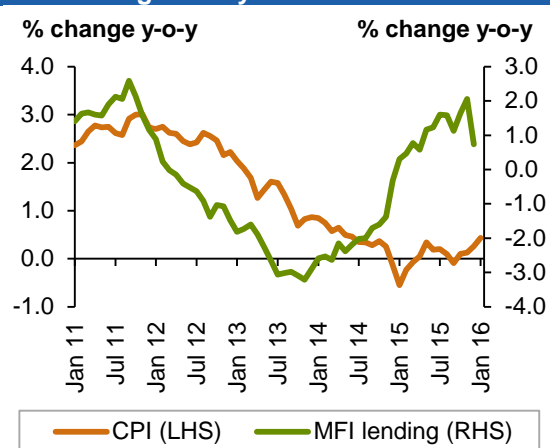
Some improvements are also reflected in the latest **PMI indicators**. The manufacturing PMI for January held up well, but retraced slightly to 52.3 from 53.2 in December. The services PMI declined slightly to 53.6 from 54.2 in December.

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, uncertainties remain. It remains to be seen whether positive developments will continue and whether the mentioned risks materialise. Taking all this into consideration, the forecast remains at 1.5% for both 2015 and 2016.

UK

Output data in the UK remains healthy, but the latest downward revision of this year's economic growth from the Bank of England highlights that the strong momentum in the UK's growth has slowed down somewhat. This view has also been supported by the latest available industrial production growth number from November, which stood at only 1.0% y-o-y compared to 1.7% y-o-y in October. Also, the headline series of retail sales in December decelerated to 2.6% y-o-y, compared to 4.5% y-o-y in November. Positively, the latest PMI numbers for the manufacturing sector increased to 52.9 in December, after 52.1 in December. The services sector PMI remained at a high level and is almost unchanged at 55.6 in January. In general, GDP growth this year seems to be well supported, although there has been some consideration of a partial slowdown. For 2015, GDP growth has been revised down to 2.2% from 2.4% previously and 2016 GDP growth is now forecast at 2.3% compared to 2.4% previously.

Emerging and Developing Economies

Despite some minor positive signals from the economy of **Brazil** the downturn seen in 2015 seems to be extending into this year. GDP is estimated to have declined 3.5% in 2015, and is expected to further shrink by 2.2% in 2016.

In **Russia**, official data shows the economy declined 3.7% y-o-y in 2015. While the manufacturing sector headed closer towards stabilization last month, the services sector remained in deep contraction. Generally speaking, the downward trend seems to be extending to this year, but at slower pace. GDP is forecast to slightly contract by 0.3% in 2016, taking into account expectations of a smaller increase in inflation and less pressure on commodity prices compared to last year.

The swings in **India's** industrial production data in October and November suggest the economic situation is still quite variable, despite high headline GDP growth. Inflation is being pushed up by rising food prices and a modest increase in core inflation; but

falling oil and commodity prices may help offset this. India's industrial output fell in November and the manufacturing PMI contracted in December. Both are slightly negative at the start of 2016. Although this poses a downside risk to GDP growth expectations for the 4Q15 as well as 1Q16, there are no expectations that it will force the Reserve Bank of India's (RBI's) hand at the February monetary policy meeting. The GDP growth expectation for 2015 remains unchanged at 7.3%. But given upside risks, expectations of GDP growth for 2016 have been revised down 0.1 pp to 7.5%.

China's real GDP grew by 6.8% y-o-y in the 4Q15, based on data released by the National Bureau of Statistics (NBS) in January. Economic growth averaged 6.9% in 2015. The People's Bank of China (PBoC) announced it would inject over 600 bn yuan (approximately \$93 bn) into the banking system to maintain stable liquidity. Utilised foreign direct investment (FDI) in China decelerated for the fourth consecutive month in December, with full-year growth of 5.6%, compared with 1.7% in the previous year. Also, overcapacity in heavy industry and real estate de-stocking may continue to drag on industrial profit growth in 2016. GDP growth has been revised down 0.1 pp to 6.3% for the year 2016.

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	-3.5	-2.2	9.0	8.3	-69.1	-50.8	-10.5	-7.5	71.5	79.4
Russia	-3.7	-0.3	15.6	8.7	61.8	67.1	-3.5	-3.2	13.7	16.2
India	7.3	7.5	4.9	5.2	-22.7	-30.9	-4.0	-3.8	51.2	50.5
China	6.9	6.3	1.5	2.1	351.2	273.2	-2.8	-3.2	16.9	19.2

Note: 2015 = estimate and 2016 = forecast.

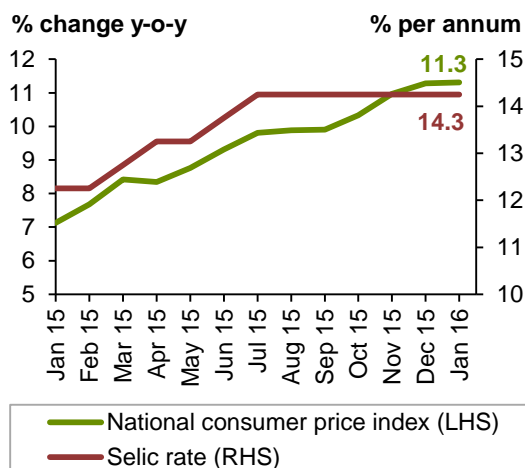
Sources: Consensus Economics, Economic Intelligence Unit, Financial Times, OPEC Secretariat and Oxford.

Brazil

Acknowledging the dilemma of how to best address declining economic activities amid high double-digit inflation, the central bank left its benchmark **interest rate** unchanged at 14.25% in January. While high interest rates failed to tame **inflation** – which was 11.3% y-o-y in December – continuing to tighten monetary policy runs the risk of pushing up the debt service cost, and discouraging investment and spending even further. The Brazilian **real** started the year depreciating 4.7% m-o-m in January.

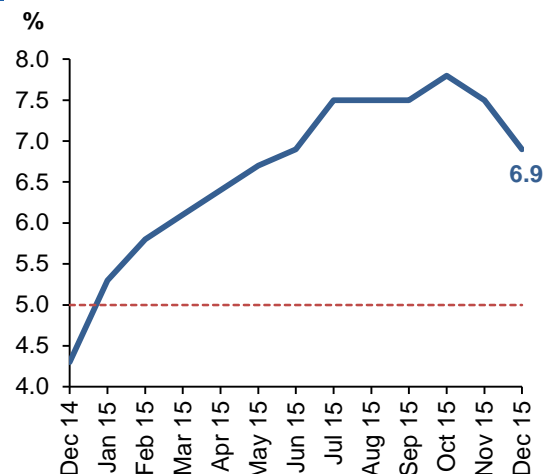
The **unemployment rate** posted a 6.9% increase in December, down from 7.5% a month earlier. This was the lowest in six months. It usually declines every December due to seasonal factors. Compared to the same month in previous years, December's unemployment rate was the highest since the 7.4% seen in December 2007. The average level of economically active unemployment increased 42% in 2015 from 2014.

Graph 3.6: Brazilian inflation vs. Interest rate



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

Graph 3.7: Brazilian unemployment rate

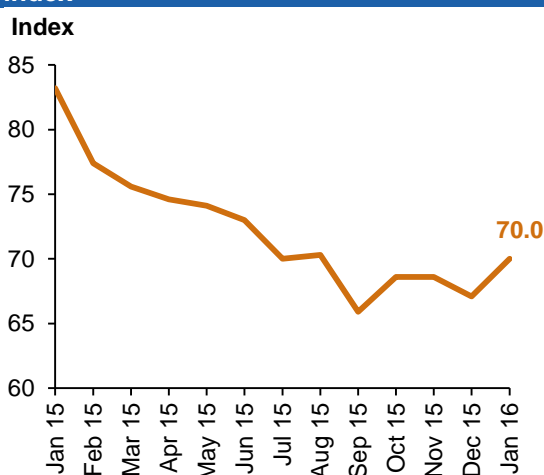


Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

The **consumer confidence index** slightly improved last month to 70, fluctuating around its record-low reading.

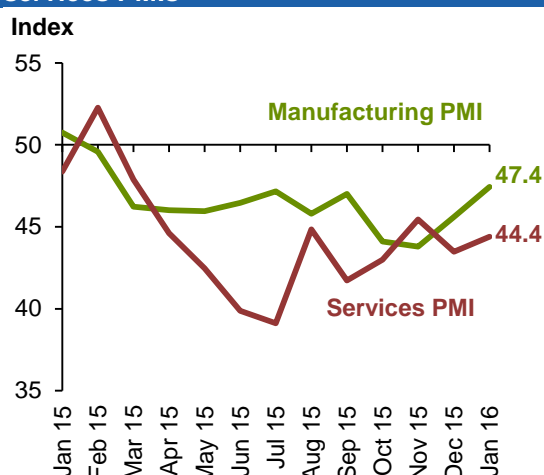
The **manufacturing PMI** in January could be deemed a step in the right direction, though still not sufficient to flip the short-term outlook of the sector and the macroeconomic picture around. While the index stayed in the sub-50 region, it improved to an 11-month high of 47.4 last month from 45.6 in December. The weaker Brazilian real provided some support for exports competitiveness, but also caused input prices to rise and hurt the domestic market. The survey showed lesser rates of deceleration in production and new orders in January.

Graph 3.8: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

Graph 3.9: Brazilian manufacturing and services PMIs



Sources: HSBC, Markit and Haver Analytics.

The public sector's **deficit** soared to a record high in 2015, amounting to \$27 bn, up from \$7.9 bn in 2014. In terms of **deficit-to-GDP ratio**, the public deficit reached 1.9% last year from 0.6% in 2014. The public deficit in the current year is expected to further worsen, unless certain reform measures are put in place regarding social spending and taxes. The government announced a plan to give **loans** of \$20 bn for infrastructure,

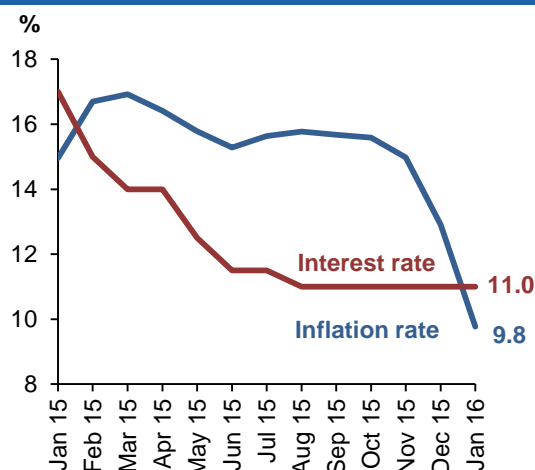
agriculture, industry and construction. However, it is not so clear yet, whether this plan will be approved by the Brazilian congress, what the time span will be for the loans, or the extent of the efficiency of their selection measures.

Despite some minor positive signals from the economy of **Brazil** in terms of slower contraction in the manufacturing sector and policy measures aimed at expanding access to credit in certain sectors, the downturn seen in 2015 seems to be extending into this year. All in all, GDP is estimated to have declined 3.5% in 2015, and is expected to further shrink by 2.2% in 2016.

Russia

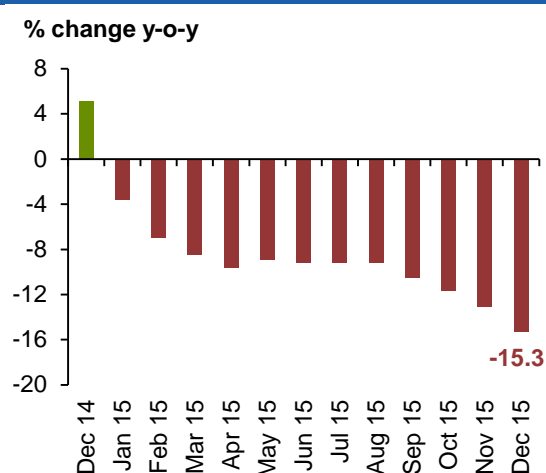
The Federal Statistics Service announced that **GDP** declined by 3.7% in 2015. The **ruble** continued its co-movement with oil prices and depreciated in January, losing 12.1% m-o-m of its value against the US dollar. The central bank kept its benchmark **interest rate** on hold at 11.0% in January, while **inflation** remained in double digits at 12.9% in December.

Graph 3.10: Russian inflation vs. Interest rate



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

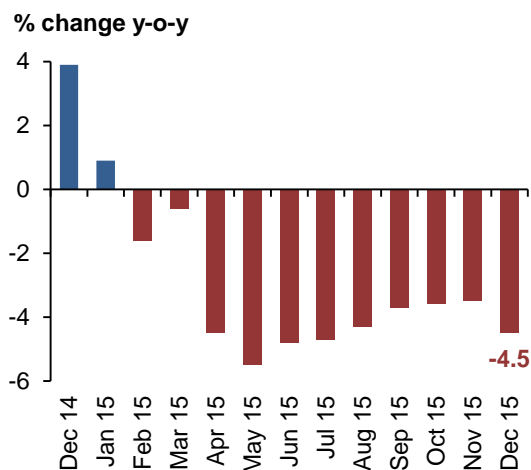
Graph 3.11: Russian retail sales



Sources: Federal State Statistics Service and Haver Analytics.

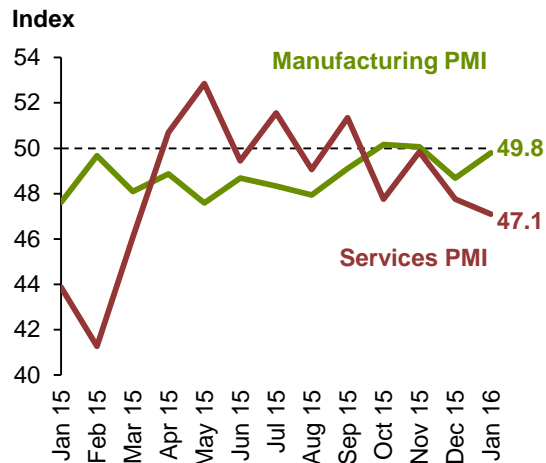
Retail sales dropped sharply by 15.3% y-o-y in December, highlighting the second-worst performance since recording this data. This is even lower than the 9.5% posted during the 2009 financial crisis. December's decline is comparable to the 16% drop seen during the crisis of 1998/1999. **Industrial production** shrank 4.5% y-o-y in December, signalling the 11th consecutive month of contraction in industrial output.

Graph 3.12: Russian industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3.13: Russian manufacturing PMIs



Sources: HSBC, Markit and Haver Analytics.

The country's **industrial production** dropped 4.5% y-o-y in December, sustaining the recent declining trend for the eleventh month in a row. The **manufacturing** sector came close to stabilization last month according to its PMI which was 49.8, a fraction below the no-change line, up slightly from 48.7 in December. The survey showed improvements in production and incoming new orders, while an unfavourable exchange rate put upward pressure on input prices.

Generally speaking, the downward trend seems to have extended into this year but at a slower pace. From a contraction of 3.7% y-o-y in 2015, **GDP** is forecast to slightly contract by 0.3% in 2016. This takes into account expectations of a smaller increase in inflation and less pressure on commodity prices compared to last year.

India

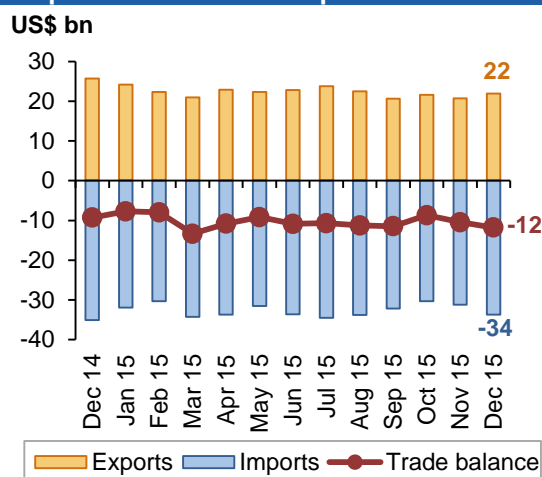
India's industrial output fell in November and the manufacturing PMI contracted in December. Readings for both indicators are slightly negative at the start of 2016. However, this is likely to be a temporary dip, partly caused by flooding in the eastern part of India in November and December. Thus, although this poses a downside risk to GDP growth expectations for both the 4Q15 and 1Q16, it isn't expected to force the RBI's hand at its February monetary policy meeting.

Food prices and core prices picked up in December and while upside pressures on inflation are expected to moderate going forward, the **RBI** is likely to remain very cautious about easing policy further – especially given the growing risks of fiscal 'slippage' (that is, the difference between the expected price of a trade and the price the trade is actually executed at). Tracing India's fiscal progress will be important, because the RBI expects fiscal tightening to play a key role in restricting upside inflation risks. In the future, the RBI is expected to continue its efforts to limit currency volatility and control the pace of depreciation. The latter, however, could raise concerns among some policymakers and manufacturers since, compared with other emerging-market currencies, the rupee's depreciation against the US dollar in 2015 was relatively muted. Foreign exchange reserves have been on a declining trend since the beginning of the year, as the RBI has intervened in foreign exchange markets to limit the rupee's slide and reduce volatility. Since the start of 2016, foreign exchange reserves have fallen by \$3 bn. The risks to macroeconomic stability from such a trend are low. Foreign exchange reserves at the end of 2015 were equivalent to an estimated 9 months of

imports, more than in many emerging markets. This was also well above the three-month threshold considered healthy among investors. Reserves presently stand at around \$275 bn.

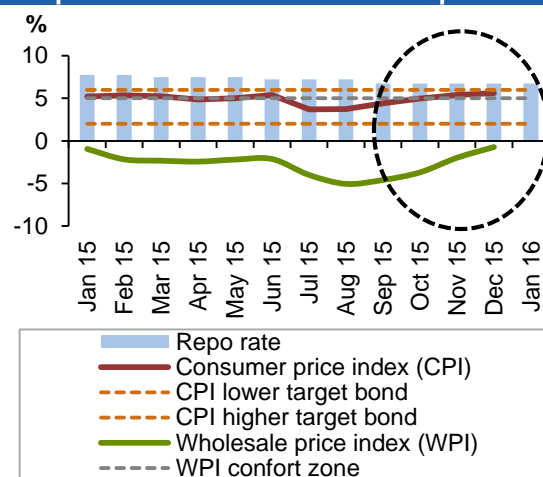
For the second successive month, the **consumer price index (CPI)** rose a seasonally adjusted 0.8% m-o-m. This was underpinned by a sharp increase in food prices. As a consequence, annual CPI inflation accelerated to 5.6% y-o-y in December from 5.4% in November, slightly above expectations. To be sure, food prices actually declined in December but much less than the typical seasonal drop when the harvest comes to market. Consequently, seasonally adjusted food prices rose 1% m-o-m on the back of the outsized 1.2% increase in November, taking annual food inflation to 6.3% y-o-y from the 6.1% seen in November. The decline in India's **WPI** slowed 0.7% y-o-y in December from more than 5% y-o-y in August, reflecting faster food price inflation. However, December marked the 14th consecutive month of falling producer prices and, given the global outlook for many commodities, there is little hope for recovery in the near term.

Graph 3.14: Indian net exports



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3.15: Indian inflation vs. Repo rate



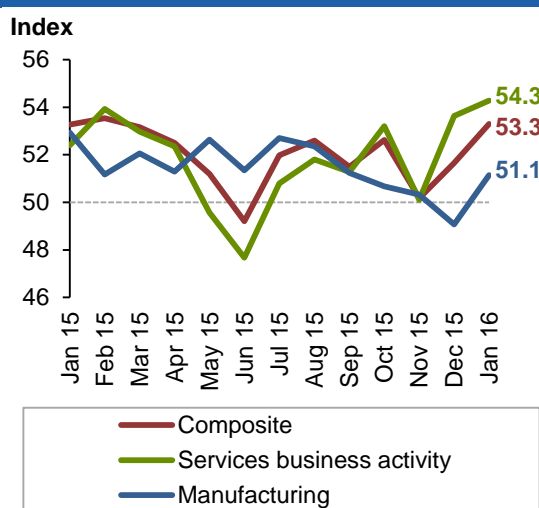
Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

In terms of trade, India's **December trade deficit** came in wider than expected at \$11.6 bn, up from \$9.7 bn the previous two months, as the forecast mean-reversion of gold imports did not materialize. Instead, gold and silver imports, which had jumped from \$2 bn in October to \$3.8 bn in November, rose further to \$4.2 bn in December. Despite the recent increase, however, gold imports are lower than their 2014 level, though this would still represent higher imported volumes in 2015 given lower average prices this year. Due to declining oil prices, it seems the remaining current account deficit also includes modest exports growth for the third consecutive month. Such a slight weakness in exports means that the government will probably fail to reach its ambitious trade targets.

Swings in **industrial production** data in October and November suggest the economy is still volatile despite high headline GDP growth. Inflation is being pushed up by rising food prices and a modest increase in core inflation. But falling oil and commodity prices will help. Industrial production fell a steep seasonally adjusted 4.9% m-o-m in November, pushing the annual trend to a 1.6% y-o-y drop, dramatically below expectations. However, this outcome should not set off alarm bells because it was likely driven by a series of temporary factors.

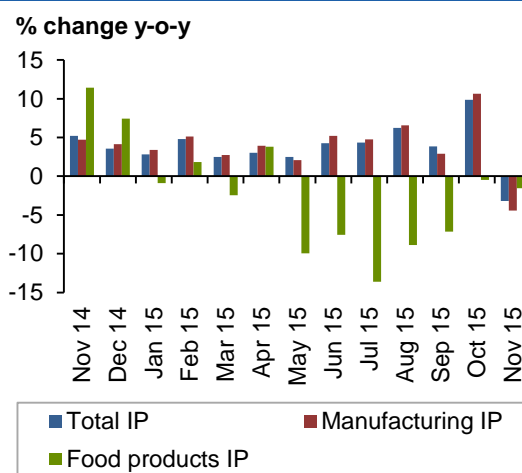
India's **manufacturing PMI** climbed from 51.6 in December to an 11-month high of 53.3 in January. Lifting the index were a rebound in manufacturing production as well as stronger growth of services output. A strong upturn in new business is an especially positive note from January's survey, which underpins hopes for further growth of activity across the country's private sector in the near-term. Moreover, this upswing in demand may boost the labour market and help end the long run of subdued employment trends. The Indian economy shifted into higher gear in January, supported by a quick rebound in manufacturing production following last month's floods. Concurrently, the service sector gained traction and posted its strongest monthly gain in activity in over one-and-a-half years.

Graph 3.16: Indian PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.17: Indian industrial production breakdown



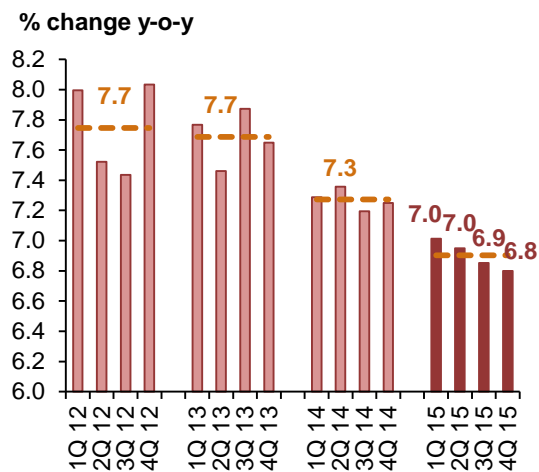
Sources: Central Statistical Organisation of India and Haver Analytics.

The **GDP growth expectation** for 2015 remained unchanged at 7.3%. But while some upside potential exists, the expectation for GDP growth in 2016 has been revised down 0.1 pp to 7.5%.

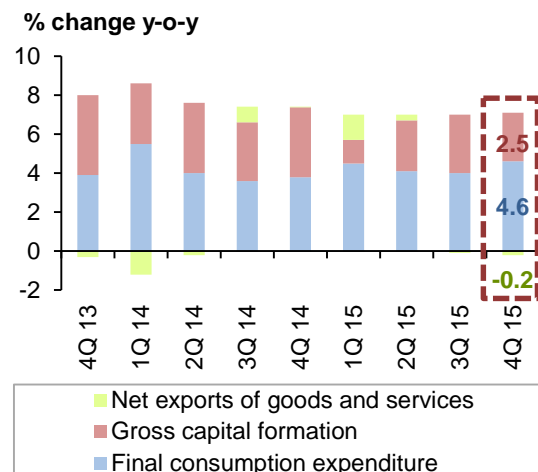
China

China's real GDP grew by 6.8% y-o-y in the 4Q15 based on data released by the National Bureau of Statistics (NBS) in January. Economic growth averaged 6.9% in 2015 as a whole. Consumer spending helped to cushion a slowdown of the traditional drivers of the economy in 2015.

The pace of economic expansion eased in the 4Q15 from July-September, when the GDP grew by 6.9% y-o-y. Nevertheless, without the lift provided by consumption expenditure, growth would have been much weaker, since investment is still slowing. Real GDP growth in 2015 as a whole was 7% and in line with the government's target but fell short of the 7.3% rate posted in 2014. According to the GDP breakdown, private and public consumption contributed around two-thirds of real GDP growth in 2015, the highest on record. Real services value-added output increased by 8.2% y-o-y in the 4Q15, bringing growth in 2015 as a whole to 8.3%. Tertiary industries accounted for 50.5% of nominal GDP in 2015, compared with 48.1% in 2014. Real industrial output rose by 6.1% y-o-y in October-December, with growth in 2015 as a whole reported at 6%. Meanwhile, output in the real primary (agriculture) sector rose by 4.1% in the 4Q15 and by 3.9% in 2015 as a whole.

Graph 3.18: Chinese GDP growth rate, SAAR

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

Graph 3.19: Contributions to Chinese GDP growth

Sources: China National Bureau of Statistics and Haver Analytics.

December's trade data was quite reassuring, pointing to the underlying health of the Chinese economy. Goods export momentum improved, probably helped by some pick-up in global demand and the depreciation of the yuan since August, while a rise in imports used in China's domestic economy points to firming domestic demand. However, recent data pointed at a modest pick-up in economic activity. The November activity data beat market expectations, and the December trade report showed encouraging exports and imports growth.

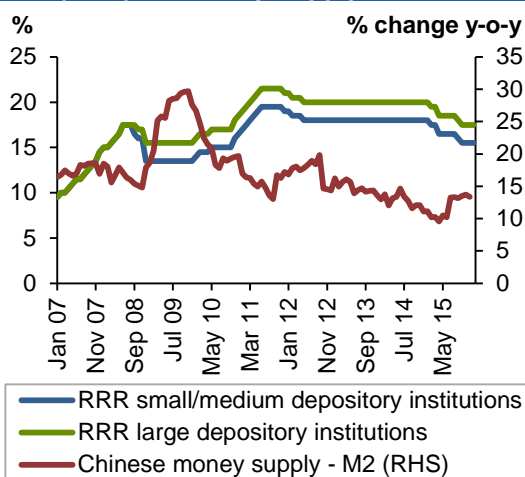
The **PBoC** announced it would inject liquidity into the banking system to maintain stable liquidity. The operation includes a short-term open market operation to address seasonally high cash demand ahead of the Chinese New Year on 8 February, with over 600 bn yuan (approximately \$93 bn) in liquidity to address medium-term liquidity demand injected via the medium-term lending facility, the standing lending facility and pledged supplementary lending. This injection into the Chinese economic system can be easily justified as a neutral liquidity operation against a backdrop of large capital outflows (around \$160 bn in December based on JPMorgan estimates) and the large \$108 bn foreign exchange reserves decline in December.

Utilised **FDI** in China decelerated for the fourth consecutive month in December, with full-year growth of 5.6% compared with 1.7% in the previous year. FDI in China in 2015 totalled \$126 bn. Manufacturing FDI remained the key drag during the 4Q15. While overall FDI expanded in 2015, manufacturing FDI contracted 1%, compared with a 12.3% contraction in 2014. Manufacturing FDI into China has contracted each year starting in 2012. Non-manufacturing FDI growth likely slowed in December, including in services. Faster contractions in manufacturing were one part of the December deceleration. Even without that change, FDI growth still would have slowed to below 6%. Weaker mining FDI is almost certain and will continue in 2016, although it is not at a large enough scale to have a dramatic impact on headline FDI. This indicates that the services FDI growth also worsened. In November, the services FDI growth slowed mostly because of weaker investment in finance, real estate and scientific research.

