OPEC

Monthly Oil Market Report

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Feature article:

Developments in global oil inventories

Organization of the Petroleum Exporting Countries

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Oil market highlights

Crude Oil Price Movements

The OPEC Reference Basket rose 19¢ to average $45.02/b in October, the third month in a row around this level. Crude oil futures increased at a faster pace with ICE Brent increasing 75¢ to $49.29/b and Nymex WTI gaining 82¢ to stand at $46.29/b. Speculator net length declined as short positions increased. The Brent-WTI spread narrowed to average close to $3/b in October.

World Economy

World economic growth remains modest at 3.1% in 2015, mainly due to a continued slowdown in emerging and developing economies, as well as low US growth in the third quarter, and global economic growth is expected to improve to 3.4% in 2016. US growth has been revised to 2.4% in 2015 and 2.5% in 2016, while total OECD growth remains at 2.0% for 2015 and 2.1% for 2016. Figures for China and India remain unchanged at 6.8% and 6.4%, and 7.4% and 7.6%, respectively.

World Oil Demand

World oil demand is expected to grow by 1.50 mb/d in 2015 to average 92.86 mb/d, unchanged from the previous report. In 2016, world oil demand growth is seen reaching 1.25 mb/d, in line with the previous month's assessment, to average 94.14 mb/d.

World Oil Supply

Non-OPEC oil supply is estimated to average 57.24 mb/d in 2015, an increase of 0.72 mb/d, unchanged from the previous month's estimation. The forecast for 2016 non-OPEC oil supply remained unchanged, showing a contraction of 0.13 mb/d to average 57.11 mb/d. OPEC NGLs in 2016 are forecast to increase by 0.17 mb/d to average 6.18 mb/d. In October, OPEC production according to secondary sources dropped by 256 tb/d to average 31.38 mb/d.

Product Markets and Refining Operations

Despite the peak maintenance season seen in October with more than 8 mb/d of capacity offline worldwide, refinery margins fell across the globe due to high inventories and expectations of a mild winter. Product markets in the Atlantic Basin continued to weaken even with healthy US gasoline demand, pressured by oversupply. Asian margins lost some momentum amid a narrowing of gasoline and gasoil crack spreads which outweighed the positive performance of naphtha and fuel oil.

Tanker Market

A general improved sentiment was seen in the dirty tanker market, on the back of strong tonnage demand and delays seen in several ports. On average, spot freight rates rose by 19% over the previous month. Clean tanker freight rates declined both East and West of Suez as clean tanker demand was limited. OPEC sailings and fixtures were higher than the month before, while sailings declined in all reported regions, except in European ports.

Stock Movements

OECD commercial oil stocks remained almost unchanged in September to stand at 2,942 mb. At this level, inventories were around 210 mb higher than the latest five-year average, with crude and products indicating surpluses of around 170 mb and 40 mb, respectively. In terms of days of forward cover, OECD commercial stocks stood at 63.0 days in September, around 4.5 days above the five-year average.

Balance of Supply and Demand

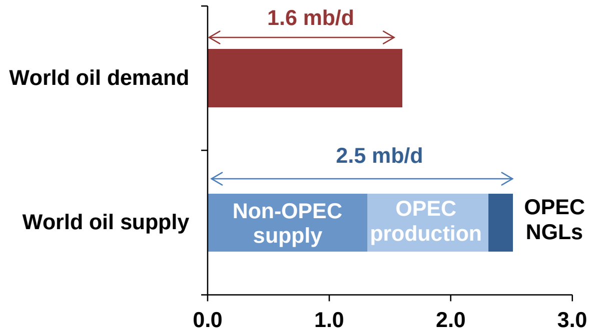
Estimated demand for OPEC crude in 2015 remains at 29.6 mb/d, an increase of 0.6 mb/d over the previous year. In 2016, demand for OPEC crude is forecast at 30.8 mb/d, around 1.2 mb/d higher than in the current year and unchanged from the previous report.

Developments in global oil inventories

Global oil inventories consist of three major components. The first is a combination of total OECD commercial oil stocks and Strategic Petroleum Reserves (SPR), which together represent more than 60% of global oil inventories. OECD commercial stocks typically serve as a key indicator of the status of the oil market, as seasonal variations are linked to oil demand through an inverse relationship. In contrast, OECD SPR has little impact on the market as its volume has not dramatically changed over the last years. The second component refers to non-OECD inventories, which have become more important in recent years as non-OECD oil demand has increased, requiring more stock-piling. Oil-at-sea, the third component, consists of both floating storage and oil-in-transit. The latter of these provides an important operational link between exporter and consumer countries, but plays a negligible role in the market as the volume fluctuates in a narrow range. In contrast, the level of floating storage fluctuates depending on the forward price structure, with a strong contango providing an incentive to hold stocks while deep backwardation would lead to a release of inventories.

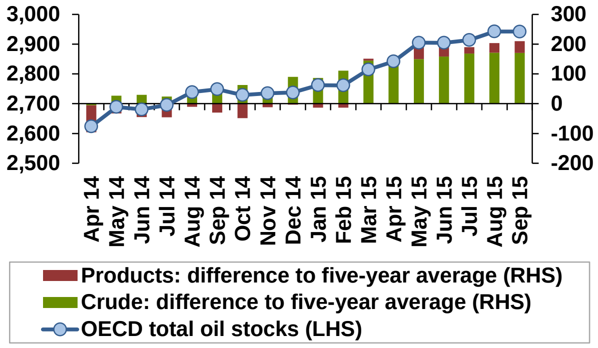
For the first three quarters of 2015, estimated global inventories saw a strong build of around 285 mb or 1.0 mb/d, the bulk of which came from a 205 mb increase in OECD commercial stocks and an 80 mb rise in non-OECD inventories. Oil-at-sea remained broadly unchanged during the same period as fluctuations in floating storage were offset by changes in oil-in-transit. The build in global inventories is mainly the result of the increase in total supply outpacing growth in world oil demand over the first nine months of this year. Over the first three quarters of the year, global oil supply rose by 2.5 mb/d y-o-y, while world oil demand increased by 1.6 mb/d y-o-y (***Graph 1***). This would imply a stock-build of 0.9 mb/d, which roughly corresponds to the build observed in global inventories over this period.

Graph 1: Supply/demand growth for first three quarters 2015, mb/d



Source: OPEC Secretariat.

Graph 2: OECD commercial stocks, mb



Source: OPEC Secretariat.

The overhang in total OECD commercial inventories started to emerge in 3Q14 when total commercial stocks were still in line with the five-year average. Since then, inventories have gradually increased and the overhang with the five-year average is currently around 210 mb (***Graph 2***). The bulk of this overhang has come from crude, with a surplus of 170 mb, while product stocks witnessed a gain of 40 mb. Within components, the excess in crude inventories started in May 2014, while for products, the surplus began around a year later, driven mainly by higher refinery outputs due to increased refinery utilization rates, especially in Europe and the US. Middle distillates accounted for most of the total global surplus, while gasoline stocks have started to improve, ending September around the five-year average.

The difference between current OECD inventory levels and the latest five-year average is usually used as an indication of whether the oil market is tight or well supplied. Over the last ten years, there have been two periods when the difference with five-year average has surpassed an excessive level of 150 mb. The first period occurred amid the deterioration in world oil demand following the 2008 financial crisis, when the surplus in total commercial OECD inventories reached 180 mb in 1Q09. The second period corresponds to the current market situation, which has been driven by higher global supply. This has led to a surplus of OECD commercial inventories. In both cases, crude oil prices dropped to multi-years lows.

The recent decline in oil prices has encouraged additional oil demand. It has also provided a challenging market environment for some higher-cost crude oil production, which has already shown a slowdown. Moreover, strategic oil reserves have grown as some countries – including China and India – have taken advantage of lower prices to add to their reserves, a trend that is likely to continue. In addition, a colder- or longer-than-expected winter, as well as better-than-projected economic activities, could support incremental demand. This would help alleviate the current overhang and support a recovery of crude oil prices in the coming months.

Crude Oil Price Movements

The OPEC Reference Basket (ORB) edged up slightly to around $45/b. The ORB has hovered at around this level since late July, with no significant fundamental or non-fundamental change in the oil market. M-o-m, the ORB rose by a marginal 19¢ to stand at $45.02/b, but remained lower y-o-y at $51.99/b. Crude oil futures were up again in October amid a rally in the second and final weeks of the month. Despite a surge in US crude oil inventories, the oil complex was able to sustain significant growth over the second week. ICE Brent ended the month up 75¢ at $49.29/b. Nymex WTI improved m-o-m by 82¢ to stand at $46.29/b. Year-to-date, compared with 2014, futures prices were lower by $42.39/b and $43.60/b, respectively. Net length in both WTI and Brent futures and options decreased as money managers expanded short positions by more than they increased long positions. The Brent-WTI spread eased further in October to $3/b, continuing to support the import of West African crudes to the US.

OPEC Reference Basket

The ORB remained almost unchanged in October; its value edged up slightly to around $45/b for the third month in a row. Prices have been bottoming at this level since the end of July, amid a lack of any significant fundamental or non-fundamental change to move them markedly. The oil market continues to be oversupplied, crude and product storage are still at record highs and reports of Chinese economic slowdown continue. Even the previously positive refining markets started to erode, particularly in the US and Europe. Global crude still faces oversupply. Nevertheless, the market is finding support from reduced drilling activities in the US, which seems to be keeping a floor under prices.

On a monthly basis, the OPEC Reference Basket rose a marginal 19¢ to stand at $45.02/b, an increase, on average, of less than 0.5%. Compared with a year ago, the ORB value is lagging at $51.99/b versus $101.79/b at that time.

Graph 1.1: Crude oil price movement, 2015

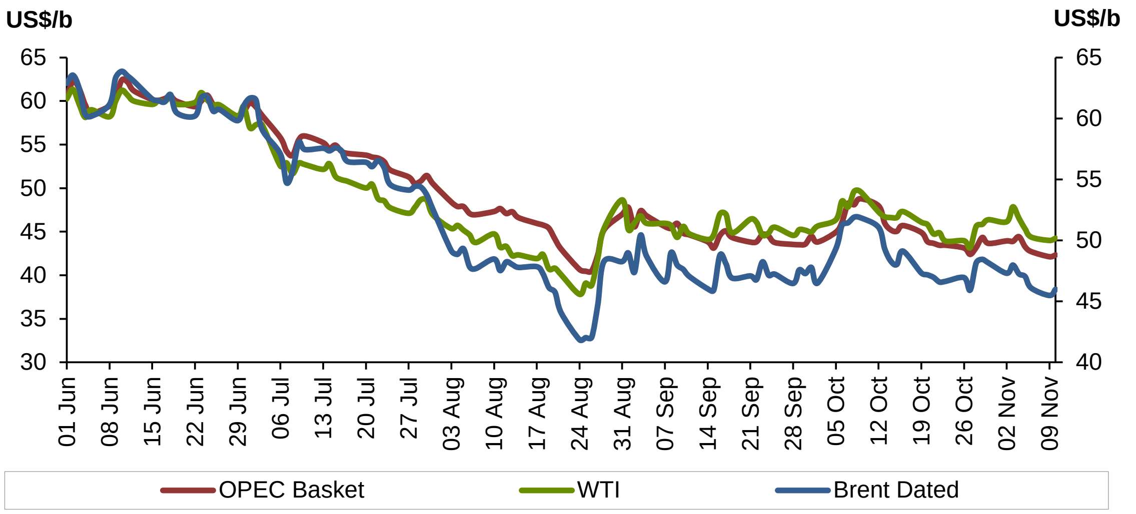


Table 1.1: OPEC Reference Basket and selected crudes, US$/b

	Sep 15	Oct 15	Change Oct/Sep	Year-to-date 2014	Year-to-date 2015
OPEC Reference Basket	**44.83**	**45.02**	**0.19**	**101.79**	**51.99**
Arab Light	45.56	45.37	-0.19	102.73	52.41
Basrah Light	43.41	43.50	0.09	99.90	50.38
Bonny Light	48.01	49.16	1.15	106.37	55.26
Es Sider	46.71	47.56	0.85	103.92	53.62
Girassol	48.01	48.45	0.44	104.72	55.31
Iran Heavy	44.62	44.55	-0.07	101.81	51.51
Kuwait Export	43.96	43.61	-0.35	100.90	50.79
Marine	45.88	45.89	0.01	101.92	53.27
Merey	34.13	35.48	1.35	92.06	43.72
Murban	48.88	49.48	0.60	105.07	56.14
Oriente	41.03	39.91	-1.12	92.21	47.08
Sahara Blend	48.36	49.51	1.15	105.12	54.98
Other Crudes					
Brent	47.61	48.56	0.95	104.50	54.66
Dubai	45.38	45.84	0.46	102.15	53.50
Isthmus	47.71	46.90	-0.81	98.30	53.28
LLS	48.64	47.38	-1.26	101.88	54.49
Mars	43.10	41.91	-1.19	97.85	50.36
Minas	42.05	42.13	0.08	104.56	51.59
Urals	47.19	47.49	0.30	103.41	54.30
WTI	45.48	46.26	0.78	98.14	50.49
Differentials					
Brent/WTI	2.13	2.30	0.17	6.37	4.17
Brent/LLS	-1.03	1.18	2.21	2.62	0.17
Brent/Dubai	2.23	2.72	0.49	2.36	1.16

Note: Arab Light and other Saudi Arabian crudes as well as Basrah Light preliminarily based on American Crude Market (ACM) and subject to revision.

Sources: Platt's, Direct Communication and Secretariat's assessments.

Global oil benchmarks rose by 1–2% over the month, with Dated Brent, WTI and Dubai prices expanding by 95¢, 78¢ and 46¢, respectively. On the other hand, West African crude oil price differentials took a turn during the month, worsening amid slowing demand from both European and Asian refiners. Demand from Europe was curtailed, as record refining margins started to ease, while Asian demand was affected by higher freight rates and a wider Brent/Dubai spread, largely during the first half of the month. An approximately 19% or 160,000 b/d increase in Caspian crude CPC Blend also helped to pressure differentials. A return of the glut of light sweet crudes in the Atlantic Basin in October negatively affected all light sweet crudes in the region. Middle East prices, including differentials, remained under pressure from ample supplies, despite improving Asia Pacific refining margins.

Brent-related, West and Northern African light sweet Basket component – Saharan Blend, Es Sider, Girassol and Bonny Light – values increased by 90¢ or 1.9% to stand at $48.67/b in October. Middle Eastern spot component grades improved by about 30¢ to stand at $47.69/b, while multi-destination grades Arab Light, Basrah Light, Iran Heavy and Kuwait Export slipped by about 15¢ to stand at $44.26/b. Regarding Latin American ORB components, Venezuela's Merey was up by $1.35 or 4% to stand at $35.48/b, while Ecuador's Oriente declined by about $1.15 or 2.7% to reach $39.91/b.

On 11 November, the OPEC Reference Basket was down by 73¢ from the previous day to stand at $41.53/b.

The oil futures market

Crude oil futures were up again in October, amid a rally in the second and final weeks of the month. Despite a surge in US crude oil inventories, the oil complex was able to sustain significant growth over the second week, breaking out of the $47 to $50/b band it has held since early September for global benchmark Brent.

Oil prices improved on renewed geopolitical tensions in the Middle East, solid Chinese factory data and threats to supply from Hurricane Joaquin. Prices were also boosted by a rally in US gasoline prices and a report showing the fifth-weekly decline in the US oil rig count, which renewed the debate over falling production in that country. Higher stock prices on Wall Street provided further support to oil and other dollar-denominated commodities. Prices also saw some gains after the US Energy Information Administration (EIA) said US crude output should decline through to mid-2016 after shrinking in September. Oil futures rallied again during the last few trading sessions of the month after another decline in the US oil rig count indicated domestic crude production could fall in coming months. Prices also got a boost from separate data showing US oil output in August fell to its third lowest figure this year. Crude futures were additionally supported by refined products and elevated geopolitical risk in the MENA region.

However, oil futures came under pressure for the remainder of the month on the persistent global supply glut and a bigger-than-expected build in crude stockpiles. Market reaction to possible sales from the US Strategic Petroleum Reserve under a budget deal, worries that the oversupply in oil products would swell due to unseasonably warm weather and the waning maintenance cycle for US refineries, added to concerns about an already oversupplied market. Crude oil futures also lost ground after a tumble in gasoline futures added pressure to a market slumping on slower growth in China and signs that Iranian oil will return to the market quickly once the recently concluded nuclear deal is implemented. A stronger dollar and softer equity markets on Wall Street added weight to the petroleum complex.

ICE Brent ended the month up 75¢ or 1.6% to stand at $49.29/b, while Nymex WTI improved m-o-m by 82¢ or 1.8% to stand at $46.29/b. Compared to 2014, year-to-date Nymex WTI and Brent were at $50.52/b and $55.85/b lower by $42.39/b and $43.60/b, respectively.

On 11 November, ICE Brent stood at $45.81/b and Nymex WTI at $42.93/b.

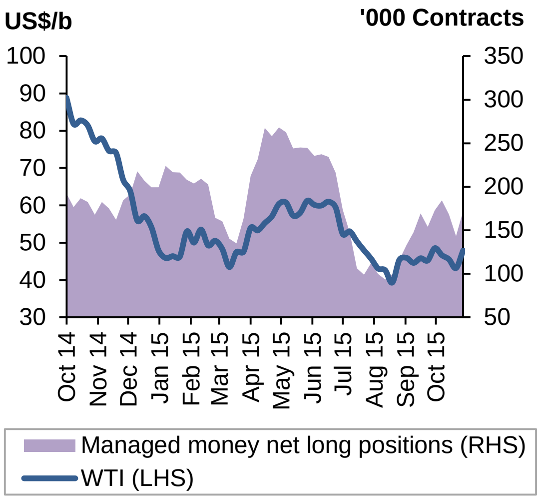
Commitments of Traders' reports from the Nymex and ICE exchanges showed that the net length in futures and options of both decreased over the month as money managers expanded short positions by a greater amount than long ones.

In the Nymex WTI, speculators increased long positions by 3.1%, while short commitments were up by 16.7%, resulting in a reduction of 10,623 in net length contracts to 143,291 lots at the end of the month. Similarly, net length positions in ICE Brent declined 8,261 lots to 161,196 contracts, as short positions surged 26.2%, while long positions increased by only 6.6%, InterContinental Exchange (ICE) data showed.

This trend indicates that investors believe prices are headed lower, since August money managers halved bets that WTI will fall, while net longs, or bets for high prices, on Nymex crude have risen from 116,002 lots in early September to 143,291 contracts at the end of October, according to data from the US Commodity Futures Trading Commission (CFTC). Similarly, ICE Brent net length contracts increased by over 30%

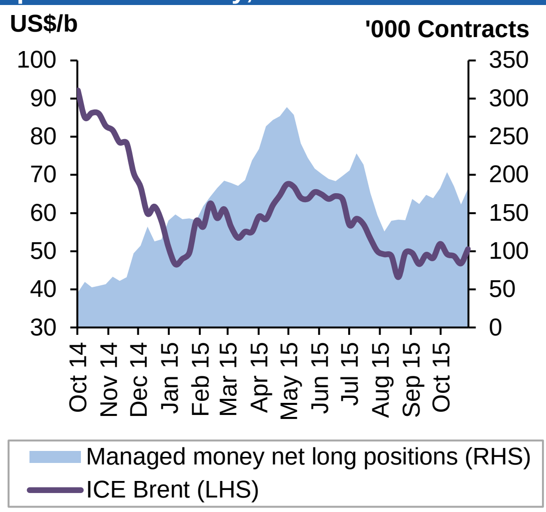
since August before dropping to 160,000 lots in the last week of October. Meanwhile, total futures and options open interest volume in the two markets declined by 244,350 contracts to 5.28 million lots.

Graph 1.2: Nymex WTI price vs. speculative activity, 2014-2015



Source: CFTC.

Graph 1.3: ICE Brent price vs. speculative activity, 2014-2015



Source: IntercontinentalExchange, Inc.

The daily average traded volume during October for Nymex WTI contracts decreased by 4,010 lots to average 794,708 contracts, while ICE Brent daily traded volume increased by 27,176 contracts to 677,840 lots. Daily aggregate traded volume in both crude oil futures markets increased by 23,166 lots to around 1.47 million futures contracts, equivalent to around 1.5 billion barrels per day. Total traded volume in Nymex WTI was up to 17.5 million contracts; similarly, ICE Brent was higher at 14.9 million lots.

The futures market structure

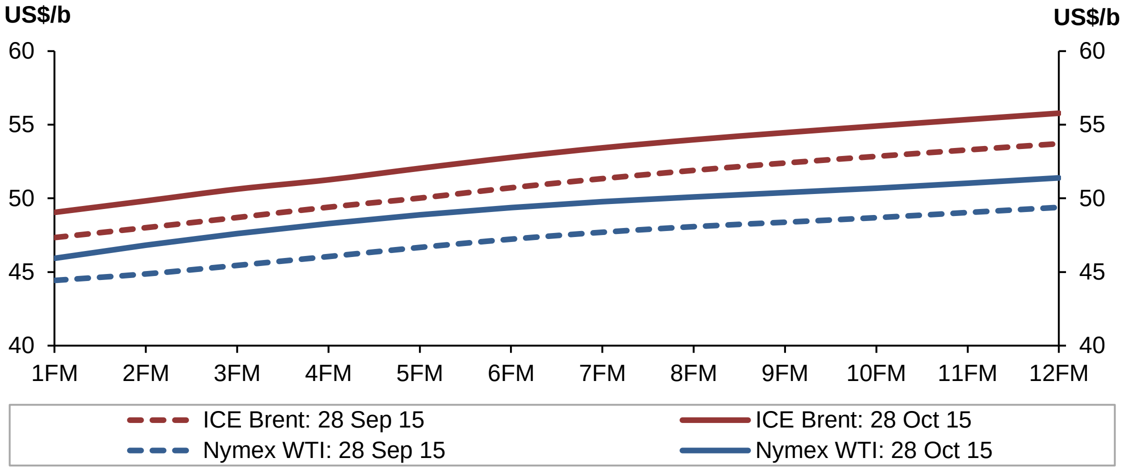
All three markets remain in contango as all continue to confront the ongoing global oil supply glut.

US inventories have seen consecutive weeks of build, particularly in Cushing Oklahoma, as refineries reduced runs and imports rose. The WTI contango reversed from the previous month's narrowing trend, widening slightly in October by about 35¢, while the M1–M3 spread increased to $1.35/b.

Despite ample light sweet regional supplies, the Brent market contango eased by 5¢, with M1–M3 at $1.65/b. This took place against a backdrop of positive refinery demand earlier in the month and open arbitrage shipments to Asia in the second half of the month. The temporarily closed Buzzard field, the largest contributor to the Forties crude stream, also supported prompt barrels.

Likewise, Middle East crude's steep contango structure eased over the month as demand for local Asian crudes increased due to a further rise in Brent prices relative to Dubai; the Brent/Dubai spread widened from the previous month by a significant $2.35/b to $2.70/b. Good refining margins in the Asia Pacific region lifted demand as well. Dubai's contango narrowed for the month by about 35¢, while the M1–M3 discount of $2.25/b dropped to around $1.90/b.

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



FM = future month.

Brent's premium over WTI eased further over the month, but at a much lower rate, continuing to support imports of West African crudes to the US. Ample light sweet crude supplies in the Atlantic Basin have affected the Brent market more than that of the US. The Brent–WTI (transatlantic) spread narrowed by about 5¢ from \$3.05/b in September to \$3/b in October, the narrowest range since January, on a monthly average basis.

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

Nymex WTI	1st FM	2nd FM	3rd FM	6th FM	12th FM
28 Sep 15	44.43	44.87	45.45	47.23	49.39
28 Oct 15	45.94	46.82	47.60	49.37	51.40
ICE Brent	1st FM	2nd FM	3rd FM	6th FM	12th FM
28 Sep 15	47.34	48.01	48.70	50.72	53.71
28 Oct 15	49.05	49.83	50.63	52.78	55.78

FM = future month.

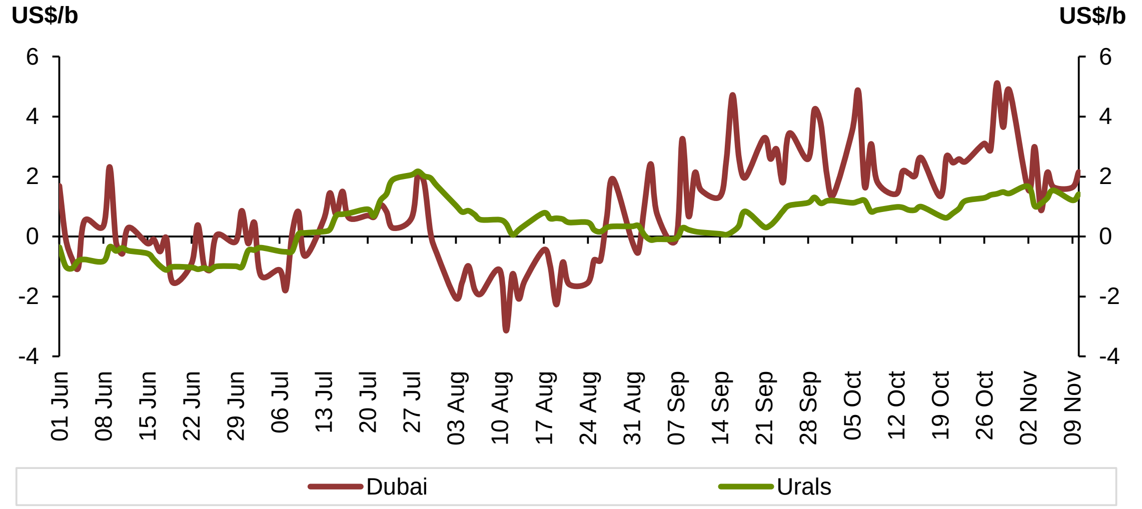
The light sweet/medium sour crude spread

Sweet/sour differentials widened in Europe and Asia, while narrowing slightly on the US Gulf Coast (USGC).

In **Asia**, the Tapis/Dubai spread continued the previous month's widening streak as did the Brent/Dubai spread, making local sweet crudes such as Tapis more attractive compared with arbitrage volumes from outside the region. In addition to a wider Brent/Dubai spread during the first half of the month, freight rates from West Africa to Asia were also up, helping to limit arbitrage movement of light sweet crudes from the Atlantic Basin – mainly West African crude – to the Asia Pacific region, supporting shorter-haul cargoes. Increasing demand from Chinese teapot refiners and robust refining margins also supported lighter Asia Pacific crudes. Crude demand weakened in the second half of the month as easing freight rates and a drop in Brent's premium against Dubai re-opened the arbitrage window for European and African cargoes heading to Asia. Meanwhile, medium sour Middle Eastern crudes weakened on ample supply. They also stayed unsupported because buyers valued most discounted grades on elevated official selling prices (OSPs). Light sweet Tapis premium over medium sour Dubai increased by 75¢ to stand near $5/b.

In **Europe**, the Urals medium sour crude discount to Brent almost tripled in October amid plentiful supplies, sagging refinery margins and wide availability of alternative grades from the Middle East. Refining margins for Urals were down for the month, as well as for the year, as Brent futures prices regained some value. Meanwhile, the Med was not only long in medium sour grades, but also in light crude grades such as CPC and Azeri. On the other hand, temporary outages at the Buzzard field and a mid-month onward open arbitrage window to Asia for light sweet crude from the North Sea supported the Brent market despite an oversupply in the region. Med Urals discount of 40¢/b in September to Dated Brent jumped to around $1.10/b in October, widening by about 70¢.

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



In the **USGC**, the Light Louisiana Sweet (LLS) premium over medium sour Mars fell slightly to $5.50/b, shrinking by 5¢. High gasoline and middle distillate inventories and the return of refineries from maintenance caused reduced runs of lighter crudes such as LLS. The narrower Brent/WTI spread is putting additional pressure on domestic light grades and increasing the import of similar West African grades.

Commodity Markets

In October, average prices for energy and non-energy commodities were mainly stable, though they showed mixed intragroup movements. In the energy group, crude oil prices showed small advances, while natural gas and coal generally declined. Meanwhile, in non-energy commodities, agricultural prices generally increased, while base metal prices declined on falls in aluminium. In the group of precious metals, gold advanced on average, but declined at the end of the month as US Federal Reserve (US Fed) officials hinted at interest rate hikes in December.

Trends in selected commodity markets

During the month, commodity prices had the support of a retreat of the US dollar, mainly against emerging market currencies, while it stayed stable against the euro, the yen and the pound. Manufacturing conditions improved for Japan and the Euro-zone, where the Purchasing Managers' Indices (PMI) were 52.4 and 52.3, respectively, versus 51.0 and 52 in September. Meanwhile in the US, the Institute for Supply Management's PMI declined to 50.1, versus 50.2 the previous month, mainly on declining inventories, while in China, a PMI reading of 48.3, versus 47.2 a month earlier shows that the sector remains in contraction, albeit at a slower rate. The group of precious metals rebounded in the first half of the month after a disappointing September employment report in the US, but declined afterwards after the US Fed downplayed previous concerns about the impact of a slow-down in emerging economies on the US economy, which had delayed the start of monetary policy normalization.

The group of metals saw mixed price movements with large drops for aluminium and iron ore. Aluminium prices declined on resilient primary aluminium output in China, which remained around 15% higher than a year ago for the month of September – based on data from International Aluminium Institute, in spite of prices being at their lowest since 2009. Iron ore prices were down to their second lowest this year on quarterly reports showing continuing increases in output during the third quarter by the three largest producing companies − Brazilian Vale (output up 2.9% y-o-y), Australian BHP (output up 7% y-o-y), and Rio Tinto (output up 12% y-o-y). On the demand side, crude steel output for September was reported down 3.7% y-o-y globally and by 3.0% in China, according to the World Steel Association. Meanwhile, nickel rebounded in the first half of the month on the expectation of a global deficit in 2016, according to the International Nickel Study Group.

Agricultural prices advanced, mainly due to higher food prices, on the impact of dryer-than-average conditions in Southeast Asia and India. During the month, the US Department of Agriculture (USDA) increased its forecast for global ending stocks in the current marketing year 2015/2016 for wheat and soybeans on higher Brazilian output, however soybean prices increased on higher imports from China. Meanwhile, the USDA expects rice stocks to be at their lowest since 2007/2008 on dryer weather in Thailand and India. Sugar prices jumped during the month due to lower-than-expected output in India, China and the European Union on dryer-than-average weather in those regions, and as a result of the increase in fuel prices in Brazil that makes production of ethanol more attractive than sugar.

Energy prices were stable, with some advances in average crude oil prices, but natural gas and coal generally declined. The expectation of warmer weather in the Northern section of the US due to El Niño meteorological phenomena, as forecast by the US

National Oceanic and Atmospheric Administration (NOAA), translated into sharp declines in natural gas prices in the US. Furthermore, although increases in inventories had been below market expectations during the month, inventories are still at their highest levels since 2012. Meanwhile, in Europe, inventories were at 80% of capacity at the end of the month, and prices were also weakened on warmer weather.

Table 2.1: Commodity price data, 2015

Commodity	Unit	*Monthly averages*			*% Change*		
		Aug 15	Sep 15	Oct 15	Aug/Jul	Sep/Aug	Oct/Sep
World Bank commodity price indices (2010 = 100)							
Energy		59.5	59.6	59.7	-13.6	0.3	0.04
Coal, Australia	$/mt	58.6	54.7	52.2	-0.9	-6.5	-4.7
Crude oil, average	$/bbl	45.7	46.3	47.0	-15.9	1.3	1.5
Natural gas, US	$/mmbtu	2.8	2.6	2.3	-2.4	-4.2	-12.5
Non-energy		79.9	79.0	79.3	-3.8	-1.1	0.3
Agriculture		87.5	85.9	86.9	-3.7	-1.8	1.2
Food		87.9	86.2	87.7	-4.8	-1.9	1.7
Soybean meal	$/mt	394.0	386.0	381.0	-5.1	-2.0	-1.3
Soybean oil	$/mt	730.0	727.0	742.0	-2.8	-0.4	2.1
Soybeans	$/mt	381.0	368.0	376.0	-5.9	-3.4	2.2
Grains		83.8	82.3	84.6	-7.9	-1.9	2.8
Maize	$/mt	162.6	165.6	171.4	-9.5	1.9	3.5
Wheat, US, HRW	$/mt	179.8	172.7	172.7	-8.9	-4.0	0.0
Sugar, world	$/kg	0.3	0.3	0.3	-10.4	3.1	17.3
Base Metal		68.3	69.1	68.2	-6.1	1.2	-1.2
Aluminum	$/mt	1,548.1	1,589.6	1,516.5	-5.6	2.7	-4.6
Copper	$/mt	5,127.3	5,217.3	5,216.1	-6.0	1.8	0.0
Iron ore, cfr spot	$/dmtu	56.0	57.0	53.0	7.7	1.8	-7.0
Lead	$/mt	1,703.6	1,684.3	1,720.1	-3.4	-1.1	2.1
Nickel	$/mt	10,386.0	9,937.6	10,316.8	-9.0	-4.3	3.8
Tin	$/mt	15,163.8	15,453.3	15,794.6	0.6	1.9	2.2
Zinc	$/mt	1,807.6	1,720.2	1,724.3	-9.6	-4.8	0.2
Precious Metals							
Gold	$/toz	1,117.9	1,124.8	1,159.3	-0.9	0.6	3.1
Silver	$/toz	14.9	14.8	15.8	-0.7	-1.3	7.2

Source: World Bank, Commodity price data.

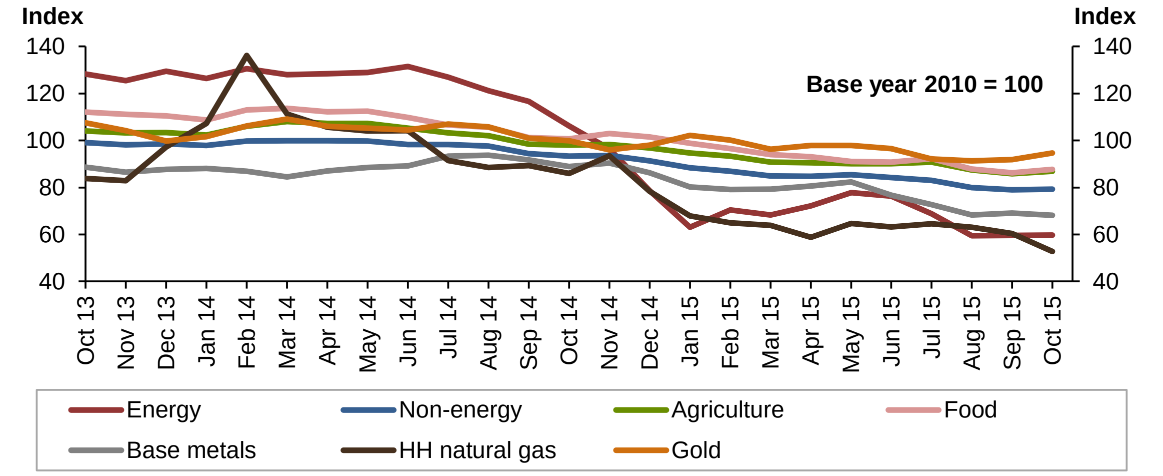
Average energy prices were stable with the offsetting effects of a 1.5% rise in crude oil. Natural gas prices declined in the US by 12.5% m-o-m, while average import prices in Europe were down by 4.2%.

Agricultural prices advanced, up by 1.2%, with rises of 1.7% and 1.2%, respectively, in the groups of food and beverages (cocoa, coffee and tea), while raw materials (timber, cotton, rubber and tobacco) stayed stable. Maize and soybeans advanced by 3.5% and 2.2%, respectively. Sugar prices leaped by 17.3% on lower estimations for sugar output from India, China and the EU.

Average base metal prices declined by 1.2%, with mixed movements across group components. Aluminium was down by 4.6%, while copper stayed stable. Meanwhile, average iron ore prices declined by 7.0% m-o-m on higher ore output and lower steel demand.

Precious metals generally advanced, with gold prices rising by 3.1% on average, supported by lower real interest rates in the first half of the month – a situation that reversed afterwards. Meanwhile, silver prices advanced strongly by 7.2% m-o-m.

Graph 2.1: Major commodity price indices, 2013-2015

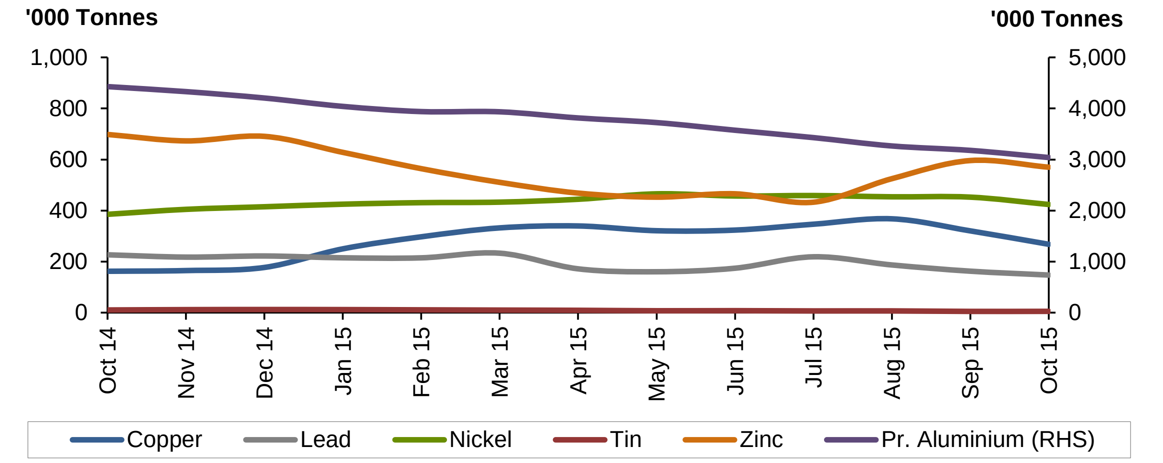


Source: World Bank, Commodity price data.