There are widespread expectations of a further **yuan depreciation**, which will weigh on FDI growth. This will have a dual negative impact on FDI figures denominated in US dollars: First, investors may be inclined to delay transfers for approved projects, given that this may increase the foreign currency value in China by several percentage points. Second, if a domestic Chinese project has a fixed cost in yuan, it will take less

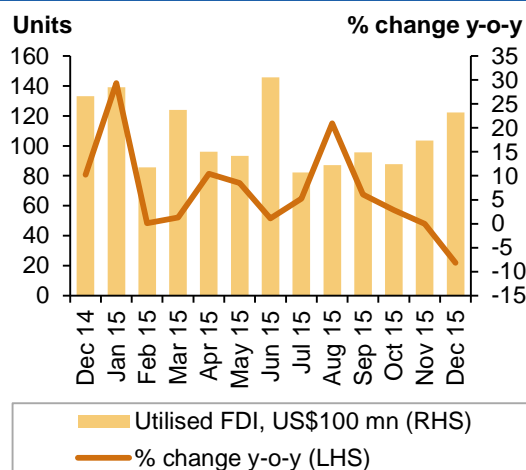
foreign currency to finance that project. The end result would be that so long as a depreciation is imminent – or that depreciation expectations persist – China's FDI figures (in US dollar terms) will face downward pressure. One positive factor is that China continues to open investments in new sectors.

Graph 3.20: Chinese Reserve Requirement ratio (RRR) vs. Money supply



Sources: People's Bank of China and Haver Analytics.

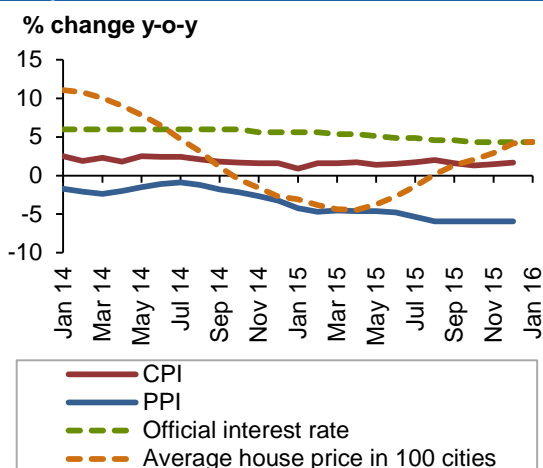
Graph 3.21: Chinese utilised FDI



Sources: China National Bureau of Statistics and Haver Analytics.

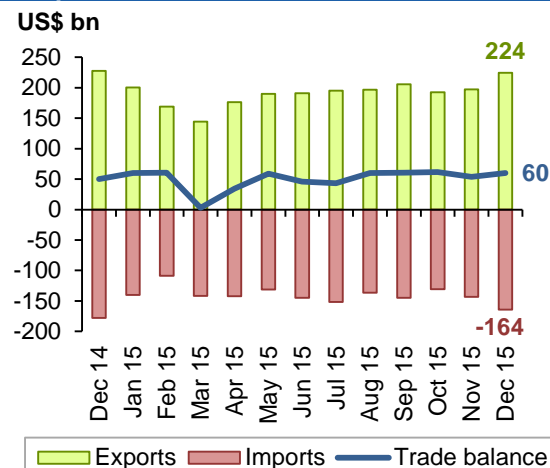
CPI inflation remains low and the **producer price index (PPI)** deflation continues to be a major challenge for the corporate sector. China's CPI inflation increased from 1.5% y-o-y in November to 1.7% in December, while PPI deflation remained at 5.9% y-o-y in December.

Graph 3.22: Chinese CPI vs. PPI



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

Graph 3.23: Chinese trade balance

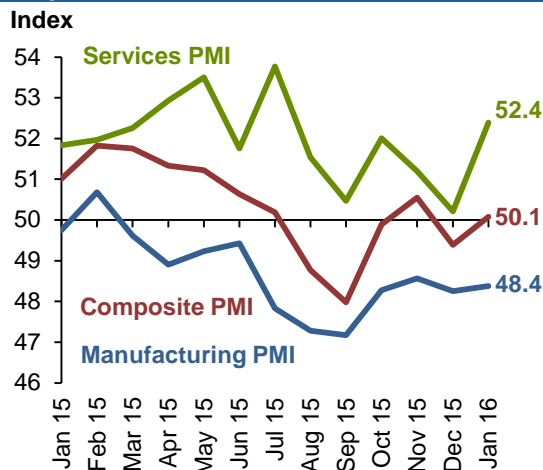


Sources: China Customs and Haver Analytics.

China's **industrial profits** sharply decelerated to 4.7% y-o-y in December from a 1.4% contraction in November. That is largely because of the deceleration in the auto sector, which declined from a 35% expansion in November to an 8.1% expansion in December. However, it remained at a high level compared with a 3.1% contraction through October 2015. As a result, 2015 industrial profit reported a 2.3% y-o-y contraction, the first contraction since the NBS published such data in 1999. Weak domestic and international demand were the main contributors to the headline

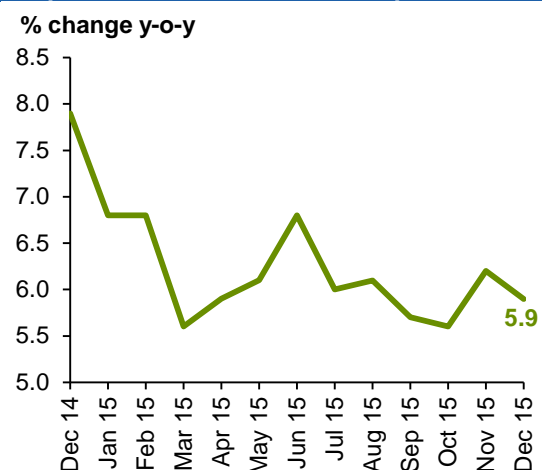
deceleration. Industrial production decelerated to 6.1% in 2015, 2.2 pp lower than the rate of 2014. China's foreign trade contracted 8% y-o-y in 2015, the second contraction after 2009.

Graph 3.24: Chinese PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.25: Chinese industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

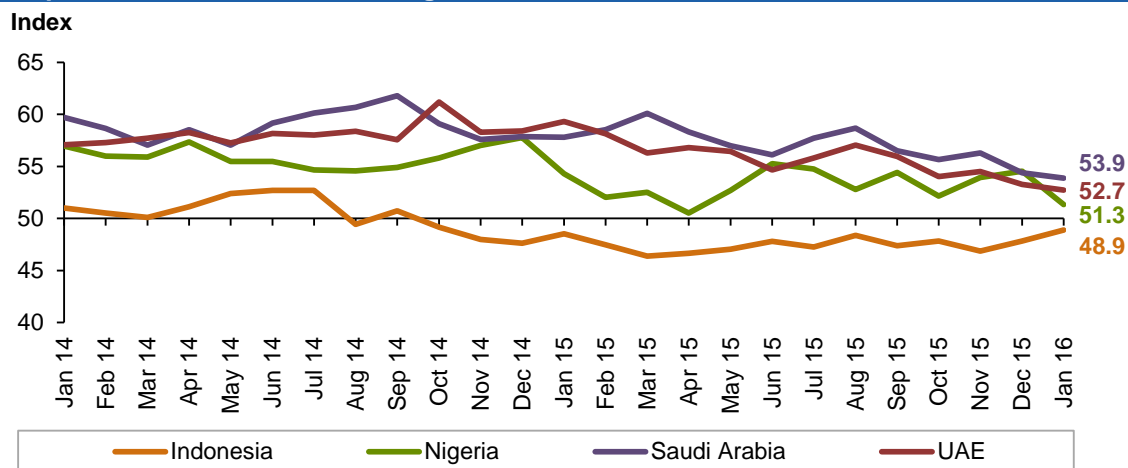
Chinese manufacturers signalled a modest deterioration in operating conditions at the start of 2016, with both output and employment declining at slightly faster rates than in December. The **manufacturing PMI** for January is 48.4, up 0.2 points from December. Recent macroeconomic indicators show that the economy is still in the process of bottoming out and efforts to trim excess capacity are just starting to show results. The China **services PMI** for January is 52.4, the highest level since July. It marks a significant improvement of 2.2 points over the reading for December. The Caixin Composite Output Index came in at 50.1 above the neutral 50-point level, showing that the economy has been recovering. Overall, the fast development of the services sector has, to a large extent, offset the impact of weakening manufacturing, indicating a better economic structure.

Overcapacity in heavy industry and real estate de-stocking may continue to drag on industrial profit growth in 2016. Moreover, the upstream mining sector will remain weak, although a cyclical rebound is possible in the next year. The GDP growth expectation has thus been revised down 0.1 pp at 6.3% for 2016.

OPEC Member Countries

In **Saudi Arabia**, consumer price inflation remained stable at 2.3% y-o-y in December, while the non-oil private sector continued growing in January as suggested by a PMI reading of 53.9. Output and new business both rose at a slower pace than the previous month.

IR Iran plans to implement a tax reform that offers a 100% tax exemption to the exports of goods and services, starting from the third decade of March 2016, aiming at expanding non-oil exports. The country's non-oil exports amounted to more than \$35 bn between March 2015 and January 2015.

Graph 3.26: PMIs of Indonesia, Nigeria, Saudi Arabia and UAE

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

The non-oil private sector in **Nigeria** had a modest improvement in business conditions in January. The PMI stood at 51.3 last month, signalling growth in production, new orders and job creation.

The central bank of the **United Arab Emirates** kept its benchmark interest rate unchanged in January at 1.25%, following an increase in December from 1.00% to 1.25%. The non-oil private sector expanded in January, though at a slower pace than in the previous month, according to the PMI reading.

The manufacturing sector of **Indonesia** reported the highest reading in 15 months of its respective PMI in January, although it remained under 50. The survey indicated a stabilization in employment levels, while output and new orders declined.

Other Asia

In **Vietnam**, a quicker increase in incoming new business largely supported the manufacturing sector in January. The PMI survey showed an improvement in production together with a steep discount in input and output prices.

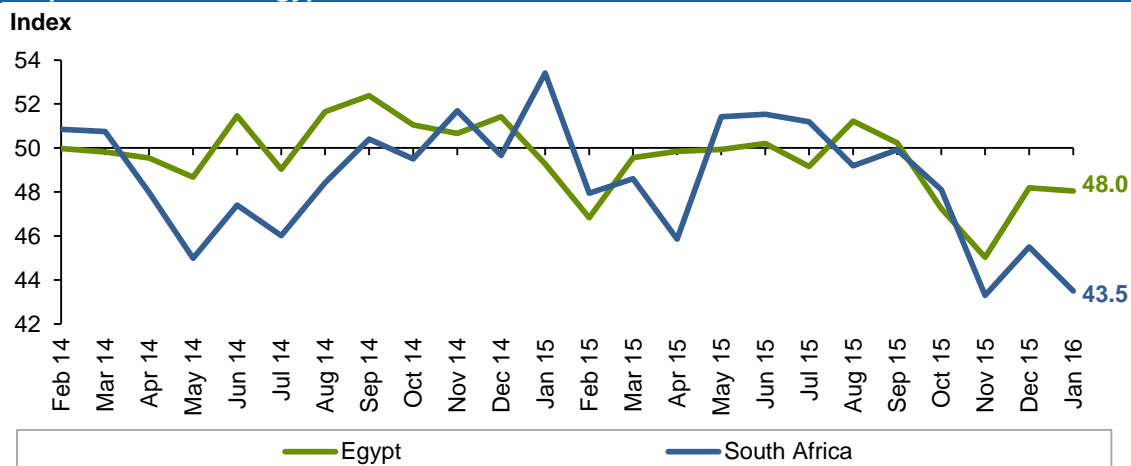
The **Philippines'** GDP grew 6.3% y-o-y in 4Q15, up from 6.1% in the previous quarter. For the full year, the economy expanded 5.8% y-o-y from 6.1% in 2014. Government consumption expenditure soared for the second consecutive quarter in 4Q15, rising by more than 17% y-o-y. Gross Fixed Capital Formation markedly grew by 22.5% y-o-y in the 4Q15, while exports increased 7.1% y-o-y in the same quarter, compared to 12.8% improvement in the 4Q14.

In contrast, the manufacturing sector in **Malaysia** remained in the contraction territory last month. The manufacturing PMI posted 48.6 in January, up slightly from 48.0 in the previous month. A slower rate of contraction had been reported in production and new orders.

Africa

The currency of **South Africa** (the rand) depreciated 9.7% m-o-m in January, after a 5.7% depreciation in the previous month. As a result, inflation increased to its eleven-month high reading of 5.2% y-o-y in December, up from 4.8% in the previous month. This also signalled the biggest increase of 2015. Aiming at preventing further currency depreciation and limiting a rise in inflation, the country's Reserve Bank increased its benchmark interest rate to 6.75% in January, the second consecutive increase in two months. South Africa's private sector stayed in contraction last month, according to the PMI reading of January.

Graph 3.27: PMIs in Egypt and South Africa



Sources: Investec, IPSA, Markit, Reuters Telerate and Haver Analytics.

Inflation in **Egypt** rose 11.9% y-o-y in December, fractionally higher than November. In January, business conditions in the private sector deteriorated for the fourth month in a row on the contraction of both output and new orders.

Latin America

In **Argentina**, the peso depreciated 18.7% and 19.4% m-o-m in December and January, respectively, on the lifting of capital and currency controls. This, together with the lifting of export tariff for farmers, has enhanced the competitiveness of framers, facilitating the release of grain inventories to the markets. The government is also working on settling debt issues with foreign creditors, something which has kept the country locked out of international debt markets since its 2001 default.

Transition region

The manufacturing sector in the **Czech Republic** continued sending positive signals in January as suggested by the country's recent manufacturing PMI. The index rose to 56.9 in January, up from December's 55.6. This signals the third consecutive increase in the index, revealing strong ongoing gains in production, new business and employment.

The upturn in the business conditions of **Poland's** manufacturing sector remained in place last month, though at a slower pace. The manufacturing PMI of January stood at 50.9, down from 52.1 a month earlier, signalling a loss of momentum on lesser growth in both production and new business.

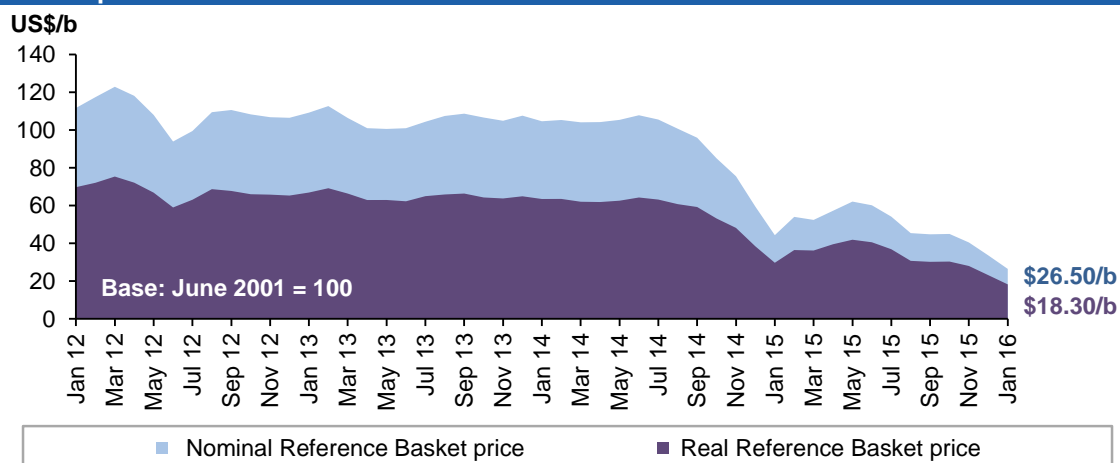
Oil prices, US dollar and inflation

Compared to its most important currency counterparts, the **US dollar** had mixed performance on average in January. It remained strong, however, particularly against the currencies of emerging and developing economies. It remained almost flat against the euro, strengthened by 1.1% against the Swiss franc, was 3.0% lower compared to the yen and increased by 4.1% versus the pound sterling. While there is a clear and continued divergence of the Fed's monetary policy compared to that of the ECB and the BoJ, the likelihood that the Fed may pause its interest raising cycle in March has increased. This may lead to a temporary weakening of the US dollar, which will also depend on the actions of other central banks and the development of their respective economies.

Among the major **emerging market currencies**, the Chinese yuan continued declining in January by 1.6% on average versus the US dollar. This comes after several months of weakening (around 7% since August). Also, the decline of the Brazilian real versus the US dollar continued in January, with the real falling an average of 4.7% m-o-m against the US dollar in January. The Russian ruble also continued weakening, this time by again a considerable 12.1% m-o-m versus the US dollar in January.

In nominal terms, the price of the **OPEC Reference Basket (ORB)** fell by a monthly average of \$7.14, or 21.2%, from \$33.64/b in December to \$26.50/b in January. In real terms, after accounting for inflation and currency fluctuations, the ORB declined by 21.0%, or \$4.88, to \$18.30/b from \$23.18/b (base June 2001=100). Over the same period, the US dollar increased by 0.3% against the import-weighted modified Geneva I + US dollar basket*, while inflation remained flat.

Graph 3.28: Impact of inflation and currency fluctuations on the spot OPEC Reference Basket price*



Source: OPEC Secretariat.

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

World Oil Demand

World oil demand growth in 2015 was unchanged from the previous month's projections and currently stands at 1.54 mb/d y-o-y, despite some upward and downward revisions within the regions. As such, global consumption is estimated to average around 92.96 mb/d. In 2016, world oil demand growth was revised down by a marginal 10 tb/d as a result of slower economic momentum in Latin America compared with last month. World oil demand growth is now anticipated at 1.25 mb/d, leading to global consumption averaging around 94.21 mb/d. The expected growth in 2016 is in line with the average seen over the last three years. Growth could be even higher, depending on an improvement in the global economy.

World oil demand in 2015 and 2016

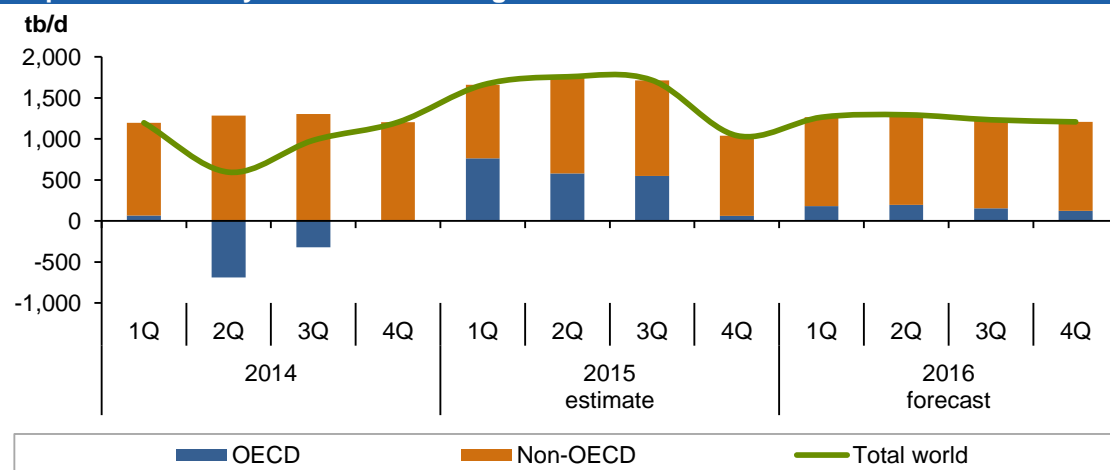
Table 4.1: World oil demand in 2015, mb/d

	2014	1Q15	2Q15	3Q15	4Q15	2015	Change 2015/14	
							Growth	%
Americas	24.18	24.25	24.12	24.77	24.79	24.48	0.30	1.24
of which US	19.43	19.60	19.47	19.99	20.00	19.77	0.34	1.74
Europe	13.45	13.56	13.59	14.10	13.54	13.70	0.24	1.81
Asia Pacific	8.14	8.75	7.71	7.63	8.24	8.08	-0.06	-0.69
Total OECD	45.77	46.55	45.43	46.51	46.56	46.26	0.49	1.06
Other Asia	11.42	11.46	11.95	11.89	11.82	11.78	0.36	3.16
of which India	3.79	4.01	3.98	3.91	4.11	4.00	0.22	5.70
Latin America	6.60	6.40	6.66	6.88	6.54	6.62	0.02	0.26
Middle East	8.14	8.24	8.21	8.74	8.22	8.35	0.21	2.59
Africa	3.78	3.88	3.85	3.79	3.94	3.86	0.09	2.25
Total DCs	29.95	29.99	30.66	31.30	30.52	30.62	0.67	2.25
FSU	4.58	4.43	4.27	4.64	4.96	4.58	0.00	-0.08
Other Europe	0.65	0.66	0.62	0.66	0.75	0.67	0.02	2.79
China	10.46	10.44	11.06	10.69	11.13	10.83	0.37	3.51
Total "Other regions"	15.70	15.53	15.95	15.99	16.83	16.08	0.38	2.43
Total world	91.42	92.06	92.05	93.80	93.92	92.96	1.54	1.69
Previous estimate	91.38	92.01	92.00	93.68	93.95	92.92	1.54	1.68
Revision	0.04	0.05	0.05	0.12	-0.03	0.05	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

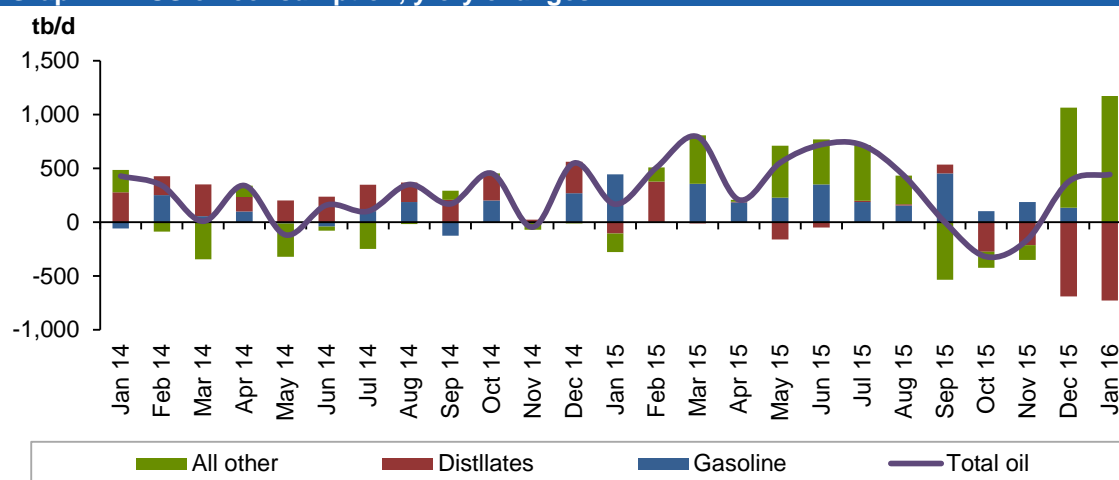
The most recent available monthly **US oil demand** data for November 2015 implies losses in oil requirements of approximately 0.16 mb/d, or around 1%, y-o-y, after decreasing in October 2015 and with strong oil demand growth data in 3Q15, in which gasoline was the leading product.

Monthly data for November 2015 was adjusted down from the optimistic preliminary expectations published last month, which were based on weekly data. November growth in gasoline and jet fuel demand was particularly robust, but was more than offset by strong declines in distillate requirements, due to an exceptionally warm month. Demand growth in gasoline exceeded the 2% increase y-o-y and averaged close to 0.2 mb/d; growth in jet fuel requirements surpassed the 4% rise y-o-y. Losses in demand for propane/propylene were also strong y-o-y at more than 7%, to a large extent due to fuel substitution, a trend that has continued since September 2015.

Nevertheless, monthly data available for 11 months and the preliminary weekly figures for December show strongly growing US oil requirements for the whole of 2015, rising by almost 2%, with total product demand adding up to around 0.3 mb/d over 2014 levels.

Gasoline and jet fuel usage in the transportation sector accounted for the bulk of the increases, while residual fuel oil, distillates and propane/propylene demand remained on the bearish side. Preliminary weekly data suggests rising oil requirements during the month of January 2016, with strong growth in gasoline, jet fuel oil and the “other products” category. This was, however, somewhat counterbalanced by declining distillate fuel requirements. US oil demand is generally in line with economic improvements in the country, with principally more oil requirements in the industrial and transportation sectors, the latter also as a result of lower fuel prices.

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



Source: US Energy Information Administration.

In **Mexico**, December 2015 was characterized by growing oil demand, which increased by roughly 30 tb/d, or 2%, y-o-y. Gains were evident for residual fuel oil, gasoline and jet fuel. For the whole of 2015, however, oil demand in Mexico declined slightly, with diesel, residual fuel oil and LPG being in the negative territory, while gasoline and jet fuel grew. The 2016 risks for Mexican oil demand remain balanced, compared with last month.

The latest November 2015 **Canadian data** showed falling oil requirements of around 60 tb/d, or 3%, y-o-y. Reductions in oil requirements were most notable in gasoline, gas/diesel oil and fuel oil requirements, partly offset by demand in jet fuel and naphtha. Year-to-date data, with only the month of December missing, indicates an approximate 3% y-o-y decline in oil requirements in Canada, as slower manufacturing activities in the energy sector weighed on the demand numbers. 2016 projections for Canadian oil demand remain unchanged from those in the previous month, showing demand to be slightly in the positive, y-o-y.

OECD Americas oil demand grew by 0.30 mb/d in 2015 compared with the previous year. In 2016, OECD Americas oil demand is projected to grow by 0.29 mb/d compared to the previous year.

OECD Europe

European oil demand appeared to grow robustly in November 2015 y-o-y, following a flat October and saw healthy gains in the majority of countries in the region with Turkey, Netherlands and Belgium recording the most solid increases. Product-wise, November 2015 demand was dominated by rising requirements for road transportation fuels, predominantly diesel, and gasoline, to a lesser extent. Oil demand was further supported by rising naphtha and LPG requirements, which have, however, been more than offset by shrinking residual fuel oil demand, as a result of marine bunker fuel specifications throughout the region's ports. Heating oil demand was also in the positive, due to colder-than-expected weather as compared to the historical norm.

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

	Dec 15	Dec 14	Change from Dec 14	Change from Dec 14, %
LPG	440	435	5	1.1
Gasoline	1,059	1,085	-26	-2.4
Jet/Kerosene	726	725	1	0.1
Gas/Diesel oil	3,262	3,267	-4	-0.1
Fuel oil	286	304	-18	-5.9
Other products	849	856	-7	-0.8
Total	6,622	6,671	-49	-0.7

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

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

Preliminary **European Big 4** (Germany, France Italy and the UK) data for December 2015 implies declines of approximately 0.05 mb/d y-o-y, with Italy being in the positive while Germany, France and the UK are anticipated to have recorded declines. In terms of products, gasoline and residual fuel oil accounted for the bulk of the overall losses.

Another major indicator that influences transportation fuel data is the European auto market expanding for yet another month in December 2015. Passenger car registrations were higher by almost 17% y-o-y and for the 28th consecutive month, according to data by the European Automobile Manufacturers Association. The year 2015 has been a robust one in terms of passenger car sales with car registrations in all major auto markets increasing y-o-y, particularly in Spain, Italy, France, the UK and Germany.

For 2016, OECD Europe oil demand growth is anticipated to shrink marginally as economic developments in the region's major economies, along with the higher base of comparison of 2015, weigh on oil demand growth data. Accordingly, most countries in the region are anticipated to reduce their oil requirements compared to 2015.

OECD Europe oil demand grew by 0.24 mb/d in 2015, while 2016 oil demand is expected to remain largely flat with a marginal decline of 0.01 mb/d compared with 2015.

OECD Asia Pacific

According to preliminary data from the Ministry of Economy, Trade and Industry (METI), **Japanese oil demand** decreased in December 2015 by 0.3 mb/d y-o-y, showing declines in most product categories, particularly gasoline, LPG and kerosene. These declines were partly offset by demand for naphtha and jet fuel, which showed increases. Oil requirements in crude and fuel oil for direct burning and electricity generation fell y-o-y, as a result of warmer-than-usual weather compared to the historical norm and due to increasing substitution with other commodities.

For the whole of 2015, Japanese oil demand fell by more than 2% y-o-y, roughly 80 tb/d lower than in 2014. However, this is a much milder reduction compared to 2014, when oil demand shrank by as much as 0.2 mb/d. A key contributor to this is the declining fuel oil demand and less direct crude burning, in line with reductions from the power generation sector, which saw demand drop by more than 4% y-o-y.

The outlook for 2016 holds significant downside risk for Japan's oil demand, considering that the forecast is based on the assumption of more than a handful of nuclear plants re-joining operation in the country during 2016.

Table 4.3: Japanese domestic sales, tb/d

	Dec 15	Change from Dec 14	Change from Dec 14, %
LPG	435	-11	-2.5
Gasoline	962	-49	-4.8
Naphtha	898	43	5.0
Jet fuel	91	7	8.4
Kerosene	518	-108	-17.3
Gasoil	610	-16	-2.5
Fuel oil	499	-118	-19.2
Other products	60	0	-0.7
Direct crude burning	129	-51	-28.4
Total	4,202	-304	-6.7

Source: Ministry of Economy Trade and Industry of Japan.

In **South Korea**, November 2015 came up strongly increasing, rising by almost 0.21 mb/d, which equates to an approximate 9% rise y-o-y. Strongly growing demand for LPG and naphtha in the petrochemical industry and healthy demand for gasoline and diesel in the road transportation sector, in combination with remarkable growth in residual fuel usage, drew the main picture for November 2015.

South Korean oil demand during 2016 remains unchanged from the previous month's projections with the potential for oil demand growth being skewed to the upside, especially for petrochemical fuels and to a lesser extent for transportation fuels.

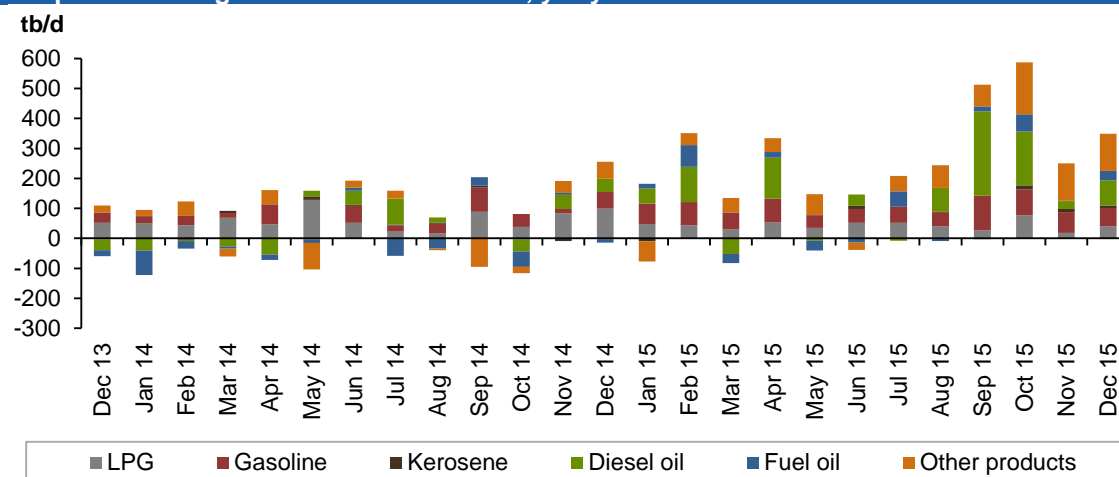
OECD Asia Pacific oil consumption shrank by 0.06 mb/d in 2015. The downward trend is forecast to continue to a larger degree in 2016, dropping by 0.12 mb/d.

Other Asia

In **India**, oil demand for December 2015 grew robustly, rising by a remarkable 0.35 mb/d, or 8%, y-o-y, continuing its strongly increasing trend in 2015, which was particularly seen in the second half of the year.

For the whole of 2015, Indian oil demand rose by 0.22 mb/d y-o-y as compared to a year earlier. All main product categories showed solid gains, particularly LPG, gasoline and diesel, in line with major macroeconomic indicators in the country and also supported by the low international oil price environment. Thus, 2015 marked a particularly strong year for Indian oil demand with an overall growth way above the historical levels of the last decade.

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



Sources: OPEC Secretariat and PPAC.

Focusing on December 2015, the main contributors to oil demand are products at the light and heavy ends of the barrel, LPG, gasoline and naphtha, as well as residual fuel oil.

In line with strong vehicle sales and low retail fuel prices, December 2015 gasoline requirements grew by 12% y-o-y, while LPG demand was particularly strong in the residential and road transportation sectors. Moreover, naphtha usage advanced in the petrochemical and industrial sectors. Towards the heavy end of the barrel, demand was bullish for residual fuel oil, particularly in the agricultural sector, while construction activities throughout the country supported growth in bitumen usage. Finally, December 2015 diesel and kerosene demand grew by around 5% and 3% y-o-y, respectively.

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

	Dec 15	Dec 14	Change	Change, %
LPG	698	658	40	6.2
Gasoline	578	517	61	11.8
Kerosene	281	273	8	2.8
Diesel oil	1,651	1,566	85	5.4
Fuel oil	261	230	30	13.2
Other products	1,080	956	124	13.0
Total oil demand	4,549	4,200	348	8.3

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

World Oil Demand

The solid oil demand performance, which was observed in 2H15, is expected to continue in 2016, contributing positively to overall growth as a result of low per capita oil demand and forecasted robust economic growth.

For the remaining countries in the region and with most data available up to November 2015, oil consumption grew solidly in **Indonesia, Thailand, Singapore, Philippines** and **Taiwan**. The bulk of growth in all these countries originates in transportation fuels, notably gasoline, industrial fuels, distillates and residual fuel.

As for the current year, the risks for 2016 in Other Asian oil demand growth is expected to be balanced with a slightly positive influence from India as a result of the overall improvement in economic activities along with lower oil prices and with transportation fuels being the main contributors to growth. Some downside risks in the region relate, however, to reduced subsidies on transportation fuels although lower international oil prices would most likely moderate this impact.

Other Asia's oil demand grew by 0.36 mb/d in 2015. As for 2016, oil demand is forecast to be 0.32 mb/d higher than in 2015.

Latin America

Brazilian oil demand declined in December 2015 y-o-y, dropping by around 0.11 mb/d, or 4%, y-o-y, with the decline apparently reflecting the weak pace of the country's economic momentum.

All products performed far lower than expectations with the exception of ethanol, which grew strongly, rising by more than 0.03 mb/d, which is equivalent to a 12% rise y-o-y. Gasoline, on the other hand, was sluggish and fell sharply, dropping by around 0.05 mb/d, yet it increased by more than 6% y-o-y. Drivers in the country frequently switch to ethanol for gasoline in order to take advantage of the price differential between the two products. Diesel oil also lost momentum during December 2015, dropping by more than 0.04 mb/d, or 4%, y-o-y. This decline is in line with slower economic activities in the country, marking the sixth consecutive drop in monthly oil demand growth.

The overall 2015 oil demand growth in Brazil is on the negative side as a result of slower economic momentum in the country.

Table 4.5: Brazilian inland deliveries, tb/d

	<u>Dec 15</u>	<u>Dec 14</u>	<u>Change</u>	<u>Change, %</u>
LPG	227	233	-6	-2.6
Gasoline	801	851	-49	-5.8
Jet/Kerosene	126	133	-7	-5.5
Diesel	913	956	-42	-4.4
Fuel oil	77	111	-35	-31.1
Alcohol	314	280	34	12.1
Total	2,458	2,564	-106	-4.1

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

Oil demand was also on the decline during all of 2015 in **Ecuador**, dropping by as much as 5% y-o-y. All main petroleum product categories were sluggish, particularly gasoline and fuel oil demand, as a result of the adverse effects from the low international oil price environment. Oil demand was similarly sluggish in **Venezuela** during the first nine months of 2015. In **Argentina**, with data up to November 2015, oil

demand growth levels showed gains of 0.03 mb/d, or 4%, y-o-y. Almost all product categories showed strong demand with gasoline, diesel oil and residual fuel oil requirements on the rise, while demand for the remaining product categories remained relatively flat.

Expectations for oil demand growth in Latin America in 2016 are similarly sluggish to last month's projections, with a slightly increased risk to the upside as a result of forecast improvements in the region's economy as compared to 2015.

Latin America's oil demand growth is projected to be around 0.02 mb/d during 2015, while the 2016 outlook expects oil demand to grow by 0.11 mb/d.

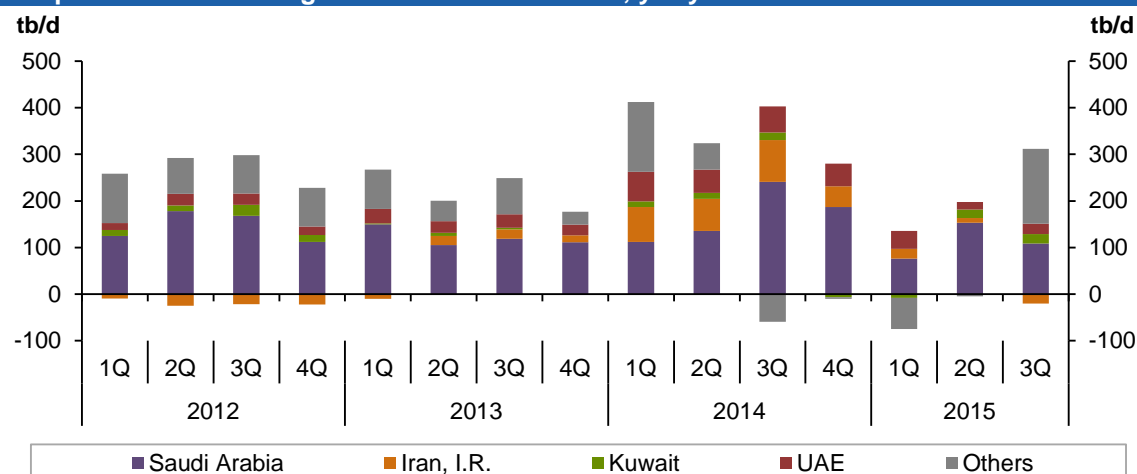
Middle East

In **Saudi Arabia**, December 2015 oil demand recorded a decline of around 0.11 mb/d, or 5%, y-o-y. This marks the second month during 2015 of declining growth and the sharpest in terms of size.

Total consumption in the country stood at 2.29 mb/d in December. Growth in the majority of the main petroleum categories, notably gasoline and diesel in the road transportation sector, has been more than offset by strongly shrinking demand for residual fuel oil. Residual fuel oil consumption declined sharply in December 2015, shedding more than 0.27 mb/d, or around 42%, of its values as compared to December 2014. High baseline effects as well as off seasonal demand with lower power generation usage have led to less fuel oil consumption. On the other hand, all transportation fuels (diesel oil, gasoline and jet) have registered above 10% gains y-o-y, signaling that healthy demand in the last month of the year.

Overall 2015 oil demand grew by approximately 0.13 mb/d, or by more than 5%, y-o-y, led by the uptick in gasoline and diesel demand in the road transportation sector as well as residual fuel oil use in the country's additional refineries, particularly during the first three quarters of 2015. Furthermore, colder-than-anticipated weather conditions in parts of the country prompted some additional usage of oil for power generation. Fuel oil and direct crude burning usage increased by 3.5% and 4.8% during 2015, respectively, as compared to 2014.

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



Sources: Direct communication, JODI and OPEC Secretariat.

World Oil Demand

Other countries in the region were also on the positive during December 2015. Oil demand in **Iraq** continued to increase for the seventh consecutive month, higher y-o-y by 0.05 mb/d, while consumption from **Kuwait** and **Qatar** were also on the rise.

Going forward, Middle East oil demand is subject to the performance of various economies in the region with the impact of lower oil prices naturally playing a negative role on expected spending plans.

For 2015, **Middle East oil demand** growth hovered around 0.21 mb/d, while demand in 2016 is projected to grow by 0.18 mb/d.

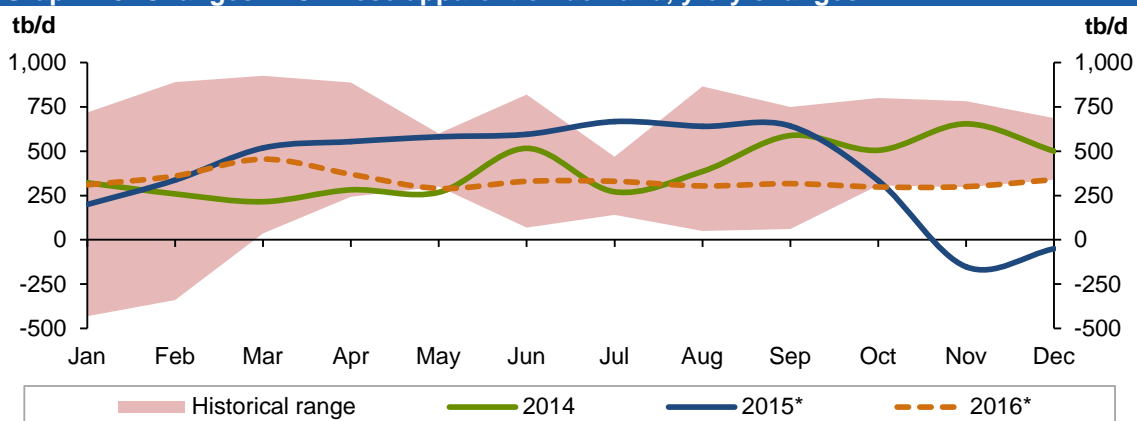
China

Chinese oil demand in December declined for the second month in a row, falling by 0.05 mb/d or approximately 0.5% y-o-y. The overall 2015 average growth for China stands at around 0.37 mb/d, or roughly 3.5%. In December 2015, oil demand was determined by rising gasoline, LPG, and jet/kerosene usage, while fuel oil and diesel consumption decreased sharply and more than offset increases from other petroleum product categories.

Gasoline demand growth during December 2015 was substantially weaker than in previous months, in line with slower growing vehicle sales during the same month. However, for the whole of 2015, passenger car sales exceeded 20 million units for the first time, setting a new record. According to the China Association of Automobile Manufacturers, in 2015, sales of passenger cars were 21.15 million, or around 7%, higher than in 2014. Additionally, Sport Utility Vehicle (SUV) sales were higher by more than 52% y-o-y and Multi-Purpose Vehicle (MPV) sales increased by more than 10% y-o-y.

For LPG, the increase in demand can be attributed to the country's expanding petrochemical industry as LPG grew for another month by more than 0.31 mb/d, or more than 26%, y-o-y. In line with increasing air traffic statistics, jet fuel demand grew by 0.08 mb/d, or approximately 17%, y-o-y. Some concerns in relation to the overall development of the Chinese economy remain, however, with sluggish diesel and residual fuel oil demand during December 2015 and with the focus being mainly on the industrial sector.

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



Note: * 2015 = estimate and 2016 = forecast.

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

The 2016 outlook risks are skewed to the downside compared with the last MOMR and are connected to likely slower economic activities as well as possible implementation of transportation fuel consumption measures geared towards curbing demand. The solid petrochemical sector and expansions in refining capacity, on the other hand, could be considered as elements supporting upward potential for 2016 oil demand estimates.

For 2015, **Chinese oil demand** is estimated to grow by 0.37 mb/d, while demand in 2016 is projected to increase by 0.29 mb/d.

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

	<u>2015</u>	<u>1Q16</u>	<u>2Q16</u>	<u>3Q16</u>	<u>4Q16</u>	<u>2016</u>	<i>Change 2016/15</i>	
							<u>Growth</u>	<u>%</u>
Americas	24.48	24.54	24.44	25.05	25.05	24.78	0.29	1.19
of which US	19.77	19.86	19.75	20.24	20.23	20.02	0.25	1.27
Europe	13.70	13.57	13.58	14.08	13.51	13.69	-0.01	-0.08
Asia Pacific	8.08	8.62	7.60	7.53	8.13	7.96	-0.12	-1.44
Total OECD	46.26	46.73	45.62	46.66	46.69	46.43	0.17	0.36
Other Asia	11.78	11.79	12.27	12.21	12.14	12.10	0.32	2.73
of which India	4.00	4.18	4.14	4.07	4.28	4.17	0.17	4.12
Latin America	6.62	6.51	6.78	6.99	6.64	6.73	0.11	1.66
Middle East	8.35	8.42	8.39	8.93	8.40	8.54	0.18	2.19
Africa	3.86	3.98	3.95	3.89	4.05	3.97	0.11	2.75
Total DCs	30.62	30.70	31.40	32.01	31.23	31.34	0.72	2.35
FSU	4.58	4.49	4.33	4.69	5.01	4.63	0.05	1.13
Other Europe	0.67	0.68	0.64	0.68	0.77	0.69	0.02	2.98
China	10.83	10.73	11.35	10.99	11.42	11.13	0.29	2.71
Total "Other regions"	16.08	15.89	16.32	16.35	17.20	16.45	0.37	2.27
Total world	92.96	93.33	93.34	95.03	95.13	94.21	1.25	1.34
Previous estimate	92.92	93.30	93.29	94.91	95.17	94.17	1.26	1.36
Revision	0.05	0.03	0.05	0.12	-0.05	0.04	-0.01	-0.01

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

Source: OPEC Secretariat.

World Oil Supply

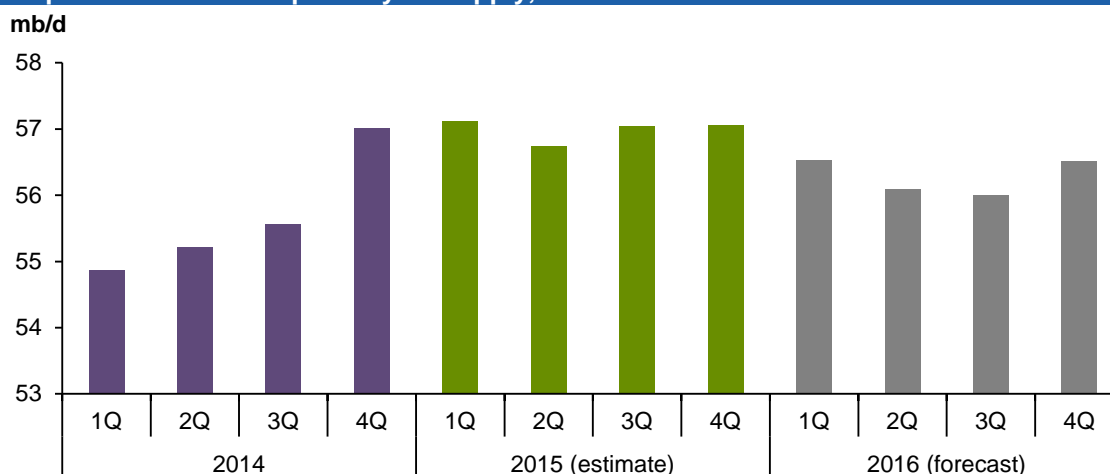
Non-OPEC oil supply for 2015 was revised up by 120 tb/d from the previous report to stand at 56.99 mb/d. This revision was mostly driven by upward 4Q15 revisions in the OECD (+161 tb/d), Developing Countries (DCs) (+73 tb/d) and the FSU (+37 tb/d). Y-o-y growth was also revised up by 90 tb/d to 1.32 mb/d for 2015. Non-OPEC oil supply for 2016 is projected to decline by 0.70 mb/d to average 56.28 mb/d. This is mainly due to announced capex cuts for 2016 on the part of international oil companies, a decline in the number of active drilling rigs in the US and Canada, and a heavy annual decline in the world's brownfields. OPEC NGLs production, which is estimated to grow by 0.15 mb/d to average 6.15 mb/d in 2015, is also expected to grow by 0.17 mb/d to reach 6.32 mb/d in 2016. In January, OPEC crude production increased by 131 tb/d to average 32.33 mb/d, according to secondary sources. As a result, preliminary data indicates the global oil supply increased by 0.03 mb/d in January to average 95.64 mb/d. Over the last three years, non-OPEC supply has increased on average by 1.7 mb/d, while average OPEC supply over the same period has not registered any gain.

Estimate for 2015

Non-OPEC supply

Preliminary data for 4Q15 indicates that total **non-OPEC oil supply in 2015** was revised up by 120 tb/d to average 56.99 mb/d. This revision was mostly driven by upward changes in 4Q15 for OECD countries such as the US, Canada, Norway and the UK, as well as Malaysia, Thailand, India, Brazil, Oman and Congo, along with Kazakhstan and Russia. These figures were partially offset by downward revisions for Azerbaijan and Vietnam.

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

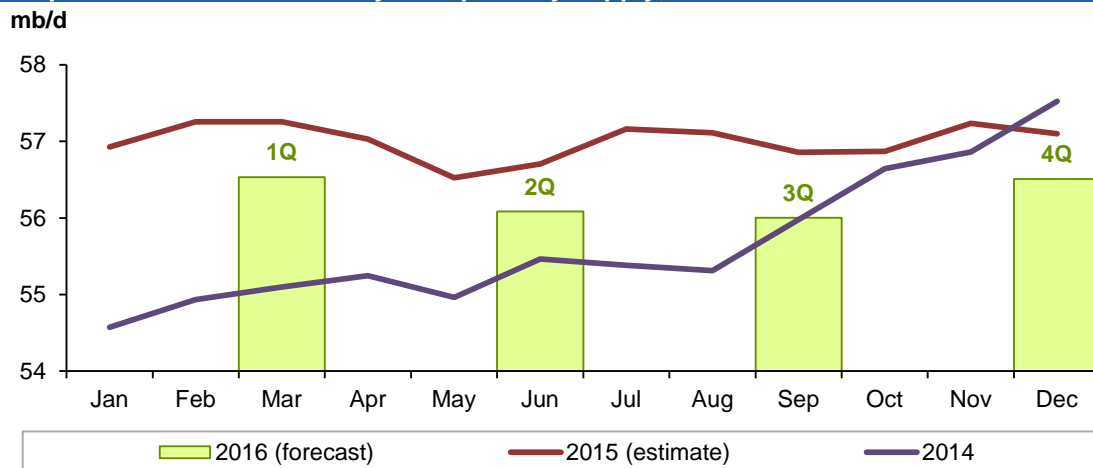


Source: OPEC Secretariat.

Non-OPEC oil supply is estimated to have averaged growth of 1.32 mb/d over 2014. This shows an upward revision by 90 tb/d in total non-OPEC supply growth over the previous report. Updated production data for 4Q15 primarily led to this upward adjustment, with the OECD experiencing the greatest rise of 161 tb/d, followed by 73 tb/d in DCs and 37 tb/d in the FSU. There were also upward revisions to non-OPEC supply figures for 3Q15, 2Q15 and 1Q15 of 86 tb/d, 56 tb/d and 72 tb/d, respectively.

The expectation of reduced cash flow in 2016 has prompted many companies to reduce investment, deferring major new projects until a sustained price recovery can be maintained. Downsizing of onshore expenditures, particularly in the US tight oil industry, is predicted to further reduce the count of oil rigs and well completions in 2016. Hence, a strong contraction is expected for 2016 of 0.70 mb/d, a downward revision of 40 tb/d over the previous month, to average 56.28 mb/d for the year.

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



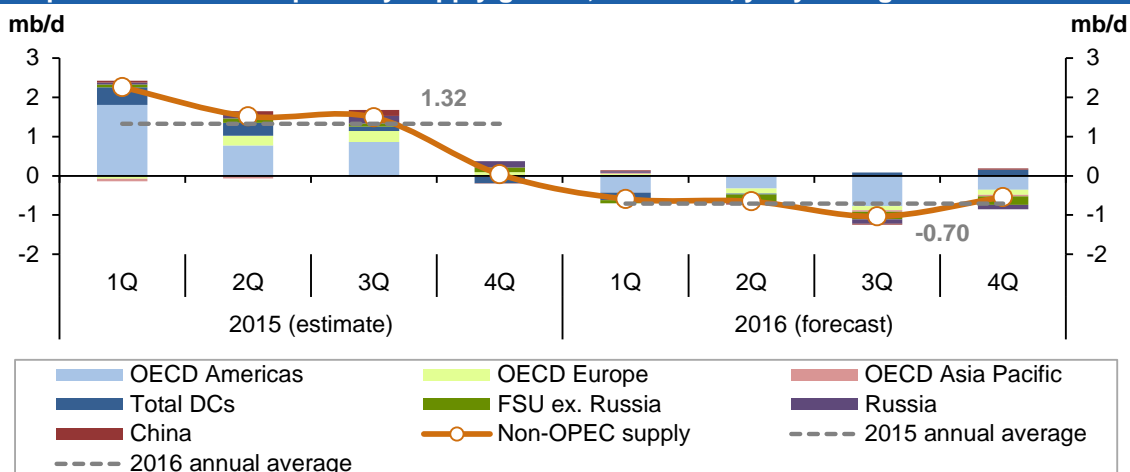
Source: OPEC Secretariat.

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

	<u>2014</u>	<u>1Q15</u>	<u>2Q15</u>	<u>3Q15</u>	<u>4Q15</u>	<u>2015</u>	<i>Change</i> <u>15/14</u>
Americas	20.08	21.04	20.69	21.14	20.88	20.94	0.85
of which US	12.96	13.78	14.05	14.06	13.86	13.94	0.98
Europe	3.61	3.69	3.77	3.68	3.83	3.74	0.14
Asia Pacific	0.51	0.43	0.45	0.50	0.49	0.47	-0.04
Total OECD	24.20	25.16	24.90	25.32	25.20	25.14	0.95
Other Asia	2.60	2.71	2.71	2.65	2.70	2.69	0.09
Latin America	5.01	5.23	5.16	5.18	5.15	5.18	0.17
Middle East	1.34	1.30	1.27	1.24	1.24	1.26	-0.08
Africa	2.38	2.39	2.38	2.37	2.36	2.37	-0.01
Total DCs	11.33	11.63	11.53	11.44	11.45	11.51	0.18
FSU	13.55	13.68	13.61	13.59	13.70	13.64	0.09
of which Russia	10.68	10.74	10.76	10.81	10.88	10.80	0.12
Other Europe	0.13	0.13	0.13	0.13	0.13	0.13	0.00
China	4.29	4.33	4.39	4.38	4.38	4.37	0.07
Total "Other regions"	17.98	18.14	18.13	18.10	18.21	18.15	0.17
Total Non-OPEC production	53.51	54.94	54.55	54.85	54.86	54.80	1.30
Processing gains	2.16	2.19	2.19	2.19	2.19	2.19	0.02
Total non-OPEC supply	55.67	57.12	56.74	57.04	57.05	56.99	1.32
Previous estimate	55.64	57.05	56.68	56.95	56.78	56.87	1.23
Revision	0.03	0.07	0.06	0.09	0.27	0.12	0.09

Source: OPEC Secretariat.

On a regional basis, OECD Americas' oil supply saw the greatest increase among all non-OPEC regions in 2015 at 0.85 mb/d, but in 2016 this region is expected to see the highest decline among regions at minus 0.47 mb/d (**Graph 5.3**).

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


Source: OPEC Secretariat.

On a country basis the US, Brazil, Russia, the UK, Canada, China, Norway, Malaysia and Oman experienced the largest growth in 2015, while Mexico, Yemen, Australia and Kazakhstan witnessed the biggest declines.

FSU's output is expected to see the highest decline after OECD Americas at minus 0.16 mb/d on a regional basis in 2016. On a country basis it is expected that Brazil and Canada will be the main contributors to growth, while the US, FSU, Mexico and the UK will be the main contributors to decline.