In October, the Henry Hub natural gas index decreased. The average price was down 33¢ or 12.5% to \$2.32 per million British thermal units (mmbtu) after trading at an average of \$2.65/mmbtu the previous month.

The US Energy Information Administration (EIA) said utilities put 52 billion cubic feet (Bcf) of gas into storage during the week ending 30 October. This was lower than market expectations of an 58 Bcf increase. Total working gas in storage stood at 3,929 Bcf, which was 10% higher than at the same time in the previous year and 4% higher than the previous five-year average. Current storage levels are tying 2012 record highs. The EIA noted that temperatures during the reported week were warmer than the 30-year average, but slightly below last year.

Graph 2.2: Inventories at the LME

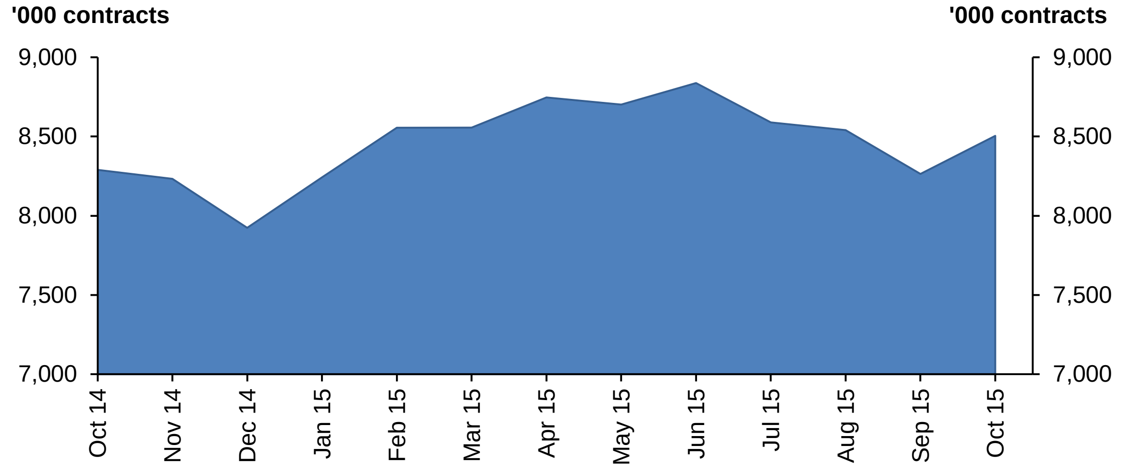


Sources: London Metal Exchange and Thomson Reuters.

Investment flows into commodities

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

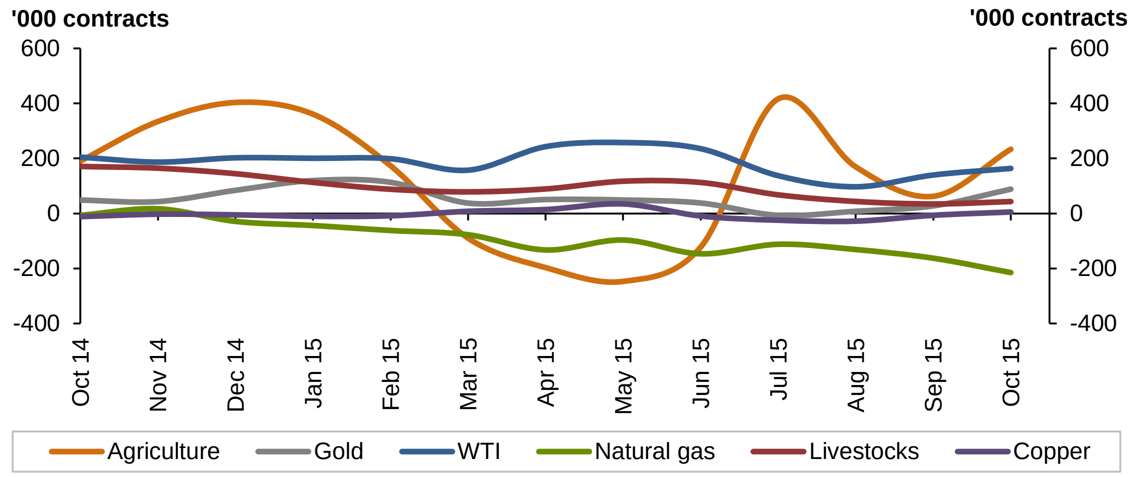
Graph 2.3: Total open interest volume



Source: US Commodity Futures Trading Commission.

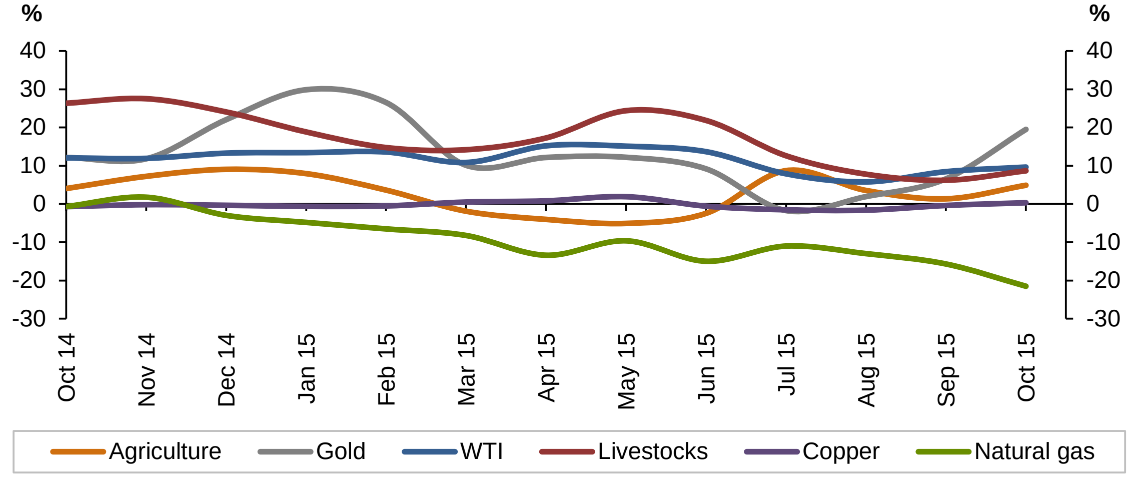
Agriculture's OIV increased by 3.2% m-o-m to 4,769,529 contracts in October. Meanwhile, money managers increased their net long positions by 2.7 times to 233,553 lots. More than two thirds of this increase was due to the rising net length in sugar.

Graph 2.4: Speculative activity in key commodities, net length



Source: US Commodity Futures Trading Commission.

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



Source: US Commodity Futures Trading Commission.

Henry Hub's natural gas OIV increased by 6.5% m-o-m to 972,974 contracts in October. Money managers increased their net short positions by 32% to reach to 214,828 lots on the expectation of a warmer winter.

Copper's OIV increased by 2.8% m-o-m to 159,694 contracts in October. Money managers switched to a net long position of 5,402 lots from a net short position of 6,631 lots the previous month.

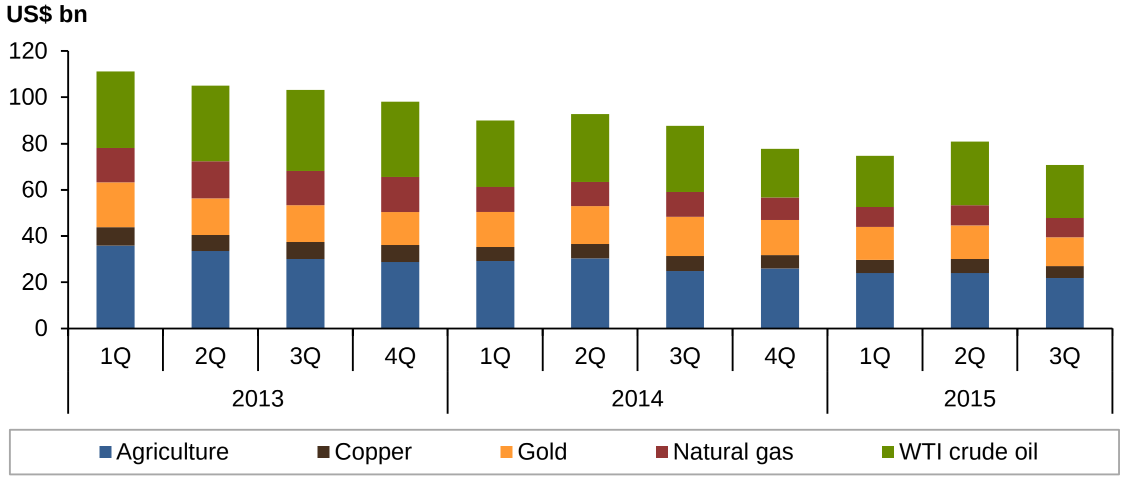
The precious metals' OIV increased by 7.3% m-o-m to 613,908 contracts in October. Money managers' net long positions increased by 2.7 times to 131,217 lots, mainly for gold.

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

	Open interest		*Net length*			
	Sep 15	Oct 15	Sep 15	% OIV	Oct 15	% OIV
Crude oil	1,664	1,653	140	8	164	10
Natural gas	913	973	-163	-18	-215	-22
Agriculture	4,620	4,770	62	1	234	5
Precious metals	572	614	35	6	131	21
Copper	155	160	-7	-4	5	3
Livestock	495	499	35	7	43	9
Total	**8,420**	**8,668**	**103**	**1**	**362**	**4**

Source: US Commodity Futures Trading Commission.

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



Source: US Commodity Futures Trading Commission.

World Economy

Global economy dynamics remain modest, and the latest slowdown from the third quarter, also affecting the US, points to the possibility of a downward revision for global economic growth in the coming months. While this remains to be seen, global growth forecasts for 2015 and 2016 are unchanged at 3.1% and 3.4%, respectively. The OECD forecast remains at 2.0% for 2015 and 2.1% for the coming year. However, for the US, low 3Q15 GDP growth has led to a 0.1 percentage point (pp) downward revision for both 2015 and 2016. US growth now stands at 2.4% in 2015 and 2.5% in 2016. The deceleration in emerging and developing economies seems to be continuing, with the exception of India. Growth numbers for all major emerging economies remain unchanged, with the exception of Russia's 2016 growth, which has been revised down from 0.6% to 0.3%. Decelerating momentum in China and a declining trend in Russia and Brazil will need close monitoring. Moreover, some fragility in the Euro-zone remains, and the strength of the general trend in US growth will also have to be watched. Japan will need to manage a balancing act of fiscal tightening and, at the same time, stimulating its economy. Geopolitical issues and their potential spill over into the real economy also constitute a challenge. Finally, central bank policies will be an influential factor amid lower global inflation. Most importantly, a decision by the US Fed to hike interest rates has become more likely recently.

Table 3.1: Economic growth rate and revision, 2014-2015, %

	World	OECD	US	Japan	Euro-zone	China	India	Brazil	Russia
2015*	**3.1**	**2.0**	**2.4**	**0.8**	**1.5**	**6.8**	**7.4**	**-2.2**	**-3.2**
Change from previous month	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
2016*	**3.4**	**2.1**	**2.5**	**1.2**	**1.5**	**6.4**	**7.6**	**-0.5**	**0.3**
Change from previous month	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.3

**Forecast.*

OECD

OECD Americas

US

The US economy has continued to witness solid growth, largely supported by the services sector. In general, private household consumption is holding up well, perhaps supported by low oil-product prices. The generally positive dynamic in the economy has again led to solid improvements in October's labour market numbers, which are now an important factor for the US Fed to consider when deciding upon key interest rates at the upcoming meeting in December. In the meantime, some weakness reappeared in backward-looking 3Q15 GDP numbers. After very strong 2Q15 GDP growth of 3.9% q-o-q seasonally adjusted annualised rate (SAAR), a 1.5% q-o-q SAAR was disappointing, particularly when considering that 1Q15 growth was extremely weak at 0.6% q-o-q SAAR. This shows that the strength of economic growth is still uncertain in the US, despite improvements in the economy, with labour market conditions nearly at pre-crisis levels again, recovering asset markets and gradually falling debt levels.

With these improvements now in place and the expectation of a further recovery in the domestic market, it is more likely that the Federal Open Market Committee (FOMC) will raise interest rates in December. This is even more possible as the international dimension may be less sensitive now, given that China's stock market turbulence and the surprise devaluation of the yuan may have both been overcome, at least for now. Also India, which was widely affected by the taper-talks in 2013, is doing much better.

The advance release of the **third quarter US GDP** showed a weaker-than-expected growth level of only 1.5% q-o-q SAAR. While private household consumption was strong, a decline in inventories of 1.44% q-o-q SAAR was to blame, along with falling private investment that kept GDP down. Generally speaking, there is solid momentum in the economy, investments are expected to rebound in the coming quarter and consumption will remain strong, hence growth in the coming quarter should rebound. Personal consumption expenditures grew by 3.2% q-o-q, only slightly below the 2Q15 level of 3.6% q-o-q and higher than the 1.6% q-o-q of 1Q15, which was affected by cold weather. Investments, however, fell by 5.6% q-o-q SAAR; a large contribution to this decline came once again from energy sector-related declines in investment, which fell by 48.7% q-o-q SAAR in 3Q15, a trend that has been witnessed since the middle of last year when oil prices started to decline.

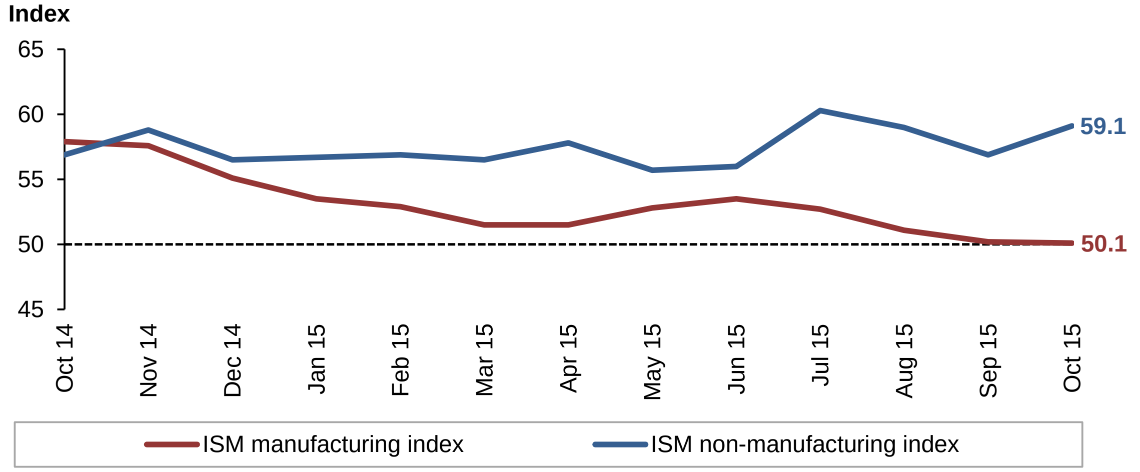
A major driver for the US economy is the continuously improving situation in the **labour market**. The unemployment rate fell to 5.0% in October, compared with 5.1% in September, to stand at its lowest level since 2008. Non-farm payroll additions also grew again in October by a strong 271,000 after reaching 137,000 in September. The share of long-term unemployed has remained relatively low, climbing only slightly by 0.2 pp to stand at 26.8%. The participation rate, however, remained at 62.4%, the same as in September.

While the GDP seems to be well supported by the services sector, **industrial production** remains weak, rising by only 0.4% y-o-y in September, the lowest growth level since 2010. Manufacturing orders were also decidedly negative at -6.9% y-o-y in September, pointing to a continuation of a weak trend in the sector.

Given the relatively positive developments in the labour market, **consumer confidence** stood at solid levels, though it retreated slightly in October. The Conference Board Consumer Confidence Index fell to 97.6 in October, down from 102.6 in September. This positive sentiment is indeed supportive for retail trade, which grew by 2.4% y-o-y in September, a solid level, and approximately the monthly average for this year so far.

However, the **Purchasing Managers' Index** (PMI) for the manufacturing sector, provided by the Institute of Supply Management (ISM), declined again to a sensitive figure of 50.1, down from 50.2 in August. This is indeed an area that will need close monitoring in the near term. The services sector index performed much better, moving to a high of 59.1 in October, compared with 56.9 in September.

Graph 3.1: US Manufacturing and non-manufacturing ISM indices



Sources: Institute for Supply Management and Haver Analytics.

The US economy seems to be expanding at a healthy level, though some indicators point to a continuation of the current moderate growth trend. Weak 3Q growth and the expectation of ongoing challenges have led to a slight downward revision to 2.4% in 2015 and 2.5% in 2016, with both years' GDP growth forecasts 0.1 pp lower than in the previous month.

Canada

Canada's slowdown from the first half of the year is expected to rebound only slightly after considerable challenges for the energy sector due to low oil prices. Industrial production turned positive in August, growing by 0.6% y-o-y, after five months of decline. However, based on the latest PMI for manufacturing in October it is likely a weak trend will continue for some time, The index stood at 48.0, down from 48.6 in September, clearly below the growth-indicating level of 50. In anticipation of some continued improvement in the industrial sector, the 2015 GDP growth level has been lifted slightly to 0.8%, compared with 0.7% the previous month. The 2016 forecast remains unchanged at 1.9%.

OECD Asia Pacific

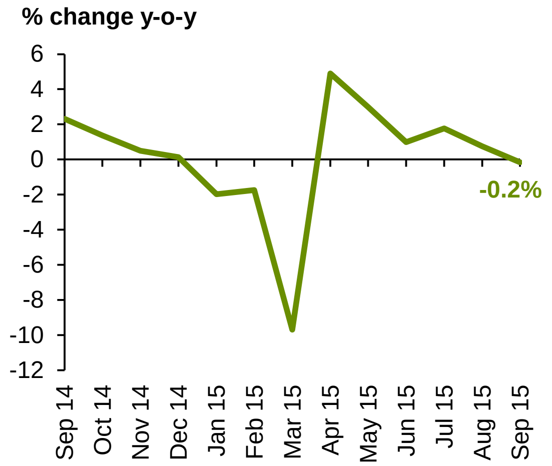
Japan

Japan's economy is still challenged by various issues. While the country's unprecedented stimulus programme is ongoing, the outcome has so far not entirely delivered what was initially expected. Domestic demand remains moderate, and retail trade has even declined recently amid clearly falling inflation. Also, industrial production and exports remain sluggish. The domestic services sector, however, is providing healthy support to the economy and, given the extremely low unemployment rate, wage increases may soon be necessary, which again could filter through via rising consumption. While this remains to be seen, growth in China is expected to stay low, and this may also impact Japan's exports in the near future. Additionally, fiscal adjustments remain a sensitive subject, as the previous year's rise in the sales tax and the postponement of another sales tax rise from this year to 2016 clearly indicated. It remains to be seen how the government will deal with this in order to avoid any negative ripple effects on the economy.

Low inflation still constitutes a drag on domestic consumption. It stood at 0% y-o-y in September, lower than in August and July, when it stood at 0.2% y-o-y and 0.3% y-o-y, respectively, clearly on a negative trend. While deflationary pressures from energy, food and the situation in China are obvious challenges, core inflation – without energy and food prices – also remains low at only 0.9% y-o-y in September, though at least some appreciation is evident. Real income is declining further amid low inflation. Average monthly earnings fell by 0.8% y-o-y in September, after reaching -1.3% y-o-y in August, the eighth consecutive month of decline. However, given the very tight labour market, with an unemployment rate of only 3.4% in September, expectations remain that this may soon turn positive.

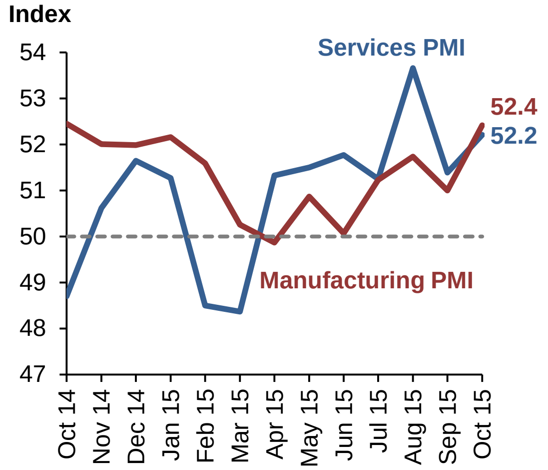
Japanese exports slowed again significantly in September, rising by only 0.6% y-o-y on a non-seasonally adjusted base. This comes after a rise of 7.6% y-o-y in July and 3.1% y-o-y in August. **Industrial production** remained sluggish, falling by 1.1% y-o-y in September after a decline of 0.5% y-o-y in August. **Domestic demand** is also currently an area of concern. Retail trade fell by 0.2% y-o-y in September after experiencing a rise of 0.8% y-o-y in August and an increase of 1.8% y-o-y in July.

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.

There was some positive news amid some clear signals in the past months of a further slowdown in the Japanese economy. The **latest PMI numbers**, as provided by Markit, point to a recovery in manufacturing activity. September's manufacturing PMI rose to 52.4, compared with 51 in August and even higher than the 51.7 recorded for July. In addition, momentum in the important services sector is rising, with the PMI increasing to 52.2 in September from 51.4 in August.

While some upside from rising wages may support the economy, this remains to be seen. In consideration of slowing domestic demand, ongoing challenges in the export markets and low industrial activity, **GDP growth estimates** for 2015 and 2016 remain unchanged at 0.8% and 1.2%, respectively.

South Korea

While South Korea's economic performance remains sluggish, it seems to be gaining some slight traction again. The country's 3Q15 GDP stood at 2.6% y-o-y, better than in the first half, when it grew by 2.4% on average. Industrial production rose by 4.1% y-o-y in September, after reaching 1.0% y-o-y in August. However, exports fell considerably by 7.8% y-o-y in September, compared with a rise of 3.0% y-o-y in August and a decline of 2.5% y-o-y in July. The latest PMI numbers for manufacturing still mirror a weak situation. October's PMI stood at 49.1, lower than in September, when it reached 49.2, but significantly better than the 47.9 recorded for August and 47.6 for

July. However, all indicators of the past months are clearly below the growth-indicating level of 50. As most of this weak momentum was anticipated, the GDP growth forecast remains unchanged at 2.3% for 2015 and 2.7% for 2016.

OECD Europe

Euro-zone

The situation in the Euro-zone remains broadly positive, more than anticipated over the past months. 1H15 GDP growth turned out to be higher than expected, despite the Greek debt crisis, and a broad range of indicators point to a continuation of that momentum. This dynamic is not only supported by the major economies, but also by the smaller peripherals, in addition to Italy and Spain, the third- and fourth-largest economies of the Euro-zone, which are both recovering. As they are relatively broad-based, improvements have also become visible domestically. Exports are recovering as well, amid some euro weakness, particularly compared with the US dollar.

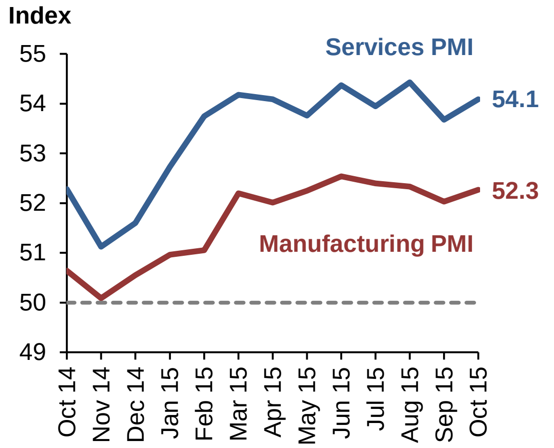
While the Euro-zone’s improvements are continuing, many potentially re-emerging challenges remain. The situation in Greece is far from solved and despite the economy’s recovery, the debt burden that it carries might become an issue again over the coming months. In general, sovereign debt has not materially come down in the Euro-zone over the past years and this will continue to constitute a drag on the economy. Moreover, the soft balance-sheet situation of many large banks will continue to keep debt-financed growth from rising quickly. Also, although high unemployment is improving, it still adds some fragility to the economic development of the region. And while it has been highlighted that the influx of refugees into the Euro-zone might be a supportive factor for growth in the short-term, the cost of the crisis will probably become an unexpected burden to budgets, particularly in Germany.

The positive underlying momentum so far has been reflected in the latest **industrial production** numbers, which increased by 1.9% y-o-y in August, after reaching 1.4% y-o-y in July. The capacity utilisation rate rose to the considerable level of 81.5% in 4Q15, after reaching 81.1% in 3Q15. Moreover, **retail sales** performed very well, with a yearly growth rate of 2.9% y-o-y in August, after reaching 2.1% y-o-y in July. Challenges in the labour market remain, though; the unemployment rate retracted to 10.8% in September from 10.9% in August, but remains high.

While the **European Central Bank** (ECB) is continuing with its liquidity programme and has pointed out that it may even increase its current programme if necessary, **inflation** remained at 0% y-o-y, only slightly better than in September, when it was negative at -0.1% y-o-y. The highest inflation in the calendar year was recorded for May at a fragile 0.4% y-o-y. Positively, core inflation – excluding energy and food – remained relatively healthier at 0.9% y-o-y in October, the same level as in September. Moreover, the ECB remains supportive in credit lending, but the momentum has unfortunately slowed again. Loan growth was positive for every month of the current year, though it moved to 1.1% y-o-y in September from 1.7% y-o-y in August.

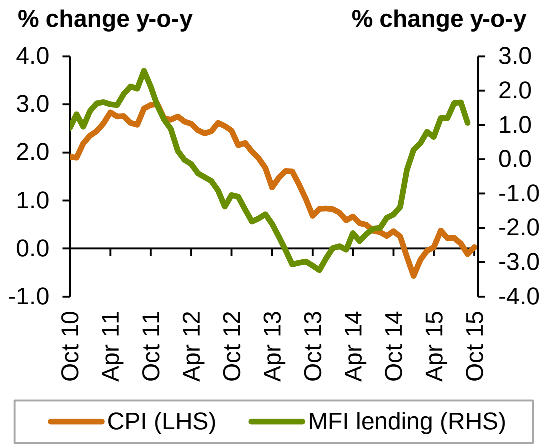
Some improvements were visible in **PMI indicators** as well. The latest October manufacturing PMI rose to a healthy 52.3, after reaching 52.1 in September, while the services PMI rose to 54.1 from 53.7.

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.

In conclusion, Euro-zone recovery is slowly continuing, but uncertainties remain. Taking this into consideration, the forecast remains at 1.5% for both 2015 and 2016.

UK

Although output data for the UK remains healthy, signs of some deceleration have appeared. Industrial production increased by 1.1% y-o-y in September, after reaching 1.8% y-o-y in August. A solid output trend has been reconfirmed by the latest PMI numbers for the manufacturing sector, which rose to 55.5, 3.7 index points above September's level of 51.8. Additionally, the services sector index increased to 54.9 from 53.3. In general, GDP growth for the year seems to be well supported. It is forecast at 2.5% for both 2015 and 2016, unchanged from the previous month.

Emerging and Developing Economies

The economic trend continued to point to the downside in **Brazil** and **Russia**. Domestic consumption and the service sectors in both economies remained weak in October, accompanied by high inflation and interest rates. Appreciation of the real and ruble helped somewhat to limit inflation during the month, though they are still considered to be too high, thus hurting consumers' purchasing power. The GDP forecast for Brazil in 2015 and 2016 is unchanged this month at -2.2% and -0.5%, respectively. Russia's economy is anticipated to shrink by 3.2% this year, before barely growing by 0.3% in the coming year.

India's September monetary policy statement saw a 50 basis point (bp) cut in interest rates. Indeed, concerns about growth outlook have risen, despite positive developments in monetary policy. Greater drag from exports, soft rural demand and continuing private investment will have a short-term effect on India's economic growth in 3Q15. In addition, September's consumer price index (CPI) predictably accelerated as favourable base effects from the previous year reversed. The outlook for India's industrial sector and the overall economy is not without a note of caution, however, as earlier data showed deepening weakness in the country's external trade. Purchasing manufacturers' index (PMI) data for October show a further loss of growth momentum across India's manufacturing economy, with a slower rise in new business inflows resulting in weaker expansion of output.

Data published on 19 October shows that **Chinese** growth slowed to 6.9% y-o-y in 3Q15, a 0.1 pp deceleration. More detailed national accounts data issued on 20 October indicate that the most significant decelerations took place in finance and construction, where growth slowed by half a percentage point each. Operating conditions faced by Chinese goods producers continued to deteriorate in October, albeit at the weakest rate in four months. China published a summary of its fifth plenum on 29 October and from an economic perspective the key news is affirmation of an existing target to double the economy by 2020, requiring 6.6% average growth, according to officials. A wide range of difficulties such as slowing corporate sales revenue, along with dragging nominal GDP and manufacturing growth, elevated corporate debt and financing costs, and ongoing restructuring pressure in overcapacity sectors continued to restrain corporate profits and hence corporate ability and willingness to invest.

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	-2.2	-0.5	8.8	6.6	-62.1	-57.4	-7.7	-7.8	67.3	72.3
Russia	-3.2	0.3	15.4	8.2	57.9	62.3	-3.3	-2.9	13.5	15.7
India	7.4	7.6	5.6	5.9	-30.5	-38.5	-4.0	-3.7	49.0	48.1
China	6.8	6.4	1.7	2.4	419.9	395.1	-2.6	-3	16.7	18.7

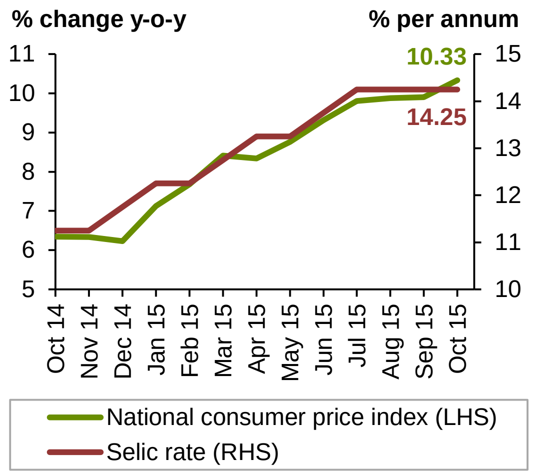
Sources: OPEC Secretariat, Consensus Economics, Economic Intelligence Unit, Financial Times and Oxford.

**Forecast.*

Brazil

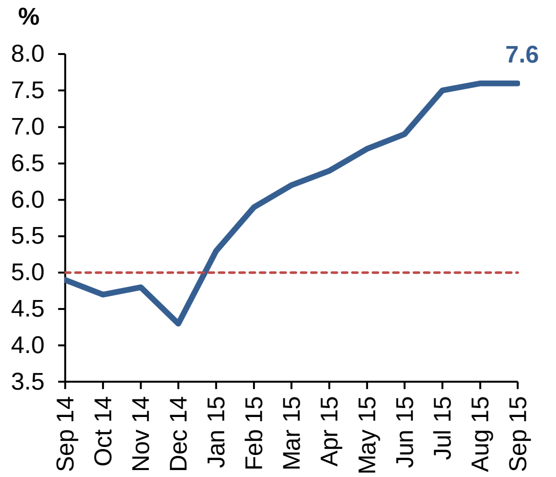
The central bank of Brazil kept its benchmark **interest rate** unchanged in October at 14.25%, the highest level in nine years. With **inflation** remaining at its highest point since December 2003 at 10.33% y-o-y in October, the monetary tightening cycle started in October 2014 met with little success in preventing fast growth in consumer prices amid economic shrinkage. The inflation rate of 10.33% is far above the upper limit of 6.5% set by the central bank. The real **exchange rate** versus the dollar slightly improved in October, appreciating by 0.7% m-o-m. The **unemployment rate** in September remained at its highest level since March 2010 at 7.6%.

Graph 3.6: Brazilian inflation rate vs. Interest rate



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

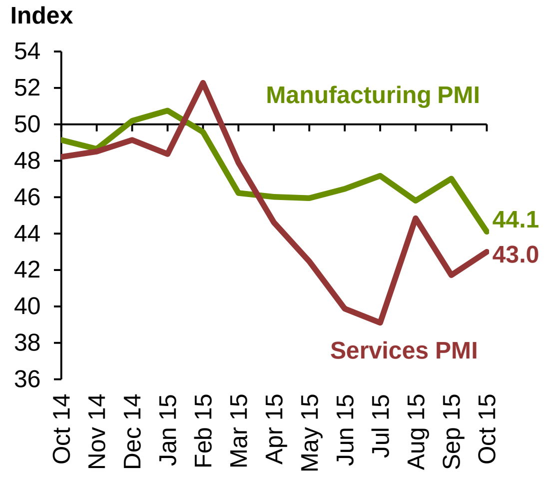
Graph 3.7: Brazilian unemployment rate



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

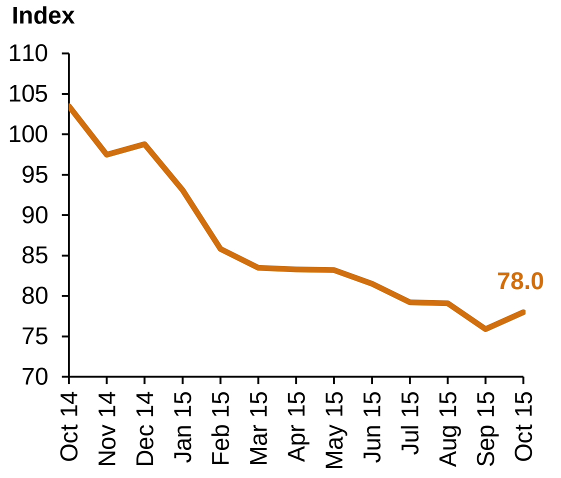
The **manufacturing sector** continued contracting in October, according to its PMI. The index dropped to a 79-month low reading of 44.1 one month ago. Surveyed firms reported an overall decrease in production at the fastest possible pace since March 2009. This was the outcome of a quick reduction in new orders. As a result, job shedding was at its highest in six-and-a-half years. The services sector remained in contraction last month. The services PMI rose to 43.0 in October from the previous month at 41.7.

Graph 3.8: Brazilian manufacturing and services PMI



Sources: HSBC, Markit and Haver Analytics.

Graph 3.9: Brazilian consumer confidence index



Sources: Fundação Getúlio Vargas and Haver Analytics.

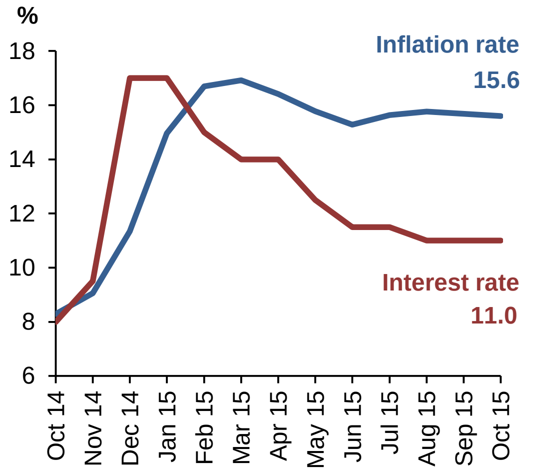
An increasing unemployment rate, together with rising inflation and high interest rates, kept consumer sentiment under pressure – though slightly improved – in October. The **consumer confidence index** increased to 78.0 one month ago, up from 75.9 in September, the second-lowest reading in data history.

GDP growth forecasts for 2015 and 2016 remain intact this month at -2.2% and -0.5%, respectively.

Russia

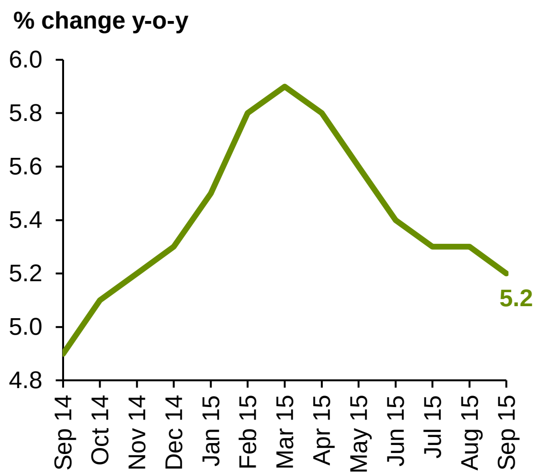
The Russian central bank kept its benchmark **interest rate** unchanged in October at 11.0%. The interest rate stood at 17.0% at the beginning of the year. The **ruble** appreciated 5.4% m-o-m in October, following a 2.5% m-o-m depreciation in September. **Inflation** increased by 15.7% y-o-y in September from 15.8% a month earlier, while the unemployment rate went down to 5.2% in September.