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

	<u>2015</u>	<u>1Q16</u>	<u>2Q16</u>	<u>3Q16</u>	<u>4Q16</u>	<u>2016</u>	<u>Change</u> <u>16/15</u>
Americas	20.94	20.62	20.36	20.37	20.52	20.47	-0.47
of which US	13.94	13.64	13.50	13.43	13.57	13.54	-0.40
Europe	3.74	3.74	3.64	3.57	3.71	3.67	-0.08
Asia Pacific	0.47	0.45	0.46	0.46	0.44	0.45	-0.01
Total OECD	25.14	24.81	24.46	24.40	24.67	24.59	-0.56
Other Asia	2.69	2.69	2.71	2.73	2.76	2.72	0.03
Latin America	5.18	5.15	5.19	5.23	5.31	5.22	0.04
Middle East	1.26	1.24	1.23	1.22	1.22	1.23	-0.04
Africa	2.37	2.36	2.37	2.34	2.32	2.35	-0.03
Total DCs	11.51	11.44	11.49	11.52	11.61	11.52	0.00
FSU	13.64	13.60	13.44	13.39	13.49	13.48	-0.16
of which Russia	10.80	10.79	10.71	10.69	10.77	10.74	-0.06
Other Europe	0.13	0.13	0.13	0.13	0.13	0.13	0.00
China	4.37	4.35	4.36	4.36	4.41	4.37	0.00
Total "Other regions"	18.15	18.08	17.93	17.89	18.03	17.98	-0.16
Total Non-OPEC production	54.80	54.34	53.89	53.81	54.31	54.08	-0.72
Processing gains	2.19	2.20	2.20	2.20	2.20	2.20	0.01
Total non-OPEC supply	56.99	56.53	56.08	56.00	56.51	56.28	-0.70
Previous estimate	56.87	56.46	56.01	55.93	56.43	56.21	-0.66
Revision	0.12	0.08	0.08	0.08	0.08	0.08	-0.04

Source: OPEC Secretariat.

OECD

Total OECD oil supply in 2016 is projected to decline by 0.56 mb/d over the previous year to average 24.59 mb/d, indicating a downward revision of 70 tb/d compared with the previous *MOMR*. This is driven by adjustments carried over from historical data, as well as some changes to supply that affect production estimations from the US and the UK. The OECD supply profile remains relatively unchanged, with a strong decline expected from OECD Americas, OECD Europe and OECD Asia Pacific, respectively. According to updated production data for 4Q15, the OECD's oil supply in 2015 was revised up by 76 tb/d to average 25.14 mb/d, indicating growth of 0.95 mb/d.

OECD's oil supply in 2016 is expected to stand at 24.81 mb/d, 24.46 mb/d, 24.40 mb/d and 24.67 mb/d on a quarterly basis.

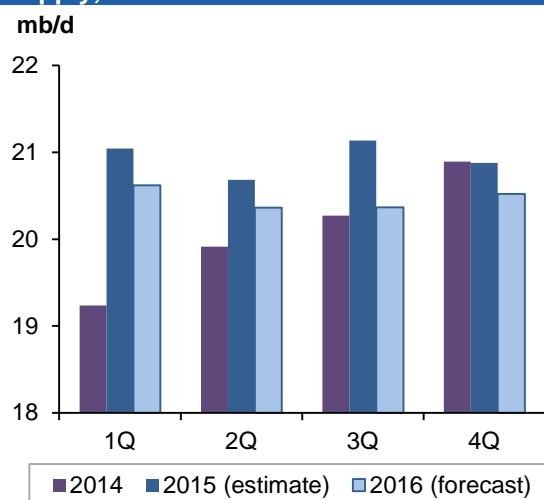
OECD Americas

Oil production in **OECD Americas** is projected to decline by 0.47 mb/d y-o-y to average 20.47 mb/d in 2016, indicating a small downward revision of 20 tb/d compared with the previous month. The oil production outlook for this region in 2016 remains uncertain since the cost of production is seen to be higher than current oil prices in most areas of the US and Canada as well as Mexico, although the upstream industry witnessing a remarkable reduction in drilling and completion costs during 2015.

OECD Americas' oil supply in 2016 is expected to stand at 20.62 mb/d, 20.36 mb/d, 20.37 mb/d and 20.52 mb/d on a quarterly basis.

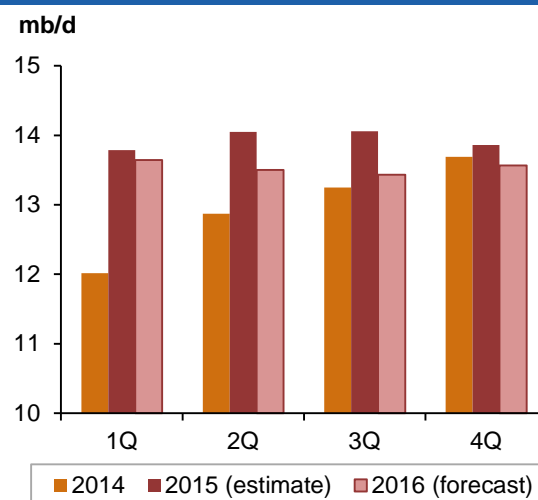
Oil production in OECD Americas is estimated to grow by 0.85 mb/d to average 20.94 mb/d in 2015. On a quarterly basis, the region grew y-o-y in the first three quarters by 1.80 mb/d, 0.78 mb/d, 0.87 mb/d respectively and remained almost flat in 4Q15. Production during 1H15 and 2H15 increased by 1.48 mb/d and 0.49 mb/d, respectively, over the same period a year earlier.

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



Source: OPEC Secretariat.

Graph 5.5: US quarterly oil supply, 2014-2016



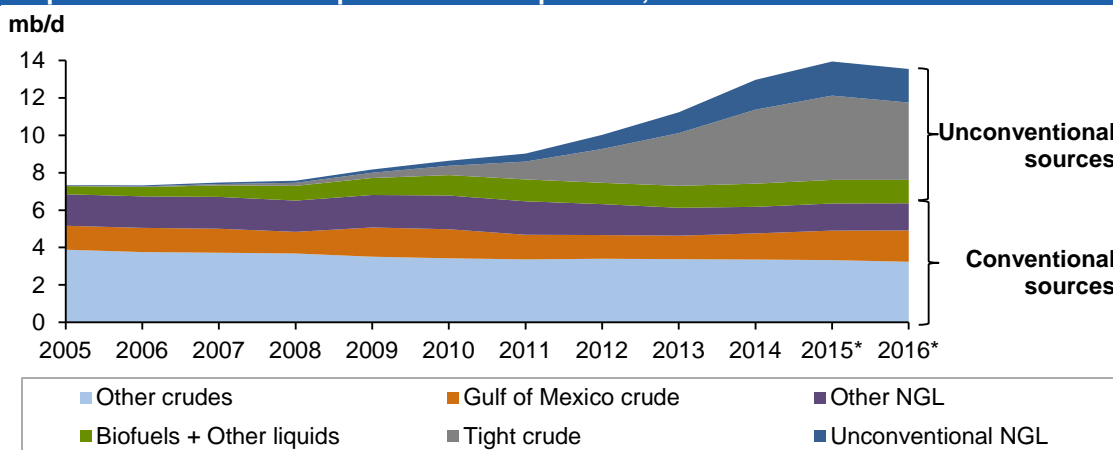
Source: OPEC Secretariat.

US

Actual **US oil supply** was pegged at 14.02 mb/d in November, down m-o-m by 0.07 mb/d, with crude output lower by 50 tb/d at 9.32 mb/d; the slowdown came mainly from Texas and the Gulf of Mexico, though oil production in Alaska increased by 26 tb/d in November. Total NGLs production in November dropped by nearly 10 tb/d to approximately 3.32 mb/d from the previous month, according to national source data.

Total US liquids supply for 2015 based on the latest data at the end of November 2015 is estimated to be 13.94 mb/d. This consists of 6.35 mb/d of liquids from conventional sources (conventional onshore and offshore crude, as well as condensate and NGLs) and 7.59 mb/d from unconventional sources (tight crude, unconventional NGLs, biofuels and other unconventional oils).

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



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

Finally, **total US oil supply** is estimated to increase by 0.98 mb/d to average 13.94 mb/d in 2015, representing an upward revision of 60 tb/d from the previous *MOMR*. All quarters were revised up due to the release of national source production data, by 49 tb/d, 41 tb/d, 60 tb/d and 108 tb/d, respectively. Despite an annual increase in US liquids production in 2015, mainly from unconventional sources, y-o-y production growth was lower by 0.75 mb/d, compared to growth in 2014.

Following weaker growth in 2015 over 2014, US total liquids output is expected to decline by 0.40 mb/d to average 13.54 mb/d in 2016, with the fall coming primarily from a drop in tight crude production in different regions of the US.

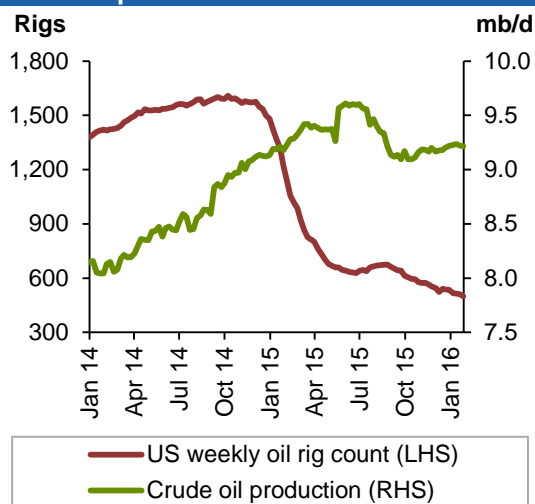
The country's oil production for 2016 is seen to stand at 13.64 mb/d, 13.50 mb/d, 13.43 mb/d and 13.57 mb/d on a quarterly basis.

US onshore drilling activity in both emerging and mature oil producing regions declined in January. The number of active US oil rigs fell by 12 to 498, according to Baker Hughes' latest weekly survey from 29 January, bringing the count to below 500 for the first time since 2010.

The total active US rig count, including natural gas rigs, fell by 18 to 619. The total rig count has fallen 60% y-o-y from 1,543, while the oil rig count is down 59% from a year ago and 69% from its October 2014 peak, because of unattractive economic returns. Due to the oil price decline, total investments in North American tight oil and shale gas plays dropped to just below \$100 billion in 2015 compared with \$170 billion in 2014. A

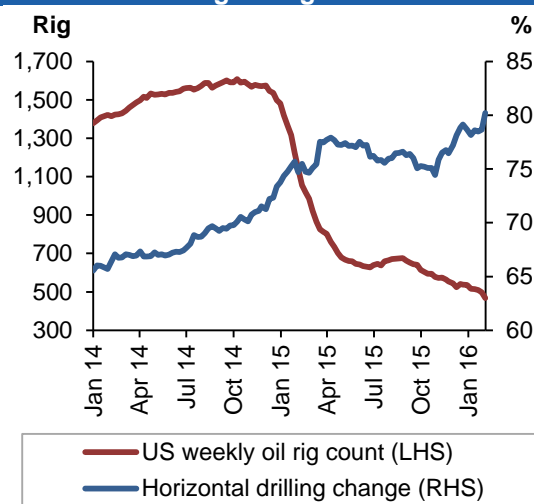
January 2016 prediction by Rystad Energy anticipates a drop in investments by an additional 35% for the year; an amount of approximately \$60 billion.

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



Sources: Baker Hughes and EIA.

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



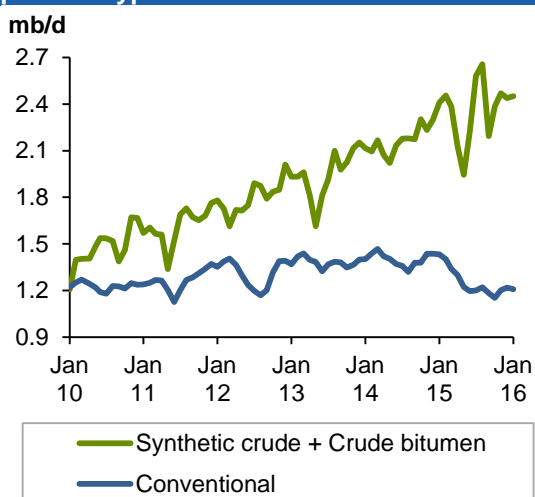
Source: Baker Hughes.

Although the heavy decline in total onshore rig counts could impact production, two main factors are slowing a tight crude output drop. The first is an increase in the share of horizontal well drilling compared with vertical and directional well drilling employed in most plays' sweet spots in the current circumstances, and the second is the DUC (drilled, but uncompleted wells) inventory. In 2015, companies completed more wells than they spudded, yielding an oil DUC of approximately 4,000 wells. According to the latest study on North American shale plays by Rystad Energy, the build-up in DUC inventory is expected to continue during the first half of 2016.

Canada and Mexico

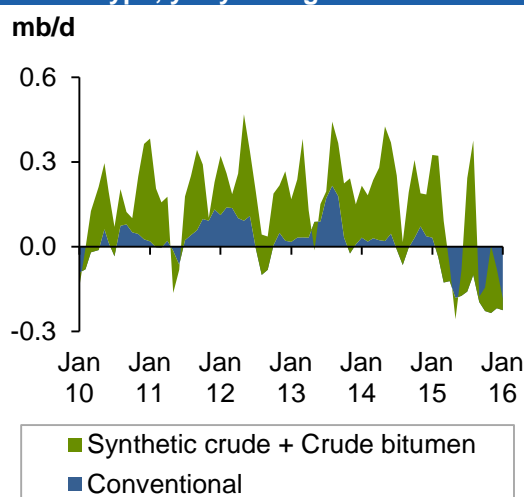
Canada's 2015 oil supply growth was lower than expected, with annual output growing only by 80 tb/d to average 4.39 mb/d due to weak output in 2Q15 because of wild fires. Oil production in the current year is expected to increase by 70 tb/d y-o-y to average 4.46 mb/d, unchanged from the previous *MOMR*. The expected growth is supported by oil sands developments. Oil prices will play an important role in the development of Canada's oil supply this year.

Graph 5.9: Canada production by product type



Source: OPEC Secretariat.

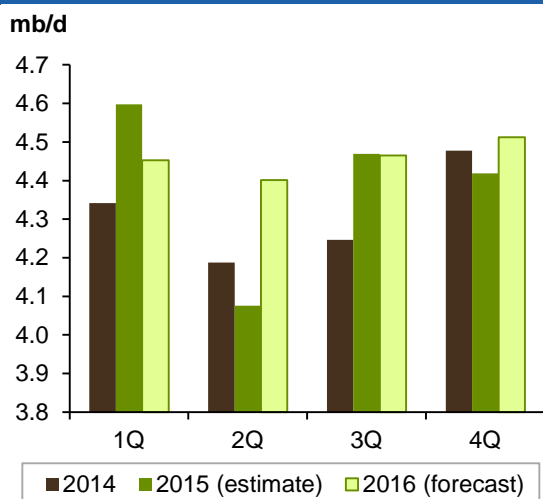
Graph 5.10: Canada production by product type, y-o-y change



Source: OPEC Secretariat.

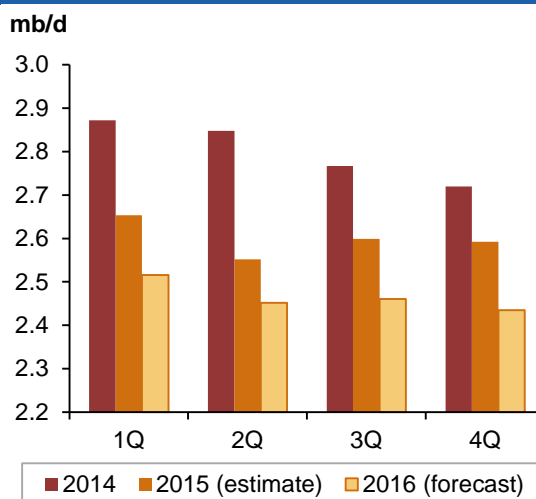
Nevertheless, preliminary estimates indicate that total liquid output from Canadian unconventional sources for 2016 will be 0.07 mb/d. Canada's oil supply for the year is expected to average 4.45 mb/d, 4.40 mb/d, 4.47 mb/d and 4.51 mb/d on a quarterly basis.

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 decline by 0.2 mb/d to average 2.60 mb/d in 2015, unchanged from the previous month. In 2015, Mexican crude oil production was basically steady during 3Q15 and 4Q15 at 2.60 mb/d and 2.59 mb/d, though lower by 170 tb/d and 130 tb/d, respectively, than the same period one year earlier. Annual oil production for 2016 is expected to decline at a slower pace of 0.13 mb/d, with average supply anticipated to be 2.47 mb/d.

Mexico's oil supply in 2016 is expected to stand at 2.52 mb/d, 2.45 mb/d, 2.46 mb/d and 2.43 mb/d on a quarterly basis.

OECD Europe

OECD Europe's oil production is anticipated to decline by 0.08 mb/d to average 3.67 mb/d in 2016, indicating a downward revision of 20 tb/d compared with the previous *MOMR*. The expected decline will mainly come from the UK, although supply difficulties are being encountered in the North Sea in general due to deep cuts in capital expenditures following the sharp decline in oil prices which started in mid-2014. Nevertheless, OECD Europe's oil supply grew by 0.14 mb/d in 2015, registering remarkable growth in the UK and Norway.

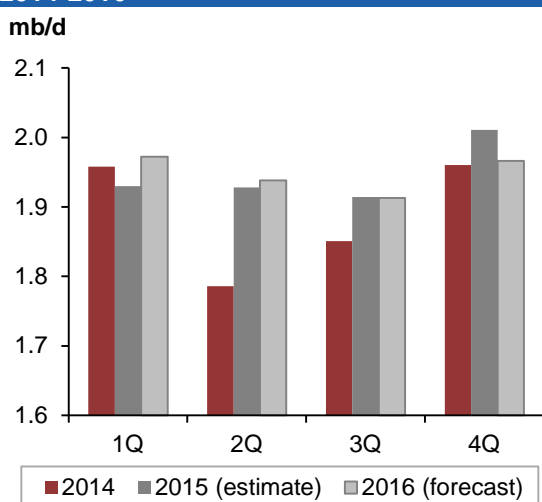
OECD Europe is seen in 2016 to have a supply of 3.74 mb/d, 3.64 mb/d, 3.57 mb/d and 3.71 mb/d on a quarterly basis.

Preliminary December oil output figures for **Norway** indicate an increase of 37 tb/d m-o-m to average 2.02 mb/d, a record monthly supply-high supported by lower maintenance and new added output from the ramp-up of 0.1 mb/d at the Edward Grieg field as well as a record quarterly high of 2.01 mb/d in 4Q15. Norway started several new projects in 2015 with a total capacity of 0.26 mb/d. Average daily liquids production in December registered 1.61 mb/d of oil, 0.37 mb/d of NGLs and 0.05 mb/d of condensate, according to data from the Norwegian Petroleum Directorate (NPD).

Norway decreased investment in oil and gas development and production for 2016 by 9.3% y-o-y. Moreover, the country is planning to start production from only three projects with a total capacity of 0.13 mb/d, exactly half the capacity of a year ago, hence no growth is expected in 2016, assuming the natural annual decline of mature fields.

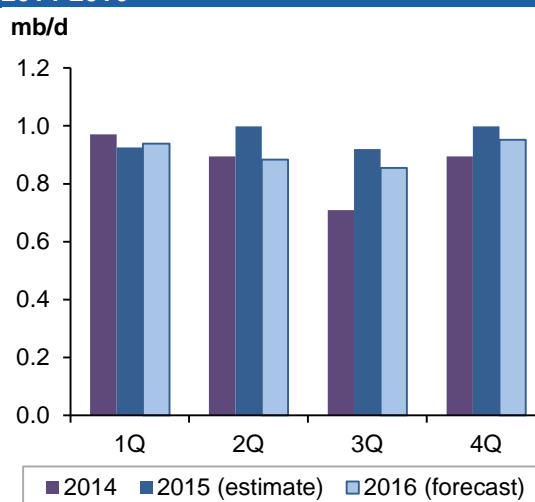
Preliminary annual production rates indicate Norwegian output in 2015 saw growth of 60 tb/d and will reach an average of 1.95 mb/d. Output is anticipated to remain stagnant in 2016. Norwegian oil production in 2016 is anticipated to average 1.97 mb/d, 1.94 mb/d, 1.91 mb/d and 1.97 mb/d on a quarterly basis.

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** oil supply is estimated to grow by 90 tb/d to average 0.96 mb/d in 2015, unchanged compared with the previous month. Throughout 2015, UK liquids production grew a surprising 10% despite a roughly observed 12% average yearly decline rate, mainly due to stable output from the Buzzard field and less maintenance

during the year. Prospects for 2016 production are absolutely negative. The Buzzard field – the biggest field in the UK – is expected to decline because of heavy and significant maintenance following almost no work in 2015. Output in 2016 is anticipated to decline by 50 tb/d to average 0.91 mb/d.

UK oil production in 2016 is forecast to average 0.94 mb/d, 0.88 mb/d, 0.86 mb/d and 0.95 mb/d on a quarterly basis.

OECD Asia Pacific

Oil production in the **OECD Asia Pacific** region is seen decreasing by 40 tb/d in 2015 to average 0.47 mb/d, indicating no change compared with the previous *MOMR*. OECD Asia Pacific's total oil supply in 2016 is also anticipated to decline by 10 tb/d to average 0.45 mb/d.

Australia's oil supply decreased by 50 tb/d in 2015 to average 0.38 mb/d; for this year expected growth of 20 tb/d could boost the country's oil supply. Production in 2016 is seen to stand at 0.38 mb/d, 0.40 mb/d, 0.41 mb/d and 0.40 mb/d, on a quarterly basis.

Developing Countries

Total oil production in **developing countries (DCs)** grew by 0.18 mb/d in 2015 to average 11.51 mb/d, indicating a basically steady state with a negligible upward revision of 10 tb/d from the previous *MOMR*. In 2016, no growth is expected for DCs. In fact, the expected growth from Other Asia and Latin America will be offset by declines in the Middle East and Africa.

DCs' oil production in 2016 is projected to stand at 11.44 mb/d, 11.49 mb/d, 11.52 mb/d and 11.61 mb/d, on a quarterly basis.

Other Asia

Other Asia's oil supply grew by 90 tb/d y-o-y to average 2.69 mb/d in 2015. Expected growth for this year will be slower at 30 tb/d following weak oil prices. It is predicted that total oil supply will reach 2.72 mb/d in 2016.

Total oil supply in Other Asia for 2016 is expected to average 2.69 mb/d, 2.71 mb/d, 2.73 mb/d and 2.76 mb/d on a quarterly basis.

Latin America

Latin America's oil supply saw good growth of 0.17 mb/d in 2015, making it the second-strongest region next to OECD Americas, with an average supply of 5.18 mb/d. This growth will shrink to only 40 tb/d in 2016, reaching average supply of 5.22 mb/d, with the growth coming mainly from Brazil.

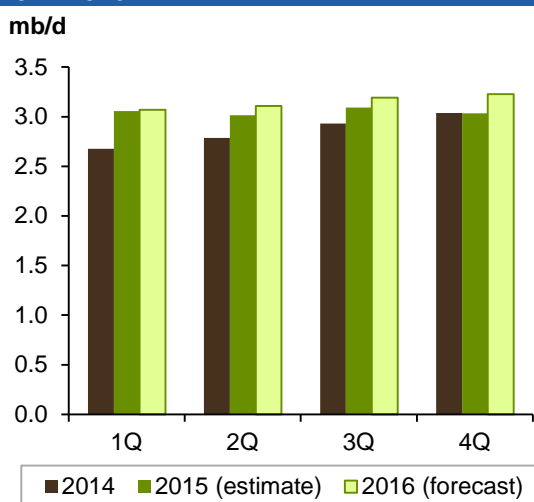
On a quarterly basis, total oil supply in Latin America is expected to average 5.15 mb/d, 5.19 mb/d, 5.23 mb/d and 5.31 mb/d, respectively.

Brazil's supply is estimated to average 3.05 mb/d in 2015, indicating an increase of 0.19 mb/d over the previous year, unchanged from the previous *MOMR*. Liquids output in November dropped by 50 tb/d m-o-m to average 2.98 mb/d, with y-o-y growth remaining broadly flat. Oil production from post-salt reservoirs continued to decline, led

by the Marlim Sul field, while output rose to another record high in pre-salt areas. Brazil's oil supply added 0.19 mb/d to production in 2015, notwithstanding only one new 0.15 mb/d FPSO being brought online, compared with 0.66 mb/d in 2014.

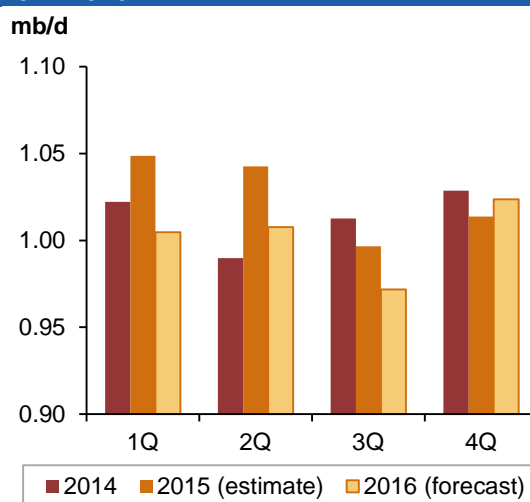
In 2016, the addition of 0.38 mb/d at peak capacity will be implemented through three new FPSO's, all in the Santos basin. Nevertheless, growth in 2016 is not expected to be more than 0.1 mb/d due to companies' capex cuts as well as more maintenance in the current year. Lula, Sapinhoa, Roncador and Jubarte are the main pre-salt fields for growth, while Marlim Sul and Marlim Leste are the main post-salt fields in decline. Brazil's 2016 oil supply is expected to stand at 3.07 mb/d, 3.11 mb/d, 3.19 mb/d and 3.23 mb/d on a quarterly basis.

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 produced 1.03 mb/d of crude on average the previous year to register growth of 10 tb/d, but the government cut its crude production target for 2016, following weak oil prices in international markets. In response to crude prices below \$30/b, it has already deferred a number of projects to the future. Its anticipated total oil supply will decline to 1 mb/d in 2016. On a quarterly basis, it is expected to stand at 1.00 mb/d, 1.01 mb/d, 0.97 mb/d and 1.02 mb/d for 2016.

Middle East

Middle East oil supply declined by 80 tb/d y-o-y to average 1.26 mb/d in 2015. The main decline, of 100 tb/d in the previous year, came from Yemen. The total decline for 2016 is expected to be 40 tb/d, due to ongoing geopolitical conflicts. Thus, total oil supply is expected to fall to 1.23 mb/d.

On a quarterly basis, total oil supply from the Middle East is expected to average 1.24 mb/d, 1.23 mb/d, 1.22 mb/d and 1.22 mb/d, respectively.

Africa

Africa's oil supply decreased by 10 tb/d y-o-y to average 2.37 mb/d in 2015 and is predicted to experience a further decline of about 30 tb/d in 2016 to average 2.35 mb/d. Declines are expected from Egypt, Equatorial Guinea, Gabon and the Sudans.

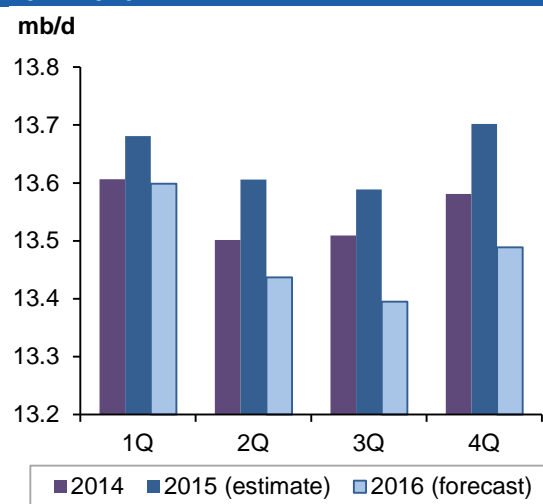
On a quarterly basis, total oil from Africa is expected to average 2.36 mb/d, 2.37 mb/d, 2.34 mb/d and 2.32 mb/d, respectively.

FSU, other regions

Total FSU oil production is expected to average 13.64 mb/d in 2015, an increase of 0.09 mb/d over a year earlier, and unchanged compared with the previous *MOMR*. The main growth came from Russia, with minor growth from FSU others. However, limited new developments coupled with declines in mature areas, as well as fiscal issues and Western sanctions, have reduced anticipated growth in the FSU for the year. However, the FSU remains the leading region next to OECD Americas and Latin America in terms of production among non-OPEC regions in 2015. It is anticipated that FSU total supply decline in 2016 will reach 0.16 mb/d, the second highest on a regional basis; thus the area will average 13.48 mb/d. The greatest decline is expected to be seen in Russia, followed by Kazakhstan and Azerbaijan.

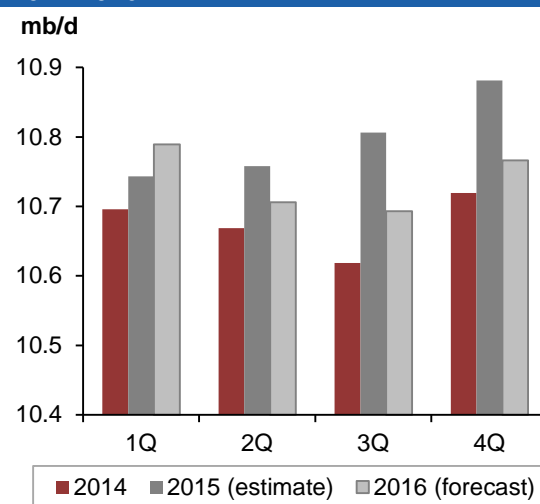
On a quarterly basis, total oil supply from the FSU in 2016 is seen to average 13.60 mb/d, 13.44 mb/d, 13.39 mb/d and 13.49 mb/d, respectively.

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 grow by 0.12 mb/d to average 10.80 mb/d in 2015, unchanged from the previous *MOMR*. The country's oil supply growth for 2014 was only 40 tb/d over a year earlier, but despite a reduction in capex across Russian companies and the impact of discontinued cooperation between IOCs and Russian firms in the oil industry, the country saw an increase in its 2015 output. In December, total oil output in Russia reached a new record high of 10.91 mb/d, up by 20 tb/d m-o-m, following the start-up of the Yarudeiskoye field with a peak capacity of 70 tb/d. According to Nefte Compass, Russia's smaller oil producers, which showed output growth in the previous year, are facing the challenge of surviving in the current market situation. These firms'

operations might become economically unprofitable if crude remains at a price lower than \$30–\$40/b in the long run.

For 2016, Russia's oil supply will decline by 60 tb/d to average 10.74 mb/d. On a quarterly basis, total oil supply from Russia in 2016 is seen to average 10.79 mb/d, 10.71 mb/d, 10.69 mb/d and 10.77 mb/d, respectively.

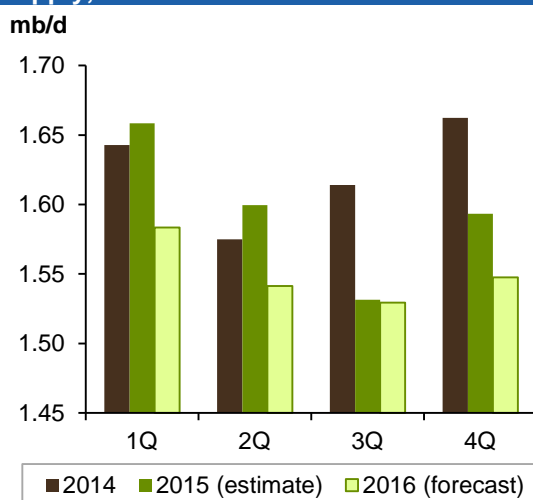
Caspian

Oil production in **Kazakhstan** in 2015 declined by 30 tb/d to average 1.60 mb/d and is anticipated to see a further decline of 40 tb/d in 2016, to reach 1.55 mb/d. In November, oil output increased seasonally by 160 tb/d to 1.65 mb/d. Nevertheless, oil production in Kazakhstan, mainly from major fields such as Tengiz, was seen declining recently and this trend will continue until the Kashagan field starts to produce.

In **Azerbaijan**, a small decline of only 10 tb/d was registered in 2015. This will increase to 40 tb/d in 2016, due to higher maintenance expectations and the lack of replacement for mature field losses. In November, oil output shrunk by 40 tb/d m-o-m due to heavy maintenance at the ACG complex. Moreover, absolute December total output will be highly affected by a deadly fire at Guneshli platform 10. Total oil supply, which registered at 0.86 mb/d in 2015, is expected to decline to 0.82 mb/d in 2016.

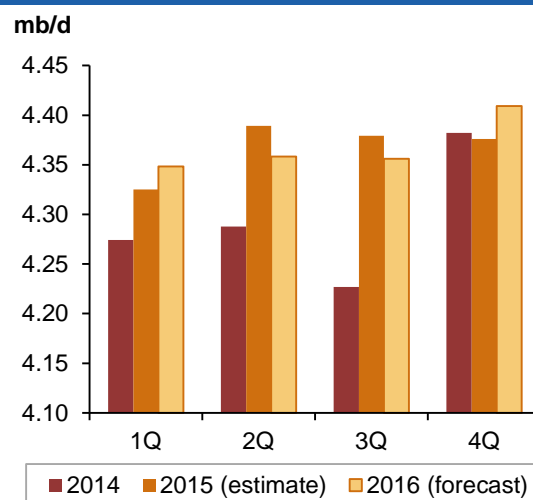
Other Europe's supply is expected to remain steady, averaging 0.14 mb/d in 2015 as well as in 2016.

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 seen to grow by 70 tb/d to average 4.37 mb/d in 2015. Lower oil production growth is expected in 2016 because of mature fields in both onshore and offshore areas and lower spending. With new production coming from sanctioned projects, output will stay stagnant at 4.37 mb/d.

China National Offshore Oil Corporation (CNOOC) cut its net output target by about 5% and slashed about 10% in capex for 2016, compared with 2015. The company hopes to focus on exploration for medium and large-scale projects and moderately reduce

drilling wells with high risk and cost. CNOOC will likely see y-o-y output shrink in 2016 for the first time in over 10 years to a net production target of 470 to 485 million barrels of oil equivalent (mboe), lower than the estimated output of 495 mboe in 2015. CNOOC announced in early February that the Weizhou 12-2 oilfield joint development project (Weizhou 12-2) and Weizhou 11-4 North oilfield Phase II project (Weizhou 11-4 North) recently commenced production. The total peak capacity of these two projects is 24 tb/d.

On a quarterly basis, China's oil supply in 2016 is seen to average 4.35 mb/d, 4.36 mb/d, 4.36 mb/d and 4.41 mb/d, respectively.

OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional oils were estimated to average 6.15 mb/d in 2015, representing growth of 0.15 mb/d over the previous year. In 2016, OPEC NGLs and non-conventional oils are projected to average 6.32 mb/d, an increase of 0.17 mb/d over the previous year. There are no changes in 2015 estimations and 2016 expectations for OPEC NGLs and non-conventional production compared with the previous *MOMR*.

Table 5.3: OPEC NGLs + non-conventional oils, 2013-2016

			<i>Change</i>							<i>Change</i>	
	<u>2013</u>	<u>2014</u>	<u>14/13</u>	<u>1Q15</u>	<u>2Q15</u>	<u>3Q15</u>	<u>4Q15</u>	<u>2015</u>	<u>15/14</u>	<u>2016</u>	<u>16/15</u>
Total OPEC	5.82	6.00	0.17	6.02	6.11	6.18	6.29	6.15	0.15	6.32	0.17

Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, total OPEC crude oil production in January averaged 32.33 mb/d, an increase of 131 tb/d over the previous month. Crude oil output increased mostly from Nigeria, Iraq, Saudi Arabia and Iran, while production showed a decrease of from Angola, Venezuela and Algeria.

Table 5.4: OPEC crude oil production based on secondary sources, tb/d

	<u>2014</u>	<u>2015</u>	<u>2Q15</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Jan 16</u>	<u>Jan/Dec</u>
Algeria	1,151	1,109	1,107	1,109	1,108	1,106	1,104	1,084	-20.7
Angola	1,660	1,752	1,718	1,759	1,781	1,795	1,777	1,738	-39.2
Ecuador	542	545	546	540	545	548	547	540	-7.2
Indonesia	696	695	702	695	705	703	710	707	-3.2
Iran, I.R.	2,766	2,837	2,828	2,860	2,880	2,876	2,887	2,925	38.1
Iraq	3,265	3,927	3,866	4,160	4,232	4,371	4,324	4,384	60.0
Kuwait	2,774	2,728	2,726	2,721	2,718	2,730	2,728	2,745	17.0
Libya	473	404	450	381	402	389	391	399	8.3
Nigeria	1,911	1,852	1,814	1,851	1,857	1,856	1,795	1,869	74.0
Qatar	716	668	667	659	667	675	658	655	-3.6
Saudi Arabia	9,683	10,108	10,253	10,259	10,106	10,125	10,047	10,091	44.2
UAE	2,761	2,853	2,838	2,880	2,878	2,885	2,877	2,874	-2.3
Venezuela	2,373	2,369	2,376	2,368	2,365	2,368	2,358	2,324	-34.5
Total OPEC	30,771	31,848	31,891	32,241	32,243	32,426	32,204	32,335	130.7

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

Source: OPEC Secretariat.

Table 5.5: OPEC crude oil production based on *direct communication*, tb/d

	<u>2014</u>	<u>2015</u>	<u>2Q15</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Jan 16</u>	<u>Jan/Dec</u>
Algeria	1,193	1,156	1,147	1,159	1,179	1,181	1,185	1,123	-62.0
Angola	1,654	1,767	1,784	1,777	1,742	1,722	1,740	1,770	30.0
Ecuador	557	542	544	538	536	537	533	..	..
Indonesia	..	..	..	..	..	..	..	..	..
Iran, I.R.	3,117	3,152	3,103	3,170	3,313	3,310	3,350	3,370	20.0
Iraq	3,110	3,504	3,351	3,744	3,846	3,747	4,130	4,183	53.0
Kuwait	2,867	2,859	2,838	2,870	2,876	2,900	2,930	3,000	70.0
Libya	480	..	..	..	..	..	..	..	..
Nigeria	1,807	1,733	1,622	1,780	1,768	1,797	1,697	1,949	251.8
Qatar	709	656	647	640	651	683	632	637	4.9
Saudi Arabia	9,713	10,193	10,401	10,285	10,202	10,186	10,144	10,230	85.8
UAE	2,794	2,987	2,973	3,030	2,998	3,033	2,993	3,133	140.6
Venezuela	2,683	2,654	2,683	2,631	2,581	2,576	2,570	2,558	-11.8
Total OPEC	..	..	..	..	..	..	..	..	..

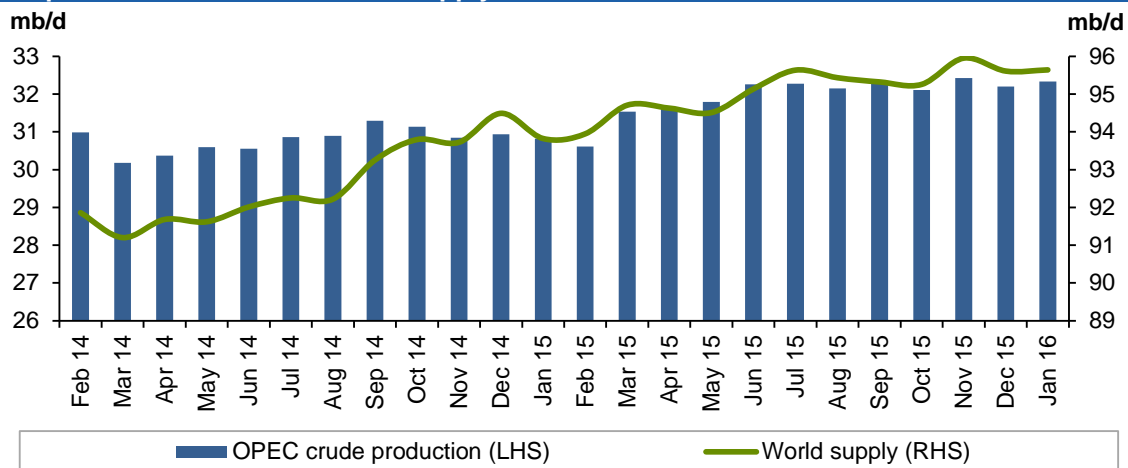
Note: Totals may not add up due to independent rounding.

.. Not available.

Source: OPEC Secretariat.

World oil supply

Preliminary data indicates that the global oil supply in January 2016 increased by 0.03 mb/d compared with the previous month to average 95.64 mb/d. Non-OPEC supply declined by 0.10 mb/d, while OPEC production increased by 0.13 mb/d. The share of OPEC crude oil in total global production increased slightly to 33.8% in January compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

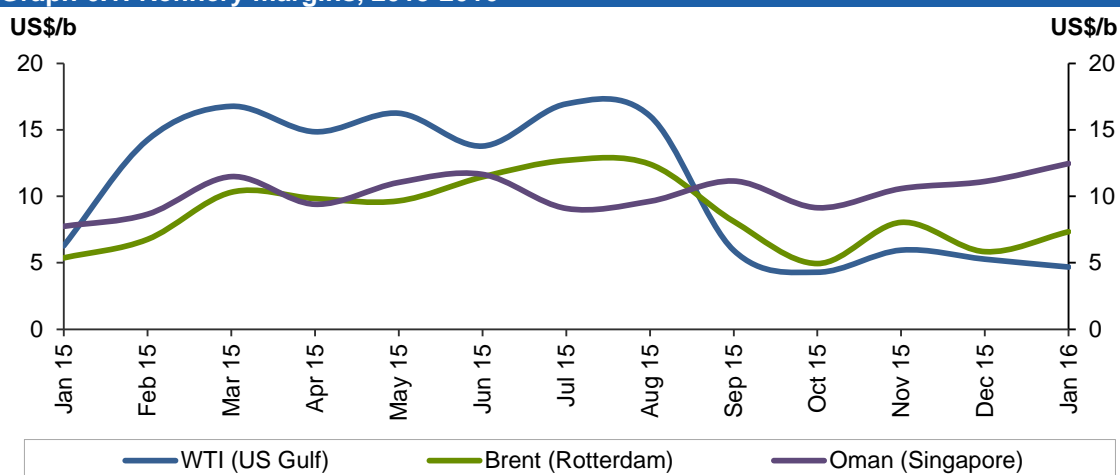
Graph 5.21: OPEC and world oil supply

Source: OPEC Secretariat.

Product Markets and Refinery Operations

Product markets continued to be impacted by low demand for middle distillates in the Northern Hemisphere this winter season. Despite some snowstorms on the US East Coast temporarily boosting heating oil demand, the middle distillate market continued exhibiting very soft fundamentals, causing refinery margins to weaken in the US. In Europe and Asia, stronger regional demand amid a tightening environment allowed for a recovery in crack spreads at the bottom of the barrel which, along with continued strength in the gasoline market, allowed refinery margins to rise in these regions.

Graph 6.1: Refinery margins, 2015-2016



Source: Argus Media.

US product markets continued to weaken in January, impacted by negative performance in the middle distillate markets. Despite a snowstorm in the country's northeast, US middle distillate demand continued hitting multi-year lows. US Gulf Coast (USGC) refinery margins for WTI crude lost 60¢ versus the previous month's levels to average around \$5/b in January.

Product markets in **Europe** saw a mixed performance in January. Strong recovery was seen at the bottom of the barrel on the back of a temporarily tightening market and export opportunities. Meanwhile, the oversupply environment continued hitting middle distillate fundamentals. The gasoline market, however, received support from stronger domestic demand and higher export opportunities. The refinery margin for Brent crude in Northwest Europe (NWE) showed an increase of more than \$1 versus the previous month, to average \$7/b in January.

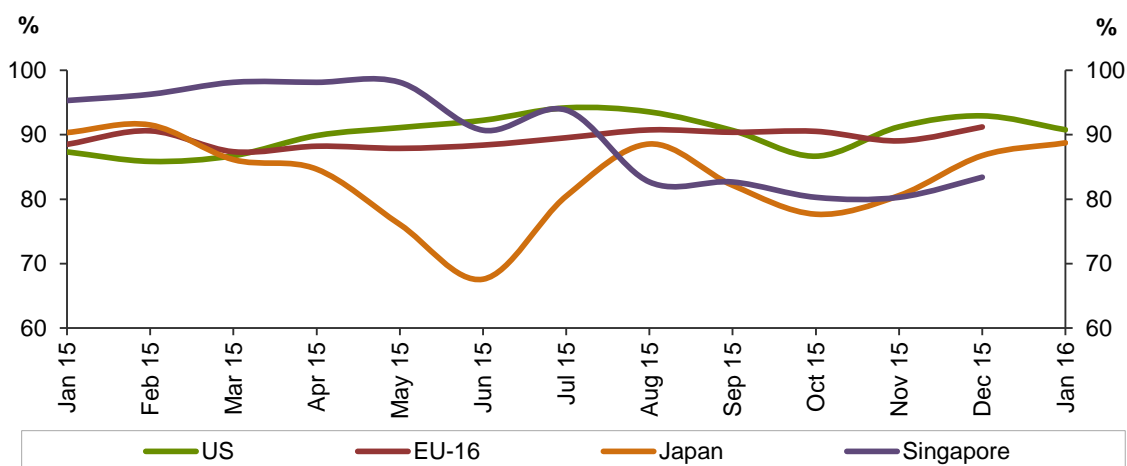
Asian product markets continued to be healthy, with a recovery seen at the bottom of the barrel due to stronger regional demand amid a tightening environment. This, along with the strength in gasoline crack spreads, offset continuing weakening at the middle of the barrel, allowing refinery margins to rise slightly in the region. Refinery margins in Singapore gained more than \$1 to average \$12/b in January.

Refinery operations

Refinery utilization rates continued to rise, mainly in the Asian region, following the end of a heavy maintenance season in several countries during 4Q15, with refiners cashing in on healthy margins attributed to strong seasonal demand, despite the weakness in middle-of-the-barrel crack spreads.

Refinery utilization in the **US** averaged around 90% in January, corresponding to 16.0 mb/d, and were 600 tb/d lower than a month earlier. This level could have been higher, but was limited by some refinery operations, which were impacted by severe weather conditions in the Midwest. Higher refinery runs the previous month contributed to product inventories being above typical average levels, which encouraged refiners to minimize gasoil yields in an effort to face lower demand seen during this winter season.

Graph 6.2: Refinery utilisation rates, 2015-2016



Source: Argus Media.

European refinery runs averaged around 91% of capacity in December, corresponding to a throughput of 10.7 mb/d. This was up by 250 tb/d from the previous month and more than 450 tb/d higher than the same month a year ago. European refineries have continued to increase throughputs, taking advantage of healthy margins and export opportunities. However, product stocks overhang exerted pressure in recent weeks.

Asian refinery utilization was on the rise, with Chinese refineries hitting a new record of around 10.77 mb/d during December as teapot refineries increased crude runs and due to expectations of an increase in export quotas by the government. Refinery runs in Singapore for December averaged around 83%, increasing 3 percentage points (pp) versus a month earlier. Meanwhile, Japanese throughputs increased to 89% of capacity in January, around 2 pp higher than a month ago.

US market

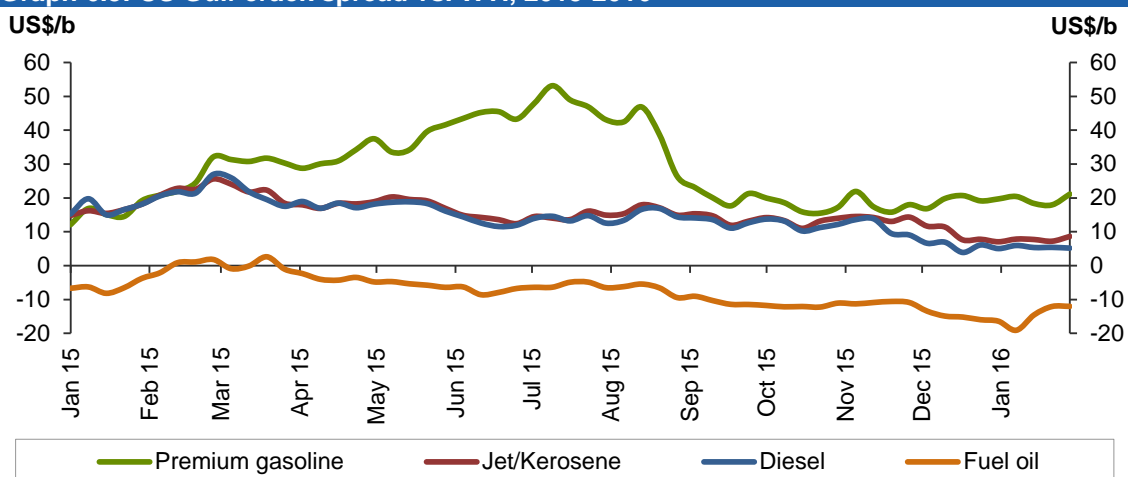
US **gasoline** demand stood at around 8.7 mb/d in January, around 360 tb/d lower than the previous month and similar to the level seen in the same month a year earlier. Despite the impact caused by snowstorms on the East Coast, gasoline demand remained relatively strong, which along with export opportunities allowed the gasoline crack spread to continue to strengthen, despite some pressure from the supply side. Refineries maximised gasoline production, thus gasoline inventories continued to rise, building more than 20 mb during the month.

Product Markets and Refinery Operations

Support came from the turnaround of several reformers and catalytic cracking units on the USGC amid higher exports to Latin American countries.

The gasoline crack spread gained around 40¢ versus the previous month's level to average \$20/b in January.

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



Source: Argus Media.

Middle distillate demand stood at around 3.5 mb/d in January, some 20 tb/d higher than the previous month, but about 720 tb/d lower than the same month a year earlier.

Despite a snowstorm in the country's northeast boosting demand for heating oil and strengthening the premium of NYH/USGC, the middle distillate market continued to exhibit very weak fundamentals, with US middle distillate demand continuing to hit multi-year lows.

Despite lower demand, middle distillate inventories stopped increasing due to reduced gasoil yields from refineries amid lower throughputs, although they continued to be well above the five-year average, thus exerting pressure on the market.

Another bearish factor was higher inventories in the ARA region, which limited arbitrage opportunities to Europe. Additionally, requirements for Latin America have been slower in recent months.

The USGC gasoil crack remained at its lowest level in more than five years, averaging around \$6/b in January, a level similar to that of the previous month.

At the **bottom of the barrel**, the fuel oil market showed a slight recovery from a slump suffered the previous month. Despite inventories remaining high, the winter weather revived buying interest on the USEC, while trading activity was seen to increase on the USGC.

The USGC fuel oil crack gained around \$1/b in January.

Higher availability of VGO due to some FCC unit maintenance and lower gasoil prices continued to pressure the fuel oil market, limiting an uptick in crack spreads.

European market

Product markets in Europe exhibited a mixed performance in January. A strong recovery was seen at the bottom of the barrel on the back of a temporarily tightening market and export opportunities. Meanwhile, the oversupply environment continued to hit middle distillate fundamentals.

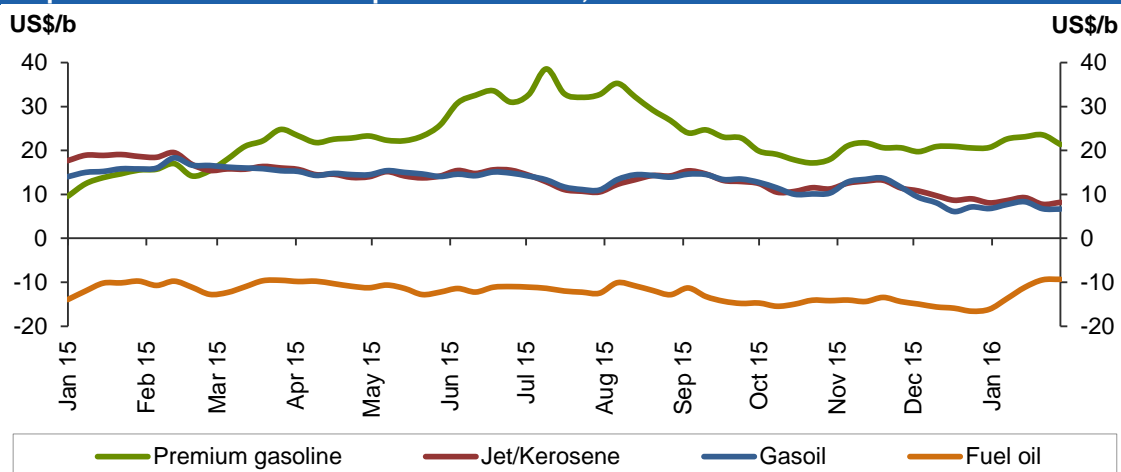
The **gasoline** market continued to receive support in January. NWE gasoline cracks strengthened as more domestic demand and higher requirements from the Middle East and Africa offset lower export opportunities to the USEC.

Another supporting factor was steady volumes exported to East Asia, mainly high-octane components.

The gasoline crack spread against Brent gained about \$1 to average around \$23/b in January.

Domestic demand for naphtha in the petrochemical sector remained strong in Europe. However, the light distillate naphtha crack declined in January, losing almost \$2 due to reduced arbitrage volumes to Asia.

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



Source: Argus Media.

Gasoil market fundamentals continued to weaken in Europe in January and crack spreads remained pressured by the oversupply environment.

The European gasoil market stayed oversupplied amid elevated production and high inventories. In addition, Russian exports continued to rise, taking advantage of lower export duties and higher export capacity.

This has led to growing interest in floating storage for middle distillates in NWE and limited arbitrage volumes from the US.

The gasoil crack spread against Brent crude at Rotterdam averaged around \$8/b in January, similar to the previous month's level.

At the **bottom of the barrel**, the fuel oil market recovered on the back of a tightening environment fuelled by reduced arrivals from Russia following the start of secondary units. In addition, higher arbitrage opportunities to Asia continued drawing volumes from the region, thus supporting the fuel oil market.

Product Markets and Refinery Operations

The NWE fuel oil crack gained almost \$5 versus the previous month to average around minus \$11/b in January.

Asian market

The Asian market showed a mixed performance in January. Support was seen at the bottom of the barrel with stronger regional demand amid a tightening environment. This, along with the strength of gasoline crack spreads, offset continuing weakening at the middle of the barrel, allowing refinery margins to slightly rise in the region.

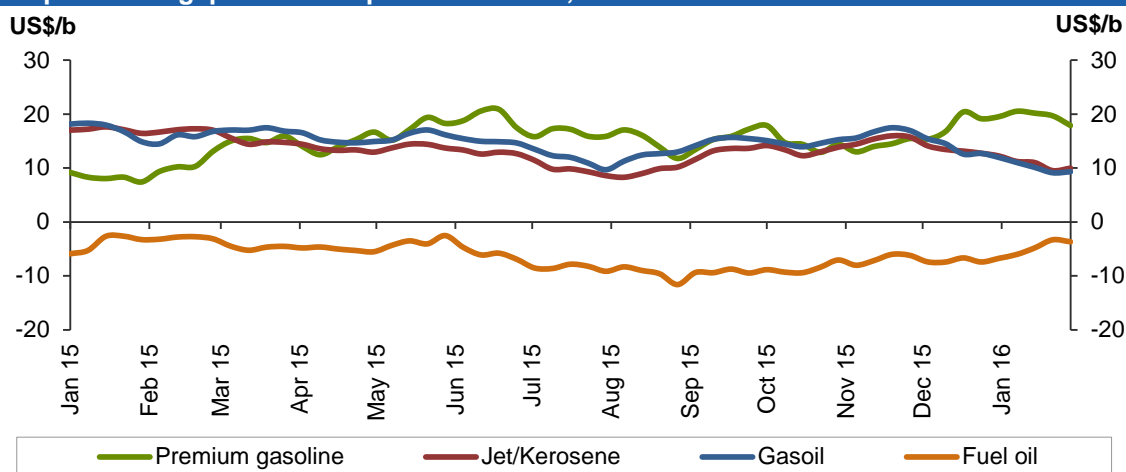
The gasoline market continued to be supported by strong demand from Indonesia and India, which outweighed increasing exports from several countries within the region, such as South Korea, Japan, Taiwan and China.

The Singapore **gasoline** crack continued strengthening during January in a relatively balanced market. A tightening environment was fuelled by upcoming spring refinery maintenance in the region.

The gasoline crack spread against Oman crude in Singapore averaged around \$20/b in January, gaining almost \$2 versus the previous month's level.

The Singapore naphtha crack lost some ground over the month, dropping almost \$2/b, impacted by the oversupply environment, which in turn is fueled by increasing refinery runs amid several petrochemical cracker unit outages in Northeast Asia.

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



Source: Argus Media.

At the **middle of the barrel**, the gasoil market continued to come under supply pressure, causing crack spreads to fall further in January.

Supplies were on the rise in several countries, with increasing refinery runs in the region. A recent boost in Chinese export quotas contributed to this growth, along with higher gasoil exports from Japan and South Korea, which kept the regional gasoil market long.