Graph 3.10: Russian inflation rate vs. Interest rate



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

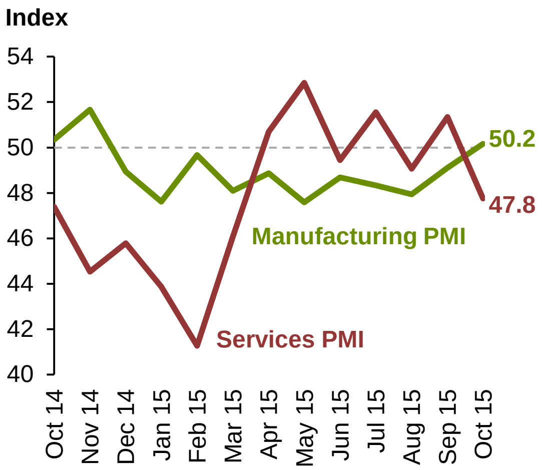
Graph 3.11: Russian unemployment rate



Sources: Central Bank od the Russian Federation and Haver Analytics.

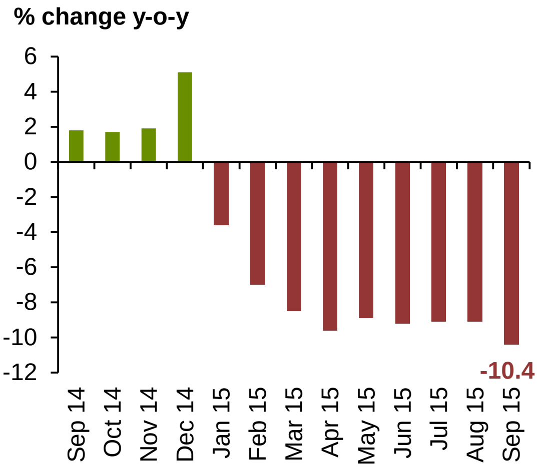
Retail sales fell in September by 10.4% y-o-y, the ninth consecutive month of contraction. The **manufacturing sector** was back in expansion territory in October, according to its PMI. The index registered fractional improvement in operating conditions, increasing from 49.1 in September to 50.2 in October, and a faster pace of growth in both production and new business. The **services sector**, on the other hand, markedly contracted in October. The services PMI posted 47.8 the previous month, down from September's 51.3, due to business stagnation. The sector witnessed the sharpest fall in employment since February.

Graph 3.12: Russian manufacturing and services PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.13: Russian retail sales



Sources: Federal State Statistics Service and Haver Analytics.

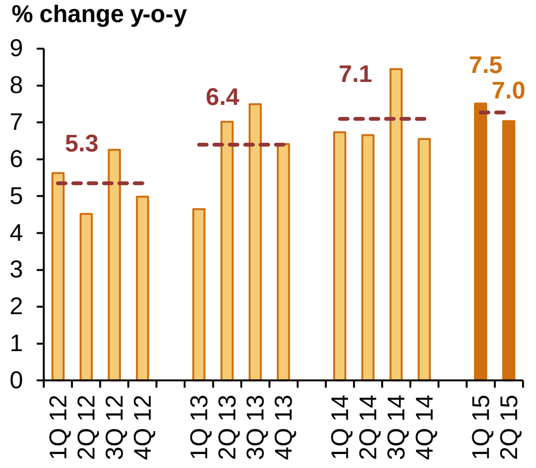
Russian GDP is expected to contract by 3.2% in 2015 before posting growth of 0.3% in 2016.

India

India's September monetary policy statement described a 50 bp cut in interest rates as being 'front-loaded'. Indeed, concerns about growth outlook have risen, despite positive developments in monetary policy, larger drag from exports, soft rural demand and continuous private investment. These factors will have a short-term effect on India's economic growth in 3Q15. September's CPI predictably accelerated as favourable base effects from the previous year reversed.

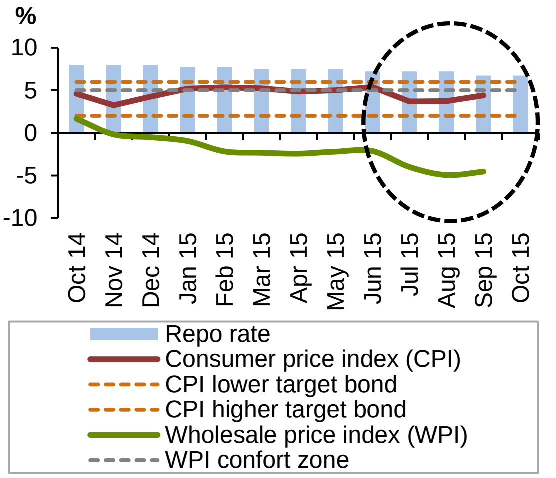
October saw inflationary pressure return to India's **manufacturing economy**. Average purchase costs rose amid reports of higher metal, paper and food prices. The rate of increase was, however, only slight in the context of historical data. Part of the additional cost burden was passed on to clients as tariffs were raised. Nonetheless, the rate of inflationary charge was marginal overall. A return to inflationary pressures, meanwhile, indicates that the **Reserve Bank of India** (RBI) may pause its loosening cycle for the rest of the year following a 50 bp cut to the key repo rate in September. Upcoming survey data will show how effective the central bank's efforts to revive the economy have been.

Graph 3.14: Indian GDP growth, SAAR



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

Graph 3.15: Indian inflation rate vs. Repo rate

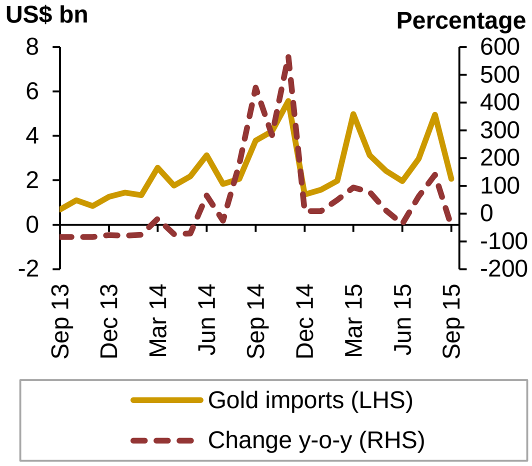


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

The **trade deficit** remained below $13 billion every month of the current fiscal year starting in April, while the current account deficit remains on track to stay below 1% of GDP in the fiscal year 2016 (FY16). Such a narrow deficit provides a significant buffer for the economy in an uncertain global environment and also creates the policy space needed for the central bank to execute its monetary policy.

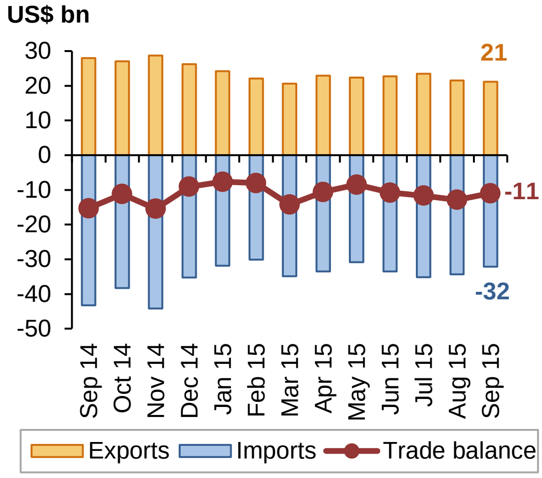
Indian's reported trade in September was positive on several counts. The trade deficit was at $10.97 billion, which was below market expectations, narrowing from $12.93 billion one month ago on a steep drop in **gold imports** to $2.05 billion from $4.970 billion in August. The drop in gold imports largely drove compression of the trade deficit. This shift should soothe some nerves because it had been unclear whether August's widening represented an early and ominous start to the festival season, or simply the front-loading of imports ahead of holidays, to be followed by payback in September. It appears to be the latter.

Graph 3.16: Indian gold imports



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3.17: Indian trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

The **fiscal deficit** for the period from April to August this year is much lower than in recent years; in FY16 the cumulative fiscal deficit is 66.5% of the budgeted deficit for the full fiscal year, down from 74.9% in FY15 and 74.6% in FY14. However, given the shortfall in direct tax collections and privatization proceeds compared with the budget, the government will still have to make spending cuts to meet its budget target.

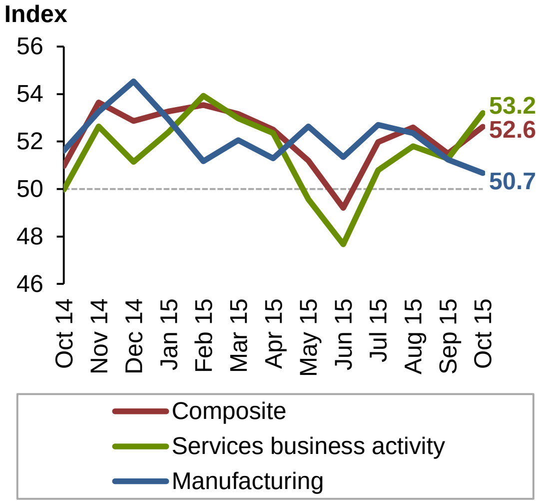
Strong recovery in consumer goods output drove India's **industrial production** growth to 6.4% y-o-y in August. Impressive gains in other sectors reflected large base effects from the previous year's weak growth.

The outlook for India's industrial sector and the overall economy is not without a note of caution; data show a deepening weakness in India's external trade. With both external demand and prices for traded goods being suppressed, it is unlikely that the manufacturing sector can rebound at full speed.

Infrastructure-sector output growth accelerated to a four-month high of 3.2% y-o-y in September, but two key sectors – steel and cement – contracted, highlighting concerns over India's tentative manufacturing and construction recovery. Data released by the Ministry of Commerce and Industry showed India's composite index of eight core industries growing by 3.2% y-o-y in September, the highest amount in four months and the second-highest this year. This brought year-to date average growth to a modest 1.9% compared with a 4.5% expansion in 2014, highlighting ongoing industrial weakness despite the government's efforts to boost infrastructure spending. The core sector accounts for nearly 38% of the industrial production index.

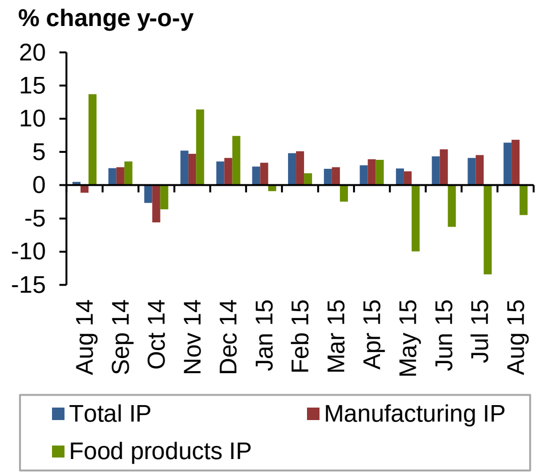
The **PMI** posted a 22-month low of 50.7 in October (September: 51.2); this indicates a weaker improvement in business conditions across the sector. Nonetheless, the PMI has been above the crucial 50.0 threshold each month since November 2013. Output growth eased in October on the back of a slower increase in new orders. Rates of expansion in both production and order books were at their weakest in the current 24-month sequence of growth, on the back of challenging economic conditions and a reluctance among clients to commit to new projects. Despite a slowdown in new order growth, manufacturers hired additional workers in October. Employment rose for the first time since January, though only marginally. Companies reporting higher staffing levels commented on expectations of a pickup in demand in the coming months.

Graph 3.18: Indian PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.19: Indian industrial production breakdown



Sources: Central Statistical Organisation of India and Haver Analytics.

The Indian **GDP growth expectation** for 2015 and 2016 remains unchanged at 7.4% and 7.6%.

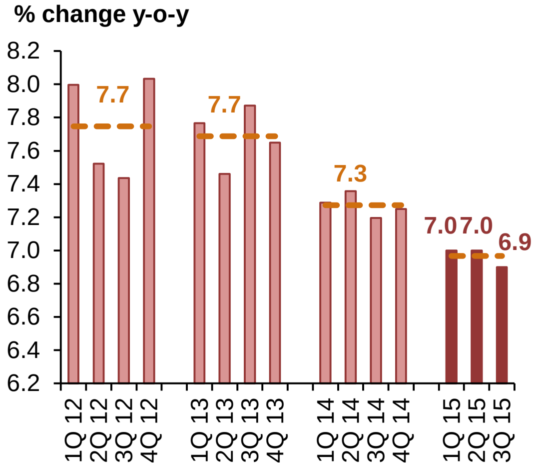
China

China's **GDP growth in 3Q15** has moderated, but only slightly, by a slowdown largely concentrated in the industrial sector. 3Q15 Chinese GDP growth slowed slightly to 6.9% y-o-y, a 0.1 pp deceleration. The most significant deceleration took place in finance and construction, where growth slowed by half a percentage point each. A supply side breakdown confirmed expectations of the 3Q15 slowdown composition, which primarily arose from a steady slowdown in industry and construction, eroding the total share in the economy of these areas, a long-term trend. Additionally, the stock market impact is starting to become visible, albeit only in relative terms. Trading volume growth has slowed significantly since June, although remaining positive in y-o-y comparisons. This is partly reflected in real financial sector value-added growth deceleration, which was only modest.

The **People's Bank of China** (PBOC) forecast 6.6% real economic growth in 2016 and 6.9% for 2015. In addition, China published a summary of its fifth plenum on 29 October, highlighting major policy themes in the 2016–20 timeframe. From an economic perspective, the key news is affirmation of an existing target to double the economy by 2020, requiring average growth of 6.6%, according to officials.

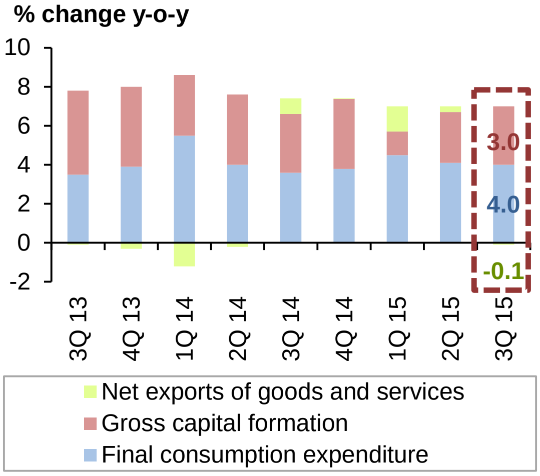
In terms of **reserve requirement ratio** (RRR), the PBoC cut one-year deposit and lending rates again by 25 bp to 1.5% and 4.35%, respectively, and removed the ceiling for deposit rates. It also lowered the RRR for large banks by 50 bp to 17.5%. This is only the second time since the height of the global financial crisis that the PBoC has acted on both interest rates and the main RRR at the same time. The PBoC is reacting to a number of concerns: deflationary pressures in industry are adding to the financial strain of indebted firms; despite six rate cuts since November 2014, real lending rates are estimated to be higher now than a year ago; in addition, liquidity conditions are under pressure from substantial capital outflows, requiring an offset from lower bank reserve requirements.

Graph 3.20: Chinese GDP growth rate, SAAR



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

Graph 3.21: Contributions to Chinese GDPgrowth

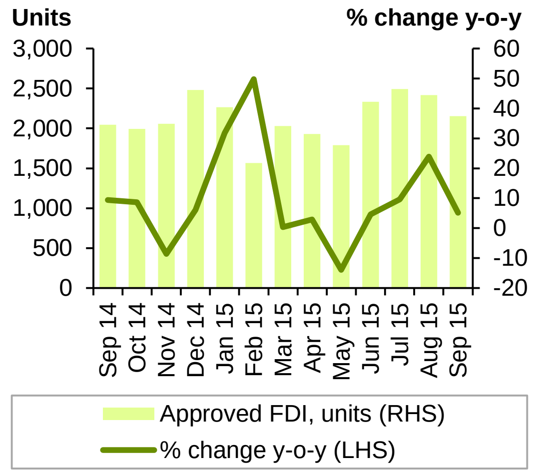


Sources: China National Bureau of Statistics and Haver Analytics.

A critical part of investment growth in China is **real estate development**. While new investment continues to decelerate, floor space indicators provide cautious optimism. Sales growth continued to accelerate from 8% to 12.7%. Unfortunately, land sales data remain unambiguously negative and worsening. The two created a mixed picture for China's medium-term real estate services outlook, and will very likely continue to play a (once again) positive and expanding role in GDP growth because of improved sales receipts, though real estate construction continues to lag significantly behind, with little sign of a meaningful recovery in the near term.

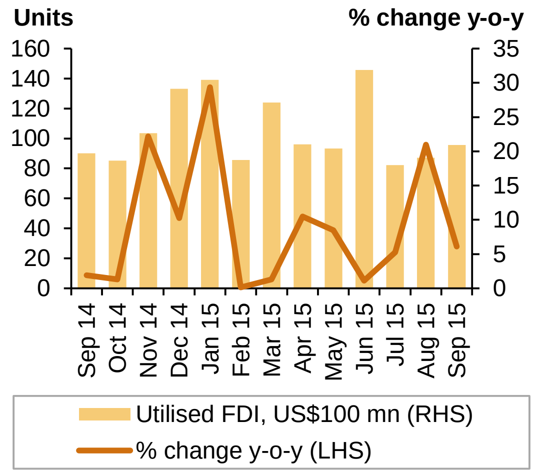
A wide range of difficulties – such as slowing corporate sales revenue, slowing nominal GDP and manufacturing growth, elevated corporate debt and financing costs, and ongoing restructuring pressure in overcapacity sectors – continues to restrain corporate profits and hence corporate ability and willingness to invest. The latest macro data show that **manufacturing investment growth** decelerated further to 4.6% y-o-y in September from 7.4% in August. It seems manufacturing investment will remain sluggish, posting single-digit growth in 2016.

Graph 3.22: Chinese approved FDI



Sources: China National Bureau of Statistics and Haver Analytics.

Graph 3.23: Chinese capital utilised FDI

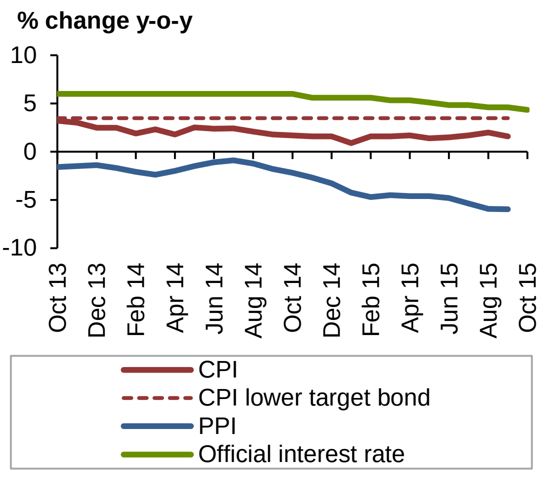


Sources: China National Bureau of Statistics and Haver Analytics.

In spite of a devaluation in mid-August, the trade-weighted **renminbi** is still around 6% stronger than a year ago. With the US dollar forecast to continue strengthening in anticipation of the first rate hike by the US Federal Reserve (Fed), depreciation pressures will persist. Although policymakers are unlikely to let the renminbi weaken soon, given the bad experience had with the initial devaluation, it is forecast to likely fall to $6.7 by 2Q16.

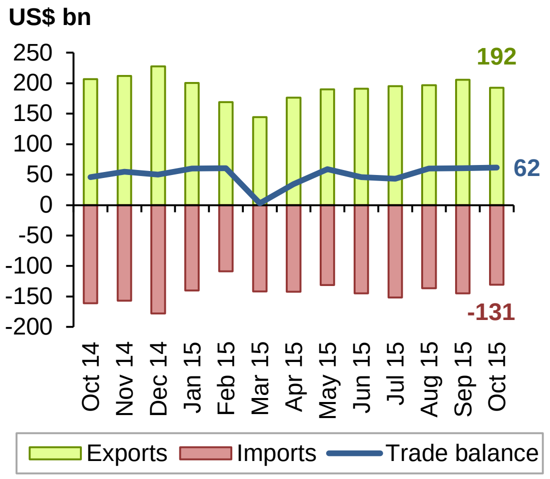
China recorded a **trade surplus** of $603 billion in September, while exports increased to $206 billion in September from $197 billion in August. Imports in the country increased to $145 billion in August from $137 billion in July.

Graph 3.24: Chinese consumer price index (CPI) vs. Producer price index (PPI)



Sources: China National Bureau of Statistics and Haver Analytics.

Graph 3.25: Chinese trade balance



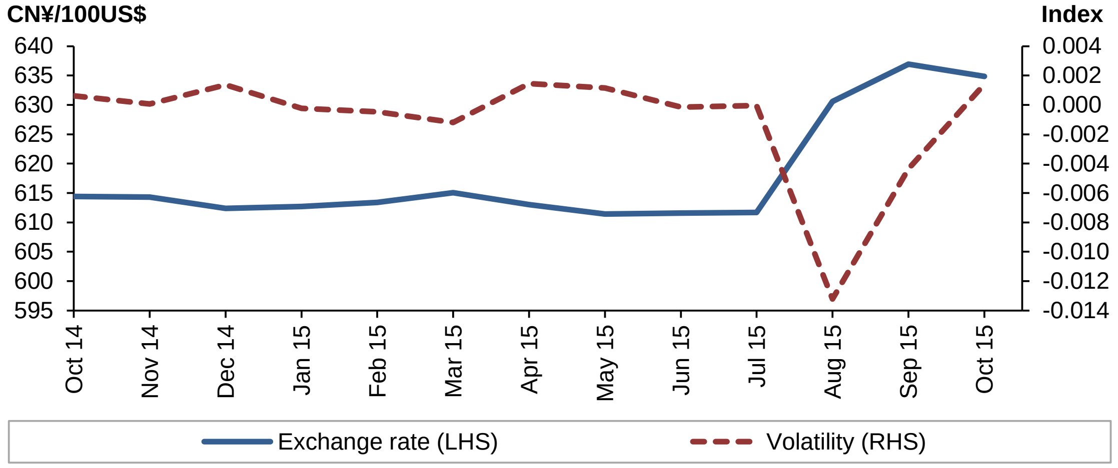
Sources: China Customs and Haver Analytics.

China's exports contracted by 3.7% in September in nominal US dollar terms, compared with a 5.5% contraction in August, the second consecutive month of improvement. Imports slid by 20.4%, a faster rate compared with the 13.8% contraction of one month prior. That led the monthly trade surplus to remain as high as $60.3 billion. On account of depreciation of the renminbi over the past month and slow recovery in developed economies, exports to main partners – with the exception of Hong Kong – improved in September.

Exports to the United States and Association of Southeast Asian Nations (ASEAN) countries expanded by 6.7% and 6.0%, respectively, compared with a contraction in August. Of note, exports to countries along the "One Belt, One Road" route continued to perform well.

China's efforts to have the **renminbi** included in the **Special Drawing Rights** (SDRs) system are up for a decision. SDRs play a mostly arcane role in the global financial system. Technically they constitute an international reserve asset that helps maintain balance between countries with big external liabilities and those flush with cash. In practice, they are more marginal, as countries largely rely on capital markets and hard currencies to cover their obligations. Now China, eager to make the renminbi go global, has placed SDRs in the spotlight. The International Monetary Fund, which manages SDRs, is conducting a five-year review of the basket of currencies that form its value. China wants it to bring the renminbi into the basket. Two criteria determine whether a currency can be part of the SDR: its issuing country must be a major exporter and the currency must be freely usable. The political atmosphere has turned more supportive of renminbi inclusion in the SDR. The top 10 voting IMF members, including the US and Japan, have expressed varying degrees of support for the move, based on the condition that the renminbi meet the technical requirements for SDR inclusion.

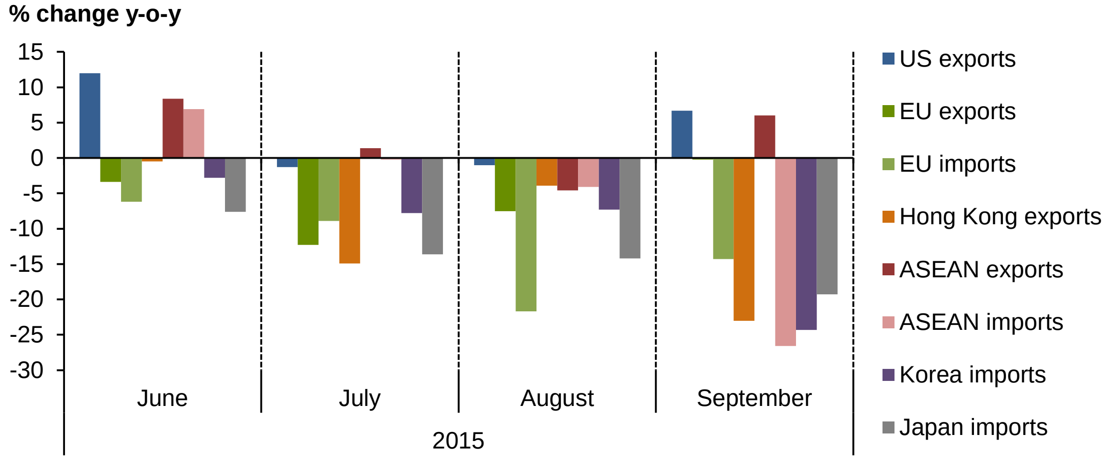
Graph 3.26: Chinese yuan vs. US dollar exchange rate



Sources: State Administration of Foreign Exchange and Haver Analytics.

China's National Bureau of Statistics (NBS) announced that total **industrial profits** (for companies with annual sales from their principal business above 20 million renminbi) fell by 1.7% y-o-y in the first nine months of the year, compared with a 1.9% y-o-y fall in the first eight months of the year. In monthly figures, total industrial profits declined by 0.1% y-o-y in September, after reaching 8.8% in August. There are several factors behind the easing pace of decline in industrial profit for September, such as renminbi fluctuation in August causing foreign exchange losses for some externally oriented corporate bodies and technical changes in corporate tax calculations due to accounting changes at certain oil companies in September, which created a favourable base effect for tax expenses this year. Finally, the producer price index, representing producer output prices, fell by 5.9% y-o-y in September as it had in August, while the decline in the **Purchasing Price Index** (PPI), which captures producer input prices, accelerated to 6.8% from 6.6% in August.

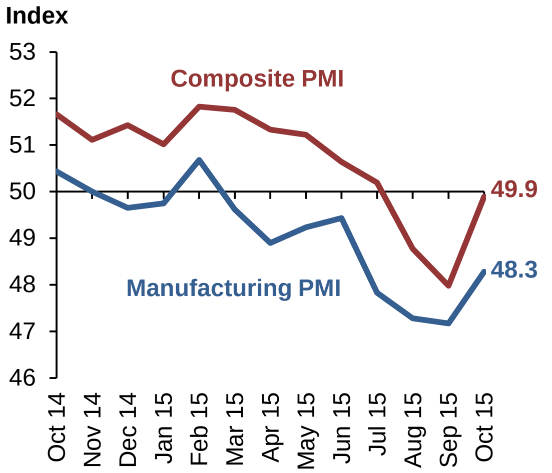
Graph 3.27: Chinese merchandise trade



Sources: China Customs and Haver Analytics.

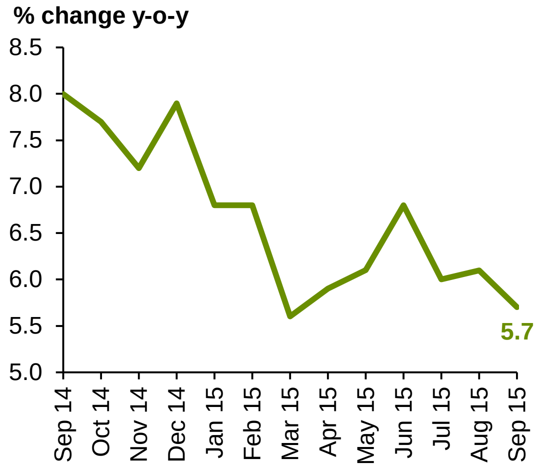
The **PMI** for October is 48.3, up 1.1 points from September's reading. The slight upswing shows the manufacturing industry's overall weakening has slowed, indicating that previous stimulating measures have begun to take effect. Weak aggregate demand remained the biggest obstacle to economic growth, and the risk of deflation resulting from a continued fall in the price of bulk commodities needs attention. That said, the rate of reduction was the weakest seen in three months.

Graph 3.28: Chinese PMIs



Sources: HSBC, Markit and Haver Analytics.

Graph 3.29: Chinese industrial production



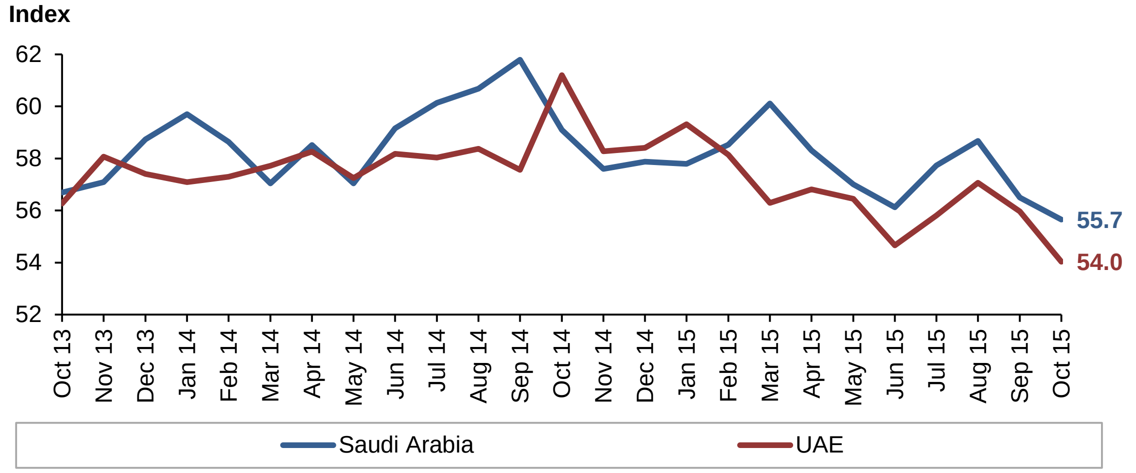
Sources: China National Bureau of Statistics and Haver Analytics.

Chinese GDP growth remains unchanged at 6.8% this year and 6.4% for year 2016.

OPEC Member Countries

In **Saudi Arabia**, the economy grew by 4.0% y-o-y in 2Q15, up from 2.5% y-o-y in 1Q15. The fastest-growing sectors were mining and quarrying, which grew by 4.8% y-o-y, manufacturing (4.0%), construction (4.2%) and transportation, storage and communication (5.4%) in 2Q15. Firm growth in the non-oil private sector continued in October, though at a slower pace when compared with the previous month. The PMI posted 55.7 in October, down from 56.5 a month earlier. Surveys showed evident job creation, despite a deceleration to a three-month low in October.

Graph 3.30: Saudi Arabia and UAE: PMIs



Sources: SAAB, HSBC, Markit and Haver Analytics.

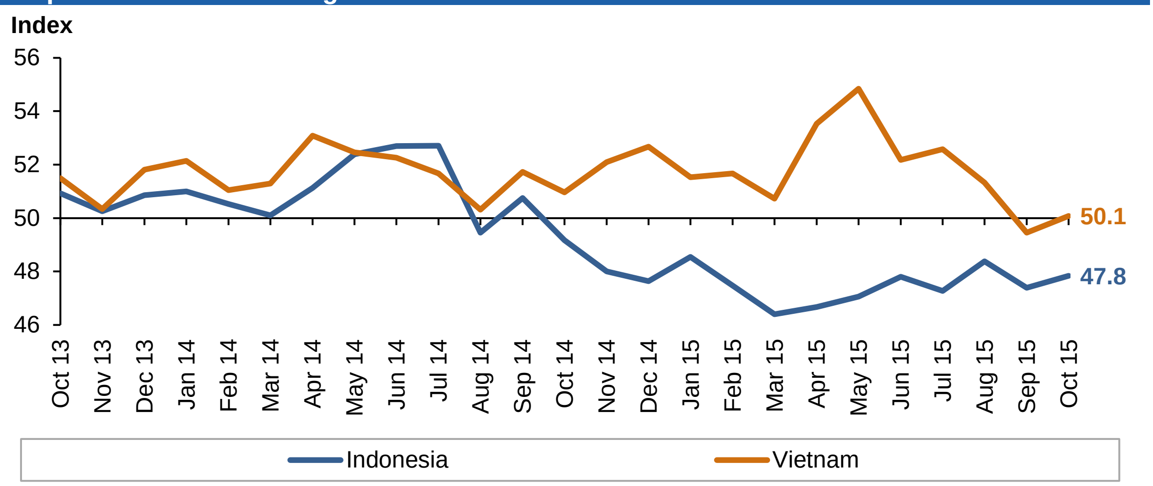
Inflation in the **United Arab Emirates** increased by 4.3% y-o-y in September after rising 4.9% y-o-y in August. Business conditions in the non-oil sector continued to improve in October, albeit with a slower momentum. The survey showed strong expansion in output and new orders along with a modest rise in employment.

Other Asia

In **Vietnam**, GDP grew by 6.5% y-o-y in 3Q15, following growth of 6.3% and 6.0% in 2Q15 and 1Q15, respectively. The faster growth rate is mainly due to improvements in industry and construction, which grew by 9.6% y-o-y. Business conditions in Vietnam's manufacturing sector stabilized in October. The manufacturing PMI posted 50.1 one month ago, up from September's 49.5. The survey revealed a marginal rise in production, accompanied by a slight fall in new orders.

In **Indonesia**, the economy advanced by 4.7% y-o-y in 3Q15, fractionally up from the previous quarter. Faster expansion in government spending and investment offset a further decline in exports. The manufacturing PMI survey showed a drop in new exports by the second-fastest pace in survey history. The index recorded 47.8 in October, fractionally up from 47.4 a month earlier. This marks the thirteenth consecutive monthly deterioration in manufacturing operating conditions.

Graph 3.31: Manufacturing PMIs of Indonesia and Vietnam



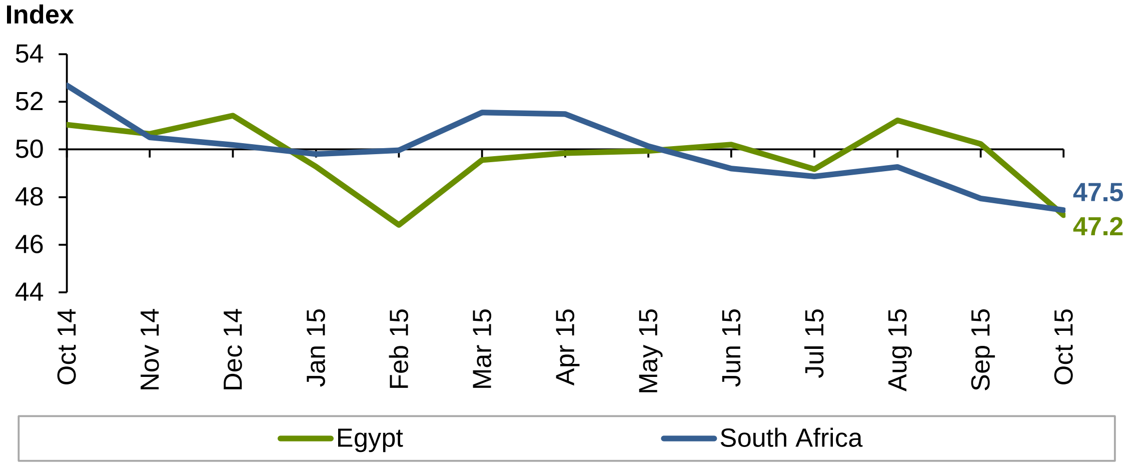
Sources: HSBC, Markit and Haver Analytics.

Africa

Consumer price inflation increased in **Egypt** by 9.5% y-o-y in September, up from 7.9% y-o-y in August. The non-oil private sector was back in contraction territory in October, according to its respective PMI. The index recorded an eight-month low of 47.2 one month ago, down from 50.2 in September, on marked decreases in output and new business. Among the reported issues, which impacted business conditions the previous month, are power supply problems and availability of foreign exchange.

In **South Africa**, the trade deficit declined to 0.89 billion rand in September from an upwardly revised 10.1 billion rand deficit the previous month as exports increased and imports shrank. The unemployment rate increased to 25.5% y-o-y in 3Q15, up from 25.0% in the previous quarter. The private sector sent signals of deepening deceleration in October as the PMI dropped to its lowest reading in 15 months. The PMI fell to 47.5 in October from 47.9 in September due to a continuing slowdown in output amid a sharper decline in new orders.

Graph 3.32: Composite PMIs in Egypt and South Africa



Sources: Emirates NBD, Standard Bank, Markit and Haver Analytics.

Latin America

Argentina's GDP expanded by 2.3% y-o-y in 2Q15, slightly better than the upwardly revised 2.1% increase in 1Q15. It is the highest growth rate seen since 3Q13, boosted by a 10.3% surge in public spending. Private consumption increased by 0.8%, while gross fixed capital formation went up 4.6%, mainly driven by a 10.7% rise in construction. Exports edged down by 0.2%, while imports went up 2.8%.