In addition, arbitrage opportunities to Europe continued to be limited by the oversupply environment in the ARA hub amid higher freight rates.

The gasoil crack spread in Singapore against Oman lost more than \$3 versus the previous month to average around \$10/b in January.

The Asian fuel oil market exhibited strong recovery in January, as crack spreads were supported by tightening regional sentiment, fueled by delays seen in arrivals of Western volumes.

Additional support came from stronger seasonal demand in the power generation sector, mainly in South Korea. The fuel oil crack spread in Singapore against Oman gained more than \$2 to average about minus \$5/b in January.

Table 6.1: Refined product prices, US\$/b

	<u>Dec 15</u>	<u>Jan 16</u>	<u>Change Jan/Dec</u>	<u>Year-to-date</u>	
				<u>2015</u>	<u>2016</u>
US Gulf (Cargoes FOB):					
Naphtha*	47.04	36.87	-10.17	55.87	36.87
Premium gasoline (unleaded 93)	56.58	51.15	-5.43	63.76	51.15
Regular gasoline (unleaded 87)	50.59	43.42	-7.17	54.72	43.42
Jet/Kerosene	46.40	39.49	-6.91	63.86	39.49
Gasoil (0.2% S)	42.94	37.07	-5.87	64.76	37.07
Fuel oil (3.0% S)	23.03	19.12	-3.91	38.47	19.12
Rotterdam (Barges FoB):					
Naphtha	42.67	33.48	-9.19	43.66	33.48
Premium gasoline (unleaded 98)	58.79	53.41	-5.38	61.80	53.41
Jet/Kerosene	47.54	39.21	-8.33	66.67	39.21
Gasoil/Diesel (10 ppm)	45.68	38.11	-7.57	63.24	38.11
Fuel oil (1.0% S)	22.40	19.85	-2.55	37.20	19.85
Fuel oil (3.5% S)	22.59	15.08	-7.51	37.79	15.08
Mediterranean (Cargoes FOB):					
Naphtha	40.29	33.42	-6.87	39.92	33.42
Premium gasoline**	51.81	47.01	-4.79	56.54	47.01
Jet/Kerosene	45.98	37.27	-8.71	63.25	37.27
Diesel	46.40	39.48	-6.92	64.39	39.48
Fuel oil (1.0% S)	25.88	21.22	-4.66	39.43	21.22
Fuel oil (3.5% S)	22.20	18.35	-3.85	38.01	18.35
Singapore (Cargoes FOB):					
Naphtha	45.69	36.78	-8.91	45.23	36.78
Premium gasoline (unleaded 95)	55.63	50.33	-5.30	57.42	50.33
Regular gasoline (unleaded 92)	52.83	47.04	-5.79	54.66	47.04
Jet/Kerosene	47.70	37.91	-9.79	63.66	37.91
Gasoil/Diesel (50 ppm)	48.00	37.37	-10.63	63.65	37.37
Fuel oil (180 cst 2.0% S)	28.20	26.77	-1.43	43.99	26.77
Fuel oil (380 cst 3.5% S)	27.15	22.77	-4.38	42.59	22.77

Note: * Barges.

** Cost, insurance and freight (CIF).

Sources: Argus Media and OPEC Secretariat.

Product Markets and Refinery Operations

Table 6.2: Refinery operations in selected OECD countries

	<i>Refinery throughput, mb/d</i>				<i>Refinery utilization, %</i>			
	<u>Nov 15</u>	<u>Dec 15</u>	<u>Jan 16</u>	<i>Change</i> <u>Jan/Dec</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Jan 16</u>	<i>Change</i> <u>Jan/Dec</u>
US	16.30	16.60	16.00	-0.60	91.24	92.94	89.90	-3.04
France	1.16	1.06	-	-	82.22	76.17	-	-
Germany	1.84	2.03	-	-	83.96	92.55	-	-
Italy	1.39	1.37	-	-	67.79	66.76	-	-
UK	1.14	1.14	-	-	86.77	86.62	-	-
Euro-16	10.42	10.68	-	-	89.06	91.22	-	-
Japan	3.18	3.43	3.50	0.08	80.57	86.77	88.75	1.98

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

Tanker Market

Freight rate for dirty tanker ship owners showed a continued increase in January. On average, dirty tanker freight rates rose by 3% from the previous month, influenced by higher freight rates achieved by the Suezmax class, which increased by 25% from the previous month. In January, vessel availability was the main influence on freight rates for all classes moving from one direction to another. The average spot freight rates for VLCCs were mixed and fluctuated in January, as they reached high levels at the beginning of the month before gradually dropping as the amount of activity fell. This reflected lower freight rates for fixtures to the East. Nevertheless, VLCC freight rates remained stable on average from those seen a month before. In contrast, Aframax experienced drops on different routes to the West, as a lack of sufficient loading requirements contributed to the drop in rates. Clean tanker freight rates increased from a month earlier to average WS156 points. This increase came as a result of weather port delays and tightening tonnage supply.

Spot fixtures

According to preliminary data, **OPEC spot fixtures** declined by 0.37 mb/d in January over the previous month to average 10.68 mb/d. This drop was driven mainly by a decline in outside Middle East fixtures, which dropped by 0.57 mb/d. Fixtures from Middle East-to-West also contributed to the drop as they declined 0.05 mb/d from the previous month.

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

	<u>Nov 15</u>	<u>Dec 15</u>	<u>Jan 16</u>	<u>Change</u> <u>Jan 16/Dec 15</u>
Spot Chartering				
All areas	16.52	15.92	14.54	-1.38
OPEC	11.66	11.05	10.68	-0.37
Middle East/East	5.39	4.92	5.18	0.26
Middle East/West	2.98	2.40	2.35	-0.05
Outside Middle East	3.29	3.74	3.16	-0.57
Sailings				
OPEC	24.20	23.66	23.90	0.25
Middle East	17.59	17.05	17.31	0.26
Arrivals				
North America	10.57	10.19	10.54	0.35
Europe	12.11	11.99	11.28	-0.71
Far East	8.22	8.30	8.59	0.30
West Asia	4.81	4.86	4.48	-0.38

Source: Oil Movements.

Sailings and arrivals

OPEC sailings, as per preliminary data, remained above the level seen last month, increasing by 0.25 mb/d to average 23.9 mb/d. Compared with the same month a year ago, they were lower by 0.5%. Arrivals in North America and the Far East were up in January by 0.35 mb/d and 0.30 mb/d, from the previous month, to average 10.54 mb/d and 8.59 mb/d, respectively. Arrivals in Europe and West Asia went down during the same period by 0.71 mb/d and 0.38 mb/d, to average 11.28 mb/d and 4.48 mb/d,

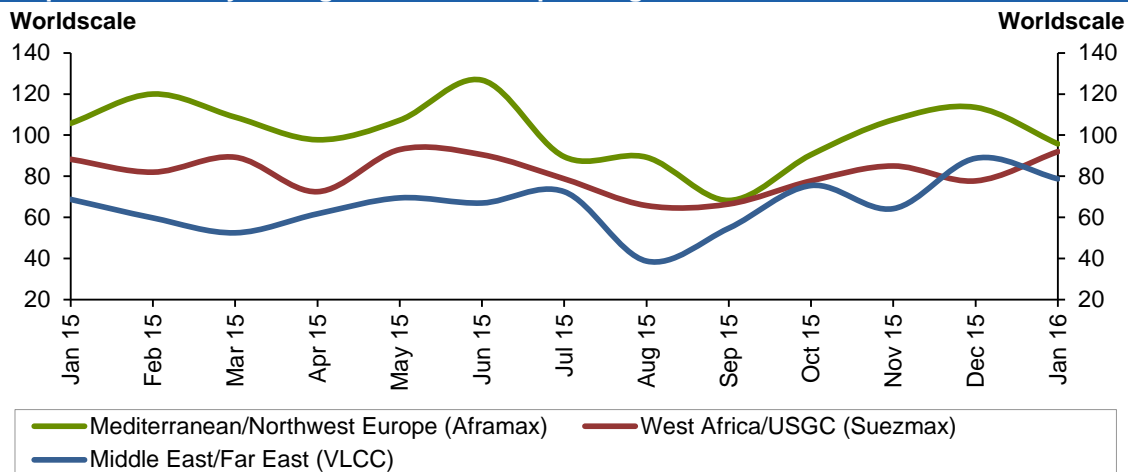
respectively. From an annual standpoint, arrivals in reported regions followed the same movement as those seen in the monthly comparison.

Spot freight rates VLCC

VLCC spot freight rates in January remained almost stable from one month before to average WS73 points. VLCC chartering activities slowed with the start of the New Year with rates dropping from peaks seen the month before, mainly to eastern destinations. Following that, earnings did encounter a significant drop as a result of increased vessels supply, where the availability of vessels was seen higher in the market as vessels returned from dry dock (in addition to new arrivals). The imbalance in the market was clearly affecting the Middle East and West African chartering markets. However, rates rebounded as the imbalance was gradually treated and firm orders for February loadings returned to the market. Nevertheless, tanker earnings in different regions remain at healthy levels in January, despite volatility.

Rates for tankers operating on the Middle East-to-East route saw the only drop among all other reported routes for VLCCs, dropping by WS10 points, or 11%, in January from the previous month to stand at WS79 points. Rates for tankers trading on the Middle East-to-West routes saw an increase of WS5 points, or 9%, from a month before to average WS58 points. The West Africa-to-East route also closed the month higher, edging up 4% to average WS83 points. In an annual comparison, all freight rates on reported routes from the Middle East-to-East, Middle East-to-West and West Africa-to-East showed gains at the levels seen last year by 15%, 48% and 25%, respectively.

Graph 7.1: Monthly averages of crude oil spot freight rates



Sources: Argus and Platts.

Suezmax

Suezmax freight rates showed the highest gain in January from other dirty tanker vessels rising on average by 25% from the previous month. Unlike what was seen in the VLCC market, Suezmax had plenty of activity at the beginning of the year and increased requirements, mostly seen to western destinations. The market in West Africa showed a firm trend supported by the steady flow of requirements and the continued delays at the Turkish straits. In the Middle East market, activity was quiet to some extent, however the balanced market prevented rates for dropping as well as not granting any worthwhile gains.

Rates for tankers operating on the West Africa-to-US route increased by 18% in January to stand at WS92 points, and rates on the Northwest Europe-to-US route gained 34% to stand at WS83 points. Freight rates on both reported routes were 4% and 13% higher, respectively, than those seen in the same month a year before.

Table 7.2: Spot tanker crude freight rates, Worldscale

Crude	Size 1,000 DWT	Change			
		Nov 15	Dec 15	Jan 16	Jan 16/Dec 15
Middle East/East	230-280	64	89	79	-10
Middle East/West	270-285	38	53	58	5
West Africa/East	260	68	80	83	3
West Africa/US Gulf Coast	130-135	85	78	92	14
Northwest Europe/US Gulf Coast	130-135	66	62	83	21
Indonesia/East	80-85	104	123	126	3
Caribbean/US East Coast	80-85	171	124	122	-2
Mediterranean/Mediterranean	80-85	113	120	102	-18
Mediterranean/Northwest Europe	80-85	108	114	96	-18

Sources: Argus and Platts.

Aframax

Aframax registered the main freight rate drop in January, amid other dirty tanker vessel sizes, declining on average by 7%, despite the mixed performance seen on its different routes.

In January, Aframax spot freight rates were mixed, though mostly down from the previous month and year earlier, showing drops on most routes with the only exception on the Indonesia-to-East route which stood at WS126 points, increasing by 2% from one month earlier.

The Mediterranean market showed weakness in January as rates slipped on the back of limited requirements and the lack of firm tonnage orders. Both the Mediterranean and Black Sea added downward pressure on rates, with lowest levels in several months reached at times. Therefore, freight rates for tankers operating on the Mediterranean-to-Mediterranean and the Mediterranean-to-Northwest Europe routes dropped in January by 15% and 16%, to average WS102 points and WS96 points, respectively, each remaining 10% lower over the same month last year.

Rates in the North Sea and Baltic Sea were not affected dramatically from what was seen before, despite the ice restrictions regulation coming into effect in the middle of January. This was partially due to the loss of loading opportunities, as Primorsk ports have gone into a maintenance period. In the Caribbean, the tonnage supply was balanced as bad weather conditions reduced the amount of available vessels.

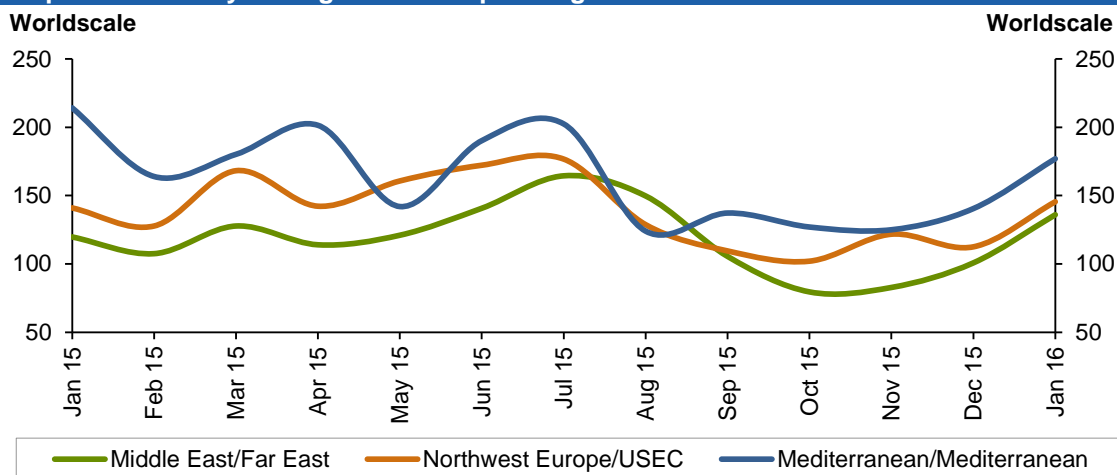
Tanker Market

However, they somehow kept the drop in rates to a minimum, therefore the freight rates for tankers trading on the Caribbean-to-US route dropped only by a slight 1% to average WS122 points.

Clean spot freight rates

In the **clean tanker market**, spot freight rates turned positive on both sides of Suez. Freight rates strengthened on all reported routes in the East and West. Average rates went up by 27%, showing an average gain for the third month in a row.

Graph 7.2: Monthly average of clean spot freight rates



Sources: Argus and Platts.

Freight rates for several classes in the clean market showed an upward sentiment in January. In the long-range segment, the market had an active start and rates were seen higher mainly on the back of port delays and a tightening positions list. On the other hand, the medium-range market fluctuated as the amount of activity varied during the course of the month, making the availability of vessels the main influence on rates on both directions of Suez. The rates for tankers trading on the Singapore-to-East route and Middle East-to-East route showed gains in January, increasing by 35% and 23%, respectively, from the previous month. In the West, the rates for the Mediterranean-to-Mediterranean and the Mediterranean-to-Northwest Europe routes each went up by 25% and 26%, respectively, although they remained 17% below the highs reached last year. The Northwest Europe-to-US route edged up by 29% to average WS134 points, as rates were firming on gasoline tanker fixtures.

Table 7.3: Spot tanker product freight rates, Worldscale

Products	Size 1,000 DWT	Worldscale			Change Jan 16/Dec 15
		Nov 15	Dec 15	Jan 16	
Middle East/East	30-35	83	101	136	35
Singapore/East	30-35	111	109	134	26
Northwest Europe/US East Coast	33-37	122	113	146	33
Mediterranean/Mediterranean	30-35	125	141	177	37
Mediterranean/Northwest Europe	30-35	135	151	188	37

Sources: Argus and Platts.

Oil Trade

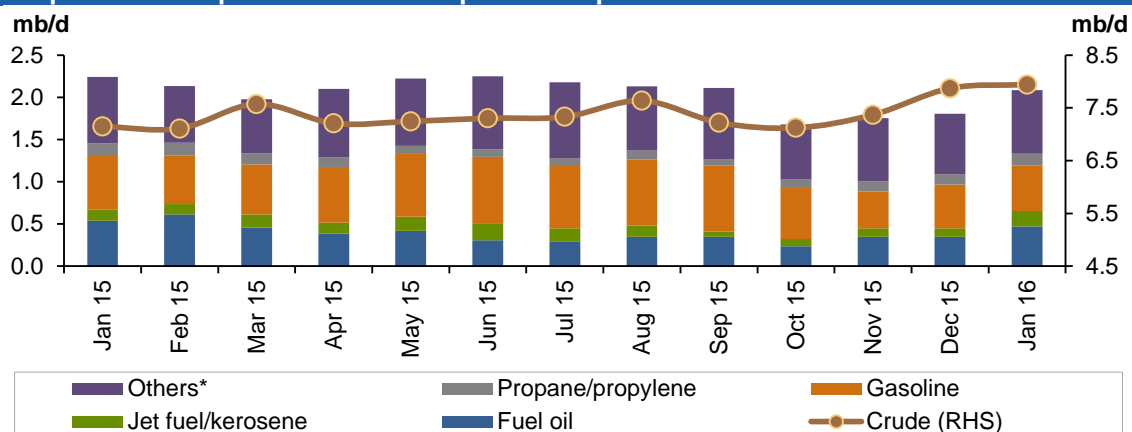
US crude oil imports averaged 7.9 mb/d in January, according to preliminary data, some 71 tb/d higher than last month. This represents a 793 tb/d, or 11%, increase over the previous year. US monthly product imports also rose 277 tb/d m-o-m, but fell 158 tb/d, or 7% y-o-y. As the peak maintenance season was completed, Japan's crude oil imports increased further in December, following gains seen a month earlier. Japan's crude imports increased by 248 tb/d, or 8%, to average 3.5 mb/d. On a y-o-y comparison, crude imports were 45 tb/d, or 1%, down from last year. Japan's product imports increased in December by 99 tb/d to average 677 tb/d, a 17% m-o-m gain, and broadly unchanged from the previous year. China's crude imports increased in December by a remarkable 1.17 mb/d, or 18%, from the previous month to reach a peak record of 7.8 mb/d. At the same time, crude imports reflected an annual gain of 664 tb/d or 9%. China's product imports also reached a high level in December to average 1.4 mb/d as they increased by 401 tb/d from November and 265 tb/d from the same month in 2015. In December, India's crude imports rose 214 tb/d, or 5%, from the previous month to reach a record of 4.2 mb/d. At the same time, crude imports reflected an annual gain of 272 tb/d or 7%. India's product imports in December increased both on a monthly and annual basis, rising by 17 tb/d and 101 tb/d, respectively, to average 650 tb/d in December.

US

In January, preliminary data showed that **US crude oil imports** increased to average 7.9 mb/d, up by 71 tb/d from last month and 793 tb/d, or 11%, higher than last year.

US monthly **product imports** also increased from last month, rising by 277 tb/d, while on an annual comparison they decreased by 158 tb/d, or 7%. As to **product exports**, in January US product exports were 77 tb/d less than seen a month ago to average 3.9 mb/d. On an annual comparison, product exports were 174 tb/d, or 4%, lower than a year before. As a result, **US total net imports went up in January by 450 tb/d, or 9%, to average 5.7 mb/d**. Compared to last year's level, this shows an increase by 848 tb/d, or 18%.

Graph 8.1: US imports of crude and petroleum products



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

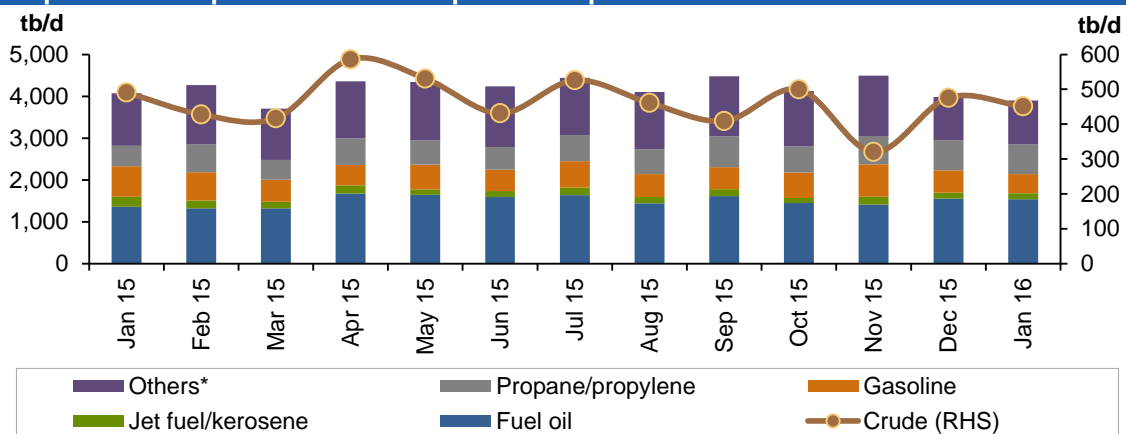
Sources: US Energy Information Administration and OPEC Secretariat.

In November, the **top** first and second **crude suppliers to the US** maintained the same order as seen last month. Canada remained the premier crude supplier to the US accounting for 43% of total US crude imports. Crude imports from Canada were 226 tb/d, or 7%, higher than a month ago. Saudi Arabia, which remained the second largest supplier to the US in November, increased its crude exports to the US by 249 tb/d over the previous month. Venezuela came in as the third top supplier accounting for 11% of total US crude imports as the country increased its exports to the US by 51 tb/d, or 7%, from the previous month .

Total crude imports from OPEC Member Countries were higher in November from the previous month, up by 163 tb/d or 6%. Crude imports from OPEC Member Countries accounted for 40% of total US crude imports. As to US product imports from OPEC Member Countries, these were 71 tb/d, or 36%, higher than the previous month and 33 tb/d, or 14%, higher than the previous year. Looking to the product supplier share, Canada and Russia maintained their position as first and second supplier to the US, accounting for 25% and 17%, respectively. The data shows that Canadian product exports to the US dropped 18 tb/d in November from the previous month, while imports from Russia went up by 96 tb/d from a month before. Algeria came in as the third supplier to the US, holding a share of 7% as it increased its exports to the US by 48 tb/d from the previous month.

Looking into the **import regions**, in November 2015 imports from North America were the most, averaging 3.2 mb/d. Imports from Latin America came in second with average imports of 2 mb/d in November. The Middle East came in third with an average of 1.6 mb/d. Imports from Africa dropped from the previous month to average 332 tb/d.

Graph 8.2: US exports of crude and petroleum products



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

As to **crude imports by PADDs**, in PADD-1 the highest crude imports came from North America followed by Africa, with levels averaging 250 tb/d and 195 tb/d, respectively. Crude imports from North America and Africa in November were 59 tb/d and 39 tb/d higher, respectively, than a month earlier. In contrast, crude imports from Latin America and the Middle East dropped from the previous month to average 184 tb/d and 102 tb/d, respectively. Imports from PADD-2 remain largely covered from North America, averaging 201 tb/d. PADD-2 imports from the Middle East remain minor. PADD-3 imported higher volumes in November from its main source Latin America and the Middle East – by 62 tb/d and 75 tb/d, respectively – to average 1.6 mb/d and 1 mb/d, respectively. PADD-4 only imported from North America and averaged 266 tb/d in November, 40 tb/d lower than last month. On the West Coast, the

main imports came from the Middle East and Latin America, which stood at 474 tb/d and 296 tb/d, respectively, while imports from North America declined from a month before by 49 tb/d to average 216 tb/d.

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

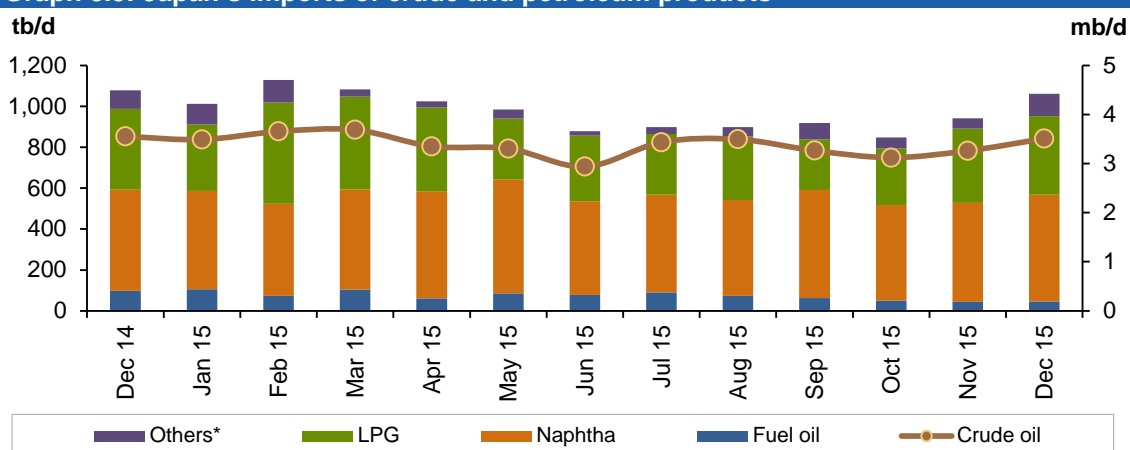
	Nov 15	Dec 15	Jan 16	Change Jan 16/Dec 15
Crude oil	7,051	7,396	7,491	95
Total products	-2,743	-2,172	-1,817	354
Total crude and products	4,308	5,224	5,674	450

Sources: US Energy Information Administration and OPEC Secretariat.

Japan

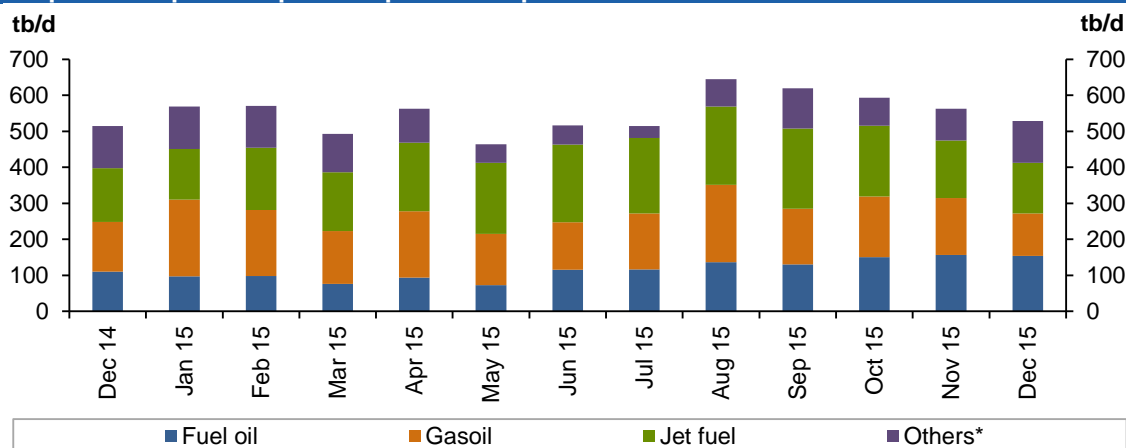
Japan's **crude oil imports** increased further in December, following the increase encountered the previous month. Japan's crude imports increased by 248 tb/d, or 8%, to average 3.5 mb/d. On a y-o-y comparison, crude imports dropped by 45 tb/d, or 1%, from the previous year. At the same time, Japan's refinery runs increased by 240 tb/d in December, from a month ago.

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.

Looking at the **crude supplier share**, Saudi Arabia maintained its previous role as the first crude supplier to Japan holding a share of 33% of total crude exports to the country, but with 25 tb/d less than a month before. The UAE came in as the second largest supplier to Japan, with a share of 22% of total crude imports, with an 87 tb/d increase in its volumes in comparison to the previous month. Kuwait came in as the third supplier in December with a share of 9%. Volumes imported from Kuwait increased by a slight 19 tb/d compared to last month.

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.

Japan's **product imports** increased in December by 99 tb/d to average 677 tb/d. This was 17% higher m-o-m, but 8 tb/d less than a year earlier.

Japan's domestic oil product sales fell 1.1% in December from a year earlier. As to **product exports**, Japan's exports in December dropped 35 tb/d to average 528 tb/d, yet remained 14 tb/d, or 3%, above last year's level. Accordingly, **Japan's net imports increased in December by 381 tb/d to average 3.7 mb/d, the highest level since March 2015, reflecting a monthly gain of 12%**. This still, however, reflects a drop of 2% from the same month a year earlier.

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

	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Change</u> <u>Dec 15/Nov 15</u>
Crude oil	3,122	3,260	3,508	248
Total products	-23	16	149	133
Total crude and products	3,098	3,276	3,657	381

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

China

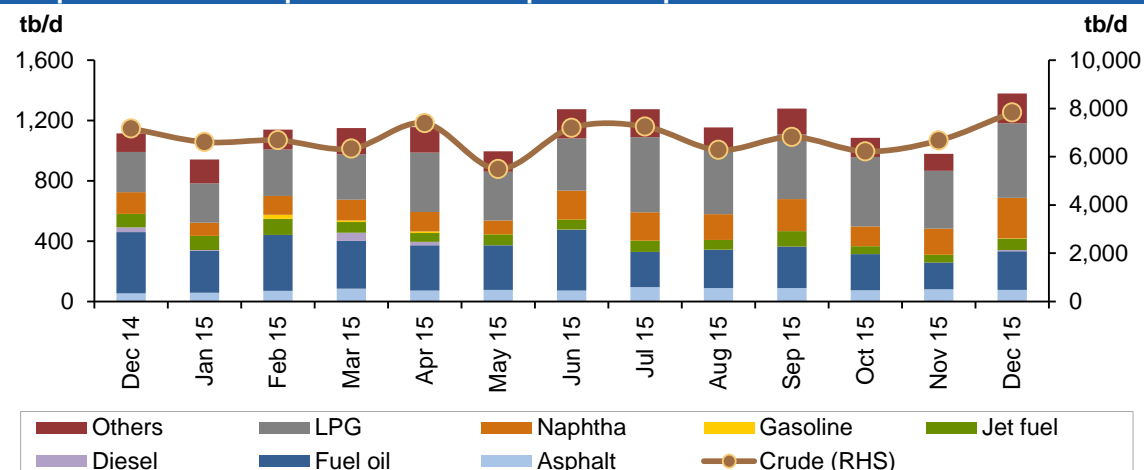
China's **crude imports** increased in December by a remarkable 1.17 mb/d, or 18%, from the previous month, to reach a peak record of 7.8 mb/d. At the same time, crude imports reflect an annual gain of 664tb/d or 9%. China's refinery throughput also increased in December for the second consecutive month, reaching a high level.

China's **product imports** also reached a high level in December to average 1.4 mb/d, having increased by 401 tb/d from the previous month and 265 tb/d from the same month a year earlier. Product imports increased in all product categories, but most obviously in LPG, naphtha and fuel oil. On a year-to-date basis, the figures reflect an increase of 553 tb/d, or 9%.

As to the **crude oil supplier** share, Russia, Saudi Arabia, Angola and Russia were the top suppliers to China in December, accounting for 15%,14% and 10%, respectively. Crude imports from all top suppliers were higher than the month before, and imports from Russia and Saudi Arabia were 183 tb/d and 165 tb/d higher, respectively, than the previous month. Imports from Angola increased by 178 tb/d or 29%. Similarly, Iraq

increased its imports to China by 29% in December, coming in fourth place among suppliers with increased volumes of 106 tb/d.

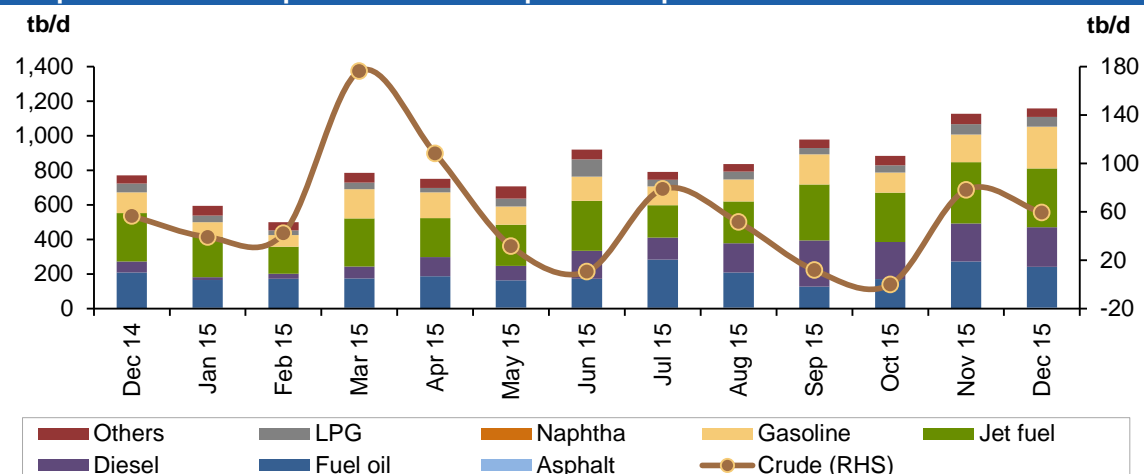
Graph 8.5: China's imports of crude and petroleum products



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

In December, China **exported** 59 tb/d of **crude**. This was 19 tb/d lower than the month before. On the other hand, China's **product exports** were 31 tb/d higher in December compared to last month to average 1.2 mb/d.

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



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

As a result, China's net oil imports increased by 1.6 mb/d from the previous month to average around 8.0 mb/d, and by 540 mb/d from a year before.

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

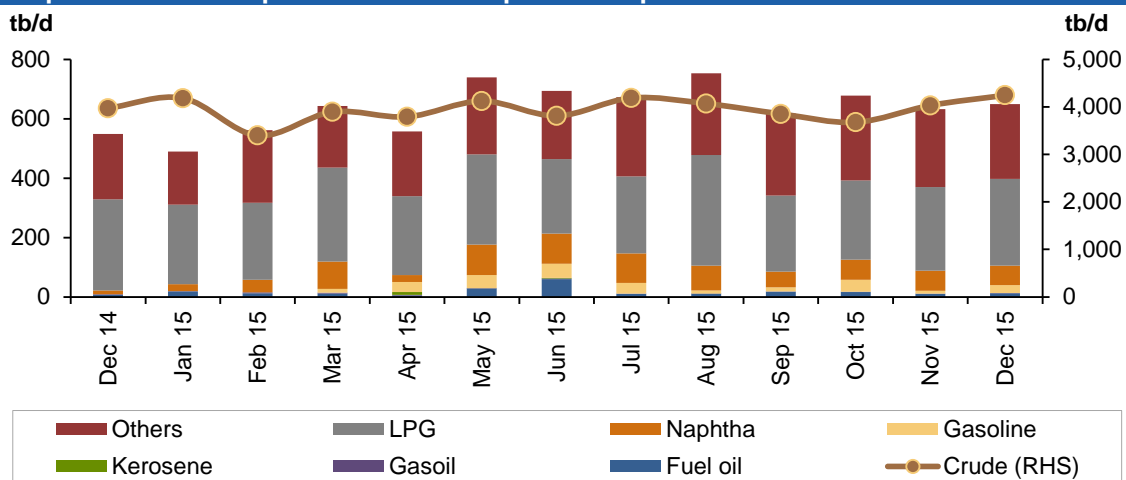
	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	Change <u>Dec 15/Nov 15</u>
Crude oil	6,222	6,592	7,777	1,185
Total products	203	-149	221	370
Total crude and products	6,425	6,443	7,998	1555

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

India

In December, India's **crude imports** increased by 214 tb/d, or 5%, from the previous month, to reach a peak record of 4.2 mb/d. At the same time, crude imports reflect an annual gain of 272 tb/d or 7%. Also, India's refinery runs increased by 150 tb/d in December from the previous month.

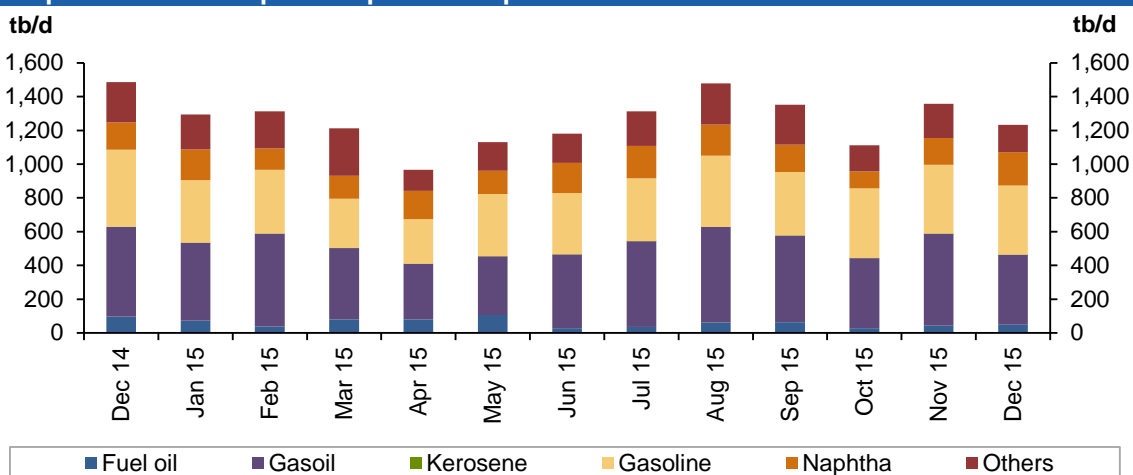
Graph 8.7: India's imports of crude and petroleum products



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

The country's **product imports** in December increased both on a monthly and annual basis – by 17 tb/d and 101 tb/d, respectively – to average 650 tb/d in December. The annual products imports increase came on the back of higher naphtha and petrol imports in December, which went up by 52 tb/d and 27 tb/d, respectively, from a month ago.

Graph 8.8: India's exports of petroleum products



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

India's **product exports** were 253 tb/d, or 17%, lower in December than a year ago to average 1.2 mb/d as they exported lesser volumes of diesel, fuel oil and petrol. Consequently, **India's net imports increased by 355 tb/d to average 3.7 mb/d, reflecting an increase of 11% m-o-m and 21% y-o-y.**

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

	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<i>Change</i> <u>Dec 15/Nov 15</u>
Crude oil	3,676	4,030	4,243	214
Total products	-434	-725	-584	141
Total crude and products	3,242	3,305	3,659	355

*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 December, **total crude oil exports from the Former Soviet Union (FSU) dropped by 80 tb/d, or 9%, to average 6.4 mb/d.** Crude exports through Russian pipelines also declined, falling by 277 tb/d, or 5%, to average 3.9 mb/d.

Total shipments from the **Black Sea** dropped by 129 tb/d, or 24%, to average 416 tb/d. This drop came as a result of lower exports through the Novorossiysk port. Total **Baltic Sea** exports also dropped by 166 tb/d in December as shipments from both the Primorsk port terminal and the Ust Luga port terminal dropped by 53 tb/d and 112 tb/d, respectively. Total shipments across the **Druzhba** pipeline declined by 11tb/d to average 1 mb/d, while Kozmino shipments went up by 58/d, or 10%, to average 675 tb/d.

Exports through the **Lukoil system** increased by 30 tb/d in the **Barents Sea** while remaining at the previous month's level in the **Baltic Sea**.

Through Asia, **Russia's total Far East** exports were up by 57 tb/d, or 18%, from the previous month. **Black Sea** total exports fell by 22 tb/d mainly as exports via the Novorossiysk port terminal dropped by 19 tb/d to average 1 mb/d. In the **Mediterranean**, BTC supplies increased by 86 tb/d, or 15%, from the previous month to average 660 tb/d.

Looking into product exports, **total product exports** for the FSU were higher in December than in the previous month, rising by 151 tb/d, or 5%, to average 3 mb/d. This drop in product exports came as a result of a decline seen in gasoil and fuel oil.

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

<u>Transneft system</u>		<u>2013</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>
Europe	Black sea total	739	594	533	545	416
	Novorossiysk port terminal - total	739	594	533	545	416
	of which: Russian oil	535	433	396	357	289
	Others	204	160	137	187	127
	Baltic sea total	1,546	1,358	1,492	1,569	1,404
	Primorsk port terminal - total	1,083	836	955	1,013	959
	of which: Russian oil	1,007	836	955	1,013	959
	Others	76	0	0	0	0
	Ust-Luga port terminal - total	463	522	536	557	445
	of which: Russian oil	342	356	323	339	234
	Others	121	166	213	218	210
	Druzhba pipeline total	1,032	1,058	1,077	1,035	1,047
	of which: Russian oil	1,000	1,026	1,045	1,003	1,015
Others	32	32	32	32	32	
Asia	Pacific ocean total	434	592	647	617	675
	Kozmino port terminal - total	434	592	647	617	675
	China (via ESPO pipeline) total	321	338	341	345	344
China Amur	321	338	341	345	344	
Total Russian crude exports		4,071	3,939	4,090	4,112	3,886
<u>Lukoil system</u>		<u>2013</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>
Europe & N. America	Barents sea total	111	137	136	122	152
	Varandey offshore platform	111	137	136	122	152
Europe	Baltic sea total	19	15	14	12	12
	Kalinigrad port terminal	19	15	14	12	12
<u>Other routes</u>		<u>2013</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>
Asia	Russian Far East total	259	301	347	309	365
	Aniva bay port terminal	114	105	114	97	134
	De Kastri port terminal	145	196	233	211	231
	Central Asia total	239	217	211	208	202
Kenkiyak-Alashankou	239	217	211	208	202	
Europe	Black sea total	853	736	1,068	1,162	1,140
	Novorossiysk port terminal (CPC)	704	649	961	1,046	1,027
	Supsa port terminal	76	79	96	111	107
	Batumi port terminal	53	8	11	5	5
	Kulevi port terminal	20	0	0	0	0
	Mediterranean sea total	641	471	613	574	660
BTC	641	471	613	574	660	
<u>Russian rail</u>		<u>2013</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>
Russian rail	Russian rail	198	13	13	12	16
	of which: Russian oil	9	8	9	7	13
	Others	189	4	3	4	3
Total FSU crude exports		6,392	5,829	6,492	6,511	6,431
<u>Products</u>		<u>2013</u>	<u>3Q15</u>	<u>4Q15</u>	<u>Nov 15</u>	<u>Dec 15</u>
	Gasoline	122	115	145	178	108
	Naphtha	390	457	519	418	576
	Jet	11	29	23	17	26
	Gasoil	857	888	863	834	857
	Fuel oil	1,415	1,253	1,204	1,206	1,185
	VGO	263	270	264	264	316
Total FSU product exports		3,058	3,012	3,018	2,917	3,068
Total FSU oil exports		9,450	8,842	9,510	9,428	9,499

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

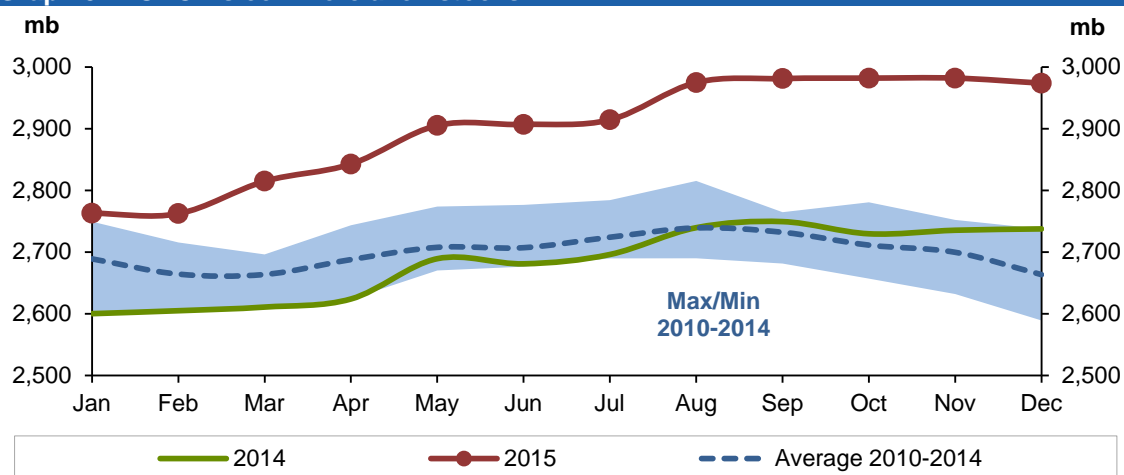
OECD commercial oil stocks fell in December to stand at 2,974 mb, which is around 310 mb higher than the latest five-year average. Crude and products indicated surpluses of around 249 mb and 61 mb, respectively, above the seasonal norm. In terms of days of forward cover, OECD commercial stocks stood at 63.7 days, which is 6.1 days higher than the latest five-year average. Preliminary data for January showed that total commercial oil stocks in the US rose by 25.1 mb to stand at 1337.7 mb. At this level, they were 238.0 mb higher than the latest five-year average. Within the components, crude rose by 20.5 mb, while products rose only by 4.7 mb. The latest information for China showed an increase in total commercial oil inventories of 5.2 mb in December to stand at 384.1 mb, which is around 5.9 mb higher than the previous year at the same time. Within the components, commercial crude oil fell by 1.8 mb, while product inventories rose by 7.0 mb.

OECD

The latest information for December shows that **total OECD commercial oil stocks** fell by 8.2 mb to stand at 2,974 mb, which is around 236 mb higher than the same time one year ago and 310 mb above the latest five-year average. Within the components, crude rose by 4.8 mb, while products fell by 13.0 mb.

OECD commercial crude stocks rose contra-seasonally by 4.8 mb to end December at 1,516 mb, which is 180 mb above the same time one year ago and nearly 249 mb higher than the latest five-year average. OECD Europe experienced a build, while OECD North America saw a drop and OECD Asia Pacific remained unchanged.

Graph 9.1: OECD's commercial oil stocks



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

In contrast, **OECD product inventories** fell in December by 13.0 mb, reversing the build of last month, to settle at 1,457 mb, which is 56 mb higher than a year ago at the same time and 61 mb above the seasonal norm. All three OECD regions experienced declines, with the bulk coming from OECD North America.

In terms of **days of forward cover**, OECD commercial stocks remained unchanged in December to stand at 63.7 days, which is 4.9 days above the previous year in the same period and 6.1 days higher than the latest five-year average. Within the regions,

Stock Movements

OECD Americas' days of forward cover was 7.3 days higher than the historical average to stand at 63.9 days in December. OECD Asia Pacific stood at 4.7 days above the seasonal average to finish the month at 50.0 days. At the same time, OECD Europe indicated a surplus of 5.0 days above the seasonal norm, averaging 72.2 days in November.

Commercial stocks in **OECD Americas** fell by 13.9 mb in December to end the month at 1,567 mb, which is a surplus of 121 mb above a year ago and 214 mb higher than the seasonal norm. Within the components, crude and product stocks fell by 5.1 mb and 8.8 mb, respectively.

At the end of December, **commercial crude oil stocks** in **OECD Americas** fell, ending the month at 830 mb, which was 114 mb above the same time one year ago and 176 mb above the latest five-year average. The fall in crude inventories was mainly driven by higher US refinery runs, which increased by around 250,000 b/d, reaching 16.6 mb/d. Refiners were running at 92.1%, which is 0.7 percentage points (pp) higher than the previous month.

Product stocks in OECD Americas also declined, falling by 8.8 mb, to end December at 1,457 mb, which is a surplus of 6.8 mb above the same time one year ago and 37.9 mb higher than the seasonal norm. The drop came mainly from higher US demand.

OECD Europe's commercial stocks rose by 9.5 mb in December to stand at 975 mb, which is 88.7 mb higher than the same time a year ago and 62.7 mb above the latest five-year average. Crude stocks rose by 9.9 mb, while product inventories fell slightly by 0.4 mb.

OECD Europe's commercial crude stocks rose in December to stand at 421 mb, which is 36.8 mb above the same period a year earlier and 38.3 mb higher than the latest five-year average. The build in crude oil stocks was mainly driven by high supply along with increased imports in the region. In contrast, **OECD Europe's commercial product stocks** fell slightly by 0.4 mb to end December at 554 mb, which is 51.9 mb higher than a year ago at the same time, and 24.4 mb higher than the seasonal norm. This fall was mainly driven by lower product demand in the region.

OECD Asia Pacific commercial oil stocks fell by 3.8 mb in December, ending the month at 432 mb, which is 26.4 mb higher than a year ago and 33.2 mb above the latest five-year average. Within the components, product stocks fell by 3.8 mb, while crude remained unchanged at 265 mb. At this level, crude inventories ended the month of December at 28.9 mb higher than a year ago and 34.3 mb above the seasonal norm. OECD Asia Pacific's total product inventories ended December at 166 mb, which is 2.5 mb less than a year ago and 1.1 mb lower than the seasonal norm.

Table 9.1: OECD's commercial stocks, mb

	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Change</u> <u>Dec 15/Nov 15</u>	<u>Dec 14</u>
Crude oil	1,519	1,512	1,516	4.8	1,336
Products	1,463	1,470	1,457	-13.0	1,401
Total	2,982	2,982	2,974	-8.2	2,738
Days of forward cover	64.4	63.7	63.7	0.0	58.9

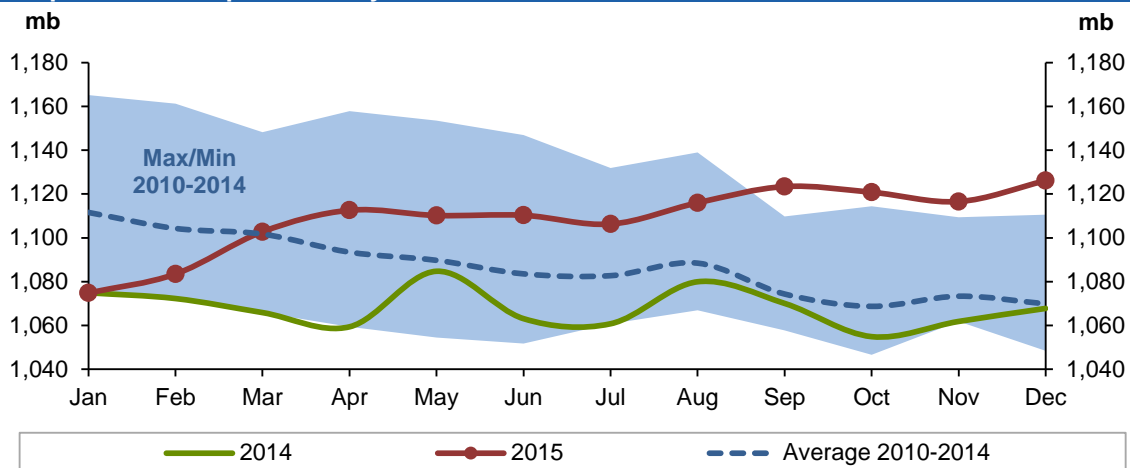
Sources: Argus Media, Euroilstock, IEA, JODI, METI, OPEC Secretariat and US Energy Information Administration.

EU plus Norway

Preliminary data for December shows that **total European stocks** rose slightly by 9.5 mb to stand at 1,126.1 mb, which is 58.3 mb, or 5.5%, above the same time a year ago and 46.2 mb, or 5.3%, higher than the latest five-year average. Crude rose by 9.9 mb, while product stocks fell slightly by 0.4 mb.

European crude inventories rose in December to stand at 482.3 mb, which is 6.9 mb, or 1.5%, above the same period a year ago and 25.6 mb, or 5.6%, higher than the seasonal norm. The increase came from high supply, despite crude runs rising by around 210,000 b/d to stand at 10.7 mb/d in December.

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



Sources: Euroilstock and OPEC Secretariat.

In contrast, **European product stocks** fell slightly by 0.4 mb to end December at 643.8 mb, which is 51.4 mb, or 8.7%, above the same time a year ago and 30.7 mb, or 5.0%, above the seasonal norm. Within products, the picture was mixed as gasoline and naphtha stocks saw builds, while distillates and residual fuel experienced stock draws.

Gasoline stocks rose by 0.4 mb in December to stand at 109.7 mb, which was 2.6 mb, or 2.3%, below a year earlier, and 0.4 mb, or 0.3%, less than the seasonal norm. The build was mainly driven by higher refinery outputs. **Naphtha stocks** also rose by 0.4 mb in December, ending the month at 23.3 mb, which is 2.6 mb, or 9.9%, less than the same time a year ago and 6.5 mb, or 21.9%, lower than the seasonal average.

Stock Movements

In contrast, **distillate stocks** fell by 1.2 mb to end December at 432.5 mb, reversing the stock build of last month. Despite this stock draw, distillate stocks were 50.1 mb, or 13.1%, higher than the previous year at the same time and 45.5 mb, or 11.8%, above the latest five-year average. The fall in distillate stocks came mainly from higher demand in the region. **Residual fuel oil stocks** fell marginally by 0.1 mb in December to stand at 78.2 mb, which is 6.4 mb, or 8.8%, above the same month a year ago, yet 8.0 mb, or 9.2%, lower than the latest five-year average.

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

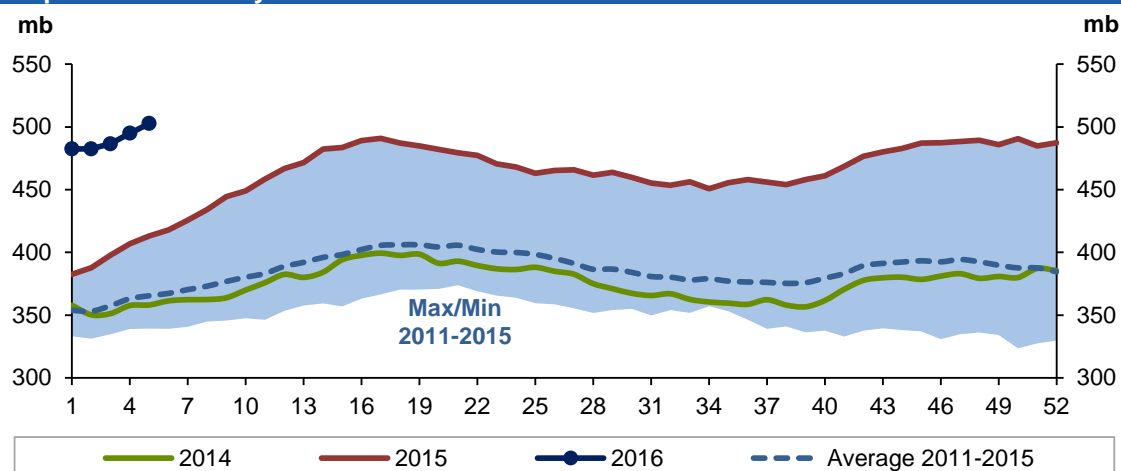
	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Change</u> <u>Dec 15/Nov 15</u>	<u>Dec 14</u>
Crude oil	484.2	472.4	482.3	9.9	475.4
Gasoline	107.6	109.3	109.7	0.4	112.3
Naphtha	22.5	22.9	23.3	0.4	25.9
Middle distillates	429.1	433.7	432.5	-1.2	382.4
Fuel oils	77.4	78.3	78.2	-0.1	71.9
Total products	636.6	644.2	643.8	-0.4	592.4
Total	1,120.8	1,116.6	1,126.1	9.5	1,067.8

Sources: Argus and Euroilstock.

US

Preliminary data for January shows that **total commercial oil stocks** in the US rose by 25.1 mb, reversing the fall of the previous month to stand at 1337.7 mb. At this level, they were 154.4 mb, or 13.0%, above the same period a year ago and 238.0 mb, or 21.6%, higher than the latest five-year average. Within the components, crude rose by 20.5 mb, while products rose by 4.7 mb.

Graph 9.3: US weekly commercial crude oil stocks



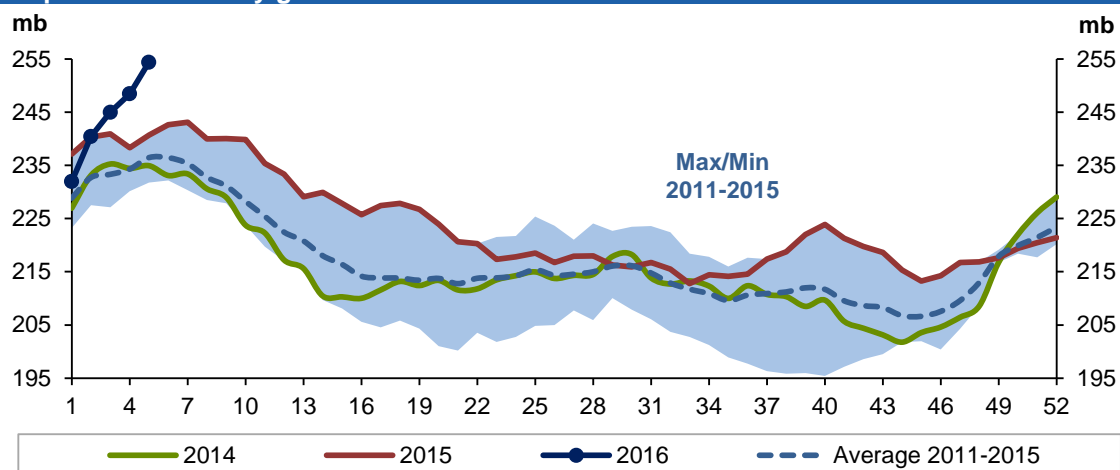
Sources: US Energy Information Administration and OPEC Secretariat.