In **Colombia**, exports dropped by 34% y-o-y from January–August, while imports decreased 12% y-o-y over the same period. The trade deficit amounted to $1.4 billion in August, compared with a surplus of $0.14 billion a year earlier. Imports decelerated by 9.5% y-o-y in August, while exports declined by 41.6%.

Transition region

The manufacturing sector in **Poland** posted another improvement last month on faster growth in new business and production. The manufacturing PMI was 52.2 in October, up from September's 50.9. The survey also signaled a resumption in new export orders, together with a sharp fall in input prices.

In the **Czech Republic**, the manufacturing sector lost some momentum in October as its respective PMI posted 54.0, down from September's 55.5. This marks a 10-month low reading for the index. The survey showed moderation in new order growth, driven by weak exports.

Oil prices, US dollar and inflation

The **US dollar** remained well supported versus all major currency counterparts on average, in October. It was flat when compared with the euro and the pound sterling, fell by 0.2% compared with the yen and declined by 0.3% versus the Swiss franc. However, since the end of October, the euro fell considerably, reaching €1.075/$ at the beginning of November, compared with an average of €1.1227/$ in October, as more signals were provided that the Fed may raise interest rates soon.

After a notable decline in August and September, the **Chinese renminbi** rose again by 0.3% compared with the US dollar on a monthly average in October. Additionally, after a multi-month decline, the **Brazilian real** gained slightly, by 0.7% m-o-m versus the US dollar on average in October. Meanwhile, the **Russian ruble** started to recover again by 5.4% m-o-m versus the US dollar on average in October.

The expectation of further monetary tightening in the US, along with low inflation/deflation in both the Euro-zone and Japan and ongoing unprecedented monetary stimulus programmes in both economies as well as in China, means the US dollar is forecast to remain well supported, at least in the short term.

In nominal terms, the price of the **OPEC Reference Basket (ORB)** rose by a monthly average of $0.19, or 0.4%, from $44.83/b in September to $45.02/b in October. In real terms, after accounting for inflation and currency fluctuations, the ORB increased by 0.3%, or $0.10, to $30.35/b from $30.25/b (base June 2001=100). Over the same period, the US dollar remained flat against the import-weighted modified Geneva I + US dollar basket[*] while inflation rose by 0.1%.

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

World Oil Demand

Estimated world oil demand growth in 2015 remains unchanged from last month's report at 1.50 mb/d, with total global oil consumption at 92.86 mb/d. OECD oil demand is estimated to grow by 0.43 mb/d, and non-OECD is expected to continue to show growth of 1.17 mb/d for the year.

In 2016, world oil demand growth is forecast to reach 1.25 mb/d, in line with the previous month's report, to average around 94.14 mb/d. OECD oil demand is forecast to rise by a slight 0.15 mb/d and non-OECD demand is projected to lead growth by around 1.1 mb/d.

World oil demand in 2015

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

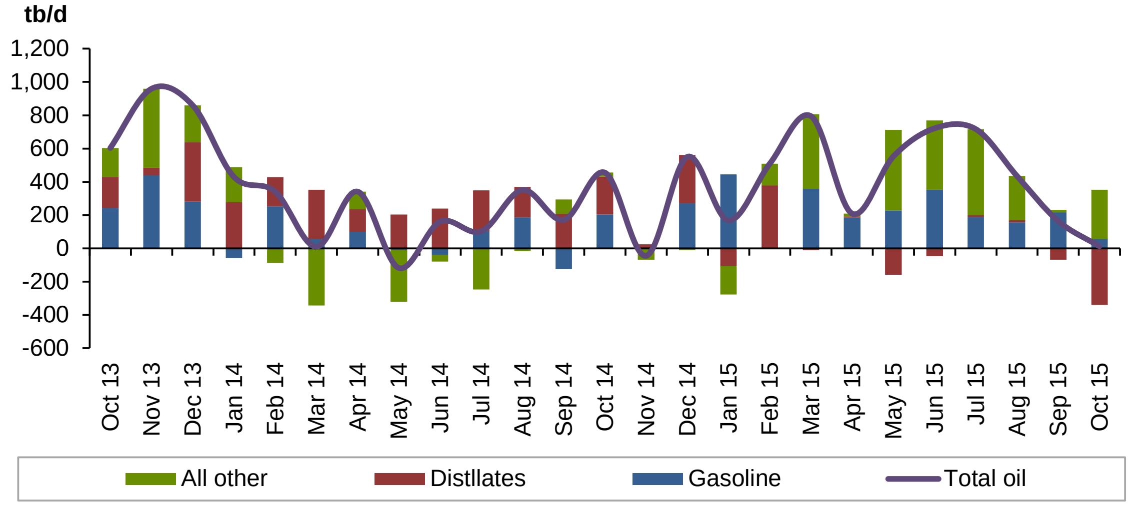
							Change 2015/14	
	2014	1Q15	2Q15	3Q15	4Q15	2015	Growth	%
Americas	24.19	24.25	24.13	24.82	24.99	24.55	0.36	1.49
of which US	*19.43*	*19.60*	*19.47*	*19.99*	*20.15*	*19.81*	*0.38*	*1.93*
Europe	13.40	13.48	13.60	13.81	13.40	13.57	0.17	1.29
Asia Pacific	8.16	8.77	7.72	7.58	8.16	8.05	-0.11	-1.31
Total OECD	**45.75**	**46.49**	**45.44**	**46.20**	**46.55**	**46.17**	**0.43**	**0.93**
Other Asia	11.42	11.46	11.95	11.76	11.70	11.72	0.30	2.60
of which India	*3.79*	*4.01*	*3.98*	*3.78*	*3.99*	*3.94*	*0.15*	*4.03*
Latin America	6.60	6.40	6.66	7.00	6.74	6.70	0.10	1.48
Middle East	8.14	8.24	8.21	8.74	8.15	8.34	0.19	2.37
Africa	3.78	3.88	3.87	3.79	3.94	3.87	0.09	2.38
Total DCs	**29.95**	**29.99**	**30.68**	**31.29**	**30.53**	**30.63**	**0.68**	**2.26**
FSU	4.54	4.39	4.23	4.63	4.94	4.55	0.01	0.20
Other Europe	0.65	0.66	0.62	0.65	0.74	0.67	0.02	2.41
China	10.46	10.44	11.06	10.66	11.19	10.84	0.37	3.58
Total "Other regions"	**15.66**	**15.49**	**15.91**	**15.95**	**16.87**	**16.06**	**0.40**	**2.55**
Total world	**91.35**	**91.97**	**92.04**	**93.44**	**93.96**	**92.86**	**1.50**	**1.65**
Previous estimate	91.35	91.97	92.04	93.44	93.96	92.86	1.50	1.65
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Totals may not add up due to independent rounding.

OECD Americas

The latest **US** monthly data for August 2015 showed a solid yearly increase in oil requirements by around 0.44 mb/d, or 2.2% – this monthly increase being a continuation of the historical trend for almost three years. Transportation fuels, and notably gasoline, took the largest share in the growth observed during August 2015, mainly as a result of lower fuel prices, as well as an improving overall economy. Moreover, increasing fleet traffic called for an additional 0.11 mb/d in August 2015, y-o-y, while distillate requirements remained flat during the same month, largely due to the slowdown in crude oil production activities in the country. Available data for ten months in 2015 – monthly data until August and preliminary weekly data for September and October – show US oil demand growing by around 0.4 mb/d with gasoline taking the largest share in gains and distillates being flat compared with the previous year. Some declines are observed in the demand for residual fuel oil and propane/propylene. The overall risk for the development of 2015 and 2016 US oil demand can be seen as skewed to the upside, compared with last month's assessments. Upside potential relates to the anticipated healthy growth of the economy and current lower fuel prices, while downside risks originate mainly in fuel substitution and, to a lesser extent, in developments in vehicle efficiencies.

Graph 4.1: US oil consumption, y-o-y changes

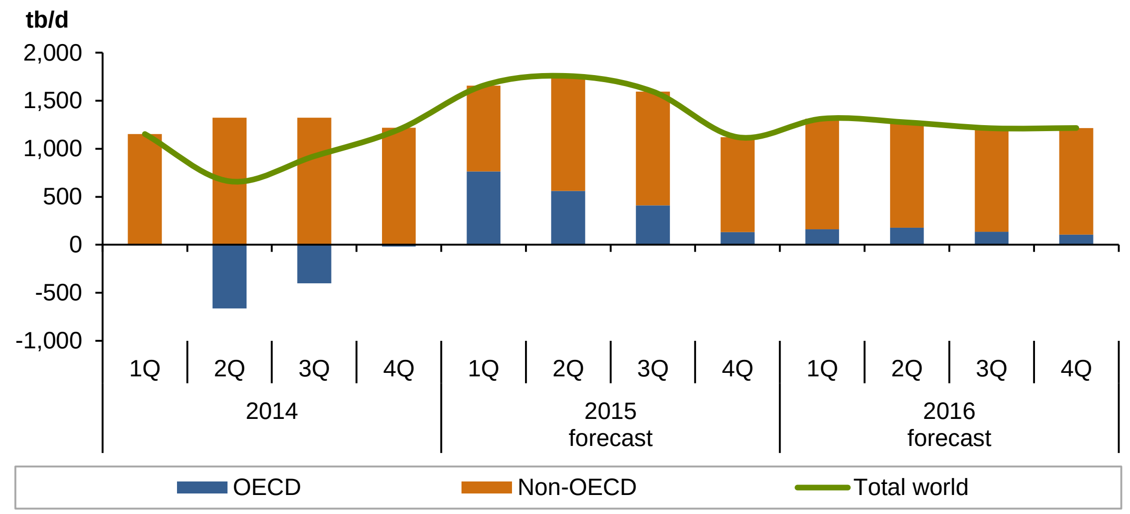


Mexican oil demand also grew solidly in September 2015 by 0.05 mb/d, or more than 3%, y-o-y for the third month in a row and following a five-month declining trend during 2015. Residual fuel oil usage, most likely in the country's oil production activities, marked an 11% or 0.02 mb/d increase y-o-y, together with rising requirements for gasoline and jet fuel. The latter positive performances relate, as also for the US, to the improvement of the overall economy and the lower fuel prices. The risks for the 2015 and 2016 Mexican oil demand are skewed to the upside as a result of the projected positive development of the overall economy.

In **Canada**, August 2015 came up decreasing y-o-y. Gains in LPG demand have been more than offset by declines in required gasoline, gasoil and fuel oil. 2016 Canadian oil demand is projected to increase as a result of an improving economy, with the risks to this projection, however, being balanced to the upside and downside.

In 2015, **OECD Americas'** oil demand is expected to grow 0.36 mb/d, compared with 2014, and 2016 demand is projected to increase by 0.29 mb/d, compared with 2015.

Graph 4.2: Quarterly world oil demand growth



OECD Europe

European oil demand remained bullish for another month, increasing strongly by 0.30 mb/d y-o-y in August 2015, in line with the stabilizing of the economy in the region. Early indications for September 2015 showed gains of more than 0.03 mb/d in Germany, France, Italy and the UK, the European Big 4 oil consumers, with a different picture among the countries. Germany declined, while France remained flat y-o-y; Italy and the UK grew. Big 4 gasoline and gasoil demand mostly declined. European auto sales continued their positive momentum in September 2015, with an overall 10% y-o-y increase and with positive momentum in all major markets. This positive momentum in combination with lower fuel prices across the continent were reflected in stronger oil demand for road transportation, particularly for diesel despite high taxation on road transportation fuels throughout the region.

The general expectations for the region's oil demand for the remainder of 2015 have once more improved since last month's projections, but remain capped with downside risks that relate to the region's oil demand structure, such as high taxation polices in oil use and fuel substitution. The main factors that could push oil demand up continue to be the forecast economic growth, the low historical baseline and the low fuel price environment. For 2016, oil demand expectations are substantially lower, as some of the positive effects during 2015 (i.e. the lower historical baseline and the fuel oil price decline) will be weaker.

OECD Europe's oil demand is projected to grow by 0.17 mb/d in 2015, while 2016 oil demand will decline slightly compared with 2015.

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

	Sep 15	Sep 14	Change from Sep 14	Change from Sep 14, %
LPG	376	352	24	6.9
Gasoline	1,103	1,114	-11	-1.0
Jet/Kerosene	775	792	-17	-2.2
Gas/Diesel oil	3,414	3,409	4	0.1
Fuel oil	305	265	40	15.2
Other products	958	964	-6	-0.6
Total	**6,930**	**6,896**	**34**	**0.5**

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

OECD Asia Pacific

Oil demand in **Japan** increased during September by 0.10 mb/d y-o-y, however with almost all the main product categories being negative, particularly direct fuel burning (crude and residual fuel oil) as well as kerosene and gasoline, the latter in line with declining vehicle sales for the same month. Nevertheless, the positive overall growth was primarily driven by bullish demand for naphtha as feedstock for the flourishing petrochemical industry in the country, showing remarkable growth of almost 0.20 mb/d or 29.5% y-o-y. Furthermore, as far as the current status of the nuclear power plants in the country is concerned, two reactors are operating, while an additional two to three reactors could possibly restart operations during the first half of 2016. The outlook risks for 2016 Japanese oil demand are furthermore skewed towards the downside, depending on the development of the economy and the number of nuclear power plants that would restart operations during 2016.

Table 4.3: Japanese domestic sales, tb/d

	Sep 15	Change from Sep 14	Change from Sep 14, %
LPG	365	4	1.0
Gasoline	915	-9	-1.0
Naphtha	854	194	29.5
Jet fuel	115	19	19.4
Kerosene	140	-13	-8.3
Gasoil	595	6	1.0
Fuel oil	352	-91	-20.6
Other products	62	-1	-1.7
Direct crude burning	47	-14	-22.7
Total	**3,444**	**95**	**2.8**

In **South Korea**, oil demand was bullish in August 2015, registering y-o-y increases of 0.13 mb/d, or 5.6%. Gas diesel oil usage in the industrial and transportation sectors took the lion's share of overall growth. Solid increases were also observed in fuel oil and, similarly to Japan, naphtha requirements. The outlook for South Korean oil demand during 2016 remained positive, unchanged from last month's projections.

OECD Asia Pacific's oil demand is expected to fall by 0.11 mb/d in 2015 and continue to decline by 0.14 mb/d y-o-y in 2016.

Other Asia

September 2015 has seen another month of impressive performance in **India's** oil requirements. Oil demand growth reached record-high numbers, increasing by as much as 0.5 mb/d y-o-y. All key products demonstrated growth, with diesel oil, gasoline and naphtha leading the pack. Diesel oil grew by approximately 0.25 mb/d, also the highest growth on record, equating to around 20% y-o-y.

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

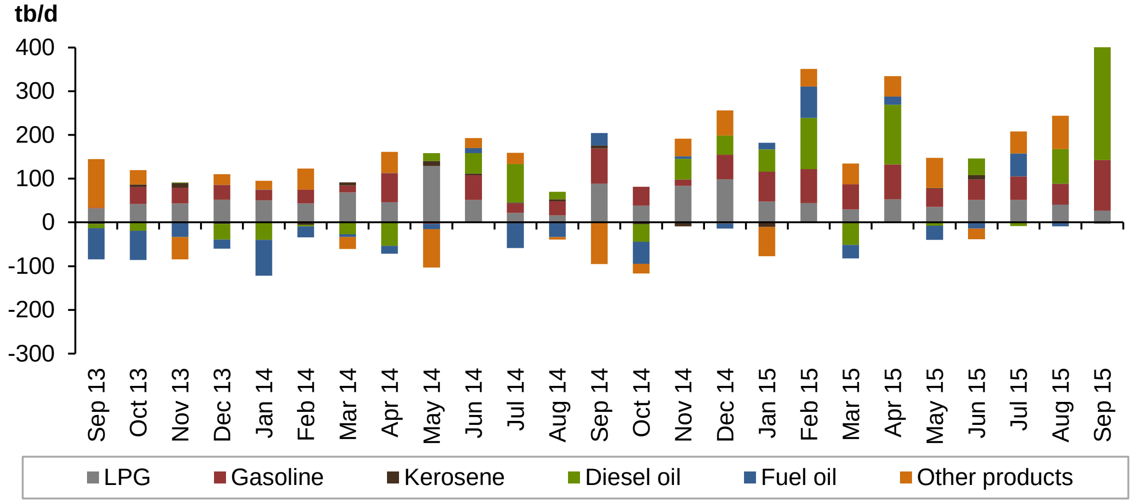
	Sep 15	Sep 14	Change	Change, %
LPG	688	661	27	4.1
Gasoline	570	455	115	25.4
Kerosene	271	273	-3	-0.9
Diesel oil	1,681	1,400	281	20.1
Fuel oil	239	223	17	7.5
Other products	906	833	73	8.7
Total oil demand	**4,355**	**3,844**	**511**	**13.3**

The rise in diesel oil consumption is attributed partially to development in construction activities, but even more so to lower rainfall during the monsoon season, which resulted in higher demand from the power sector in the form of increased diesel generator usage. Based on meteorological data, India experienced an insufficient quantity of rainfall in September, between 12-15% less than the previous year, with some areas recording much lower percentages.

Gasoline also exhibited a remarkable development, in line with expectations, rising by a strong 0.12 mb/d, the highest growth observed in years. This translates to an increase of around 25% y-o-y and the largest uptick seen since May 2013. A sharp drop in gasoline retail prices, with an approximate 8% decrease seen in the last two months alone, combined with persistent healthy development in vehicle sales and robust economic growth, were likely supportive factors for gasoline consumption in September.

Moreover, naphtha consumption growth continued its recent positive performance, rising by around 0.14 mb/d or roughly 7% y-o-y. This increase is partly due to the growing need for gasoline blending and partly a result of higher utilization at new naphtha crackers in the country.

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



Thailand's oil consumption grew in August 2015 with product demand registering an increase of around 33 tb/d from the levels seen in August 2014, which equates to more than 3% y-o-y. The total demand consumption for the country stood at 1.0 mb/d. The increased oil consumption can be attributed mainly to improved overall economic momentum in the country.

In **Indonesia**, the latest August 2015 data showed a similar rise in oil requirements to the month of July when oil demand increased by around 30 tb/d or around 2% y-o-y. All products continued their positive momentum with the exception of the 'other products' category. Support stemmed from industrial production numbers.

For 2016, oil demand projections remain unchanged from the previous report, with major assumptions hinting towards improved economic activities compared to the current year, while the effect of subsidy reductions is assumed to be less than in the past years. In terms of products, the middle of the barrel is anticipated to lead growth, followed by transportation fuels.

Other Asia's oil demand is anticipated to grow by 0.30 mb/d y-o-y in 2015 and by 0.29 mb/d in 2016.

Latin America

In **Brazil**, oil demand data from the month of September continued its downward trajectory, shrinking by 0.13 mb/d or close to 5% y-o-y and reducing the y-t-d oil demand growth level further, to settle into negative territory, now by almost 1% y-o-y. Total oil demand stood at 2.51 mb/d in September.

All products performed poorly, with the exception of ethanol, for which demand continued to increase in September, rising by more than 0.11 mb/d, which equates to a strong 48% rise y-o-y. Gasoline consumption, on the other hand, remained sluggish, falling by around 0.1 mb/d, or more than 12% y-o-y. In addition to the price differential, which favours the usage of ethanol in lieu of gasoline, a factor that might affect consumption of both the road transportation fuels negatively is the decline in vehicle sales data to a ten-year low, dropping by as much as 30% y-o-y with some brands reporting much higher dips.

Diesel demand also showed signs of weakness when compared to the same month last year, dropping by around 90 tb/d or more than 8% y-o-y, propelled by slower momentum in the overall economy, especially in the industrial and agriculture sectors. Jet/kerosene fuel showed a minor decrease of around 2 tb/d or around 2% y-o-y. Fuel oil demand decreased the most during the month of September, declining by around 42 tb/d or more than 34% y-o-y amid a slow-down in industrial production and power generation demand. For 2015, oil demand in Brazil is expected to be impacted negatively by slower economic momentum in the country. As a result, oil demand growth data was adjusted lower for 2H15.

Table 4.5: Brazilian inland deliveries, tb/d

	Sep 15	Sep 14	Change	Change, %
LPG	234	242	-8	-3.4
Gasoline	696	793	-97	-12.3
Jet/Kerosene	125	127	-2	-1.6
Diesel	1,034	1,123	-89	-7.9
Fuel oil	82	124	-42	-34.2
Alcohol	342	231	111	48.3
Total	**2,512**	**2,640**	**-128**	**-4.8**

Argentina was perhaps one of the few countries in Latin America exhibiting steady oil demand growth in August 2015, with an increase of around 4% y-o-y and most fuels rising during the month, except in the ‘other products’ categories. Transportation fuels, namely gasoline and partially diesel oil, recorded most of the gains, increasing by around 7% and 6% y-o-y, respectively.

In 2016, expectations for oil demand growth in Latin America are similar to last month’s projections with a somewhat better outlook for the economy compared with 2015.

Latin American oil demand is expected to grow by 0.10 mb/d in 2015 and to reach 0.13 mb/d in 2016.

Middle East

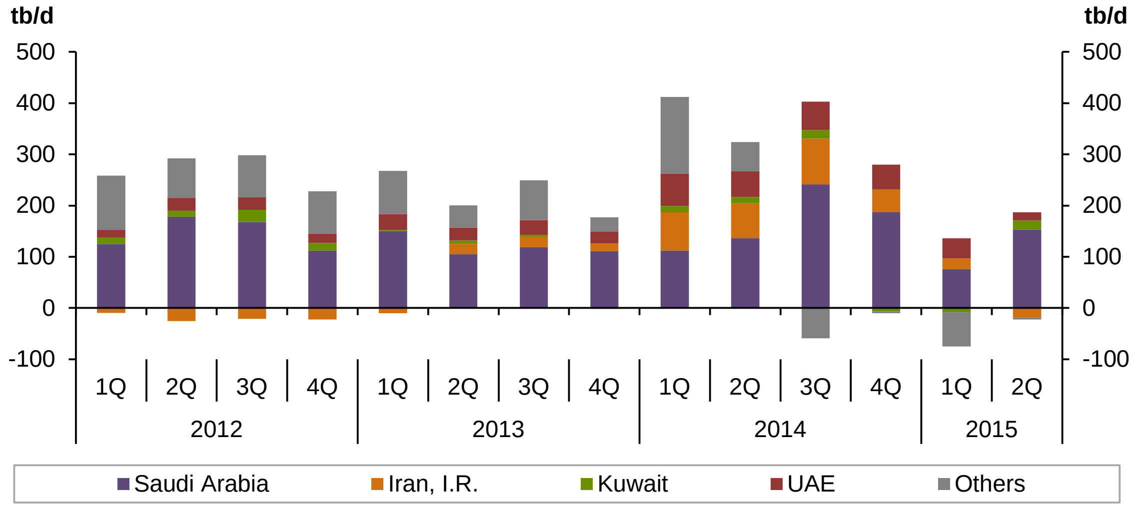
September 2015 Middle East oil demand was encouraging as oil demand growth was particularly strong in two countries: Saudi Arabia and Iraq.

In **Saudi Arabia**, oil demand rose by a notable 0.21 mb/d, which equates to a nearly 8% rise y-o-y, driven by transportation fuels such as jet/kerosene, gasoline and diesel oil, which grew at high rates. The higher consumption of jet fuel reflects the increase in travel activity towards the end of the summer vacation, which coincided with the Hajj season. This lent support to jet fuel consumption in September, which led the product categories to come in at 26% higher than the level witnessed last year. Gasoline also posted a positive gain during September, accelerating by more than 17% y-o-y, due to the busy summer activity and the expanding car passenger fleet markets, which are anticipated to rise in 2015. Gasoline consumption grew by as much as 17% y-o-y to reach a total of around 0.65 mb/d. Diesel oil recorded a significant improvement in September, rising by around 0.13 mb/d or 16% y-o-y. Diesel consumption was encouraged by both on-road diesel as well as support coming from the construction sector. Demand growth for direct crude for the purpose of burning rose during September, increasing by around 0.1 mb/d or nearly by 15% y-o-y. This rise can be attributed to the additional summer power generation requirements, which tend to peak as a result of additional air conditioning usage.

The low base line effect continued to provide support to oil demand in **Iraq**. Product consumption witnessed a healthy rise of around 0.16 mb/d or about 19% y-o-y in September, the fourth consecutive solid increase in oil requirements. Total oil demand, in absolute terms, is now around 0.72 mb/d, which is 28 tb/d lower compared to the month of August. Similar to last month's trend, jet fuel drove consumption higher, increasing sharply in percentage terms amid a low base line. Additionally, fuel oil used for power generation also registered an increase of around 58 tb/d or more than 32% y-o-y.

For 2016, assumptions are focused on healthy demand for transportation and industrial fuels, with continued consumption of crude and fuel oil for direct burning to provide electricity generation. Emphasis will also be directed towards the petrochemical industry, expansions in the refining sector and geopolitical concerns in some countries in the region.

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



Middle Eastern oil demand is expected to grow by 0.19 mb/d in 2015 and by 0.21 mb/d in 2016.

China

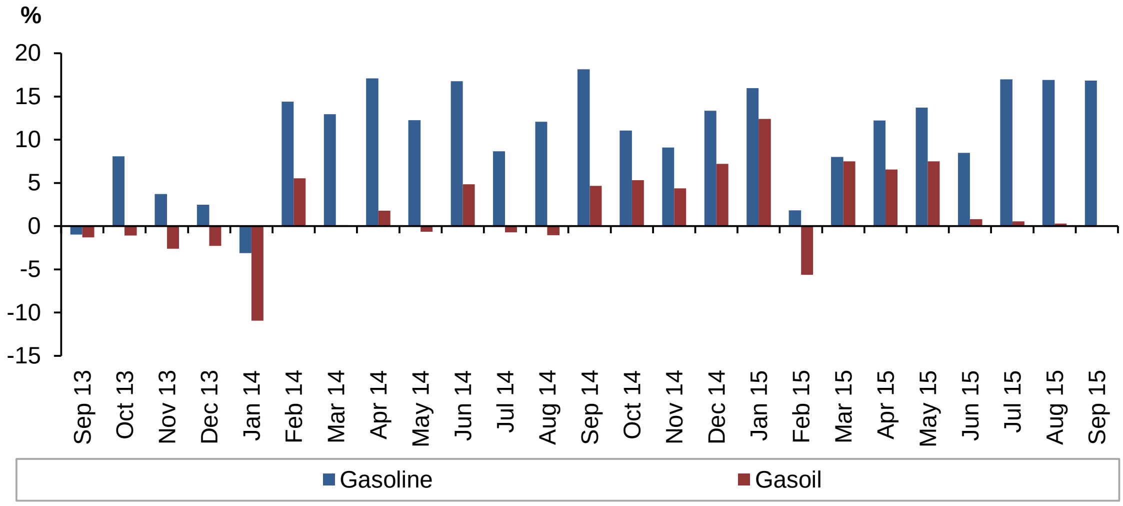
Chinese oil consumption remains upbeat, despite signs of slower economic momentum. It's most likely that diesel oil consumption, which is directly linked to economic development, has witnessed slow growth during the month of September, while other products rose. September oil demand saw a rise of around 0.49 mb/d y-o-y, which is the same level of growth as seen in August. Total consumption stood at 10.9 mb/d during the month.

LPG rose the most, gaining more than 0.22 mb/d compared with September 2014. This translated to a more than 21% gain y-o-y as ramping up and expansion in the petrochemical sector continued to lend support to the product.

Gasoline demand was on the rise once more, increasing by a significant 0.20 mb/d or around 8% y-o-y as car sales reversed their downward trajectory and grew over last year's level. According to statistics and analysis of the China Association of Automobile

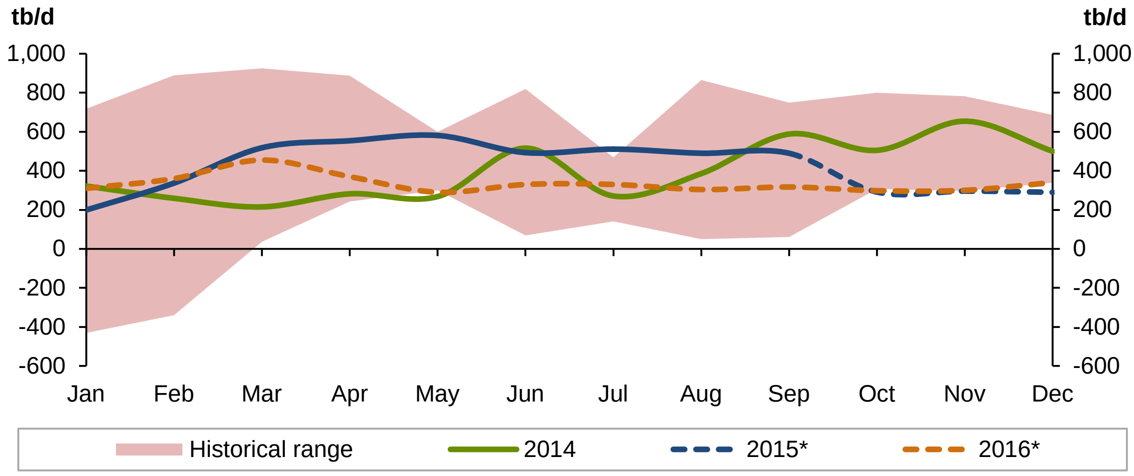
Manufacturers (CAAM), sales in September reached 1.8 million units, which is more than a 3% increase y-o-y, with SUVs leading the gains. In cumulative terms, with data for nine months, sales of passenger cars reached 14.55 million units, some 7% lower y-o-y. However, SUV sales accelerated during the period, rising by more than 47%. MPVs also enjoyed growth with an increase of more than 8%.

Graph 4.5: Chinese gasoil and gasoline demand growth, y-o-y



Diesel oil demand fell by around 0.11 mb/d to reach a total consumption of 3.48 mb/d, in line with slower manufacturing activities in the country. The manufacturing PMI for the month of September was at 47.2 points, indicating a contraction in activities. Fuel oil reversed directions and pointed upward, increasing over the levels seen last year by around by 60 tb/d or 10% y-o-y. This rise is largely attributed to an increase in teapot refinery requirements.

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



** Forecast.*

Overall, the estimation for 2015 remains the same as last month with the expectation of healthy demand stemming from the petrochemical and road transportation sectors. For 2016, the outlook for oil demand remains similar to last month with projections being based on the following factors − transportation and industrial fuels continuing to provide support to product demand, a slight decline in GDP growth compared with 2015, the continuation of the fuel quality programmes targeting fewer emissions and the continuation of fuel substitution with natural gas and coal.

For 2015, **China's** oil demand is anticipated to grow by around 0.37 mb/d, while 2016 oil demand growth is forecast to be approximately 0.30 mb/d.

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

	2015	1Q16	2Q16	3Q16	4Q16	2016	*Change 2016/15* Growth	%
Americas	24.55	24.54	24.45	25.10	25.26	24.84	0.29	1.19
of which US	*19.81*	*19.86*	*19.75*	*20.24*	*20.38*	*20.06*	*0.25*	*1.26*
Europe	13.57	13.49	13.59	13.79	13.37	13.56	-0.01	-0.08
Asia Pacific	8.05	8.62	7.58	7.45	8.03	7.92	-0.14	-1.69
Total OECD	**46.17**	**46.66**	**45.62**	**46.34**	**46.66**	**46.32**	**0.15**	**0.31**
Other Asia	11.72	11.76	12.24	12.05	11.99	12.01	0.29	2.48
of which India	*3.94*	*4.16*	*4.12*	*3.92*	*4.14*	*4.08*	*0.15*	*3.68*
Latin America	6.70	6.55	6.79	7.12	6.88	6.84	0.13	2.00
Middle East	8.34	8.45	8.42	8.96	8.36	8.55	0.21	2.55
Africa	3.87	3.97	3.96	3.88	4.04	3.96	0.10	2.49
Total DCs	**30.63**	**30.73**	**31.42**	**32.00**	**31.27**	**31.36**	**0.73**	**2.40**
FSU	4.55	4.45	4.29	4.68	4.99	4.60	0.05	1.14
Other Europe	0.67	0.68	0.64	0.67	0.76	0.69	0.02	2.99
China	10.84	10.77	11.35	10.96	11.48	11.14	0.30	2.80
Total "Other regions"	**16.06**	**15.89**	**16.28**	**16.31**	**17.24**	**16.43**	**0.38**	**2.34**
Total world	**92.86**	**93.28**	**93.31**	**94.65**	**95.17**	**94.11**	**1.25**	**1.35**
Previous estimate	92.86	93.28	93.32	94.65	95.17	94.11	1.25	1.35
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Totals may not add up due to independent rounding.

World Oil Supply

Non-OPEC oil supply is estimated to average 57.24 mb/d in 2015, an increase of 0.72 mb/d, unchanged from the previous month. Monthly changes in the forecast for supply growth in the OECD and Developing Countries, as well as the FSU and China were negligible in November. Predictions for non-OPEC oil supply in 2016 also remain unchanged over last month's forecast, as the same bearish oil market conditions persist. Non-OPEC supply in 2016 is expected to average 57.11 mb/d, representing a contraction of 0.13 mb/d from the current year. The impact of capex cuts in different regions of the world and the decreased tight oil output in the US are the main reasons for negative growth in the next year.

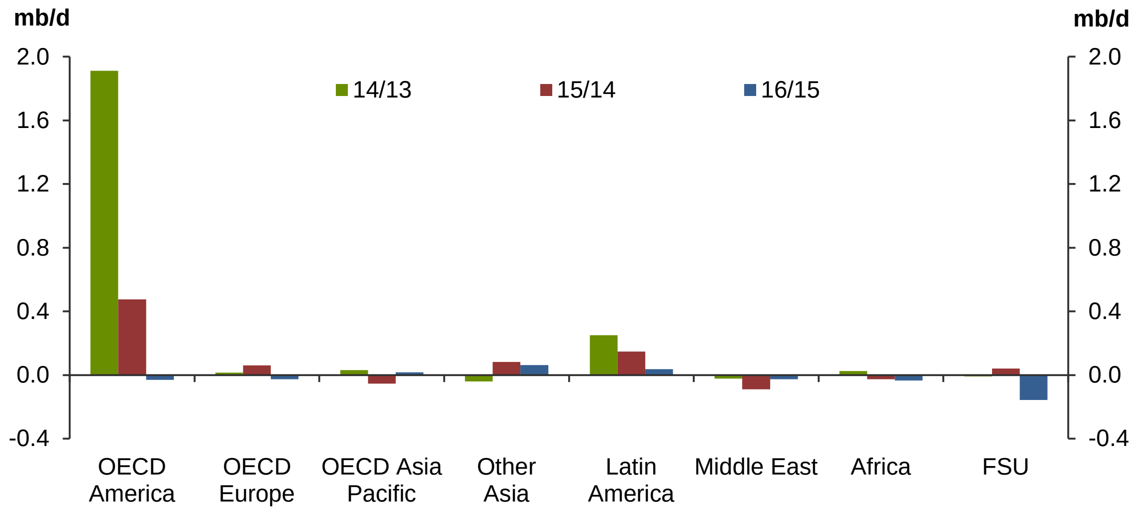
Production of OPEC NGLs is also broadly unchanged, with forecast growth of 0.19 mb/d and 0.17 mb/d to average 6.01 mb/d and 6.18 mb/d in 2015 and 2016, respectively. In October, OPEC production decreased by 256 tb/d to average 31.38 mb/d, according to secondary sources. As a result, preliminary data indicates that global oil supply decreased by 0.09 mb/d in October to average 91.13 mb/d.

Forecast for 2015

Non-OPEC supply

Non-OPEC oil supply in 2015 will be more affected by the decline in US tight oil production. The main driver of non-OPEC supply growth has been declining since May 2015. The US and Canada combined saw the highest output of all non-OPEC countries with growth of 2 mb/d in 2014, which mostly came from unconventional sources of shale and tight plays, as well as oil sands. However, persistently low oil price levels have caused the US shale oil sector to shrink. Shale drillers in the US have slashed spending and cut the number of workers this year, as prices have fallen. This downward trend should accelerate in 2H15 and 1H16, given various factors, including stable low oil prices, coupled with a more cautious approach by equity investors who will limit the availability of cash to allow producers to sustain operations. Hence, the number of newly-drilled wells is decreasing and the number of active drilling rigs has declined by around half. Furthermore, the high decline rates for tight oil wells pose a serious problem for legacy wells as, within three to five years, these wells produce less than 20% of their initial production capacity.

Graph 5.1: Regional non-OPEC supply growth, y-o-y



Nevertheless, higher-than-expected oil production from non-OPEC producers outside North America was seen during 2Q15 and 3Q15. Production in the North Sea, China, Asia, Latin America and Russia and, even recently, in Oman indicates there is still room for growth in other prospective regions. However, the current climate remains unattractive to investors, given the low oil prices, the steep decline rates, the high de-commissioning costs and the generally unfavourable fiscal regime.

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

	2014	1Q15	2Q15	3Q15	4Q15	2015	*Change* 15/14
Americas	20.09	20.92	20.56	20.41	20.36	20.56	0.47
of which US	*12.96*	*13.66*	*13.87*	*13.51*	*13.36*	*13.60*	*0.63*
Europe	3.60	3.69	3.77	3.58	3.61	3.66	0.06
Asia Pacific	0.51	0.43	0.45	0.48	0.46	0.45	-0.05
Total OECD	**24.20**	**25.04**	**24.77**	**24.46**	**24.44**	**24.68**	**0.48**
Other Asia	3.48	3.62	3.61	3.53	3.50	3.56	0.08
Latin America	5.01	5.23	5.16	5.11	5.11	5.15	0.15
Middle East	1.34	1.30	1.25	1.23	1.22	1.25	-0.09
Africa	2.36	2.40	2.38	2.29	2.29	2.34	-0.03
Total DCs	**12.19**	**12.55**	**12.39**	**12.16**	**12.12**	**12.30**	**0.11**
FSU	13.55	13.68	13.59	13.54	13.55	13.59	0.04
of which Russia	*10.68*	*10.74*	*10.76*	*10.76*	*10.74*	*10.75*	*0.07*
Other Europe	0.13	0.13	0.13	0.13	0.13	0.13	0.00
China	4.29	4.33	4.39	4.34	4.34	4.35	0.06
Total "Other regions"	**17.97**	**18.14**	**18.11**	**18.01**	**18.02**	**18.07**	**0.10**
Total Non-OPEC production	**54.35**	**55.72**	**55.28**	**54.63**	**54.58**	**55.05**	**0.70**
Processing gains	2.16	2.19	2.19	2.19	2.19	2.19	0.02
Total non-OPEC supply	**56.52**	**57.91**	**57.47**	**56.82**	**56.77**	**57.24**	**0.72**
Previous estimate	56.52	57.91	57.47	56.82	56.77	57.24	0.72
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OECD

Total OECD oil supply in 2015 is expected to grow by 0.48 mb/d to average 24.68 mb/d, unchanged from the previous *MOMR*. Y-o-y growth in 2015 is expected to come from OECD Americas and OECD Europe with 0.47 mb/d and 0.06 mb/d, respectively, while OECD Asia Pacific is forecast to decline by 0.05 mb/d compared to last year.

On a quarterly basis, total OECD supply in 2015 is estimated to average 25.04 mb/d, 24.77 mb/d, 24.46 mb/d and 24.44 mb/d, respectively.

OECD Americas

OECD Americas' oil supply in 2015 is estimated to average 20.56 mb/d, showing growth of 0.47 mb/d y-o-y and representing a downward revision of 0.2 mb/d from the previous month's report. Supply in the US and Canada is expected to grow in 2015, while Mexico is forecast to decline.

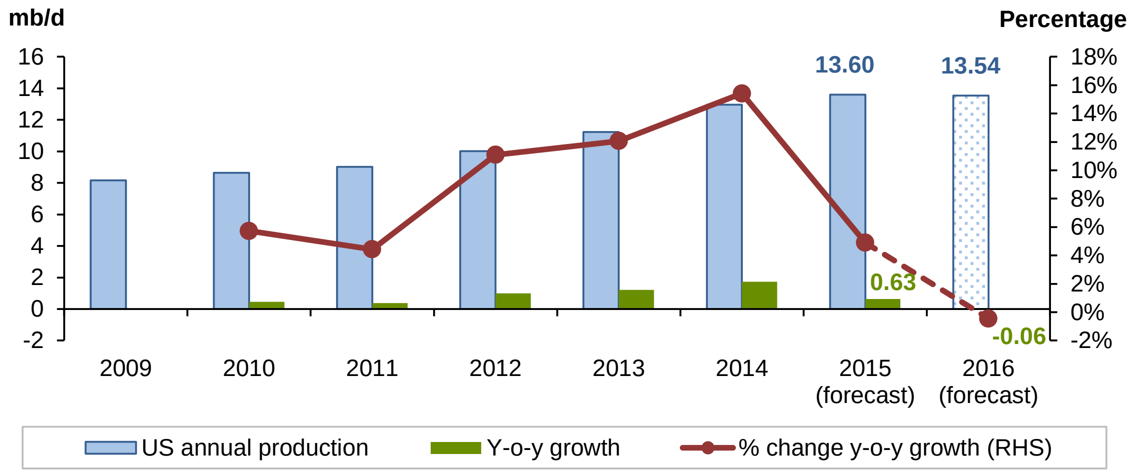
On a quarterly basis, OECD Americas' oil supply in 2015 is expected to average 20.92 mb/d, 20.56 mb/d, 20.41 mb/d and 20.36 mb/d, respectively.

US

Recent data shows that US crude output has already begun to decline after reaching a peak of 9.6 mb/d in April, although production in the Permian Basin has kept growing, based on actual data. Hence, US total oil supply is anticipated to grow by 0.63 mb/d to average 13.60 mb/d in 2015, which is unchanged from the previous month's report. US crude oil production, particularly tight oil output, reflects an oil price outlook that will weigh on oil rig counts and well completion activities throughout the forecast period. US total crude oil production decreased by 45 tb/d to average 9.32 mb/d in August. Total liquids output is estimated at 13.51 mb/d in 3Q15, higher y-o-y by 0.26 mb/d.

The decline in August was led by Texas, where output fell m-o-m by 27 tb/d, largely led by Eagle Ford. Preliminary Texas Rail Road Commission (RRC) data indicates Eagle Ford production fell m-o-m by 66 tb/d to 1.2 mb/d, which came despite continued high grading and a falling number of drilled but uncompleted wells (DUCs). This suggests the drop in drilling has seen accelerated declines. Across 3Q15, the rate at which DUCs were created slowed substantially, reflected by the differential between spuds and completions. After spiking above 200 in 2Q14, this fell to single digits in 3Q15. The trend in Eagle Ford suggests smaller E&Ps are completing wells to generate cash flow to stay alive and are running down DUCs. The larger producers are able to hold back output. A similar trend can be observed in North Dakota, where output fell m-o-m by 20 tb/d to 1.18 mb/d. The backlog of DUCs increased by 79 m-o-m, although the number of producing wells rose to a record high. This can be explained by well level data and initial production (IP) rates. The strong growth in the Gulf of Mexico (GOM), where output rose to 1.65 mb/d, higher y-o-y by 0.21 mb/d, led by the ramp-up of Delta House FPSO, could compensate for part of the declines in tight oil regions.

Graph 5.2: US annual liquids production and annual growth



Source: OPEC Secretariat.

North Dakota's oil output fell by around 20 tb/d m-o-m in August to 1.18 mb/d, higher y-o-y by just 44 tb/d, the slowest pace of increase since January 2010. This fall comes despite the number of producing wells jumping to a record high. The number of completions fell m-o-m by 4 to 115. The backlog of DUC wells rose by 79 units m-o-m to 993. The decrease in activity is also showing through in lower output with preliminary data suggesting well completions in August were 43% lower than in May when production grew y-o-y by 0.16 mb/d. Thus, legacy declines are outpacing efficiency gains, which were previously compensating for the fall in activity. The EIA DPR predicted m-o-m declines of 14 tb/d in September, rising steeply to 33 tb/d in October and 62 tb/d in November, which would put y-o-y North Dakotan production growth in negative territory for the first time since the EIA began collecting data.

RRC data indicated that crude production in **Eagle Ford** during August fell by 66 tb/d m-o-m to 1.2 mb/d, flat y-o-y. The sharp slowdown in y-o-y growth is expected to continue in the coming months. In August, the fall in production came despite continued high grading and a falling number of DUCs, which suggests higher decline rates. In particular, there was a sharp focus on Karnes County, which accounts for 16% of total Eagle Ford output. Marathon completed 12 wells in Karnes County, followed by Encana, EOG and Pioneer. The EIA predicts a 58 tb/d m-o-m decline in September, a 62 tb/d decline in October and a 71 tb/d decline in November according to their drilling and productivity report.

Rig counts plateaued in the **Permian Basin** at 232 for several weeks in June, before dropping to 222 as of end-October. This remains considerably below the count of 556 a year earlier. Crude output from the Permian Basin in August was pegged at 2.09 mb/d, higher y-o-y by 0.63 mb/d. One of the biggest drivers of growth in the Permian Basin has been Pioneer Natural Resources, which has benefitted from one of the largest hedge books in the industry, valued at $850 million as of September. After the price rally in 2Q15, the company announced plans to add two rigs per month until the end of the year, but the price fall since then has meant even the bigger players, which are less constrained financially, have scaled back their ambitions and drilling plans. The other key producers in the basin are Exxon and Occidental in the eastern Permian, and Anadarko, EOG and Devon in the western portion of the basin. The EIA forecasts m-o-m growth of 8 tb/d across total Permian output in September, followed by a 23 tb/d rise in October and a 21 tb/d increase in November. Conventional output in the Permian Basin, however, is on the decline as stripper wells are uneconomic at today's prices.

GOM output in the year-to-August is running higher by 0.12 mb/d y-o-y, benefitting from several 2H14 and early 2015 startups. In August, GOM output was pegged at 1.65 mb/d, higher m-o-m by 63 tb/d. Strong operational performance at the Mars platform and a 37 tb/d ramp-up at the Mad Dog field in August were the main reasons for the increase in August, although total output was impacted by the Mad Dog field going offline for 10 days of planned maintenance. In September, output was supported by a ramp-up of LLOG's Delta House FPSO, which came on stream in April. The field had ramped up to 62 tb/d from seven wells, and the eighth well is due to come on at the end of October, which would help take output close to nameplate capacity of 80 tb/d. Peak output is expected a year later after three additional wells come online, taking output to 0.1 mb/d. The strong supplies from the platform fed into the heavy Louisiana sweet pool. At the end of October, Noble Co. announced the early startup of the Big Bend development with the single well in operation expected to ramp-up to just under 20 tb/d by mid-November. The company also accelerated the Dantzler development and now expects first production in early November. Both will be tie-backs to the Thunder Hawk production facility.

Oil production from the Kuparuk field started in Alaska's North Slope (ANS) in the middle of October. Known as Kuparuk Drill Site 2S, or DS2S, the project is expected to add 8 tb/d gross at peak production. The project includes 14 development wells, a gravel road, a drilling pad capable of handling 24 wells, power lines, pipelines and other surface facilities. The drill site is in the southwestern section of the Kuparuk field. The project was approved for funding in October 2014, and production was originally expected in December. DS2S is the first new drill site at Kuparuk in more than 12 years. ConocoPhillips also plans to pursue viscous oil development at Kuparuk and has received permits for the Greater Mooses Tooth No. 1 (GMT1) development in Alaska's National Petroleum Reserve. A funding decision for GMT1 is expected later this year. The company says DS2S, CD-5, GMT1, the increased rig count and the

North East West Saks site have an estimated cost of about $3 billion gross and could add 40-50 tb/d gross to ANS production by 2018.

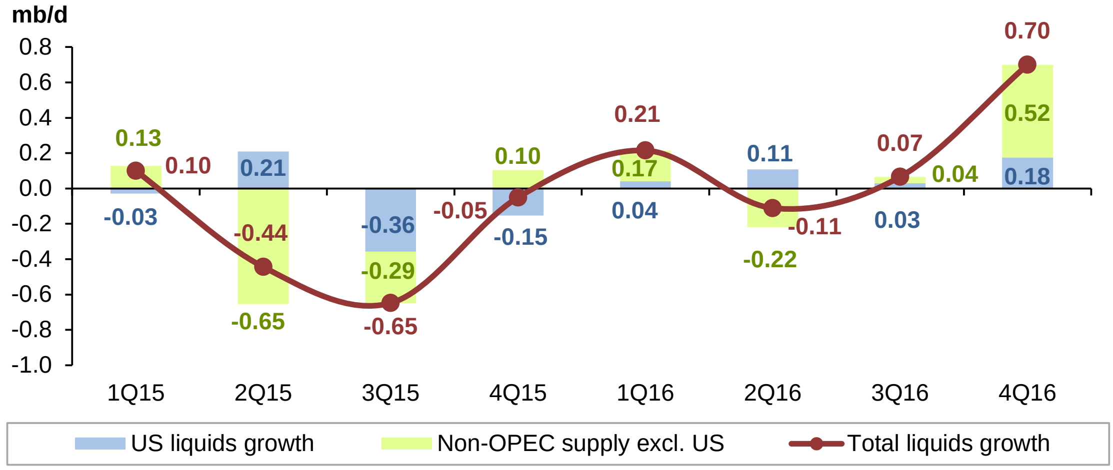
The US oil supply forecast and expected growth in 2015 and 2016 are seen in ***Table 5.2***.

Table 5.2: US oil supply and growth distribution in 2015 and 2016, y-o-y change

	1H 15	2H 15	1H 16	2H 16
Absolute US supply	13.76	13.43	13.45	13.62
Change	1.32	-0.03	-0.31	0.19

US liquids q-o-q changes compared to other non-OPEC supply can be seen in ***Graph 5.3***.

Graph 5.3: US liquids vs. non-OPEC supply, q-o-q change



Source: OPEC Secretariat.

US oil rig count

According to Baker Hughes' latest weekly report on 30 October 2015, the total **drilling rig count** in the US dropped by 1,154 rigs (-60%) y-o-y to 775 rigs. More than 97% of this decline was in onshore fields.

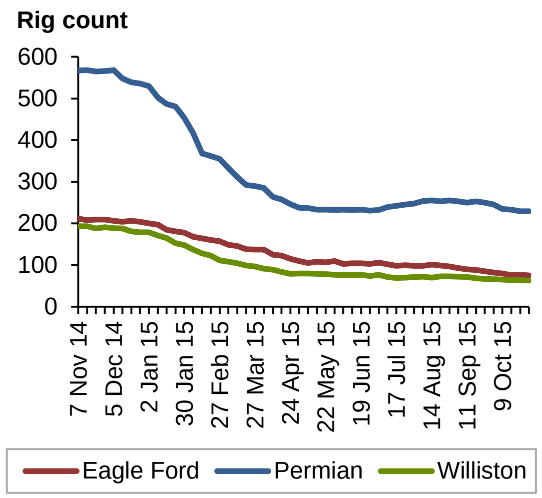
Table 5.3: US rotary rig count

			Change		
Oil and gas split	30 Oct 15	W-o-w	M-o-m	Y-o-y	Y-o-y, %
Oil	578	-16	-36	-1,004	-63
Gas	197	4	2	-149	-43
Location					
Land	738	-11	-38	-1,124	-60
Offshore	37	-1	4	-30	-45
Drilling type					
Directional	86	-1	3	-125	-59
Horizontal	577	-14	-32	-776	-57
Vertical	112	3	-5	-253	-69
US drilling total	**775**	**-12**	**-34**	**-1,154**	**-60**

Source: Baker Hughes.

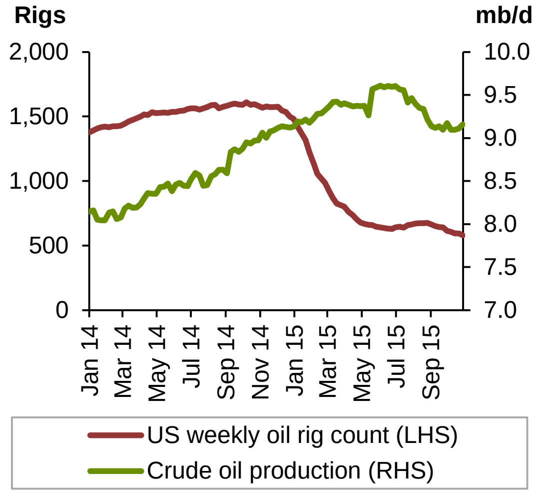
With regard to the split, rigs working in oil fields dropped by 63% from the same period a year earlier, while the number of active rigs working in US gas fields declined by 43%. In total, there was a 62% rig count decline on average in the tight oil regions. This was more or less in harmony with the decline in horizontal drilling at -57% y-o-y. Comparison details of US rig activities from different aspects registered on 30 October 2015 can be seen in ***Table 5.3***, followed by ***Graph 5.4***. Moreover, ***Graph 5.5*** also shows the US weekly oil rig count activity compared to the crude oil production up to 30 October 2015.

Graph 5.4: US total rig count by selected basin



Source: Baker Hughes.

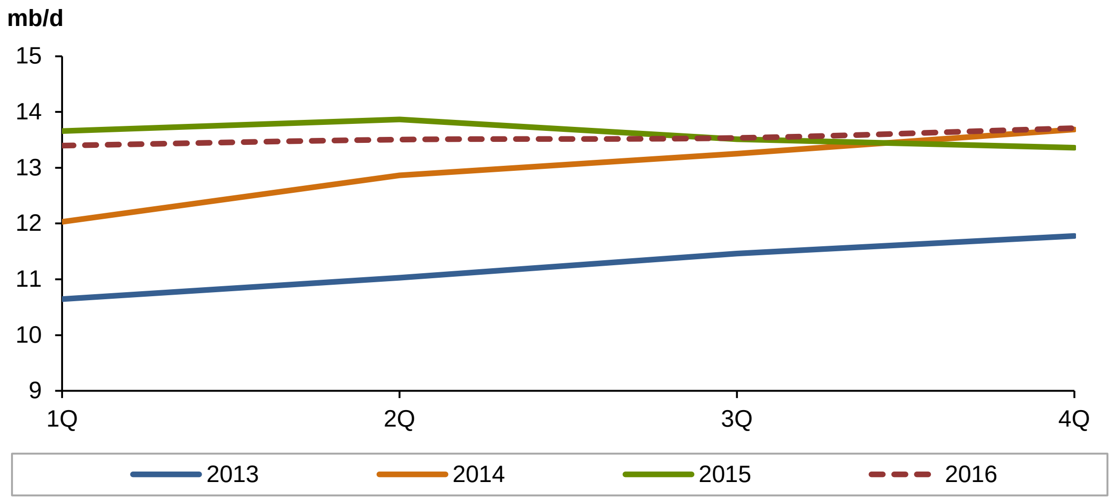
Graph 5.5: US weekly rig count vs. Crude oil production



Sources: Baker Hughes and EIA.

On a quarterly basis, US oil supply in 2015 is expected to average 13.66 mb/d, 13.87 mb/d, 13.51 mb/d and 13.36 mb/d, respectively (***Graph 5.6***).

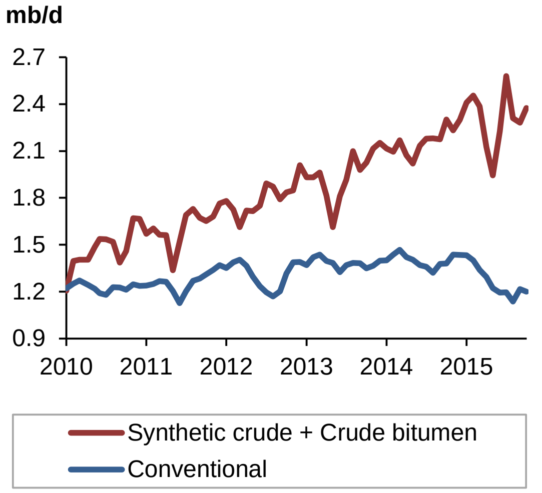
Graph 5.6: US quarterly production, annual comparison



Canada and Mexico

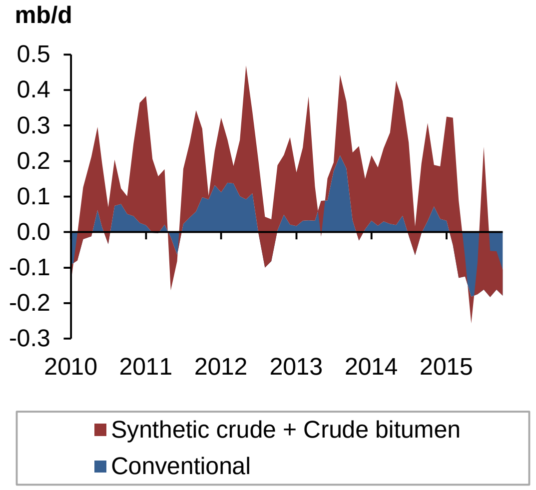
Oil supply in **Canada** is expected to grow by 0.05 mb/d in 2015 to average 4.36 mb/d y-o-y, unchanged from last month's estimation. National data indicates that oil output in July increased by 0.22 mb/d to average 4.51 mb/d and includes 2.62 mb/d of oil sands output, the highest level on record, as ExxonMobil's Nabiye and Kearl expansion projects ramped up. The two projects have already added a combined 0.12 mb/d of extra heavy crude supply and are expected to add a further 30,000 b/d by year-end. Furthermore, Canadian light sweet crude production stood at 1.20 mb/d in July, as supplies have become increasingly constrained recently and NGLs averaged 0.69 mb/d. Canadian oil supply in 3Q15 is expected to be revised up, with preliminary data indicating stronger output in August, but slower growth in September.

Graph 5.7: Canadian crude oil production by type



Source: OPEC Secretariat.

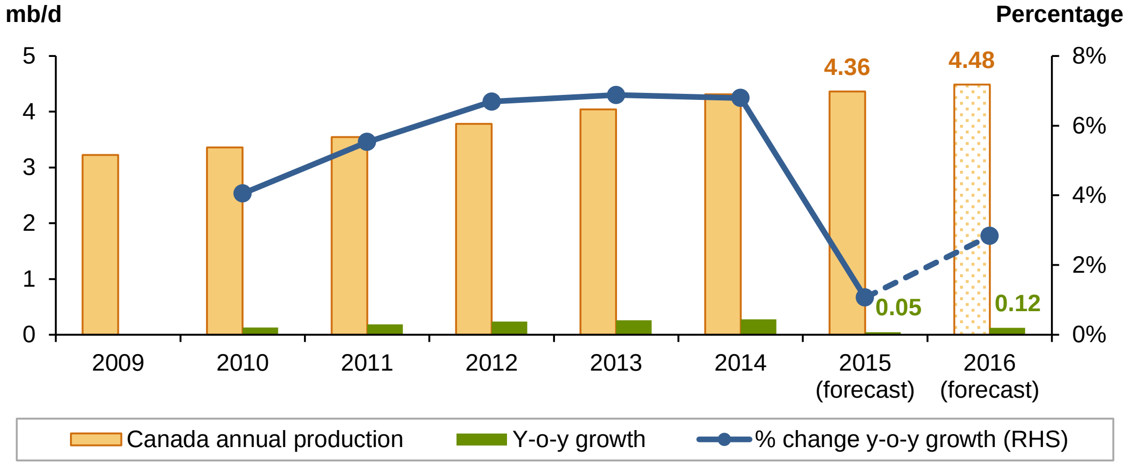
Graph 5.8: Canadian crude oil production by type, y-o-y change



Source: OPEC Secretariat.

Accordingly, Canadian Oil Sands' Syncrude upgrader produced just 23 tb/d of synthetic sweet crude, lower by 0.1 mb/d m-o-m, following a fire at the facility in September. And Nexen's Long Lake upgrader was forced to curtail output after the regulator found unsafe pipelines. These unplanned outages occurred just when Suncor's U2 upgrader was taken offline for seven weeks of planned works and comes against a backdrop of plummeting conventional light output amidst a dramatic reduction of Canadian onshore rig counts.

Graph 5.9: Canada's annual liquids production and annual growth



Source: OPEC Secretariat.

Mexico's liquids production in 2015 is expected to decline significantly by 0.21 mb/d to average 2.60 mb/d. Liquids output in 3Q15 increased by 50 tb/d to average 2.60 mb/d q-o-q, and was also higher in September by 20 tb/d over August. Mexico's oil supply in 3Q15 declined by more than 6%, or 170 tb/d, over the same quarter a year earlier.

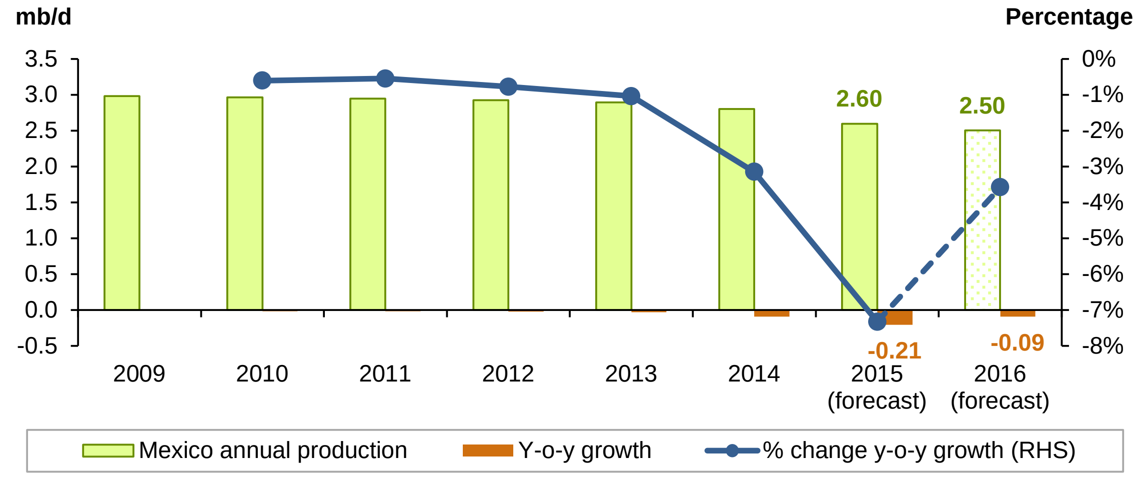
Mexico's state-run Pemex reported a $10 bn loss in its third quarter results, the worst in the company's recent history. The 167.6 bn peso loss came despite a rebound in production compared with the previous quarter. The results of the company continue to reflect the impact caused by the current price environment and foreign exchange rate. Pemex reported average third quarter crude production of 2.266 mb/d, up 1.8% from second quarter results. Heavy crude made up 52.5% of the mix, up from 51.4% a year ago, while light crude accounted for 37% and extra light for 12.5%. The increase in crude production was attributed to a full recovery at the Abkatun platform, in the Campeche basin, where a deadly April fire knocked out 10 tb/d.

The Esah and Xikin fields, two recent discoveries in the shallow waters of the GOM, and significant developments at the deepwater Maximino field have also helped increase output levels, with combined initial production of 21.4 tb/d of oil and condensates and 15.7 mn ft^3/d of gas. Still, y-o-y, crude production fell by 5.5%, cementing a decade-long downward trend. In its monthly output data, Pemex produced an average of 2.26 mb/d during the period January-September, short of its 2.29 mb/d target for the year.

Looking ahead, Pemex is still in the process of migrating 22 existing service contracts to production-sharing contracts. The process has fallen behind schedule, but Mexico's oil regulator CNH has already approved the migration of two contracts: Misión, a natural gas field located in northern Mexico, and the Magallanes-Tucán-Pajonal mature fields, in the eastern state of Tabasco.

On a quarterly basis, Mexico's oil supply in 2015 is seen to average 2.65 mb/d, 2.55 mb/d, 2.60 mb/d and 2.58 mb/d, respectively.

Graph 5.10: Mexico's annual liquids production and annual growth



Source: OPEC Secretariat.

OECD Europe

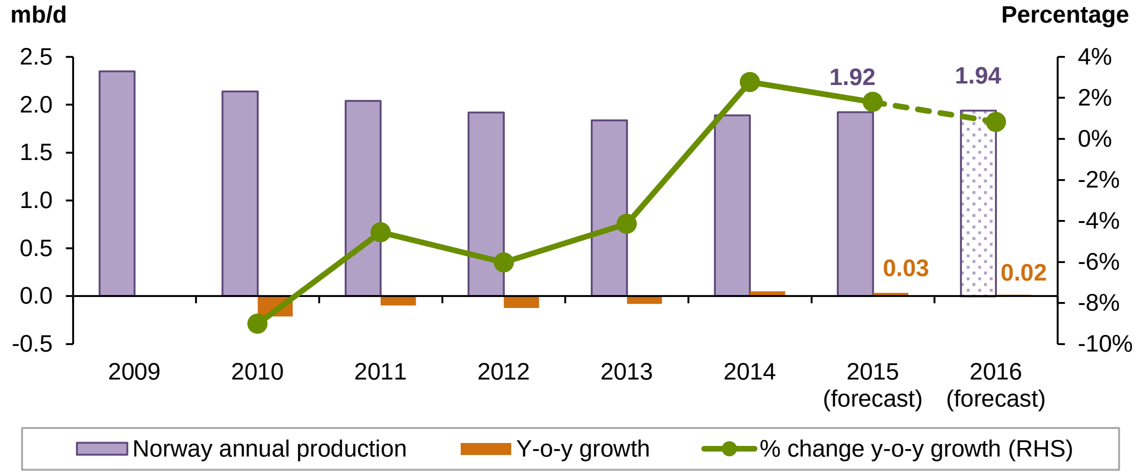
Total **OECD Europe oil supply,** which grew by 20 tb/d to average 3.60 mb/d in 2014, is expected to grow again this year – by 60 tb/d – to average 3.66 mb/d. This is due to the exploitation of new projects that have started up, as well as from several field ramp-ups in Norway and the UK.

OECD Europe in 2015 is estimated to see quarterly supply of 3.69 mb/d, 3.77 mb/d, 3.58 mb/d and 3.61 mb/d, respectively.

Norway's oil supply is expected to increase by 30 tb/d from the previous year to average 1.92 mb/d in 2015. Norway liquids production was pegged at 1.86 mb/d of crude oil, NGLs and condensate in September. This is 58 tb/d lower m-o-m compared to August, according to the official data. Nevertheless, crude oil production is 4.8% above the level in September of last year. The average daily liquid production in September was 1.54 mb/d of crude oil, 0.28 mb/d of NGLs and 0.04 mb/d of condensate.

January saw 60 tb/d of the Eldfisk extension project start up, which was followed shortly with BG's 63 tboe/d Knarr field (currently producing around 20 tb/d of oil). In contrast to previous years, many of the fields are main systems as opposed to satellites, which will boost volumes significantly. The largest project to start this year is Lundin's 90 tb/d Edvard Grieg project. The latest investor presentation by Lundin suggests the field will come on before year-end, ramping up to 35 tb/d, and the benefit will be felt across 1H16. Eni's troubled Goliat project, which has already been delayed by two years and has experienced cost overruns by 52% (compared to the original plan in 2009), has had further issues. The world's most northern offshore Arctic oil field has faced several electrical system issues, pushing back first oil into 4Q15. The 0.1 mb/d floating production unit will therefore ramp up in 1H16.

Graph 5.11: Norway's annual liquids production and annual growth



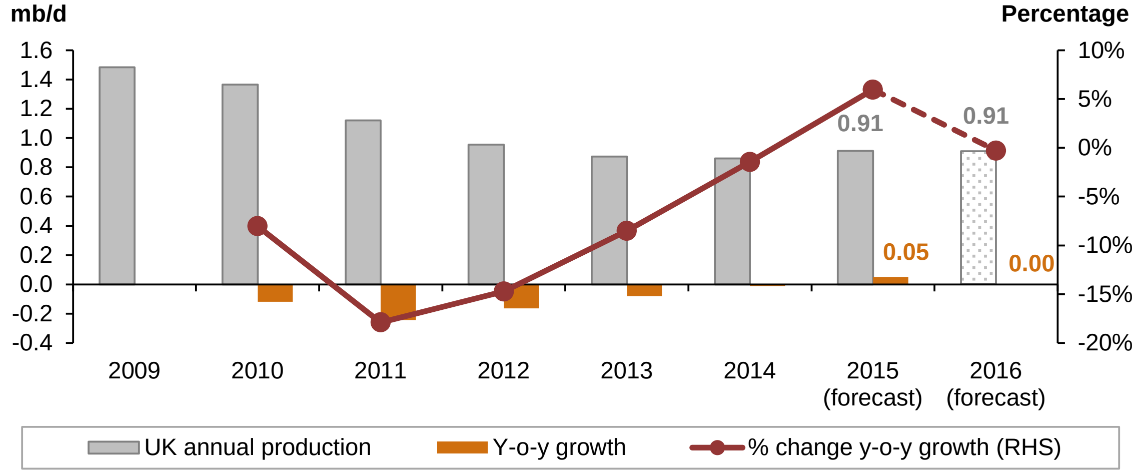
Source: OPEC Secretariat.

UK oil supply is expected to increase by 50 tb/d y-o-y to average 0.91 mb/d in 2015. UK liquids production was pegged at 1.00 mb/d in September, higher m-o-m by 0.12 mb/d. Condensate from the Britannia gas field returned in late August, supporting m-o-m output growth in September. Production also benefitted from the return of the 8 tb/d Tern field in mid-August, which had been out for maintenance since June, as well as the Elgin-Franklin field, which had been shut for 10 days in early August. With lower maintenance than last year, output remained higher for the sixth consecutive month. October output will have been impacted by an unplanned outage at Buzzard on

15 October, with production taking several days to ramp up after a four day closure. In November, output from Buzzard is likely to be lower again, with the field out for a week of works from 7 November, with planned maintenance pushed back from October. Looking ahead, the 17 tboe/d Cladhan field is due to achieve first oil in 4Q15, supporting growth at year-end. 2015 is set to benefit from a number of field startups for which capacity totals almost 0.3 mb/d.

On a quarterly basis, UK oil output in 2015 is estimated to average 0.93 mb/d, 1.00 mb/d, 0.87 mb/d and 0.87 mb/d, respectively.

Graph 5.12: UK annual liquids production and annual growth



Source: OPEC Secretariat.

OECD Asia Pacific

OECD Asia Pacific's oil supply is expected to decline by 50 tb/d in 2015, averaging 0.45 mb/d and remaining unchanged from the previous month.

On a quarterly basis, total OECD Asia Pacific oil supply in 2015 is expected to average 0.43 mb/d, 0.45 mb/d, 0.48 mb/d and 0.46 mb/d, respectively.

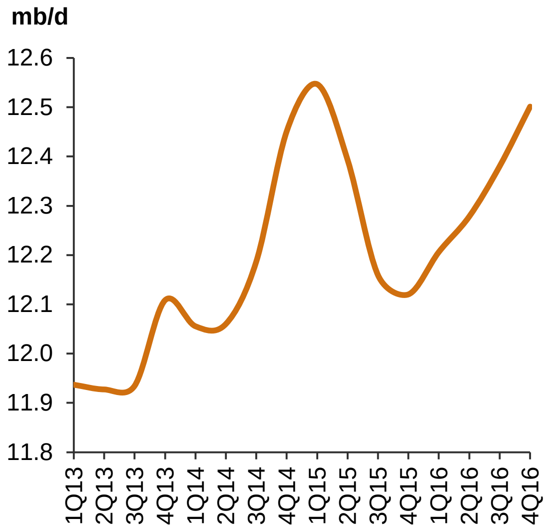
Australia's oil supply is slated to decline this year by 50 tb/d to average 0.37 mb/d. Total liquids supply increased by 40 tb/d in 3Q14 to average 0.40 mb/d, although crude oil and condensate output, according to national data, is likely to have increased, but output of NGLs was reported to be steady. According to the latest information from Australian Petroleum Statistics in August, crude oil and condensate production from six basins is declining. Total annual output of these six basins during 2010-14 declined from 161 mb to 120 mb.

Developing countries

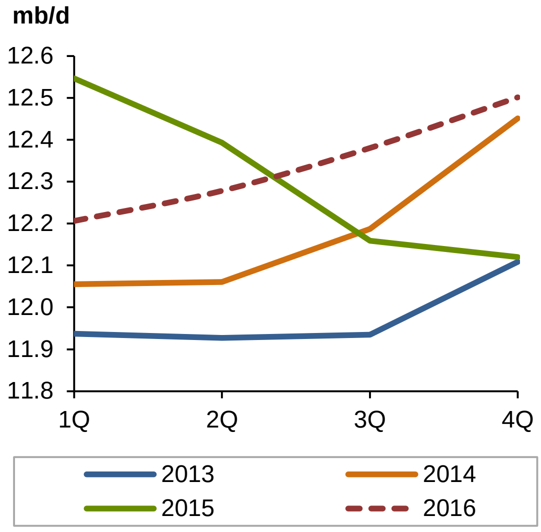
Total oil output from **developing countries (DCs)** will reach an average of 12.30 mb/d in 2015, an increase of 0.11 mb/d compared to growth of 0.21 mb/d in 2014.

On a quarterly basis, total oil supply in DCs is estimated to average 12.55 mb/d, 12.39 mb/d, 12.16 mb/d and 12.12 mb/d, respectively.

Graph 5.13: Developing Countries' quarterly production



Graph 5.14: Developing Countries' quarterly production, annual comparison



Other Asia

Other Asia's oil production is predicted to increase by 80 tb/d in 2015 to average 3.56 mb/d, unchanged from the previous *MOMR*. Oil output in Malaysia, Thailand, Vietnam and Asia others is expected to grow by 0.11 mb/d, while production in India and Indonesia will decrease by 20 tb/d and 10 tb/d, respectively. Brunei's output is expected to remain steady.

On a quarterly basis, Other Asia's oil supply in 2015 is estimated to stand at 3.62 mb/d, 3.61 mb/d, 3.53 mb/d and 3.50 mb/d, respectively.