US commercial crude stocks rose considerably in January to reach a new record high at 502.7 mb. At this level, they are 81.2 mb, or 19.3%, above the same time one year ago and 132.0 mb, or 35.6%, above the latest five-year average. The build was mainly driven by higher crude oil imports, which increased by around 70,000 b/d, averaging 7.9 mb/d. The drop in crude runs contributed to a further build in inventories. Indeed, refiners were running at 89.9% or 3.0 pp lower than in the previous month. Crude commercial inventories at Cushing, Oklahoma, rose by 0.3 mb to reach a record high of 64.2 mb.

Total product stocks rose by 4.7 mb in January, reversing the fall of the previous month. At 834.9 mb, US product stocks were around 73.1 mb, or 9.6%, above the level seen at the same time a year ago, showing a surplus of 106.0 mb, or 14.5%, above the seasonal norm. Within products, the picture was mixed. All major products saw builds, while other unfinished products, and propylene, experienced draws.

Gasoline stocks rose substantially by 22.4 mb, ending January at 254.4 mb. With this build, gasoline stocks were 14.8 mb, or 6.2%, higher than the same period a year ago, and 18.7 mb, or 7.9%, higher than the latest five-year average. The build came mainly from higher gasoline output, which increased by around 400,000 b/d to stand at 9.5 mb/d. Lower gasoline demand also contributed to the further build in gasoline stocks.

Graph 9.4: US weekly gasoline stocks



Sources: US Energy Information Administration and OPEC Secretariat.

Distillate stocks rose slightly by 0.3 mb in January, ending the month at 159.7 mb. At this level, they indicated a surplus of 27.7 mb, or 21.0%, from the same period a year ago, and stood 22.3 mb, or 16.2%, above the latest five-year average. The build in middle distillate stocks was mainly driven by higher production, which increased by around 440,000 b/d, to average nearly 5.0 mb/d.

Jet fuel stocks rose by 2.1 mb, ending January at 42.2 mb. At this level, jet fuel stocks stood 3.8 mb, or 9.8%, higher than the same month a year ago, and were 2.4 mb, or 6.0%, higher than the latest five-year average. **Residual fuel oil** inventories also rose by 1.7 mb to 43.8 mb, which was 9.6 mb, or 27.9%, higher than the previous year over the same period and 7.9 mb, or 22.1%, above the seasonal norm.

Table 9.3: US onland commercial petroleum stocks, mb

	<u>Nov 15</u>	<u>Dec 15</u>	<u>Jan 16</u>	<u>Change</u> <u>Jan 16/Dec 15</u>	<u>Jan 15</u>
Crude oil	487.4	482.3	502.7	20.4	421.5
Gasoline	222.6	232.0	254.4	22.4	239.6
Distillate fuel	156.7	159.4	159.7	0.3	132.0
Residual fuel oil	43.7	42.1	43.8	1.7	34.3
Jet fuel	38.0	40.2	42.2	2.1	38.5
Total	1,326.4	1,312.6	1,337.7	25.1	1,183.3
SPR	695.1	695.1	695.1	0.0	691.0

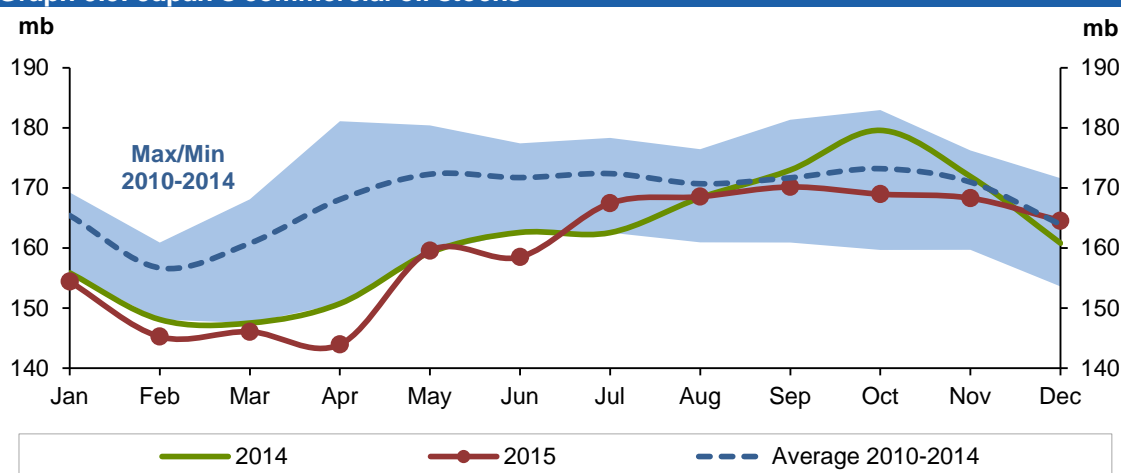
Sources: US Energy Information Administration and OPEC Secretariat.

Japan

In Japan, total **commercial oil stocks** fell by 3.8 mb in December to stand at 164.5 mb, which is 3.7 mb, or 2.3%, below a year ago at the same time and 0.6 mb, or 0.4%, below the five-year average. Within the components, product stocks went down by 3.8 mb, while crude stocks remained unchanged.

In December, Japanese commercial **crude oil stocks** remained at 98.5 mb, which is 5.7 mb, or 6.1%, above a year ago at the same time and 3.1 mb, or 3.3%, above the seasonal norm. Crude stocks remained flat in December as the increase in crude oil imports offset the increase in crude throughput. Indeed, crude imports rose by around 248,000 b/d, ending December at 3.5 mb/d. At the same time, crude throughput rose by almost a similar amount to stand at 3.4 mb/d. In December, refiners were running at 86.8%, which is 6.2 pp higher than the previous month, but they remained 2.2 pp lower than a year ago at the same time.

Graph 9.5: Japan's commercial oil stocks



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

Japan's **total product inventories** fell by 3.8 mb in December to stand at 66.0 mb, which is 2.0 mb, or 2.9%, below the same time a year ago and 2.5 mb, or 3.7%, less than the five-year average. The fall was driven mainly by higher domestic sales, which increased by 541,000 b/d, or 17.8%, to average 3.6 mb/d. Oil product imports limited this drop, as they rose by nearly 100,000 b/d to stand at 0.67 mb/d. All product categories experienced stock draws.

Distillate stocks fell by 2.0 mb in December to stand at 32.2 mb, which was 0.2 mb, or 0.8%, above the same period a year ago and 0.8 mb, or 2.7%, above the seasonal average. Within distillate components, gasoil and kerosene inventories fell by 0.4% and 3.3%, respectively, while jet fuel stocks rose by 11.4%.

Gasoline stocks also fell by 0.7 mb, ending December at 9.8 mb, which is 0.5 mb, or 5.5%, above the same time a year ago but 1.4 mb, or 12.8%, below the latest five-year average. This fall was driven mainly by higher gasoline sales, which increased by 11%, along with strong gasoline exports, which jumped by more than 20%.

Total residual **fuel oil stocks** fell by 0.3 mb in December to stand at 14.8 mb, which is 0.5 mb, or 3.0%, below a year ago and 0.8 mb, or 4.9%, lower than the latest five-year average. Within the fuel oil components, fuel oil A rose by 0.2% on the back of higher production, while fuel B.C stocks fell by 4.6% driven by strong domestic sales, which increased by almost 31%.

Naphtha inventories also fell, dropping by 0.8 mb in December, to stand at 9.2 mb, which is 2.3 mb, or 19.7%, below a year ago at the same time and 1.2 mb, or 11.3%, less than the seasonal norm. This fall was driven mainly by higher domestic sales, which increased by 17%.

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

	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Change</u> <u>Dec 15/Nov 15</u>	<u>Dec 14</u>
Crude oil	99.5	98.5	98.5	0.0	92.8
Gasoline	10.2	10.5	9.8	-0.7	9.3
Naphtha	10.5	10.0	9.2	-0.8	11.4
Middle distillates	33.4	34.2	32.2	-2.0	32.0
Residual fuel oil	15.4	15.0	14.8	-0.3	15.2
Total products	69.5	69.8	66.0	-3.8	68.0
Total**	169.0	168.3	164.5	-3.8	160.8

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 an increase in total commercial oil inventories of 5.2 mb in December to stand at 384.1 mb, which is around 5.9 mb higher than the previous year at the same time. Within the components, commercial crude oil fell by 1.8 mb, while product inventories rose by 7.0 mb.

At 243.4 mb, **commercial crude stocks** represented a deficit of around 6.7 mb below the same period one year earlier. The fall is mainly attributed to higher crude throughput as crude imports and output experienced gains.

Total **product stocks** in China rose by 7.0 mb for the second consecutive month to stand at 140.7 mb, which is 12.6 mb higher than a year ago at the same time. Within products, gasoline stocks went up by 3.9 mb, ending the month of December at 60.2 mb. This build was mainly driven by lower gasoline demand. Diesel stocks rose by 1.8 mb to stand at 64.9 mb, driven mainly by lower distillate consumption. Kerosene stocks rose by 1.3 mb, ending December at 15.6 mb, which is 2.5 mb higher than last year at the same time.

Table 9.5: China's commercial oil stocks, mb

	<u>Oct 15</u>	<u>Nov 15</u>	<u>Dec 15</u>	<u>Change</u> <u>Dec 15/Nov 15</u>	<u>Dec 14</u>
Crude oil	247.0	245.2	243.4	-1.8	250.1
Gasoline	51.8	56.3	60.2	3.9	53.8
Diesel	64.2	63.1	64.9	1.8	61.2
Jet kerosene	15.2	14.4	15.6	1.3	13.1
Total products	131.2	133.7	140.7	7.0	128.1
Total	378.2	378.9	384.1	5.2	378.2

Sources: China Oil and Gas Petrochemicals and OPEC Secretariat.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of December, **product stocks in Singapore** fell by a slight 0.2 mb to stand at 48.9 mb, which is 9.4 mb, or 23.7%, above the same period a year ago. Within products, the picture was mixed.

Light distillate stocks fell by 0.2 mb to stand at 12.6 mb, which is 1.8 mb, or 16.3%, below the previous year at the same time. Residual fuel oil stocks also fell, dropping by 0.3 mb in December to end the month at 24.9 mb, which is 5.3 mb, or 26.9%, higher than at the same time a year ago. The fall could be attributed to higher bunker demand in the region. In contrast, middle distillate stocks rose by 0.3 mb to finish the month of December at 11.4 mb, which was 2.3 mb, or 25.7%, above the same time a year ago.

Product stocks in Amsterdam-Rotterdam-Antwerp (ARA) fell by 1.4 mb in December to stand at 47.1 mb, which is 8.4 mb, or 21.6%, higher than at the same time a year ago. Within products, the picture was mixed.

Gasoline rose by 0.9 mb to end December at 6.8 mb, which is 0.8 mb, or 10.1%, below the same month last year. In contrast, gasoil fell by 2.4 mb to stand at 24.5 mb, which is 4.3 mb, or 21.4%, above last year at the same time. This drop was mainly driven by high demand in the region. Fuel oil stocks remained unchanged in December to end the month at 7.8 mb, which is a surplus of 3.0 mb, or 62.6%, above a year ago.

Balance of Supply and Demand

Demand for OPEC crude in 2015 was revised down by 0.1 mb/d from the previous report to stand at 29.8 mb/d, which is 0.1 mb/d higher than a year earlier. The global oversupply for 2015 is estimated at 2.0 mb/d. In 2016, the demand for OPEC crude is projected at 31.6 mb/d, unchanged from the last report, and around 1.8 mb/d higher than the previous year. Demand for OPEC crude is expected to improve in 2H16, reaching 32.70 mb/d in 3Q16, as a further indication towards a balanced market.

Estimate for 2015

Demand for OPEC crude for 2015 was revised down by 0.1 mb/d from the previous month to stand at 29.8 mb/d, representing an increase of 0.1 mb/d from the previous year. Within the quarters, 4Q15 was revised down by 0.3 mb/d, while the other quarters remained unchanged. This downward revision reflects mainly the upward adjustment in non-OPEC supply as world oil demand remained unchanged. 1Q15 fell by 0.7 mb/d, while 2Q15 grew by 0.2 mb/d. 3Q15 and 4Q15 rose by 0.1 mb/d and 0.7 mb/d, respectively, versus the same quarters a year earlier.

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

	<u>2014</u>	<u>1Q15</u>	<u>2Q15</u>	<u>3Q15</u>	<u>4Q15</u>	<u>2015</u>
(a) World oil demand	91.42	92.06	92.05	93.80	93.92	92.96
Non-OPEC supply	55.67	57.12	56.74	57.04	57.05	56.99
OPEC NGLs and non-conventionals	6.00	6.02	6.11	6.18	6.29	6.15
(b) Total non-OPEC supply and OPEC NGLs	61.66	63.14	62.84	63.21	63.34	63.14
Difference (a-b)	29.76	28.92	29.20	30.58	30.58	29.83
OPEC crude oil production	30.77	31.00	31.89	32.24	32.24	31.85
Balance	1.02	2.08	2.69	1.66	1.67	2.02

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 month. Within the quarters, 4Q16 was revised down by 0.1 mb/d, while the other quarters remained unchanged. The demand for OPEC crude for this year is projected to increase by 1.8 mb/d to average 31.6 mb/d. 1Q16 and 2Q16 are expected to increase by 1.5 mb/d and 1.7 mb/d, respectively, while 3Q16 and 4Q16 are projected to increase by 2.1 mb/d and 1.6 mb/d, respectively.

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

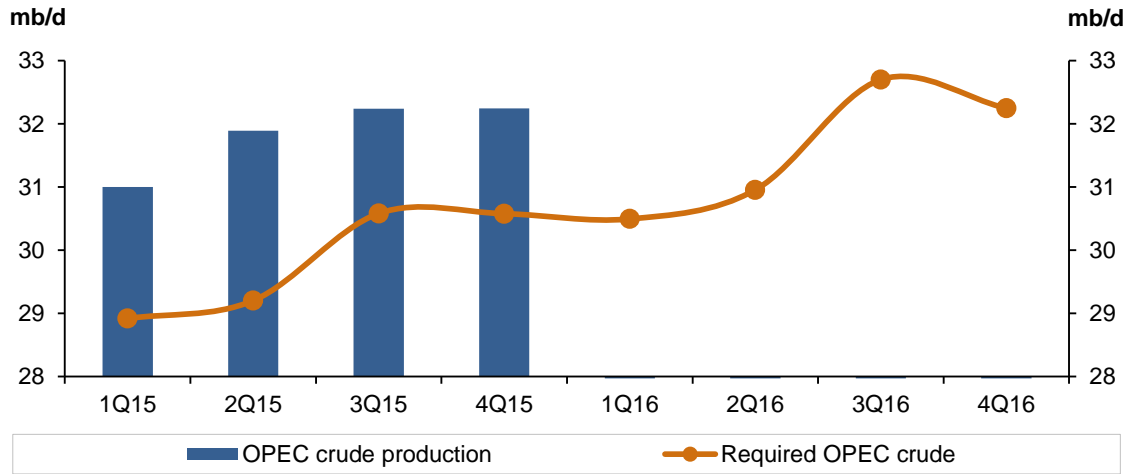
	<u>2015</u>	<u>1Q16</u>	<u>2Q16</u>	<u>3Q16</u>	<u>4Q16</u>	<u>2016</u>
(a) World oil demand	92.96	93.33	93.34	95.03	95.13	94.21
Non-OPEC supply	56.99	56.53	56.08	56.00	56.51	56.28
OPEC NGLs and non-conventionals	6.15	6.30	6.30	6.33	6.37	6.32
(b) Total non-OPEC supply and OPEC NGLs	63.14	62.83	62.38	62.33	62.88	62.61
Difference (a-b)	29.83	30.49	30.96	32.70	32.25	31.61
OPEC crude oil production	31.85					
Balance	2.02					

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Balance of Supply and Demand

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	45.8	46.5	45.4	46.5	46.6	46.3	46.7	45.6	46.7	46.7	46.4
Americas	23.6	24.1	24.2	24.2	24.1	24.8	24.8	24.5	24.5	24.4	25.1	25.1	24.8
Europe	13.8	13.6	13.5	13.6	13.6	14.1	13.5	13.7	13.6	13.6	14.1	13.5	13.7
Asia Pacific	8.5	8.3	8.1	8.7	7.7	7.6	8.2	8.1	8.6	7.6	7.5	8.1	8.0
DCs	28.3	29.2	29.9	30.0	30.7	31.3	30.5	30.6	30.7	31.4	32.0	31.2	31.3
FSU	4.4	4.5	4.6	4.4	4.3	4.6	5.0	4.6	4.5	4.3	4.7	5.0	4.6
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	11.4	11.0	11.4	11.1
(a) Total world demand	89.1	90.4	91.4	92.1	92.0	93.8	93.9	93.0	93.3	93.3	95.0	95.1	94.2
Non-OPEC supply													
OECD	21.1	22.2	24.2	25.2	24.9	25.3	25.2	25.1	24.8	24.5	24.4	24.7	24.6
Americas	16.7	18.2	20.1	21.0	20.7	21.1	20.9	20.9	20.6	20.4	20.4	20.5	20.5
Europe	3.8	3.6	3.6	3.7	3.8	3.7	3.8	3.7	3.7	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	0.5	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	11.4	11.5	11.5	11.6	11.5
FSU	13.4	13.6	13.5	13.7	13.6	13.6	13.7	13.6	13.6	13.4	13.4	13.5	13.5
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	4.3	4.4	4.4	4.4	4.4
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	57.1	56.7	57.0	57.0	57.0	56.5	56.1	56.0	56.5	56.3
OPEC NGLs + non-conventional oils	5.7	5.8	6.0	6.0	6.1	6.2	6.3	6.1	6.3	6.3	6.3	6.4	6.3
(b) Total non-OPEC supply and OPEC NGLs	57.7	59.2	61.7	63.1	62.8	63.2	63.3	63.1	62.8	62.4	62.3	62.9	62.6
OPEC crude oil production (secondary sources)	31.9	31.0	30.8	31.0	31.9	32.2	32.2	31.8					
Total supply	89.6	90.2	92.4	94.1	94.7	95.5	95.6	95.0					
Balance (stock change and miscellaneous)	0.5	-0.3	1.0	2.1	2.7	1.7	1.7	2.0					
OECD closing stock levels (mb)													
Commercial	2,683	2,589	2,738	2,815	2,907	2,981	2,974	2,974					
SPR	1,547	1,584	1,579	1,582	1,584	1,578	1,581	1,581					
Total	4,230	4,174	4,317	4,397	4,491	4,559	4,555	4,555					
Oil-on-water	879	909	924	864	916	924	1,017	1,017					
Days of forward consumption in OECD													
Commercial onland stocks	58	57	59	62	63	64	64	64					
SPR	34	35	34	35	34	34	34	34					
Total	92	91	93	97	97	98	97	98					
Memo items													
FSU net exports	8.9	9.0	9.0	9.2	9.3	8.9	8.7	9.1	9.1	9.1	8.7	8.5	8.9
(a) - (b)	31.4	31.2	29.8	28.9	29.2	30.6	30.6	29.8	30.5	31.0	32.7	32.2	31.6

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

Note: * This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the January 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	1Q14	2Q14	3Q14	4Q14	1Q15	2Q15	3Q15	4Q15
Closing stock levels, mb												
OECD onland commercial	2,683	2,589	2,738	2,974	2,611	2,681	2,749	2,738	2,815	2,907	2,981	2,974
Americas	1,365	1,316	1,446	1,567	1,317	1,387	1,416	1,446	1,483	1,537	1,572	1,567
Europe	912	881	886	975	885	889	898	886	939	940	965	975
Asia Pacific	405	392	405	432	409	405	436	405	392	430	445	432
OECD SPR	1,547	1,584	1,579	1,581	1,585	1,580	1,577	1,579	1,582	1,584	1,578	1,581
Americas	696	697	692	696	697	692	692	692	692	695	696	696
Europe	436	470	470	469	470	469	469	470	470	471	467	469
Asia Pacific	415	417	417	415	418	419	417	417	420	418	415	415
OECD total	4,230	4,174	4,317	4,555	4,196	4,261	4,327	4,317	4,397	4,491	4,559	4,555
Oil-on-water	879	909	924	1017	954	914	952	924	864	916	924	1017
Days of forward consumption in OECD												
OECD onland commercial	58	57	58	57	58	58	59	59	62	63	64	64
Americas	55	55	57	54	55	57	57	60	61	62	63	64
Europe	68	66	67	65	65	64	67	66	70	67	72	72
Asia Pacific	48	46	49	48	53	53	52	46	51	56	54	50
OECD SPR	34	33	34	35	35	34	34	34	35	34	34	34
Americas	30	29	29	29	29	28	28	29	29	28	28	28
Europe	30	31	32	35	35	34	35	35	35	34	35	35
Asia Pacific	50	49	50	51	54	54	50	48	54	55	50	48
OECD total	92	90	92	91	93	93	93	93	97	97	98	98

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					Change	
							15/14	1Q16	2Q16	3Q16	4Q16	2016	16/15
US	10.0	11.2	13.0	14.1	13.9	13.9	1.0	13.6	13.5	13.4	13.6	13.5	-0.4
Canada	3.8	4.0	4.3	4.5	4.4	4.4	0.1	4.5	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	20.9	20.9	0.9	20.6	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	1.9	0.0
UK	1.0	0.9	0.9	0.9	1.0	1.0	0.1	0.9	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	0.2	0.2	0.2	0.2	0.2	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	3.8	3.7	0.1	3.7	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	0.5	0.5	0.5	0.4	0.5	0.0
Total OECD	21.1	22.2	24.2	25.3	25.2	25.1	0.9	24.8	24.5	24.4	24.7	24.6	-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	0.8	0.9	0.9	0.9	0.9	0.0
Malaysia	0.7	0.6	0.7	0.7	0.7	0.7	0.1	0.7	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	0.3	0.3	0.0	0.4	0.3	0.3	0.3	0.3	0.0
Asia others	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	2.6	2.6	2.6	2.6	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	3.0	3.1	0.2	3.1	3.1	3.2	3.2	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	5.2	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	1.2	1.2	1.3	-0.1	1.2	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	2.4	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	11.4	11.5	11.5	11.6	11.5	0.0
FSU	13.4	13.6	13.5	13.6	13.7	13.6	0.1	13.6	13.4	13.4	13.5	13.5	-0.2
Russia	10.5	10.6	10.7	10.8	10.9	10.8	0.1	10.8	10.7	10.7	10.8	10.7	-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	0.8	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	4.3	4.4	4.4	4.4	4.4	0.0
Non-OPEC production	49.8	51.3	53.5	54.9	54.9	54.8	1.3	54.3	53.9	53.8	54.3	54.1	-0.7
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	57.0	57.0	57.0	1.3	56.5	56.1	56.0	56.5	56.3	-0.7
OPEC NGL	5.5	5.6	5.7	5.9	6.0	5.9	0.2	6.0	6.0	6.0	6.1	6.0	0.2
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	6.3	6.1	0.2	6.3	6.3	6.3	6.4	6.3	0.2
Non-OPEC & OPEC (NGL+NCF)	57.7	59.2	61.7	63.2	63.3	63.1	1.5	62.8	62.4	62.3	62.9	62.6	-0.5

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							Change
					15/14	1Q15	2Q15	3Q15	4Q15	Dec 15	Jan 16	Jan/Dec
US	1,919	1,761	1,862	977	-885	1,380	909	866	754	711	643	-68
Canada	364	354	380	192	-188	309	99	191	169	144	218	74
Mexico	106	106	86	52	-34	67	59	42	39	42	43	1
Americas	2,390	2,221	2,327	1,221	-1,107	1,755	1,067	1,098	962	897	904	7
Norway	17	20	17	17	1	17	18	18	15	17	18	1
UK	18	17	16	14	-2	18	14	13	12	9	8	-1
Europe	119	135	145	117	-28	132	116	109	110	114	108	-6
Asia Pacific	24	27	26	17	-9	21	17	16	15	16	14	-2
Total OECD	2,533	2,383	2,499	1,355	-1,144	1,908	1,200	1,222	1,087	1,027	1,026	-1
Other Asia	217	219	228	202	-26	214	203	201	191	182	179	-3
Latin America	180	166	172	145	-27	161	143	149	128	116	90	-26
Middle East	136	102	108	102	-6	103	98	100	106	110	104	-6
Africa	7	16	28	11	-16	22	12	8	3	3	4	1
Total DCs	539	503	536	460	-75	499	456	458	428	411	377	-34
Non-OPEC rig count	3,071	2,886	3,034	1,815	-1,219	2,408	1,656	1,681	1,516	1,438	1,403	-35
Algeria	36	47	48	51	3	52	52	51	49	49	51	2
Angola	9	11	15	11	-4	15	12	8	11	11	10	-1
Ecuador	20	26	24	12	-12	17	15	12	4	2	1	-1
Iran**	54	54	54	54	0	54	54	54	54	54	54	0
Iraq**	58	83	79	52	-27	57	53	47	51	51	49	-2
Kuwait**	31	32	38	47	8	51	49	44	42	43	40	-3
Libya**	9	15	10	3	-8	6	3	1	1	1	1	0
Nigeria	36	37	34	30	-4	35	29	28	28	27	28	1
Qatar	8	9	10	8	-3	9	8	7	6	7	9	2
Saudi Arabia	112	114	134	155	21	154	155	154	158	160	155	-5
UAE	24	28	34	42	8	38	39	41	52	51	50	-1
Venezuela	117	121	116	110	-6	108	105	114	112	110	109	-1
OPEC rig count	513	576	596	574	-22	595	575	561	566	566	557	-9
Worldwide rig count*	3,584	3,462	3,631	2,389	-1,241	3,002	2,231	2,242	2,082	2,004	1,960	-44
of which:												
Oil	2,594	2,611	2,795	1,727	-1,068	2,214	1,616	1,606	1,471	1,404	1,392	-12
Gas	886	746	743	563	-180	690	516	536	509	494	465	-29
Others	106	109	95	100	5	100	98	99	102	106	103	-3

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

na: Not available.

Sources: Baker Hughes Incorporated & Secretariat's estimates.

* Excludes China and FSU.

** Estimated figure when Baker Hughes Incorporated did not reported the data.

Contributors to the OPEC Monthly Oil Market Report

Editor-in-Chief

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

Editor

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

Analysts

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

Data services

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

Editing, production, design and circulation

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

Disclaimer

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

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

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

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

OPEC Basket average price

US\$/b



down 7.14 in January

January 2016	26.50
December 2015	33.64
Year-to-date	26.50

January OPEC crude production

mb/d, according to secondary sources



up 0.13 in January

January 2016	32.33
December 2015	32.20

Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
2015	2.9	2.0	2.4	0.7	1.5	6.9	7.3
2016	3.2	2.0	2.2	0.9	1.5	6.3	7.5

Supply and demand

mb/d

2015		15/14	2016		16/15
World demand	93.0	1.5	World demand	94.2	1.3
Non-OPEC supply	57.0	1.3	Non-OPEC supply	56.3	-0.7
OPEC NGLs	6.1	0.2	OPEC NGLs	6.3	0.2
Difference	29.8	0.1	Difference	31.6	1.8

OECD commercial stocks

mb

	Oct 15	Nov 15	Dec 15	Dec 15/Nov 15	Dec 14
Crude oil	1,519	1,512	1,516	4.8	1,336
Products	1,463	1,470	1,457	-13.0	1,401
Total	2,982	2,982	2,974	-8.2	2,738
Days of forward cover	64.4	63.7	63.7	0.0	58.9

Next report to be issued on 14 March 2016.