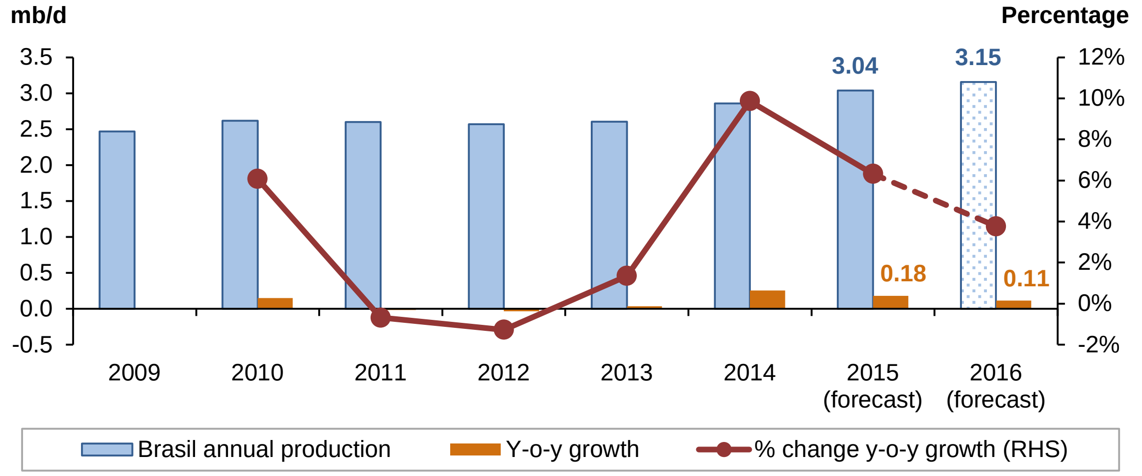
Latin America

Latin America's oil supply is estimated to grow by 0.15 mb/d to average 5.15 mb/d in 2015, remaining unchanged from the previous *MOMR*. Latin America was the second-highest driver of growth in 2014 among all the non-OPEC regions. Brazil is the main driver of growth in 2015 by 0.18 mb/d, along with a small increase in Colombia, while oil production in other Latin American countries is expected to decline by 30 tb/d.

On a quarterly basis, Latin America's oil supply in 2015 is expected to stand at 5.23 mb/d, 5.16 mb/d, 5.11 mb/d and 5.11 mb/d, respectively.

Brazil's liquids supply is expected to average 3.04 mb/d in 2015, an increase of 0.18 mb/d over the previous year and unchanged from the previous *MOMR*. Brazilian liquids output, excluding biofuels, rose m-o-m by 82 tb/d to 2.64 mb/d in August, a record level. The increase came from the ramp-up of the 0.15 mb/d FPSO Cidade de Itaguaí facility in the Lula field, while the return of platforms from maintenance also helped. In the year-to-August, y-o-y production growth has averaged 0.27 mb/d, which followed 0.24 mb/d for 2014. The pace of growth is expected to slow substantially in 2016 as the pullback in investment in the mature Campos basin by Petrobras weighs along with an already high base. In fact, already some of the largest fields in the Campos basin are registering steep declines. For example, the Marlin field, which produced 0.24 mb/d in 2014, has declined by more than 30% this year (partly maintenance-related).

Graph 5.15: Brazil's annual liquids production and annual growth



Source: OPEC Secretariat.

Brazil´s oil production, including emblematic sub-salt output that has been rising steadily for months, declined in September. According to Brazilian oil regulator ANP, the country produced 2.395 mb/d, a 6% decline compared with August and a 1.6% increase compared with September 2014. The downturn mainly reflected scheduled maintenance at offshore platforms operated by Brazil's state-controlled Petrobras, which accounted for around 93% of oil and natural gas produced during the month. Sub-salt oil production averaged around 0.83 mb/d in September, down from 0.86 mb/d in August. The P-52 platform in the Roncador post-salt field in the Campos basin registered production of 47 tb/d in September, compared with 141 tb/d in August.

The P-58 platform in the sub-salt Jubarte field lost around 30 tb/d. In both cases, operator Petrobras attributed the reductions to maintenance. Sub-salt behemoth Lula was Brazil's largest oil-producing field in September, averaging 0.35 mb/d. Lula was also the largest gas-producing field at 16.4 mn m³/d, down slightly in August.

A strike by oil workers that started on 1 November is currently affecting up to 0.45 mb/d, according to the oil industry labour federation FUP. Petrobras has not commented on the specific upstream effects of the ongoing strike.

On a quarterly basis, Brazil's oil supply in 2015 is estimated to stand at 3.06 mb/d, 3.02 mb/d, 3.05 mb/d and 3.04 mb/d, respectively.

Middle East

Middle East oil supply is estimated to decrease by 0.09 mb/d in 2015 from the previous year to average 1.25 mb/d, unchanged from the previous *MOMR*. The Middle East supply forecast is associated with a very high level of risk, mainly due to geo-political factors, which could dramatically change the outlook in either direction. Oman's oil production is expected to grow by 30 tb/d to average 0.98 mb/d, while Bahrain and Yemen are expected to see declines by 20 tb/d and 0.10 mb/d to average 0.21 mb/d and 0.04 mb/d, respectively, in 2015.

On a quarterly basis, Middle East oil supply in 2015 is seen to average 1.30 mb/d, 1.25 mb/d, 1.23 mb/d and 1.22 mb/d, respectively.

Africa

Africa's oil supply is projected to average 2.34 mb/d in 2015, a decline of 30 tb/d y-o-y and unchanged from the previous *MOMR*. In 2015, oil production from Equatorial Guinea and the Sudans is expected to grow by 10 tb/d each to average 0.29 mb/d each. While Chad, Congo and Africa others will see supply declines, other countries such as Egypt, Gabon and South Africa will show steady production in 2015.

On a quarterly basis, Africa's oil supply in 2015 is expected to average 2.40 mb/d, 2.38 mb/d, 2.29 mb/d and 2.29 mb/d, respectively.

FSU, other regions

Total FSU oil supply is expected to increase by 40 tb/d in 2015 to average 13.59 mb/d, with no changes expected from the previous month's estimation. In 2015, oil production in Russia will increase, while output in Kazakhstan, Azerbaijan and FSU others is expected to decrease.

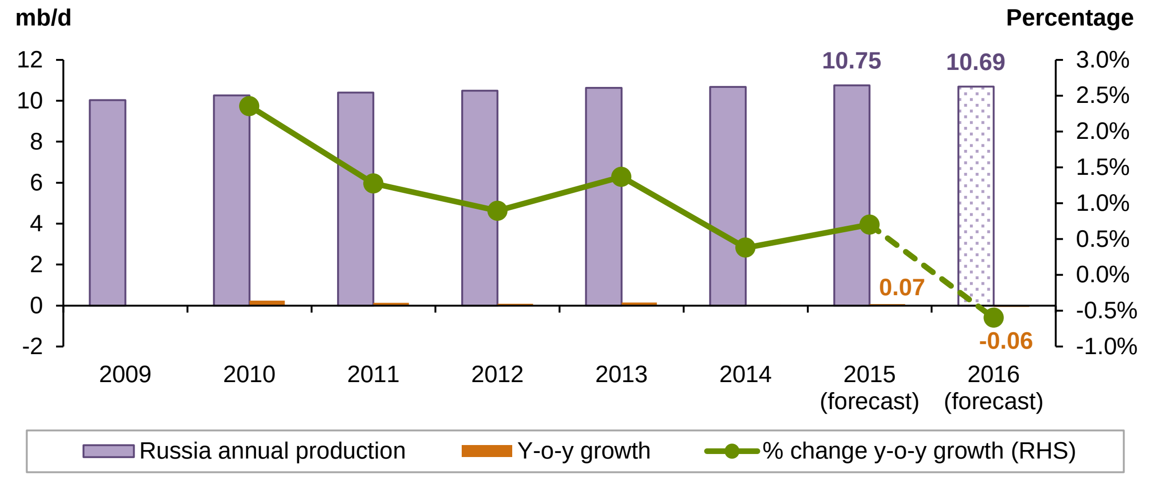
On a quarterly basis, total FSU oil supply in 2015 is seen to average 13.68 mb/d, 13.59 mb/d, 13.54 mb/d and 13.55 mb/d, respectively.

Russia

Russian oil supply in 2015 is expected to grow by 70 tb/d to average 10.75 mb/d, remaining unchanged from last month's estimation. October output rose to a post-Soviet record of 10.78 mb/d, up y-o-y by 0.14 mb/d. The increase continues to be led by Gazprom, Bashneft and PSA operators, while combined Lukoil and Rosneft output fell y-o-y by nearly 0.1 mb/d. Even though the bulk of the planned tax hikes have been put off, the Finance Ministry succeeded in pushing through a delay to planned cuts in the oil export tax regime. Thus, the export tax for 2016 will remain unchanged y-o-y at 42%. If the parliament approves this, oil companies will have to pay $2-3 billion more tax than originally planned, and some are suggesting output could fall by 0.1-0.2 mb/d as a result.

October crude exports rose sharply m-o-m to 4.69 mb/d, with y-o-y growth at 0.6 mb/d, as runs plummeted on maintenance and run cuts.

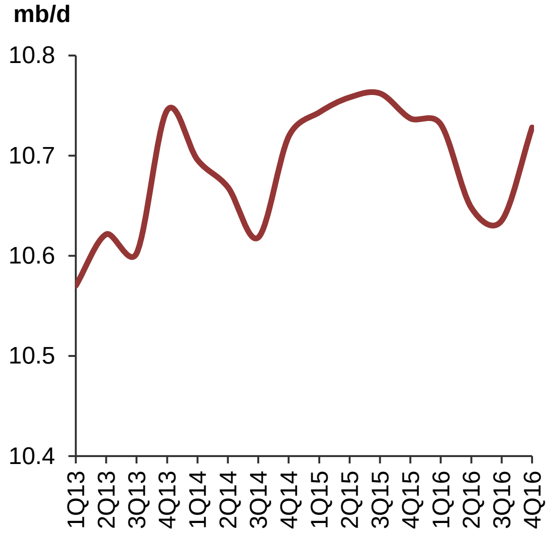
Graph 5.16: Russia's annual liquids production and annual growth



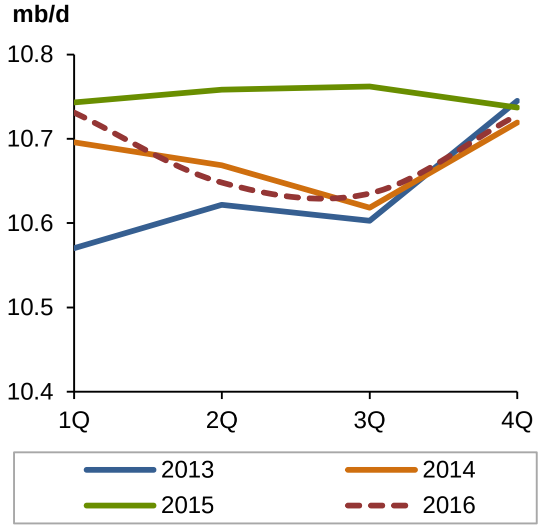
Source: OPEC Secretariat.

On a quarterly basis, Russia's 2015 supply is expected to average 10.74 mb/d, 10.76 mb/d, 10.76 mb/d and 10.74, mb/d, respectively.

Graph 5.17: Russia's quarterly production



Graph 5.18: Russia's quarterly production, annual comparison



Caspian

Kazakhstan's oil supply is expected to decrease by 20 tb/d over the previous year to average 1.60 mb/d in 2015, remaining unchanged from the previous MOMR. Kazakhstan's output fell m-o-m by 25 tb/d to 1.49 mb/d in September, which is a three-year low and is lower y-o-y for the third consecutive month. Tengiz field output remained below 0.5 mb/d for the second consecutive month despite recovering from August's lows. With no new project startups lined up for next year, decline rates are likely to step up in 2016.

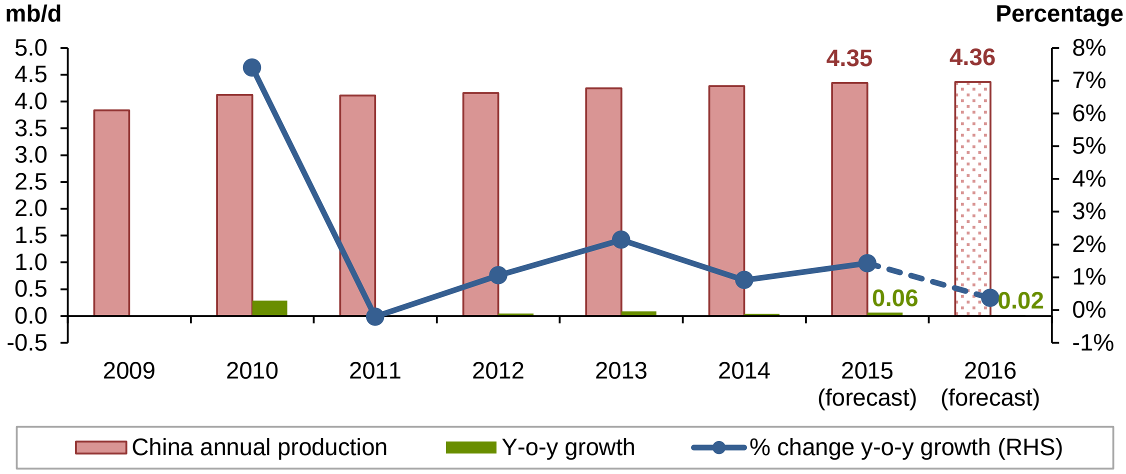
Azeri oil supply is anticipated to decline by 10 tb/d to average 0.86 mb/d in 2015, unchanged from the previous MOMR. In Azerbaijan, output increased m-o-m by 32 tb/d to 0.83 mb/d, lower y-o-y by 10 tb/d. Output is running lower y-o-y by 30 tb/d in the year-to-September, which comes despite the ACG field producing 24 tb/d (4%) more y-o-y. The field has produced at 0.63 mb/d as capex has been moved to maximize short-term production.

China

China's supply is expected to grow by 60 tb/d over the previous year to average 4.35 mb/d in 2015, unchanged from the previous month. Chinese crude output picked up to 4.33 mb/d, higher y-o-y by 0.14 mb/d. Sharp capex cutbacks are only likely to show up in declines in 2016, as the boost from CNOOC's startups fades. CNOOC announced it planned to increase production capacity by 0.12 mb/d this year with the startup of seven projects.

On a quarterly basis, China's supply in 2015 is estimated to average 4.33 mb/d, 4.39 mb/d, 4.34 mb/d and 4.34 mb/d, respectively.

Graph 5.19: China's annual liquids production and annual growth



Source: OPEC Secretariat.

Forecast for 2016

Non-OPEC supply

Non-OPEC oil supply in 2016 is expected to contract by 0.13 mb/d over the current year to average 57.11 mb/d, remaining unchanged from the previous *MOMR*. Globally, nearly 5 mb/d of projects have been deferred or cancelled due to the current low price environment. There have also been some capex reductions at fields that are currently producing, including enhanced oil recovery (EOR) and in-fill drilling activity that would otherwise offset natural declines. This is likely to lead to an increase in global decline rates from the current 5-5.5%. Marginal fields producing less than 10,000 b/d are being shut down across the North Sea and even in Brazil. Their short lifespans, high decline rates and maintenance costs generally require oil prices that are above $80/b to be economic.

Important areas to watch are Latin America, particularly Mexico and Colombia, and while Brazilian pre-salt output will continue to grow, older fields have already started to decline. In the UK's North Sea, a recent report found (assuming a $70/b oil price) that companies would only be able to make a profit on investments by cutting exploration costs by 30% and development costs by 20%. In the Asia Pacific, steep capex cutbacks in China and, to a lesser extent, Indonesia and Malaysia will lead to lower output in late 2016 and early 2017, following various project startups this year. The FSU, particularly Kazakhstan and Azerbaijan, will also experience lower output, with decline rates already rising due to a lack of investment.

Overall, non-OPEC supply is forecast to fall y-o-y in 2016 by 0.14 mb/d for the first time since 2007, as nearly $200 billion of capex cutbacks this year and next, create a gaping supply hole.

The weak growth trend estimated for 2015 is expected to persist, leading to a contraction in 2016. The forecast contraction is supported by declines from the OECD at -0.04 mb/d and the FSU at -0.16 mb/d. On a regional basis, OECD Americas, OECD Europe, the Middle East and Africa are each expected to decline in 2016 by 0.03 mb/d, while in FSU, production is forecast to decline by 0.16 mb/d. The other regions – OECD Asia Pacific, Other Asia, Latin America and China – are expected to be the main contributors of non-OPEC incremental growth with 0.02 mb/d, 0.06 mb/d, 0.04 mb/d and 0.02 mb/d, respectively. The forecast for non-OPEC supply in 2016 is associated with a high level of risk.

On a quarterly basis, non-OPEC oil supply in 2016 is projected to stand at 56.99 mb/d, 56.87 mb/d, 56.94 mb/d and 57.64 mb/d, respectively.

OECD

Total OECD oil supply in 2016 is expected to decline by 0.04 mb/d, to average 24.64 mb/d, remaining unchanged from the previous *MOMR*. The y-o-y decline in the OECD in 2016 is expected to come from OECD Americas by 30 tb/d and OECD Europe by 30 tb/d, while OECD Asia Pacific is expected to grow by 20 tb/d compared to the previous year.

On a quarterly basis, total OECD supply in 2016 is estimated to average 24.56 mb/d, 24.53 mb/d, 24.53mb/d and 24.94 mb/d, respectively.

OECD Americas

OECD Americas' oil supply in 2016 is estimated to average 20.53 mb/d, showing a decline of 30 tb/d y-o-y and remaining unchanged from the previous month's report. The US and Mexico are both expected to see declines, while Canada's supply is forecast to grow by 0.12 mb/d.

On a quarterly basis, OECD Americas oil supply in 2016 is expected to average 20.41 mb/d, 20.45 mb/d, 20.50 mb/d and 20.76 mb/d, respectively.

US

US total oil supply is anticipated to decline by 60 tb/d to average 13.54 mb/d in 2016, remaining unchanged from the previous *MOMR*. US liquids production for 2016, based on 2015 output assumptions, is shown in ***Table 5.4*** and ***Graph 5.20***. Moreover, according to US field development and new project startups in 2016, around 0.47 mb/d of added volume is expected to come on stream in the next year.

Table 5.4: US liquids production breakdown in 2015 and 2016, mb/d

Production type	2014	2015*	*Change* 2015/14	2016*	*Change* 2015/16
Tight crude	3,972	4,270	298	4,170	-100
Gulf of Mexico crude	1,397	1,590	193	1,680	90
Other crude	3,345	3,310	-35	3,220	-90
Unconventional NGL	1,594	1,760	166	1,790	30
Other NGL	1,420	1,430	10	1,450	20
Biofuels + Other liquids	1,238	1,238	0	1,228	-10
US total supply (excluding processing gains)	**12,966**	**13,598**	**632**	**13,538**	**-60**

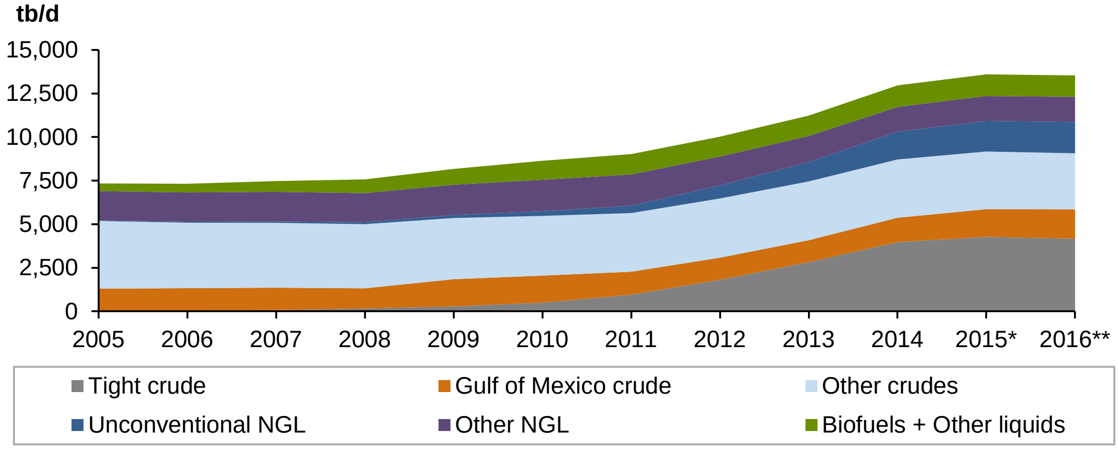
*Note: * = Forecast.*

Source: US Department of Energy.

In 2016, four new fields totalling 0.28 mb/d are due to startup in the GOM, which should help offset a 0.4 mb/d y-o-y decline in tight oil and onshore conventional output, keeping US production growth flat y-o-y in 2016. But the exact trajectory for US production will depend on the rate at which producers unleash a backlog of DUCs. Several producers are holding back completions to achieve lower service costs (EOG expects to exit the year with 320 DUCs), hence there could be a pickup in activity later in the year when prices rise.

In 2016, Anadarko's 80,000 boe/d Heidelberg spar project saw its first oil date pushed forward by a few months to 2Q16 from previous guidance of mid-2016. The project will come on stream in a phased manner, with three subsea wells initially starting up and production from two initial wells coming online at a later date. The latest guidance on the Gunflint project remained unchanged, with the project expected to produce oil around mid-year.

Graph 5.20: Trend of US oil production's components in 2005-2016



*Note: * = Estimate and ** = Forecast.*
Source: US Department of Energy and OPEC analysis.

Canada and Mexico

Oil supply in **Canada** is expected to grow by 0.12 mb/d in 2016 to average 4.48 mb/d y-o-y, unchanged from the previous *MOMR*. Oil sands projects in Canada, which are already invested and sanctioned, will not be stopped or kept on hold in 2015 or 2016. New productions with large amounts of sunken capital are insulated to price drops due to the long-term outlook. For this reason, projects totaling 459 tb/d of bitumen are expected to come onstream in 2015 and 2016. Looking forward to 2020, approximately 89% of production is already invested or sanctioned, but according to new data from different sources given by Rystad Energy, 11 projects with a total capex of around $50 billion, which were planned to materialize in 2017 onward, were deferred to the 2018-2026 period.

On a quarterly basis, total Canadian oil supply in 2016 is estimated to average 4.45 mb/d, 4.44 mb/d, 4.47 mb/d and 4.57 mb/d, respectively.

Mexican oil production in 2016 is expected to decline at a slower pace of 90 tb/d to average 2.50 mb/d, an upward revision of 10 tb/d from the previous *MOMR*.

On a quarterly basis, total Mexican oil supply in 2016 is estimated to average 2.55 mb/d, 2.50 mb/d, 2.50 mb/d and 2.47 mb/d, respectively.

OECD Europe

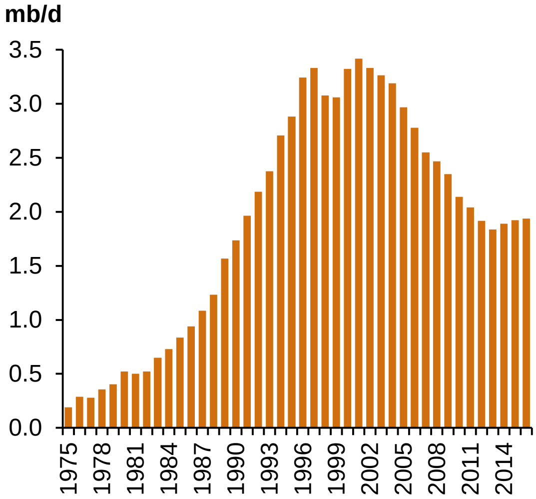
Total **OECD Europe oil supply** is expected to decline by 30 tb/d to average 3.64 mb/d in 2016, remaining unchanged from the previous *MOMR.* OECD Europe is estimated to see quarterly oil supply in 2016 of 3.69 mb/d, 3.60 mb/d, 3.54 mb/d and 3.72 mb/d, respectively.

Norway's oil supply is expected to grow by 20 tb/d from the previous year to average 1.94 mb/d in 2016, unchanged from the previous *MOMR.* It is expected that around 0.24 mb/d will be added to Norway's 2016 production, mostly through project ramp-ups, for example from Gudrun, Aasgard LP, Valemo, the infill drilling project of Troll, Goliat, Knarr and other small projects, plus the new project of Edward Grieg, adding 40 tb/d.

Norway is more promising from a reserve perspective, as the challenges from a production standpoint are analogous to the UK. Output declined every year between 2001 and 2013 from 3.40 mb/d to 1.84 mb/d in 2013, at an average rate of 5% per annum. Record investment undertaken during a four-year period of $100/b oil saw development capex rise to $11.5 billion.

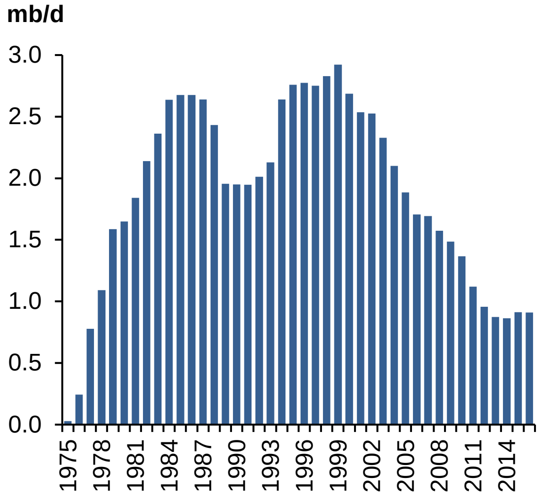
Investment in producing fields was at $14.3 billion in 2014, pushing Norwegian production higher y-o-y for the first time in 12 years, a trend likely to be replicated this year as production in the year-to-September is higher y-o-y by around 60 tb/d at 1.92 mb/d. By 2H16, the effects of higher maintenance and only 50 tb/d of additions are likely to weigh on production, as only two relatively small fields come online. Det Norske will bring on phase 1 of the Ivar Aasen field at 16 tboe/d, while its 35 tb/d Froy redevelopment will not commence production until late 2016. Therefore, following the capacity additions in 2015, 1H16 will see the effects of the ramp-up in fields. But after that, the backlog thins materially, which will weigh on production for the following few years, until the next chapter of Norwegian Continental Shelf (NCS) starts in 2020 as the Johan Sverdrup fields come online.

Graph 5.21: Norway's total oil supply



Source: OPEC Secretariat.

Graph 5.22: UK's total oil supply



Source: OPEC Secretariat.

The **UK's** oil production in 2016 is expected to remain flat to average 0.91 mb/d, unchanged from the previous *MOMR*. A plethora of satellite fields adds another 0.13 mb/d of new capacity in 2016. However, a higher base, likely heavier maintenance next year and accelerating decline rates due to cutbacks in maintenance capex, will ultimately keep production at current levels in 2016.

The UK's North Sea has about 5 billion barrels of recoverable reserves left. 170 fields produce liquids in offshore UK, with a combined output pegged at 1 mb/d. Output recovered in 2014 due to an abundance of satellite fields being brought online and tied to the existing fields. For fields producing before 2009, output halved between 2008 and 2014, from 1.3 mb/d to 0.63 mb/d, which represents an annual average production decline of 12%. The increase in declines has come as a result of several satellites being brought on stream, which are typically produced and depleted more quickly (~26%). Since 2000, an average of four to five satellite fields has been brought online annually. The average breakeven price for projects in the UK is close to $75/b, with a large range of $59/b. Only the Clair Ridge project would be profitable in the current oil price environment, while most other projects that made sense in a $110/b environment do not breakeven today. Decommissioning costs are also rising, estimated to grow to over $3 billion annually from 2018 onwards. Last year, they breached $1.5 billion. Over the next 35 years, more than 5,500 wells, 400 facilities and 10,000 km of pipelines will need to be decommissioned at an estimated cost in excess of $75 billion.

Table 5.5: UK Continental Shelf peak capacity additions in 2016

Field name	Operator	Peak capacity, tb/d
Orlando	Iona	14
Quad 204 (Schiehallion expansion)	BP	50
Greater Stella Area	Ithaca Energy	30
Western Isles (Harris and Barra fields)	Dana Petroleum	35
Alder	Chevron	14
Total		**143**

Source: Energy Aspects.

It is expected that the fruits of $100/b oil will continue to provide some more short-term respite for UK production as a slew of projects are brought to the market. 2016 additions total 0.17 mb/d. The capex for these projects has been largely sunk and therefore is not at risk. But more maintenance is expected next year given the limited works this year, which could keep output flat y-o-y in 2016. The largest project next year comes in the form of BP's Quad 204 FPSO, which aims to rejuvenate the Schiehallion and nearby Loyal fields. While the FPSO has a capacity of 0.13 mb/d, it is conservatively forecast that output will average around 50 tb/d next year. Indications are that the field will start up only towards the latter end of 2016, so its production impact will be moderate. BP started the drilling campaign earlier this year and expects to extend the life of the Schiehallion and Loyal fields to 2034. The other fields starting up are generally smaller in size (less than 30 tb/d, and 0.1 mb/d in total) and will contribute to offseting an underlying decline, which is pegged at 12%. Therefore, 2016 output is expected to be broadly flat y-o-y to slightly positive, particularly as this year has benefitted from lower volumes of maintenance.

OECD Asia Pacific

OECD Asia Pacific's oil supply is expected to grow by 20 tb/d in 2016 to average 0.47 mb/d, unchanged from the previous month's forecast. Australia's oil supply will grow by 40 tb/d to average 0.41 mb/d.

On a quarterly basis, total OECD Asia Pacific oil supply in 2016 is estimated to average 0.46 mb/d, 0.48 mb/d, 0.48 mb/d and 0.46 mb/d, respectively.

Developing countries

Total DCs' oil output will grow by 40 tb/d to average 12.34 mb/d in 2016, remaining unchanged from the previous *MOMR*.

On a quarterly basis, total DCs' oil supply in 2016 is estimated to average 12.21 mb/d, 12.28 mb/d, 12.38 mb/d and 12.50 mb/d, respectively.

Other Asia

Other Asia's oil production is predicted to increase by 60 tb/d in 2016 to average 3.63 mb/d, which is unchanged from the previous *MOMR*. Oil output in Malaysia, Indonesia and Asia others is expected to increase, while production in Vietnam and Brunei will decline. Oil production in India and Thailand will be stagnant in the year.

On a quarterly basis, Other Asia's oil supply in 2016 is expected to stand at 3.56 mb/d, 3.60 mb/d, 3.65 mb/d and 3.69 mb/d, respectively.

Latin America

Latin America's oil supply is estimated to grow by 40 tb/d to average 5.19 mb/d in 2016, unchanged from the previous *MOMR*. Latin America has been the second-highest driver of growth in recent years among all non-OPEC regions, but due to few Brazilian projects coming online in 2016, remarkable growth is not foreseen. Despite this, Brazil is still the main driver of growth in this region in 2016, while oil production in other Latin American countries is expected to decline.

On a quarterly basis, Latin America's oil supply in 2016 is expected to stand at 5.10 mb/d, 5.13 mb/d, 5.21 mb/d and 5.32 mb/d, respectively.

Brazil's giant offshore subsalt oil and gas areas will only break even with oil worth $55/b or more. The $55/b figure is 14% higher than the current benchmark Brent crude oil price and 22% higher than the $45/b break-even figure previously given by Petrobras.

The break-even estimate also applies to Libra, the 8 billion to 12 billion barrels prospect being developed by Petrobras, Royal Dutch Shell Plc, Total SA and China's state-owned CNOOC and China National Petroleum Co. If costs in the subsalt areas are that high, Petrobras, the world's most-indebted major oil company, faces serious strains on its already stretched finances. Some of its most important and highest producing fields may be operating at a loss. In a statement, Petrobras said that it is "stepping up its capacity to produce oil and gas in the subsalt region in an economically feasible way." The company said its break-even estimate rises about $5 to $7/b if gas pipelines are needed to export gas to shore from the fields, many more than 100 kilometres off Brazil's coast in water more than 3,000 meters deep. The subsalt areas are in an offshore region where oil and gas are trapped far beneath the seabed by a layer of mineral salts. The Subsalt Polygon, a region where Pedrosa's company has authority over new development, contains at least 176 billion barrels of undiscovered recoverable resources, according to Rio de Janeiro State University. That would be enough to supply all the world's oil and gas needs for more than five years and four times what has already been discovered in the region.

Middle East

Middle East oil supply is estimated to decrease by 0.03 mb/d in 2016 from the previous year to average 1.23 mb/d, unchanged from the previous MOMR. There is no expectation for growth or decline in oil supply in Bahrain, Oman and Syria, while oil output in Yemen is expected to decline to a negligible level of 10 tb/d in 2016. Moreover, the Middle East supply forecast is associated with a very high level of risk, mainly due to political factors, which could dramatically change the outlook in either direction.

On a quarterly basis, Middle East oil supply in 2016 is seen to average 1.23 mb/d, 1.23 mb/d, 1.22 mb/d and 1.21 mb/d, respectively.

Africa

Africa's oil supply is projected to decline by 30 tb/d to average 2.30 mb/d in 2016 y-o-y, remaining unchanged from the previous MOMR. Oil production in Congo and Africa other is expected to grow, while others are forecast to decline, with the exception of South Africa, which should remain steady.

On a quarterly basis, Africa's oil supply in 2016 is forecast to average 2.31 mb/d, 2.31 mb/d, 2.30 mb/d and 2.28 mb/d, respectively.

FSU and other regions

Total FSU oil supply is expected to decline by 0.16 mb/d in 2016 to average 13.43 mb/d, without any changes from the previous month's estimation. Oil production in Russia, Kazakhstan, Azerbaijan and FSU others will decrease due to a lack of investment in 2016.

On a quarterly basis, total FSU oil supply in 2016 is seen to average 13.55 mb/d, 13.39 mb/d, 13.34 mb/d and 13.46 mb/d, respectively.

Russian oil supply is expected to decrease by 0.06 mb/d to average 10.69 mb/d in 2016, unchanged from the previous MOMR.

The intense debate over next year's oil and gas taxes is largely over following a compromise solution reached by the Russian producers and the government. The plan would allow keeping Russian crude production unchanged next year, with an insignificant decline expected in 2017. However, these plans will be ruined if the Finance Ministry decides it doesn't have enough revenue to plug holes in the budget and needs to milk the oil and gas sector beyond 2016.

This fear is shared by both oil producers and the Energy Ministry. To get additional income in state coffers, export duties on oil exports next year will be frozen at the current level of 42% from the actual oil price minus $25. It was supposed to sink to 36% next year and 30% in 2017, in accordance to the so-called tax maneuver that went into force this year. The freeze would last only for eight months of 2016, which would bring an additional 133 billion rubles ($2 billion) into the state budget, Russian Minster of Energy Alexander Novak said. The government wants another 200 billion rubles from the oil sector next year. The difference would be provided as a result of higher oil output, since the more companies produce, the more income comes to the state in the form of the mineral extraction tax (MET).

According to the Energy Ministry, the production next year is to stay at this year's level of 10.68-10.7 mb/d, since all major investments to support output at this level have already been made.

On a quarterly basis, total oil supply from Russia in 2016 is seen to average 10.73 mb/d, 10.65 mb/d, 10.64 mb/d and 10.73 mb/d, respectively.

Oil production in **Kazakhstan** will decline by 30 tb/d to average 1.57 mb/d in 2016, unchanged from the previous month's forecast. With no new project startups lined up for next year, decline rates are likely to step up in 2016. Different sources have said that the giant Kashagan project was unlikely to start production before mid-2017.

Azerbaijan's oil production is predicted to decline by 40 tb/d to average 0.82 mb/d in 2016, unchanged from the previous MOMR. Lower prices are likely to accelerate declines in Azeri production in 2016 compared to 2015.

Other Europe's oil supply is estimated to remain flat from 2012 to average 0.14 mb/d and continue at this level in 2016.

China

China's oil supply is expected to grow by 20 tb/d over the previous year to average 4.36 mb/d in 2016. Expected growth didn't change from the previous month. With sharp capex cutbacks, particularly by Sinopec and PetroChina, output is set to decline in 2016.

On a quarterly basis, total oil supply from China in 2016 is seen to average 4.34 mb/d, 4.35 mb/d, 4.36 mb/d and 4.41 mb/d, respectively.

Table 5.6: Expected number of new projects in 2016

Regions	Number of new projects	Change 2016/15, mb/d
Americas	15	-0.03
Europe	7	-0.03
Asia Pacific	3	0.02
Total OECD	**25**	**-0.04**
Other Asia	13	0.06
Latin America	4	0.04
Middle East	0	-0.03
Africa	9	-0.03
Total DCs	**26**	**0.04**
FSU	…	-0.16
Other Europe	…	0.00
China	…	0.02
Total non-OPEC excluding processing gains	**51**	**-0.14**

Table 5.7: Non-OPEC oil supply in 2016, mb/d

	2015	1Q16	2Q16	3Q16	4Q16	2016	Change 16/15
Americas	20.56	20.41	20.45	20.50	20.76	20.53	-0.03
of which US	*13.60*	*13.40*	*13.50*	*13.53*	*13.71*	*13.54*	*-0.06*
Europe	3.66	3.69	3.60	3.54	3.72	3.64	-0.03
Asia Pacific	0.45	0.46	0.48	0.48	0.46	0.47	0.02
Total OECD	**24.68**	**24.56**	**24.53**	**24.53**	**24.94**	**24.64**	**-0.04**
Other Asia	3.56	3.56	3.60	3.65	3.69	3.63	0.06
Latin America	5.15	5.10	5.13	5.21	5.32	5.19	0.04
Middle East	1.25	1.23	1.23	1.22	1.21	1.22	-0.03
Africa	2.34	2.31	2.31	2.30	2.28	2.30	-0.03
Total DCs	**12.30**	**12.21**	**12.28**	**12.38**	**12.50**	**12.34**	**0.04**
FSU	13.59	13.55	13.39	13.34	13.46	13.43	-0.16
of which Russia	*10.75*	*10.73*	*10.65*	*10.64*	*10.73*	*10.69*	*-0.06*
Other Europe	0.13	0.13	0.13	0.13	0.13	0.13	0.00
China	4.35	4.34	4.35	4.36	4.41	4.36	0.02
Total "Other regions"	**18.07**	**18.02**	**17.87**	**17.83**	**18.00**	**17.93**	**-0.14**
Total Non-OPEC production	**55.05**	**54.78**	**54.67**	**54.74**	**55.44**	**54.91**	**-0.14**
Processing gains	2.19	2.20	2.20	2.20	2.20	2.20	0.01
Total non-OPEC supply	**57.24**	**56.98**	**56.87**	**56.94**	**57.64**	**57.11**	**-0.13**
Previous estimate	57.24	56.99	56.87	56.94	57.64	57.11	-0.13
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPEC NGLs and non-conventional oils

Output of OPEC natural gas liquids (NGLs) and non-conventional liquids is estimated to average 6.01 mb/d in 2015, representing growth of 0.19 mb/d over the previous year. In 2016, production of OPEC NGLs and non-conventional liquids is projected to average 6.18 mb/d, an increase of 0.17 mb/d over 2015. The 2015 estimation and 2016 predictions for OPEC NGLs and non-conventional liquids remain unchanged compared to the previous *MOMR*.

Table 5.8: OPEC NGLs + non-conventional oils, 2013-2016

	2013	2014	Change 14/13	1Q15	2Q15	3Q15	4Q15	2015	Change 15/14	2016	Change 16/15
Total OPEC	**5.65**	**5.83**	0.18	5.86	5.94	6.13	6.13	**6.01**	0.19	**6.18**	0.17

OPEC crude oil production

According to secondary sources, total OPEC crude oil production decreased by 0.26 mb/d to average 31.38 mb/d in October. Crude oil output decreased mostly in Iraq, Saudi Arabia and Kuwait, while production in Libya showed an increase. According to secondary sources, October OPEC crude oil production, not including Iraq, stood at 27.37 mb/d, a decrease of 61 tb/d over the previous month.

Table 5.9: OPEC crude oil production based on *secondary sources*, tb/d

	2013	2014	1Q15	2Q15	3Q15	Aug 15	Sep 15	Oct 15	Oct/Sep
Algeria	1,159	1,151	1,112	1,107	1,109	1,115	1,113	1,110	*-3.7*
Angola	1,738	1,660	1,746	1,716	1,766	1,746	1,777	1,781	*4.3*
Ecuador	516	542	551	546	541	539	544	552	*7.5*
Iran, I.R.	2,673	2,766	2,779	2,828	2,860	2,859	2,869	2,874	*4.7*
Iraq	3,037	3,265	3,454	3,875	4,156	4,096	4,208	4,012	*-195.4*
Kuwait	2,822	2,774	2,748	2,726	2,721	2,728	2,732	2,688	*-44.5*
Libya	928	473	382	450	381	375	373	426	*52.8*
Nigeria	1,912	1,911	1,886	1,814	1,861	1,859	1,913	1,911	*-2.3*
Qatar	732	716	679	667	659	661	665	665	*0.6*
Saudi Arabia	9,586	9,683	9,809	10,253	10,266	10,269	10,197	10,125	*-72.2*
UAE	2,741	2,761	2,817	2,838	2,880	2,877	2,882	2,881	*-1.2*
Venezuela	2,389	2,373	2,367	2,376	2,368	2,367	2,365	2,358	*-7.2*
Total OPEC	**30,231**	**30,075**	**30,330**	**31,197**	**31,566**	**31,491**	**31,638**	**31,382**	***-256.5***
OPEC excl. Iraq	**27,194**	**26,809**	**26,877**	**27,322**	**27,411**	**27,395**	**27,431**	**27,370**	***-61.1***

Totals may not add up due to independent rounding.

Table 5.10: OPEC crude oil production based on *direct communication*, tb/d

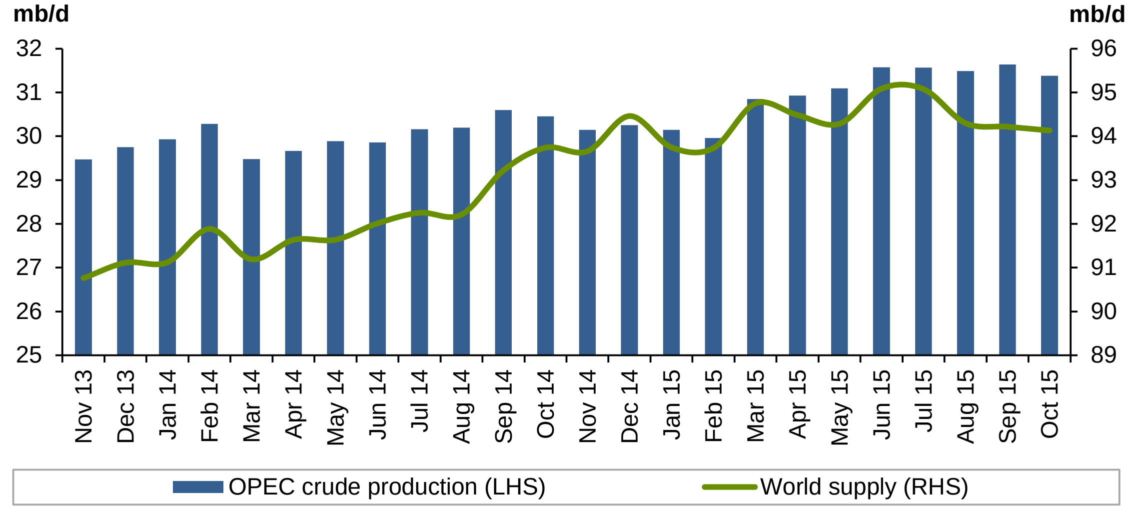
	2013	2014	1Q15	2Q15	3Q15	Aug 15	Sep 15	Oct 15	Oct/Sep
Algeria	1,203	1,193	1,141	1,147	1,159	1,153	1,163	1,172	*9.0*
Angola	1,701	1,654	1,766	1,784	1,777	1,729	1,806	1,762	*-44.0*
Ecuador	526	557	550	544	538	537	539	538	*-1.0*
Iran, I.R.	3,576	3,117	3,017	3,103	3,170	3,180	3,200	3,280	*80.0*
Iraq	2,980	3,110	3,064	3,351	3,744	3,760	3,755	3,659	*-96.0*
Kuwait	2,922	2,867	2,850	2,838	2,870	2,890	2,900	2,800	*-100.0*
Libya	993	480	411	..	..	..	..	..	*..*
Nigeria	1,754	1,807	1,762	1,622	1,780	1,746	1,818	1,881	*63.2*
Qatar	724	709	687	647	640	643	663	660	*-3.1*
Saudi Arabia	9,637	9,713	9,878	10,401	10,285	10,265	10,226	10,276	*50.0*
UAE	2,797	2,794	2,948	2,973	3,030	3,027	3,002	2,971	*-30.6*
Venezuela	2,786	2,683	2,722	2,683	2,643	2,646	2,630	2,601	*-29.9*
Total OPEC	**31,599**	**30,682**	**30,793**	**..**	**..**	**..**	**..**	**..**	***..***
OPEC excl. Iraq	**28,619**	**27,572**	**27,729**	**..**	**..**	**..**	**..**	**..**	***..***

Totals may not add up due to independent rounding.
.. Not available.

World oil supply

Preliminary data indicates that global oil supply decreased by 0.09 mb/d to average 94.13 mb/d in October, compared to the previous month. The decrease was due to a drop in OPEC crude production by 0.26 mb/d. The share of OPEC crude oil at 33.3% of total global production decreased by 0.3% in October compared to a month earlier. Estimates are based on preliminary data for non-OPEC supply and OPEC NGLs, while OPEC crude production is reported according to secondary sources.

Graph 5.23: OPEC and world oil supply



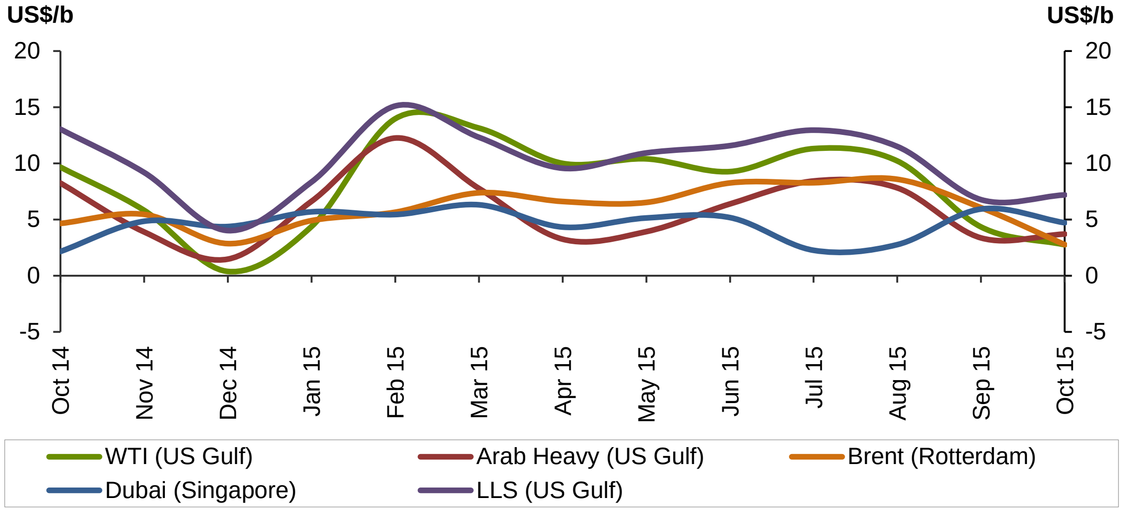
Product Markets and Refinery Operations

Despite the peak maintenance season in October with more than 8 mb/d of capacity offline, refinery margins fell worldwide due to the expectations of a mild winter amid an oversupply environment.

Product markets in the Atlantic Basin weakened during October as the gasoline crack spread continued falling, despite healthy US domestic demand, which was offset by higher inventories amid expectations of weakening demand at the end of this quarter. Meanwhile, winter has not yet lent support to the middle distillate markets, as heating fuel inventories remained high.

Asian margins lost some momentum despite tightening sentiment fueled by the peak of the refinery maintenance season in the region, as losses in the gasoline and gasoil crack spreads outweighed positive performances seen in naphtha and fuel oil.

Graph 6.1: Refinery margins, 2014-2015



Despite healthy domestic gasoline demand and export opportunities, **US** product markets continued weakening during October due to pressure coming from high inventories amid expectations of weakness in gasoline demand in the coming weeks. At the middle of the barrel, inventories remaining above the five-year average level continued to exert pressure on the market, along with expectations of a mild winter and high heating fuel inventories.

The loss suffered across the product barrel caused refinery margins to continue falling, and on the USGC, the refinery margin for WTI crude lost $1.6 to average around $3/b in October. Meanwhile, the margins for Light Louisiana Sweet (LLS) crude averaged $7.2/b in October, gaining 40¢, as the developments seen in the LLS crude price allowed this slight recovery in the margin level.

Product markets in **Europe** continued weakening during October, due to pressure coming from the supply side with an increasing product overhang and higher inflows to the region, amid a lack of export opportunities, causing inventories to be on the high side and refinery margins to fall sharply. The refinery margin for Brent crude in Northwest Europe showed a sharp loss of more than $3 versus the previous month, to average $2.8/b in October, the lowest level seen during the current year.

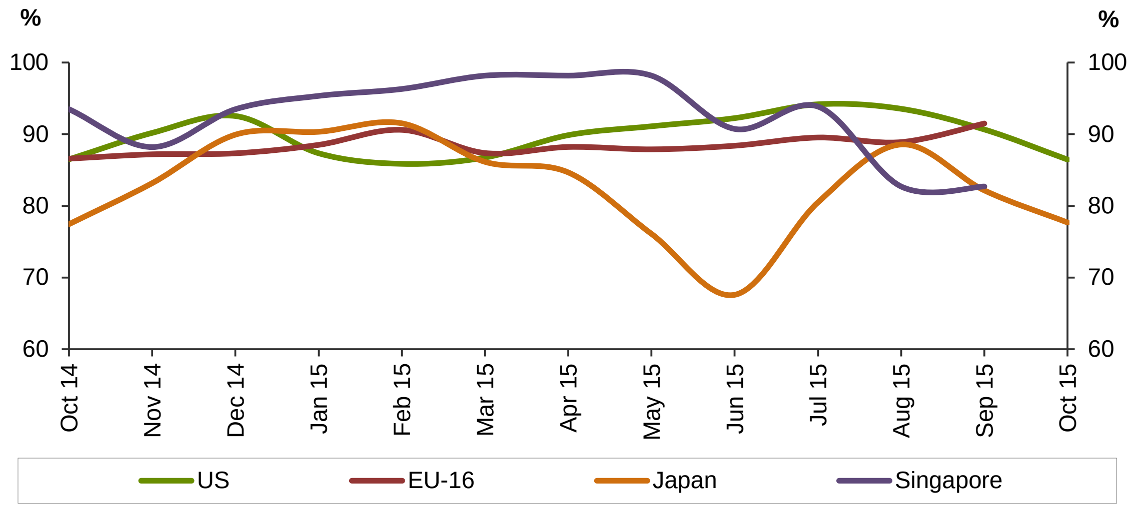
Asian product markets lost part of the ground recovered in the previous month due to losses seen in the gasoline and middle distillate crack spreads. Product margins avoided further losses with the tightening environment fuelled by the peak maintenance season in the region amid stronger demand reported from China and India. Refinery margins in Singapore dropped by more than $1 to average $4.7/b in October.

Refinery operations

Refinery utilization rates fell worldwide during last month due to the heavy maintenance season in several regions, bringing more than 8 mb/d of capacity offline during October.

Refinery utilization in the **US** averaged around 87% in October, corresponding to 15.5 mb/d, a level that is 700 tb/d lower than a month earlier. This decline was due to the heavy maintenance season, mainly in the USGC and the mid-continent. Lower refinery runs seen in the last months have led to a reduction of more than 20 mb of product inventories in the Atlantic Basin, however they remained above the five-year average level, thus exerting pressure on product markets.

Graph 6.2: Refinery utilization rates, 2014-2015



European refinery runs averaged around 91.5% of refining capacity in September, corresponding to a throughput of 10.7 mb/d, up by 80 tb/d from the previous month, and more than 700 tb/d higher than the same month a year ago. European refineries have continued increasing throughputs since the second quarter to hit the highest level seen in the last years in September. The weakening seen recently in the refinery margins could cause run cuts in the coming months.

Asian refinery utilization dropped during last month with refinery turnarounds in several countries, amid some unscheduled shutdowns, cutting around 2 mb/d of capacity. Refinery runs in Singapore for September averaged around 83%, a similar level to the previous month. Meanwhile, Japanese throughputs dropped to 78% of capacity in October, which is around 5 pp lower than in the previous month. With the end of autumn maintenance approaching in the region, refinery runs should be on the rise to catch up with the seasonal increase in demand in the coming months. However, some economic run cuts are expected, due to higher inventories impacting margins.

US market

US **gasoline** demand stood at around 9.2 mb/d in October, around 200 tb/d higher than the previous month and 60 tb/d higher than in the same month a year earlier.

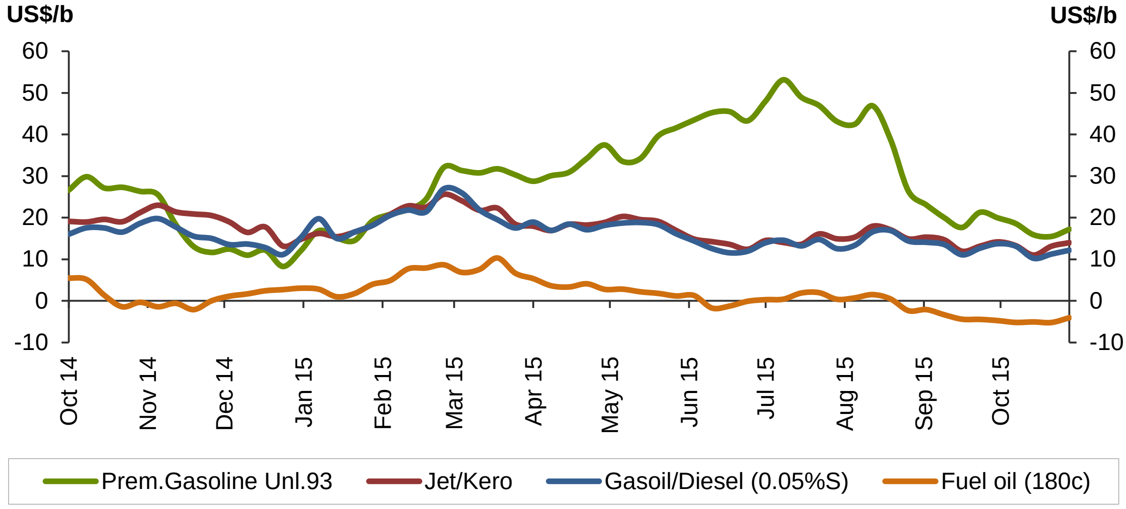
US gasoline demand remained stronger y-o-y, despite the end of the driving season. However, the gasoline crack spread continued losing ground as its downward trend started with the end of the summer driving season. During October, though, the losses decelerated as refinery maintenance peaked, providing a floor amid a drop of 7 mb in US gasoline inventories.

Another support factor limiting losses was the export opportunities to Asia as an uptick in aromatics and blending component exports has been on the rise in recent weeks, offsetting the lower exports seen to Latin America.

The gasoline crack spread lost around $3 versus the previous month's level to average $17/b in October.

Despite the temporary support from exports, the US gasoline market is expected to decline amid the winter weakness in gasoline demand approaching the end of the year.

Graph 6.3: US Gulf crack spread vs. WTI, 2014-2015



Middle distillate demand stood at around 3.9 mb/d in October, around 60 tb/d higher than in the previous month, however around 340 tb/d lower than in the same month a year earlier.

The middle distillate market continued to be pressured from the supply side, while the export levels to Europe have been reduced due to the overhang of middle distillates in Europe, which has increased due to imports of ULSD from Russia and the Middle East remaining on the high side, thus putting pressure on Atlantic Basin distillate cracks.

Middle distillate inventories have reversed the upward trend since the beginning of October, falling by around 11 mb during the month, however they remained above the five-year average level, thus keeping pressure on the market along with expectations of a mild winter and higher inventories of heating fuels.

On the other hand, heating oil demand remained thin during this month in the US East Coast (USEC) amid relatively mild temperatures, however some floating storage activity has been reported in the New York Harbor, as some traders plan to profit from the contango structure when winter demand picks up in the coming weeks.

The US Gulf Coast (USGC) gasoil crack lost almost $1 versus the previous month to average around $12 /b in October.

At the **bottom of the barrel**, the fuel oil market continued to weaken in October due to lower domestic demand amid increasing inflows into the region with VGO cargoes coming from Russia and Canada, while demand was impacted by lower fluid catalytic cracking (FCC) margins.

On the other hand, bunker activity in the Panama Canal has been under increased competition due to operational delays, as a result of maintenance work at the facility. The fuel oil crack on the USGC lost more than $1 in October.

European market

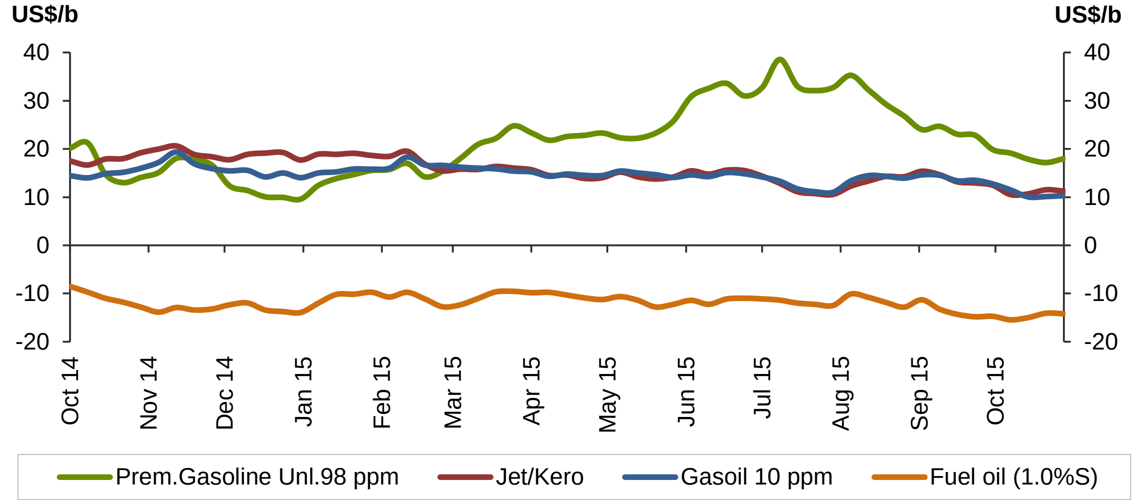
Product markets in Europe continued to weaken in October, due to the increasing product overhang, with higher inflows to the region amid a lack of export opportunities, which has caused inventories to be on the high side and refinery margins to fall.

The **gasoline** market continued losing ground during October due to pressure coming from the supply overhang across the Atlantic, which has reduced export opportunities for European refiners.

Gasoline imports on the USEC have been falling in the last two months, thus impacting gasoline exports from Europe. Another bearish factor has been the reduction seen in European exports to West Africa, which has been impacted by the ongoing subsidy repayment issue in Nigeria. The gasoline crack spread against Brent lost more than $5 to average around $18/b in October.

The light distillate naphtha crack continued its positive performance last month on the back of increasing demand for naphtha in the petrochemical sector with the end of the cracker maintenance season in Europe amid expectations of feedstock switching in the coming weeks once heating demand for propane kicks in.

Graph 6.4: Rotterdam crack spreads vs. Brent, 2014-2015



The **gasoil** market continued to be pressured by the supply side in Europe due to the growing overhang, with increasing inflows coming to the region, mainly from the Middle East and Russia. Meanwhile, demand has been thin in the last weeks.

Additional pressure came from bearish sentiment fuelled by the ARA hub inventories remaining at record-high levels, which has been boosted by the difficulties in shipping products to Central European consumers as a result of low water levels on the Rhine River.

The gasoil crack spread against Brent crude at Rotterdam lost around $3 versus the previous month to average around $11/b in October.

At the **bottom of the barrel**, the fuel oil market continued to be weak due to oversupply and lower domestic demand. In addition, export opportunities have been limited as slower US demand, amid higher freight rates, limited transatlantic shipments.

The Northwest European fuel oil crack lost around $1 versus the previous month's level to average around minus $14.7/b in October.

Losses were limited by some interest in the Mediterranean from hydrocracker feedstocks and some volumes seen exported to West Africa.

Asian market

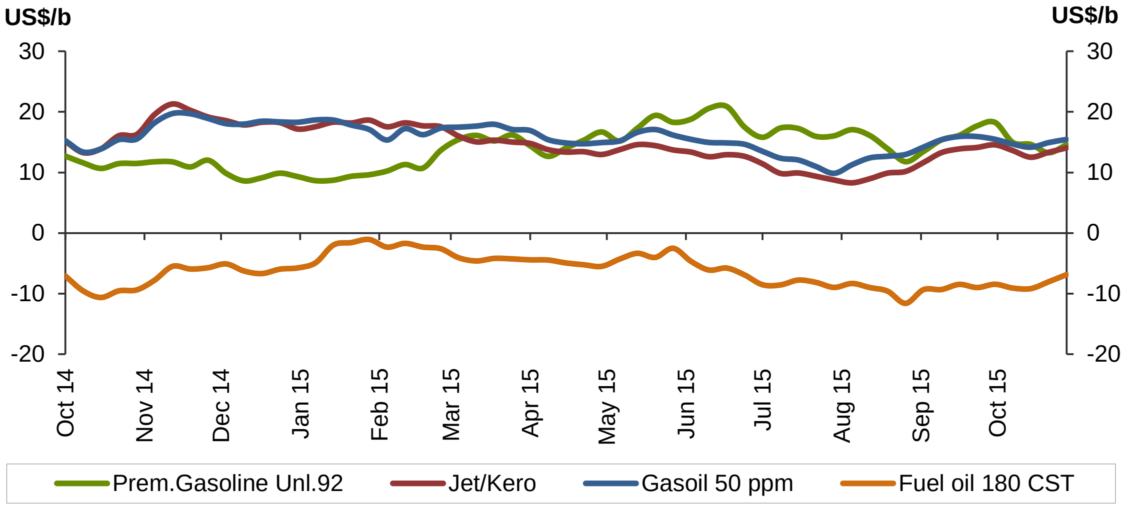
The Asian market lost some of the recovery seen in the previous month due to losses in the gasoline and middle distillate crack spreads. Product margins avoided further losses with the tightening environment fuelled by the peak maintenance season in the region.

Singapore's **gasoline** crack lost part of the ground recovered in the previous month due to some weakening in regional demand, mainly from the key importer Indonesia, where requirements have been falling with the startup of new refining facilities, cutting fuel import requirements by around 30% in this country.

Some support remained in the gasoline market as demand in several countries has been stronger, such as in India and China, amid high-octane blend stock requirements and tighter supplies. However, this is expected to ease in the coming month with the end of maintenance. The gasoline crack spread against Dubai crude in Singapore lost around $1.5 versus the previous month, to average $14.7/b in October.

The Singapore naphtha crack continued recovering ground in October, supported by stronger demand, despite the shutdown for maintenance of the Palau Bukom complex. Another supporting factor has been the decreasing inflows from the West.

Graph 6.5: Singapore crack spread vs. Dubai, 2014-2015



At the **middle of the barrel**, the gasoil market has generally continued the recovery seen in the previous month as the market continued to be supported by strong regional gasoil requirements, mainly from India, amid tightening sentiment, fuelled by the heavy maintenance season.

However, the gasoil cracks showed a slight drop due to high inventories and limited arbitrage to Europe, which exerted pressure on the market.

The gasoil crack spread in Singapore against Dubai lost around 80¢ versus the previous month to average around $14.8/b in October.

Despite the maintenance season approaching the end, some support is expected from a typical seasonal pickup in demand during the coming months, which should help to keep a more balanced market.

In the Asian **fuel oil** market, some support came from the drop seen in Singapore's inventories, which had been showing continuing increases in previous months to reach record levels. Additional support came from stronger demand reported from China and South Korea. The fuel oil crack spread in Singapore against Dubai recovered around 40¢ to average around minus $8.4/b in October.

Any additional uptick has been limited by weak fundamentals as increasing arbitrage inflows are expected from the West in coming weeks, while bunker demand in the Singapore trading hub is slowing.

Table 6.1: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				*Refinery utilization, %*			
	Aug 15	Sep 15	Oct 15	*Change* Oct/Sep	Aug 15	Sep 15	Oct 15	*Change* Oct/Sep
US	16.71	16.20	15.45	-0.75	93.55	90.66	86.46	-4.20
France	1.05	-	-	-	69.48	-	-	-
Germany	1.86	-	-	-	82.77	-	-	-
Italy	1.35	-	-	-	65.74	-	-	-
UK	1.15	-	-	-	87.53	-	-	-
Euro-16	10.62	10.70	-	-	88.90	91.50	-	-
Japan	3.50	3.24	3.07	-0.18	88.57	82.16	77.68	-4.48

Sources: OPEC statistics, Argus, Euroilstock inventory report, IEA, EIA/DoE, METI and PAJ.

Table 6.2: Refined product prices, US$/b

		Sep 15	Oct 15	Change Oct/Sep	Year-to-date 2014	Year-to-date 2015
US Gulf (Cargoes FOB):						
Naphtha*		52.10	52.62	0.51	107.28	61.31
Premium gasoline	*(unleaded 93)*	65.82	63.27	-2.55	126.04	81.61
Regular gasoline	*(unleaded 87)*	57.62	55.00	-2.62	114.72	70.87
Jet/Kerosene		59.14	59.28	0.14	119.09	67.30
Gasoil	*(0.2% S)*	58.30	58.24	-0.05	116.87	66.71
Fuel oil	*(1.0% S)*	34.90	35.14	0.24	95.89	45.95
Fuel oil	*(3.0% S)*	34.49	34.64	0.15	87.81	43.43
Rotterdam (Barges FoB):						
Naphtha		45.30	47.36	2.07	98.40	52.09
Premium gasoline	*(unleaded 98)*	70.72	66.73	-3.99	121.02	78.24
Jet/Kerosene		61.35	59.68	-1.66	120.21	69.19
Gasoil/Diesel	*(10 ppm)*	61.41	59.23	-2.19	117.92	68.82
Fuel oil	*(1.0% S)*	33.88	33.89	0.02	92.85	42.80
Fuel oil	*(3.5% S)*	34.41	34.43	0.02	88.75	43.45
Mediterranean (Cargoes FOB):						
Naphtha		43.00	45.25	2.25	96.07	49.19
Premium gasoline**		63.02	58.98	-4.05	116.73	72.18
Jet/Kerosene		59.18	57.65	-1.53	117.62	66.48
Gasoil/Diesel**		63.34	61.26	-2.08	118.62	70.63
Fuel oil	*(1.0% S)*	34.49	36.20	1.71	93.80	44.47
Fuel oil	*(3.5% S)*	34.26	34.97	0.72	88.62	43.32
Singapore (Cargoes FOB):						
Naphtha		46.81	48.92	2.12	100.35	53.72
Premium gasoline	*(unleaded 95)*	65.24	63.39	-1.84	116.83	71.59
Regular gasoline	*(unleaded 92)*	61.59	60.55	-1.04	113.95	68.43
Jet/Kerosene		58.99	59.28	0.28	117.45	67.21
Gasoil/Diesel	*(50 ppm)*	60.94	60.65	-0.30	119.04	68.73
Fuel oil	*(180 cst 2.0% S)*	37.37	38.32	0.95	93.08	48.63
Fuel oil	*(380 cst 3.5% S)*	36.58	36.99	0.41	91.38	46.88

** Barges.*
*** Cost, insurance and freight (CIF).*
Sources: Platts and Argus Media.

Tanker Market

In October, tanker spot freight rates for dirty vessels showed a remarkable gain – mainly in the VLCC sector – which drove the increase in the market and created a spillover effect for other classes as well. Rates for VLCC fixtures in October reached multi-year high levels with daily earnings approaching $100,000 on some days. Strong tonnage demand and a highly active market supported freight rates in all areas.

Suezmax and Aframax rates encountered gains in October on the back of port delays and increased transit times at Turkish straits. On average, VLCC, Suezmax and Aframax freight rates were up by 37%, 12% and 14%, respectively, from the month before. Clean tanker market activity remained limited in October with spot freight rates showing declines for the third consecutive month in October. Clean tanker freight rates showed declines in both the east and west of Suez, down by 20% and 7%, respectively, on a monthly comparison. The negative trend was mostly seen affecting long-range and medium-range classes as the surplus of tonnage continued while market activity remained insufficient to absorb the vessels' availability.

Spot fixtures

In October, **OPEC spot fixtures** increased by 3.5% from the previous month to average 11.35 mb/d, according to preliminary data. The increase came on the back of higher spot fixtures from the Middle East-to-East and Middle East-to-West routes, which rose by 5.6% and 10%, respectively, from a month before, while fixtures outside the Middle East dropped by 0.14 mb/d in October to average 3.30 mb/d.

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

	Aug 15	Sep 15	Oct 15	*Change* Oct 15/Sep 15
Spot Chartering				
All areas	16.67	15.73	15.59	-0.14
OPEC	12.20	10.96	11.35	0.39
Middle East/East	5.74	5.13	5.42	0.29
Middle East/West	2.77	2.39	2.63	0.24
Outside Middle East	3.69	3.44	3.30	-0.14
Sailings				
OPEC	24.12	23.61	23.90	0.29
Middle East	17.50	17.02	17.29	0.27
Arrivals				
North America	9.95	9.93	9.77	-0.16
Europe	12.40	12.31	12.67	0.36
Far East	8.66	8.37	8.29	-0.08
West Asia	4.65	4.85	4.82	-0.03

Sources: Oil Movements and Lloyd's Marine Intelligence Unit.

Sailings and arrivals

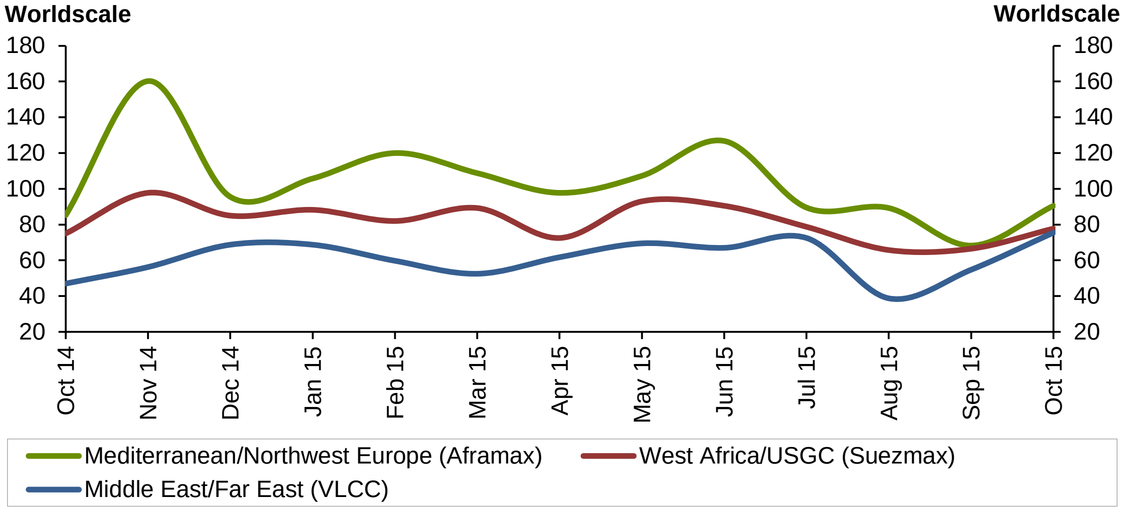
OPEC sailings increased by 0.29 mb/d or 1.2% in October to stand at 23.9 mb/d, supported by an increase in Middle East sailings, which rose by 0.27 mb/d or 1.6% over the previous month to average 17.29 mb/d. Crude oil arrivals were lower in October in most regions. Arrivals at North American, Far Eastern and West Asian ports declined by 1.6%, 0.9% and 0.7%, respectively, compared with the previous month, while arrivals in Europe rose by 2.9%.

Spot freight rates

VLCC

In the dirty market, VLCC spot freight rates climbed dramatically with daily earnings surging to multi-year highs. A thinner tonnage list on the back of continuous port delays and uncertain loading schedules led to firm VLCC rates on all routes. On average, VLCC spot freight rates gained 37% in October compared with a month before to stand at WS65 points. VLCC Middle East-to-East spot freight rates went up by 38% in October to stand at WS76 points, followed by freight rates registered for tankers trading on the West Africa-to-East route, which rose by 32% to average WS74 points as the tanker market in West Africa followed the movement of the Middle East market. The market in West Africa was active with a high number of fixtures as tonnage demand remained strong. VLCC spot freight rates on the Middle East-to-West route showed the highest gains in October percentage-wise, increasing by WS13 points to average WS46 points. October ended with a higher number of fixtures from the previous months.

Graph 7.1: Monthly averages of crude oil spot freight rates



Nevertheless, freight rates did encounter a relative drop when November requirements came as tonnage demand slowed and was much lower than in the month of October. However, constant port delays continued to support freight rates in addition to the anticipation of seasonal tonnage demand as the winter months approach. Moreover, daily earnings remained at comfortable levels despite being much lower than the peaks reached in October.

Suezmax

Suezmax spot freight rates also showed gains in the dirty market, though at a lower level than in the VLCC sector, as they rose by 12% on average in October compared with the previous month to average WS68 points. Suezmax freight rates increased on the back of high activity and a strong market in West Africa and the Middle East. Additionally, a spill-over affect from the VLCC's surging rates supported Suezmax demand on a part-cargo basis, as well as ullage delays and tighter tonnage supply as a result of higher demand in several areas. Different markets reported higher activity and lower tonnage availability, including the Black Sea and Caribbean regions. Freight rate gains were terminated by the end of the month as the tonnage market came into balance.

Consequently, spot freight rates for tankers operating on the West Africa-to-US route increased by 17% in October to stand at WS78 points, and rates on the Northwest Europe-to-US route gained 6% to stand at WS59 points.

Table 7.2: Spot tanker crude freight rates, Worldscale

	Size				Change
	1,000 DWT	Aug 15	Sep 15	Oct 15	Oct 15/Sep 15
Crude					
Middle East/East	230-280	39	55	76	21
Middle East/West	270-285	26	33	46	14
West Africa/East	260	47	56	74	18
West Africa/US Gulf Coast	130-135	66	67	78	11
Northwest Europe/US Gulf Coast	130-135	50	55	59	4
Indonesia/East	80-85	97	97	95	-2
Caribbean/US East Coast	80-85	90	110	114	4
Mediterranean/Mediterranean	80-85	94	73	96	22
Mediterranean/Northwest Europe	80-85	89	68	91	22

Sources: Galbraith's tanker market report and Platts.

Aframax

Average Aframax spot freight rates also showed increases as seen in other dirty segment vessels. Spot freight rates for Aframax operating on the Caribbean-to-US route registered minor increases from last month as they stood at WS114 points. The minor increases came as a result of slow market movement and a built in tonnage. Spot freight rates in the North Sea and the Baltics fluctuated in October as they experienced healthy increases at the beginning of the month; however, the positive momentum did not last long as the activities waned despite some upward movement, which came at the end of the month as increased activities for fuel loading accrued.

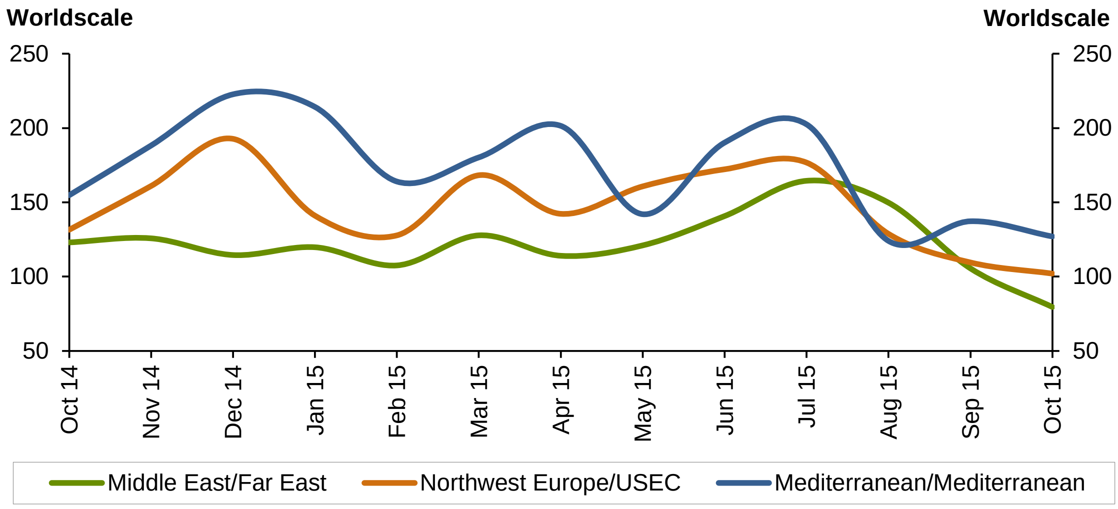
Spot freight rates on the Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe routes were the main contributors to the average rate increases as both routes reflected higher rates by 30% and 33%, respectively, from the previous month to stand at WS94 points and WS89 points. Gains in that area were driven by tight availability in the Black Sea and increased delays in the Turkish Straits. Compared with one month earlier, the positive trend did not impact freight rates on the Indonesia-to-East route, which declined slightly from a month before as they averaged WS95 points.

On average, Aframax spot freight rates gained 14% in October compared with the previous month, however, they still remain flat from last year's level.

Clean spot freight rates

On the contrary to the dirty tanker performance, clean tanker spot freight rates dropped on all reported routes in October. On average, clean freight rates went down by 12% in October compared with the previous month, registering its third monthly drop in a row.

Graph 7.2: Monthly average of clean spot freight rates



Low freight rates in the clean tanker market softened further in October in both directions from Suez. On the East-of-Suez route, market activity was slow for most classes in the clean tanker segment. Access tonnage, mainly in the LR-1 and MR sizes, and a very limited requirement drove the decline. Spot freight rates for tankers operating on the Middle East-to-East route dropped by WS26 points from the previous month. Similarly, freight rates on the Singapore-to-East route declined by WS16 points from one month earlier to average WS121 points in October. On the West-of-Suez route, rates experienced similar drops as the tonnage market in the Mediterranean continued to be quiet. Clean spot freight rates on the Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe routes dropped by 8% and 7%, respectively, in October. Rates for tanker trading on Northwest Europe-to-US East Coast averaged WS102 points, down by 7% from a month before.

Table 7.3: Spot tanker product freight rates, Worldscale

	Size *1,000 DWT*	**Aug 15**	**Sep 15**	**Oct 15**	***Change*** **Oct 15/Sep 15**
Products					
Middle East/East	30-35	150	106	80	-26
Singapore/East	30-35	167	145	121	-24
Northwest Europe/US East Coast	33-37	129	110	102	-8
Mediterranean/Mediterranean	30-35	124	137	127	-10
Mediterranean/Northwest Europe	30-35	134	147	137	-10

Sources: Galbraith's tanker market report and Platts.

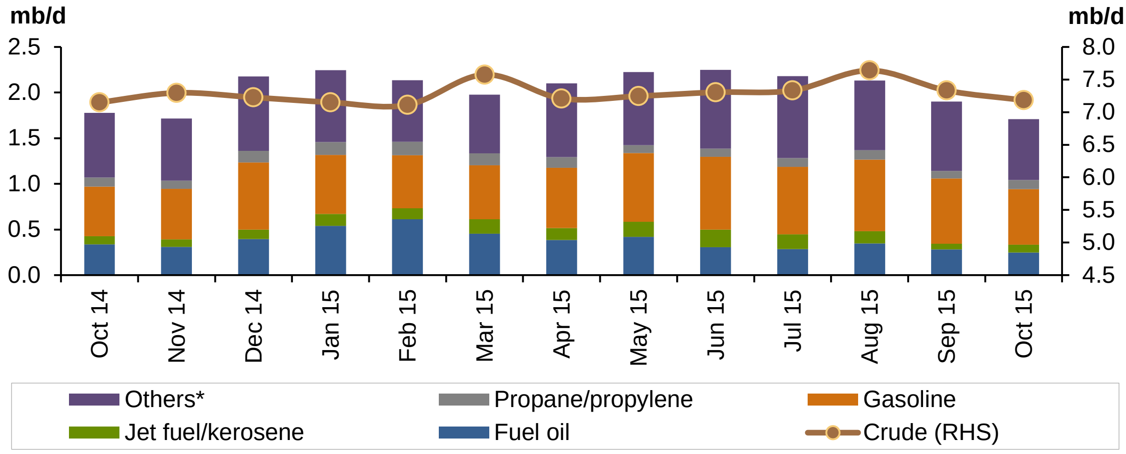
Oil Trade

In October, preliminary data shows that US crude oil imports declined from a month before to average 7.2 mb/d, down by 149 tb/d while still gaining 34 tb/d compared with the same month a year earlier. On the other hand, US product monthly imports dropped from the previous month's level to average 1.7 md/d, the lowest level seen since November 2014. On an annual comparison, they dropped by 69 tb/d or 4%. Japan's crude oil imports declined in September by 231 tb/d or 7% to average 3.3 mb/d. Y-o-y, crude imports showed a smaller decline of only 77 tb/d or 2%. Japan's product imports increased in September by 84 tb/d to average 671 tb/d, reflecting a gain of 14% m-o-m and 19% y-o-y. China's crude imports averaged 6.8 mb/d in September, up by 9% from the previous month and 1% from the previous year. China's product imports went up by 126 tb/d from a month ago, increasing by 272 tb/d from last year. In September, India's crude imports dropped from last month to average 3.8 mb/d. Y-o-y, crude imports reflected a decline of 84 tb/d or 2%. Product imports in September declined as well by 103 tb/d from the previous month to average 611 tb/d, the lowest level seen since April 2015.

US

In October, preliminary data shows that **US crude oil imports** dropped to average 7.2 mb/d, down by 149 tb/d from last month, while still gaining 34 tb/d compared with the same month last year. Y-t-d, US crude imports in October were 53 tb/d lower.

Graph 8.1: US imports of crude and petroleum products



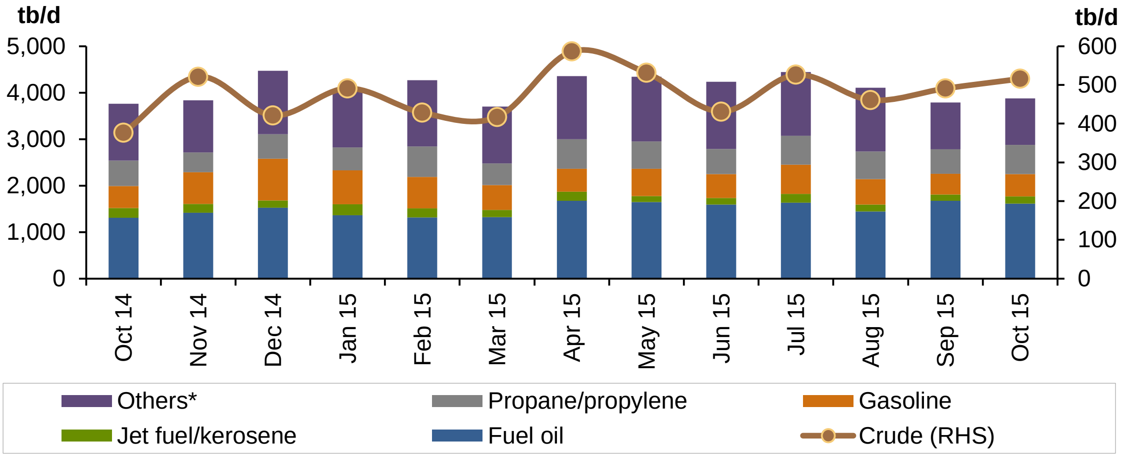
**Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.*

US monthly **product imports** dropped slightly from last month to settle at 1.7 mb/d, the lowest level seen since November 2014. On an annual comparison, they dropped by 69 tb/d or 4%. Y-t-d, product imports were up by 198 tb/d.

US **product exports** in October were 140 tb/d higher than a month ago to average 3.9 mb/d. On an annual comparison, product exports increased by 117 tb/d or 3% over the previous year.

As a result, **US total net imports dropped by 453 tb/d in October to average 4.5 mb/d.**

Graph 8.2: US exports of crude and petroleum products



**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.*

In August, the **top first and second suppliers** to the US maintained the same order as seen last month. Canada remained the premier crude supplier to the US, accounting for 45% of total US crude imports, yet its exports to the US were up from the month before by 381 tb/d from a month ago. Saudi Arabia was again the second largest supplier to the US in August, although its exports to the US were down by 168 tb/d. Venezuela came in as the third top supplier, accounting for 11% of total US crude imports, an increase of 71 tb/d from a month before.

Crude imports from OPEC Member Countries went down in August from last month, dropping by 210 tb/d or 8% and accounting for 33% of total US crude imports. On the other hand, US product imports from OPEC Member Countries were up by 65 tb/d or 36% from last month. As for the product supplier share, Canada and Russia maintained their positions as first and second suppliers to the US, accounting for 24% and 16%, respectively.

In August 2015, **US crude imports from North America** averaged 3.4 mb/d, maintaining the premier supplier position to the US as seen earlier, followed by Latin America, which exported 2.5 mb/d to the US. Imports from the Middle East and Africa declined from last month. The Middle East came in as the third region with an average of 1.2 mb/d, while imports from Africa were down from last month to average 250 tb/d.

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

	Aug 15	Sep 15	Oct 15	*Change* Oct 15/Sep 15
Crude oil	7,177	6,840	6,666	-174
Total products	-1,973	-1,889	-2,168	-279
Total crude and products	**5,204**	**4,951**	**4,498**	**-453**

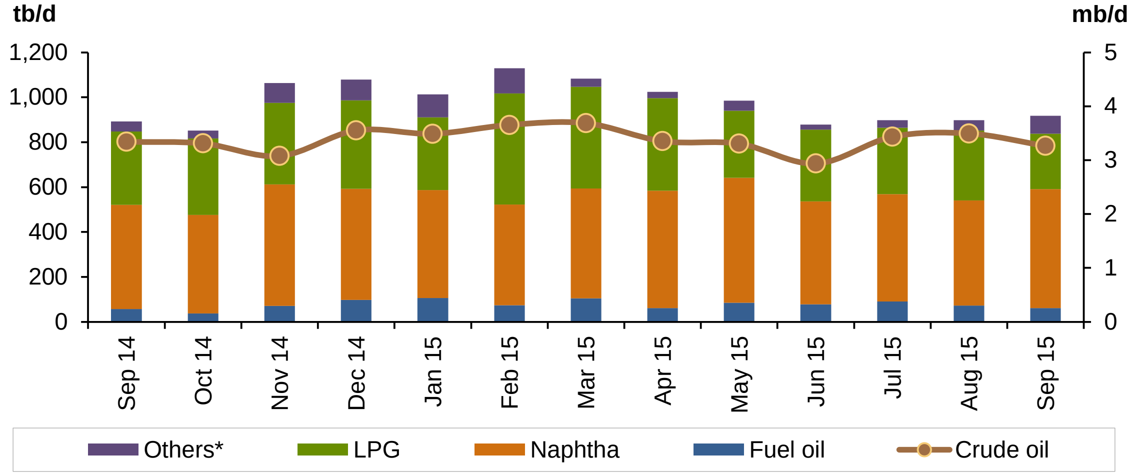
Japan

Japan's crude oil imports declined in September by 231 tb/d or 7% to average 3.3 mb/d, while y-o-y, they declined by only 77 tb/d or 2%.

As for the **suppliers' share**, as seen previously, Saudi Arabia, UAE and Qatar were the top suppliers to Japan in September. Saudi Arabia was again the premier crude supplier to Japan, holding a share of 34% of total crude exports. UAE came in as the second largest supplier with a share of 25% of total crude exports, while Qatar held the third position in September with a share of 9%. Imports from all three top countries declined in September from the month before by 79 tb/d, 49 tb/d and 64 tb/d, respectively.

On the other hand, **product imports** increased in September by 84 tb/d to average 671 tb/d, reflecting a gain of 14% m-o-m and 19% y-o-y. Japan's domestic oil product sales rose by 3.7% in September from a year before.

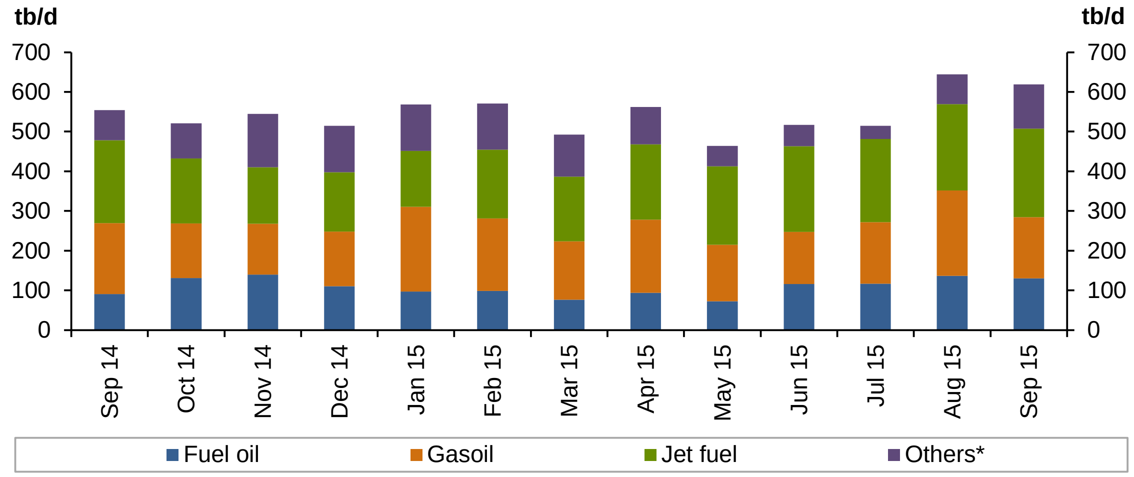
Graph 8.3: Japan's imports of crude and petroleum products



**Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.*

Japan's exports in September were slightly lower than a month before, averaging 628 tb/d, down by 23 tb/d or 4% m-o-m. Y-o-y, the figure shows a gain of 65 tb/d or 12%.

Graph 8.4: Japan's exports of petroleum products



**Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax.*

Accordingly, **Japan's net imports dropped in September by 123 tb/d to average 3.3 mb/d**, down by 4% m-o-m and 1% y-o-y.

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

	Jul 15	Aug 15	Sep 15	*Change* Sep 15/Aug 15
Crude oil	3,434	3,494	3,263	-231
Total products	86	-56	52	109
Total crude and products	**3,521**	**3,438**	**3,315**	**-123**

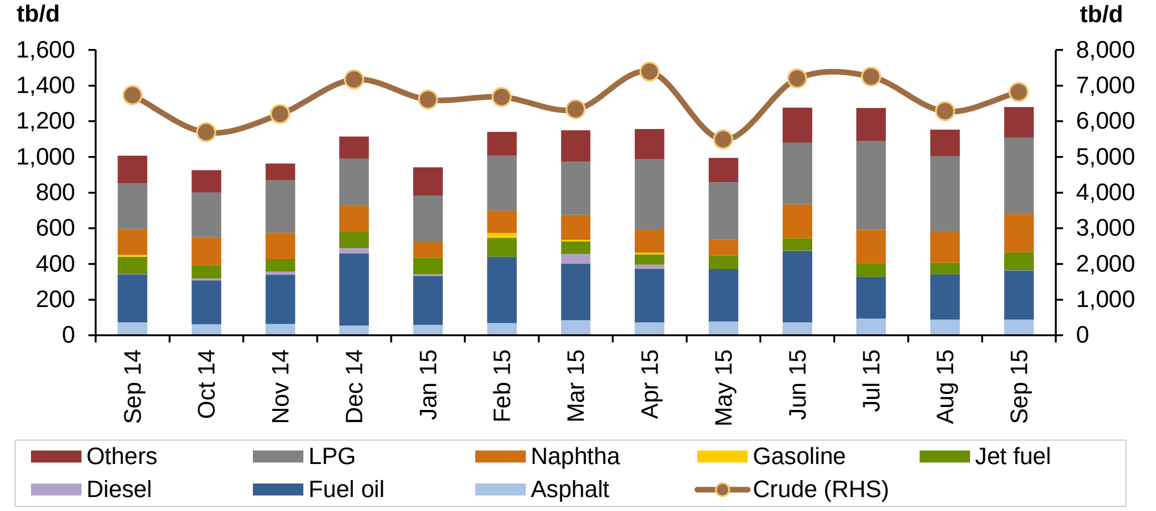
China

China's crude imports increased in September by 540 tb/d following the decline of the previous month to average 6.8 mb/d, up by 9% from the month before and 1% from a year ago. Stocks were also seen increasing. Y-t-d, the figures reflect an increase of 553 tb/d or 9%.

Looking at the **crude oil supplier's share**, Russia, Saudi Arabia and Oman were the top suppliers to China in September, accounting for 15%, 14% and 11%, respectively. Crude imports from the three top suppliers increased from last month by 257 tb/d, 42 tb/d and 163 tb/d, respectively.

China's **product imports** increased by 126 tb/d from a month ago and by 272 tb/d from last year, averaging 1.3 mb/d in September.

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



China's crude exports in September dropped by 40 tb/d to average 12 tb/d, while its **product exports** rose by 142 tb/d or 17% from last month and 334 tb/d from the year before. As a result, **China's net oil imports increased by 564 tb/d from the previous month**, yet remained stable from the same month a year before.

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

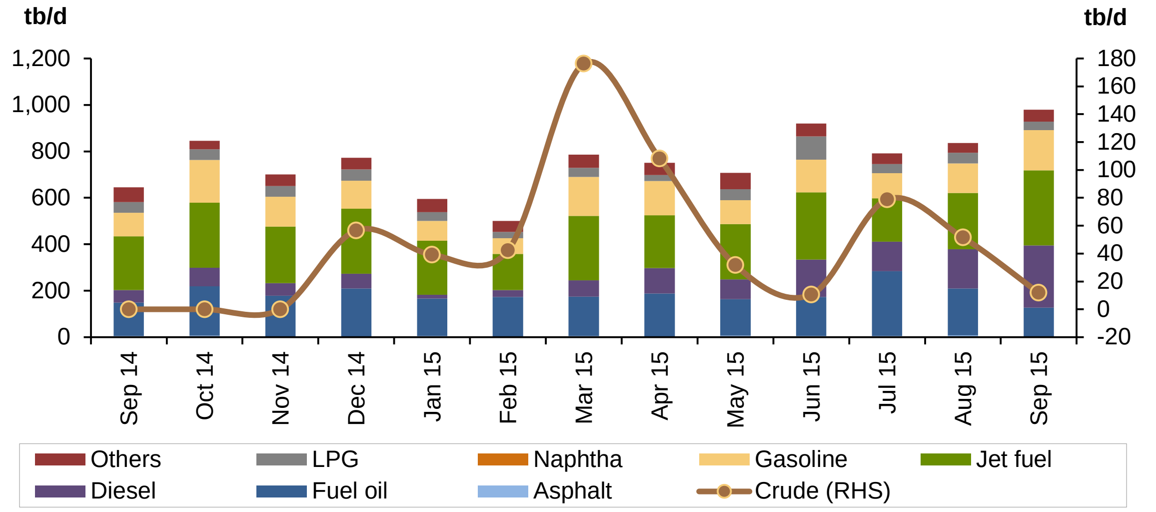


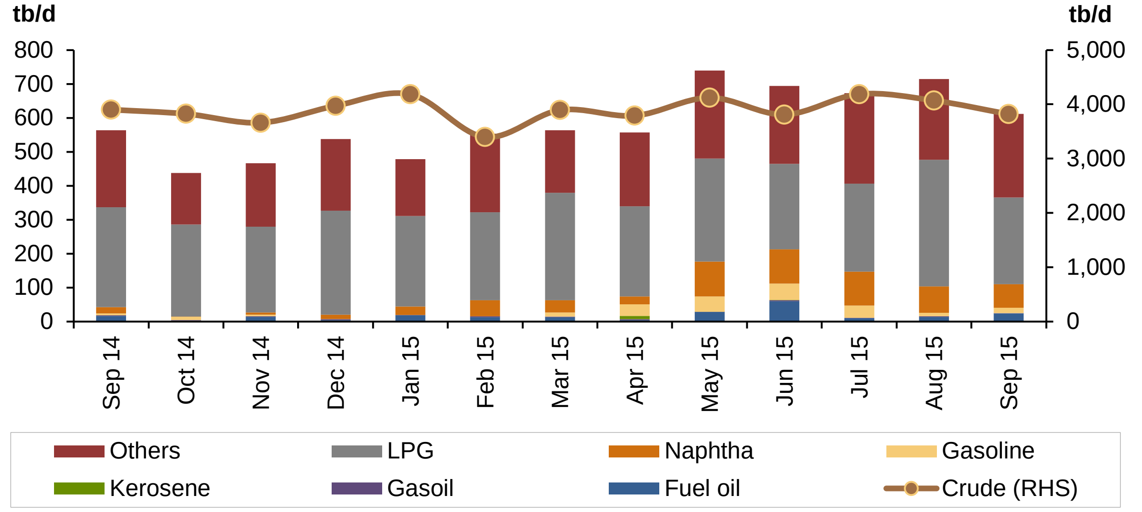
Table 8.3: China's crude and product net imports, tb/d

	Jul 15	Aug 15	Sep 15	*Change* Sep 15/Aug 15
Crude oil	7,173	6,228	6,808	580
Total products	483	317	301	-16
Total crude and products	**7,655**	**6,545**	**7,109**	**564**

India

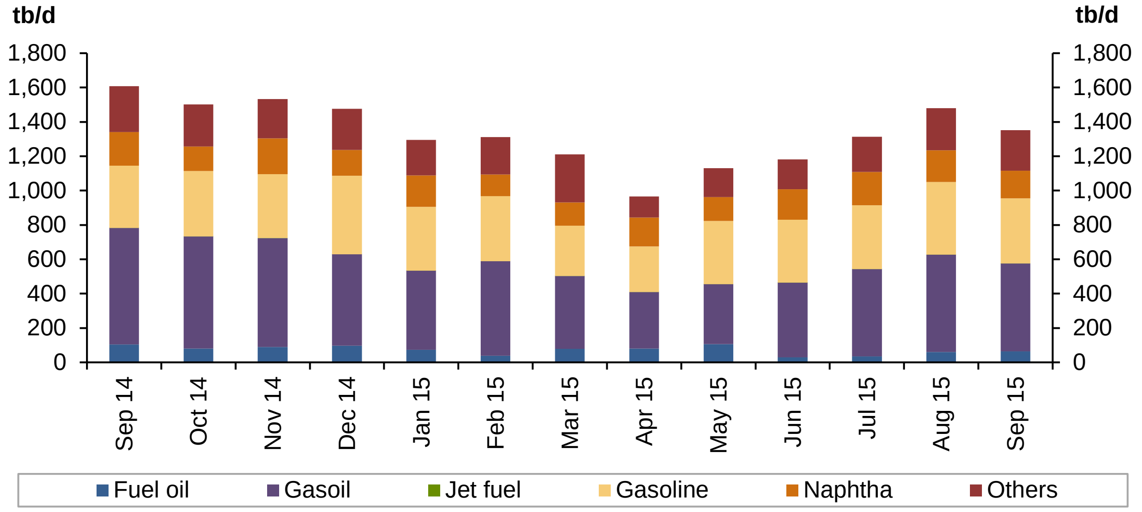
In September, **India's crude imports** dropped from last month to average 3.8 mb/d, while y-o-y, they declined by 84 tb/d or 2%. **Product imports** in September declined as well by 103 tb/d from the previous month to average 611 tb/d, the lowest level since April 2015, while y-o-y, they grew by 47 tb/d. Monthly product imports were mainly lower in LPG, which dropped by 117 tb/d or 32% from a month ago.

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



India's product exports dropped in September by 127 tb/d or 9% to average 1.4 mb/d, while y-o-y, they were lower than last year by 256 tb/d or 16%. India's monthly product exports were lower in almost all categories, except for fuel oil exports, which increased by 3 tb/d from last month.

Graph 8.8: India's exports of petroleum products



Consequentially, **India's net imports declined by 228 tb/d to average 3.1 mb/d**, down by 7% m-o-m, yet higher by 220 tb/d or 8% y-o-y.

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

	Jul 15	Aug 15	Sep 15	*Change* Sep 15/Aug 15
Crude oil	4,187	4,070	3,818	-252
Total products	-641	-764	-740	24
Total crude and products	**3,546**	**3,305**	**3,077**	**-228**

Note: India data table does not include information for crude import and product export by Reliance Industries.

FSU

In September, **total crude oil exports** from the Former Soviet Union (FSU) dropped by 520 tb/d or 9% to average 5.4 mb/d, while Russian crude exports increased by 335 tb/d or 9% to average 4.2 mb/d.

Total shipments from the **Black Sea** increased slightly, with shipments from Novorossiysk increasing by 5 tb/d or 1% to average 590 tb/d. Total **Baltic Sea** exports increased by 256 tb/d in September as shipments from both the Primorsk port terminal and the Ust Luga port terminal rose by 143 tb/d and 113 tb/d, respectively. The **Druzhba pipeline's** total shipment increased by 48 tb/d to average 1.1 mb/d.

Exports through the **Lukoil system** increased from the previous month in the **Barents Sea** where the Varandey offshore platform showed an increase of 22 tb/d, while in the **Baltic Sea**, the Kalinigrad port terminal increased by 5 tb/d.

Other routes showed mixed results in September from last month. **Russia's Far East** total exports were up by 8 tb/d or 3% from the previous month as the result of a drop in exports from the Aniva Bay port terminal by 22 tb/d and an increase from the Kastri port terminal by 30 tb/d from a month before, settling at averages of 87 tb/d and 216 tb/d, respectively. **Central Asia's** total exports stood at 259 tb/d, up by 63 tb/d.

FSU's total product exports showed almost no changes from the previous month as they averaged 2.9 mb/d. Despite stable average volumes, product exports declined in most product categories with the exception of naphtha and VGO, which increased from last month by 97 tb/d and 58 tb/d, respectively.

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

Transneft system			**2013**	**1Q 15**	**2Q 15**	**Aug 15**	**Sep 15**
	Europe	**Black Sea total**	**739**	**702**	**561**	**586**	**590**
		Novorossiysk port terminal - total	739	702	561	586	590
		of which: Russian oil	535	505	421	459	402
		Others	204	198	139	127	188
		Baltic Sea total	**1,546**	**1,444**	**1,427**	**1,288**	**1,545**
		Primorsk port terminal - total	1,083	879	917	797	940
		of which: Russian oil	1,007	879	724	797	940
		Others	76	0	193	0	0
		Ust-Luga port terminal - total	463	564	510	492	605
		of which: Russian oil	342	356	367	351	411
		Others	121	208	143	141	193
		Druzhba pipeline total	**1,032**	**1,071**	**1,078**	**1,044**	**1,091**
		of which: Russian oil	1,000	1,039	1,045	1,013	1,058
		Others	32	32	32	31	33
	Asia	**Pacific ocean total**	**434**	**605**	**637**	**552**	**598**
		Kozmino port terminal - total	434	605	637	552	598
		China (via ESPO Pipeline) total	**321**	**309**	**315**	**345**	**325**
		China Amur	321	309	315	345	325
	Total Russian crude exports		**4,071**	**4,131**	**4,018**	**3,815**	**4,150**
Lukoil system			**2013**	**1Q 15**	**2Q 15**	**Aug 15**	**Sep 15**
	Europe and North America	**Barents Sea Total**	**111**	**134**	**138**	**135**	**157**
		Varandey offshore platform	111	134	138	135	157
	Europe	**Baltic Sea Total**	**19**	**18**	**14**	**15**	**19**
		Kalinigrad port terminal	19	18	14	15	19
Other routes			**2013**	**1Q 15**	**2Q 15**	**Aug 15**	**Sep 15**
	Asia	**Russian Far East total**	**259**	**309**	**324**	**296**	**303**
		Aniva bay port terminal	114	109	111	110	87
		De Kastri port terminal	145	200	213	186	216
		Central Asia total	**239**	**252**	**232**	**196**	**259**
		Kenkiyak-Alashankou	239	252	232	196	259
	Europe	**Black sea total**	**853**	**1,118**	**993**	**879**	**336**
		Novorossiysk port terminal (CPC)	704	986	903	784	259
		Supsa port terminal	76	91	69	84	71
		Batumi port terminal	53	41	20	11	6
		Kulevi port terminal	20	0	0	0	0
		Mediterranean sea total	**641**	**638**	**606**	**552**	**142**
		BTC	641	638	606	552	142
Russian rail			**2013**	**1Q 15**	**2Q 15**	**Aug 15**	**Sep 15**
		Russian rail	**198**	**18**	**16**	**12**	**12**
		of which: Russian oil	9	*8*	*7*	*7*	*8*
		Others	189	9	8	5	4
	Total FSU crude exports		**6,392**	**6,618**	**6,342**	**5,899**	**5,379**
Products			**2013**	**1Q 15**	**2Q 15**	**Aug 15**	**Sep 15**
		Gasoline	122	162	200	101	79
		Naphtha	390	567	476	416	513
		Jet	11	28	37	28	13
		Gasoil	857	1,229	1,061	880	838
		Fuel oil	1,415	1,507	1,475	1,268	1,201
		VGO	263	231	250	212	270
	Total FSU product exports		**3,058**	**3,724**	**3,499**	**2,905**	**2,914**
Total FSU oil exports			**9,450**	**10,342**	**9,841**	**8,804**	**8,293**

Sources: Argus Nefte Transport and Argus Global Markets.

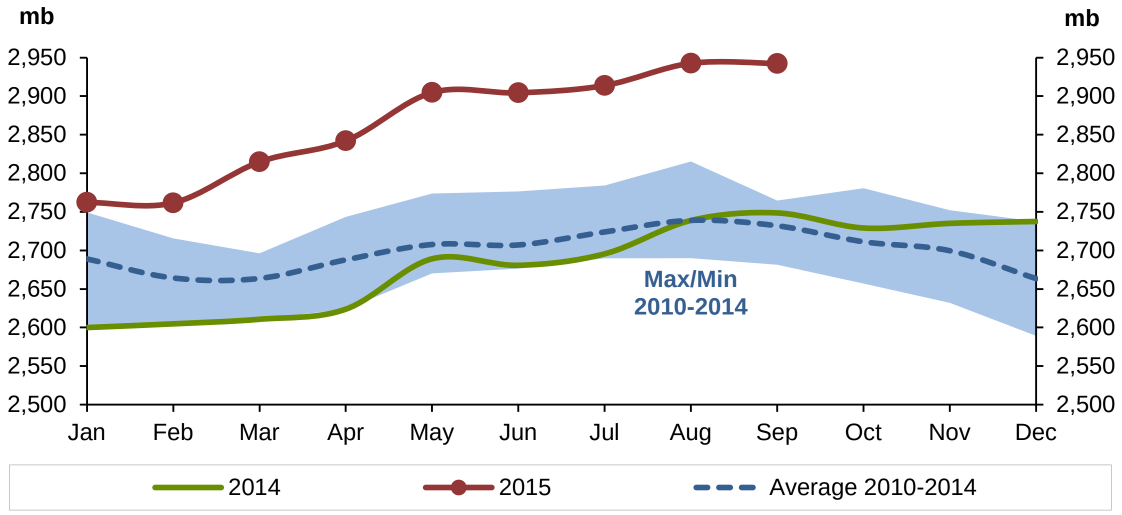
Stock Movements

OECD commercial oil stocks fell slightly in September to stand at 2,942 mb, around 210 mb higher than the latest five-year average. Crude and products indicated a surplus of around 170 mb and 40 mb, respectively, above the seasonal norm. OECD commercial stocks stood at 63.0 days of forward cover, 4.5 days higher than the latest five-year average. Preliminary data for October shows that total commercial oil stocks in the US rose slightly by 1.1 mb, to stand at 1,303 mb. At this level, inventories were 190 mb higher than the latest five-year average. Within the components, crude rose by 24.9 mb, while products fell by 23.8 mb. The latest information for China showed a drop in total commercial oil inventories of 5.6 mb in September to stand at 401.8 mb. Within the components, commercial crude oil rose by 6.0 mb, while products fell by 11.6 mb.

OECD

The latest information for September shows that **total OECD commercial oil stocks** fell slightly by 0.4 mb, reversing a massive build of nearly 29 mb in August. At 2,942 mb, OECD commercial oil stocks were around 194 mb higher than the same time one year ago and 210 mb above the latest five-year average. Within the components, crude fell by 1.4 mb, while products rose by 1.0 mb. Higher refinery throughputs resulted in a build in product stocks, but had little impact on large crude inventories in OECD countries, especially the US.

Graph 9.1: OECD's commercial oil stocks



OECD commercial crude stocks fell to end September at 1,475 mb, which is 146 mb above the same time one year earlier and 170 mb higher than the latest five-year average. OECD Europe saw a drop, while OECD Asia Pacific experienced a build. OECD Americas also experienced a small build.

In contrast, **OECD product inventories** rose in September by 1.0 mb, following a build of 32 mb in August. At 1,461 mb, product inventories stood 50 mb higher than a year ago at the same time and nearly 40 mb above the seasonal norm.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.5 days in September from the previous month to stand at 63.0 days, or 3.8 days above the previous year in the same period and 4.5 days higher than the latest five-year average.

Within the regions, OECD Americas' days of forward cover was 5.8 days higher than the historical average to stand at 63.0 days in September. OECD Asia Pacific stood 3.9 days above the seasonal average to finish the month at 53.6 days. At the same time, OECD Europe indicated a surplus of 2.6 days above the seasonal norm, averaging 68.6 days in September.

Commercial stocks in **OECD Americas** rose by 5.3 mb in September, ending the month at 1,561 mb. At this level, they represented a surplus of 173.4 mb above the seasonal norm and around 145.7 mb above the same time one year ago. Within components, crude stocks remained almost unchanged, while product inventories rose by 5.2 mb.

At the end of September, **commercial crude oil stocks** in **OECD Americas** stood at 803 mb, which was 127.4 mb above the latest five-year average and 109.2 mb higher than the same time one year ago. In contrast, **product stocks** in **OECD Americas** rose by 5.2 mb to end September at 758 mb. At this level, they indicated a surplus of 36.5 mb above the same time one year ago, and were 46.0 mb higher than the seasonal norm. The build in product stocks came mainly from higher refinery output, despite the ongoing increase in US demand.

OECD Europe's commercial stocks declined by 7.3 mb in September to stand at 932 mb. This is 34.9 mb higher than the same time a year ago and 11.5 mb above the latest five-year average. Crude and product stocks fell by 2.1 mb and 5.2 mb, respectively.

OECD Europe's commercial crude stocks fell in September to stand at 402 mb, but they are still 17.4 mb above the same period a year earlier and 15.3 mb higher than the latest five-year average. Higher crude runs were behind the fall in crude oil inventories. **OECD Europe's commercial product stocks** also fell by 5.2 mb in September to end the month at 530 mb; this is 17.4 mb higher than a year ago at the same time, but 3.7 mb below the seasonal norm. This drop was mainly driven by higher demand in the region, especially for diesel products.

OECD Asia Pacific commercial oil stocks rose by 1.6 mb in September to end the month at 449 mb, which was 13.1 mb higher than a year ago and 25.4 mb above the five-year average. Within the components, crude and product stocks rose by 0.6 mb and 1.0 mb, respectively. Crude inventories ended the month of September at 270 mb, standing 17.0 mb higher than a year ago and 27.9 mb above the seasonal norm. OECD Asia Pacific's total product inventories ended September at 179 mb, indicating a deficit of 3.9 mb with a year ago, and 2.5 mb below the seasonal norm.

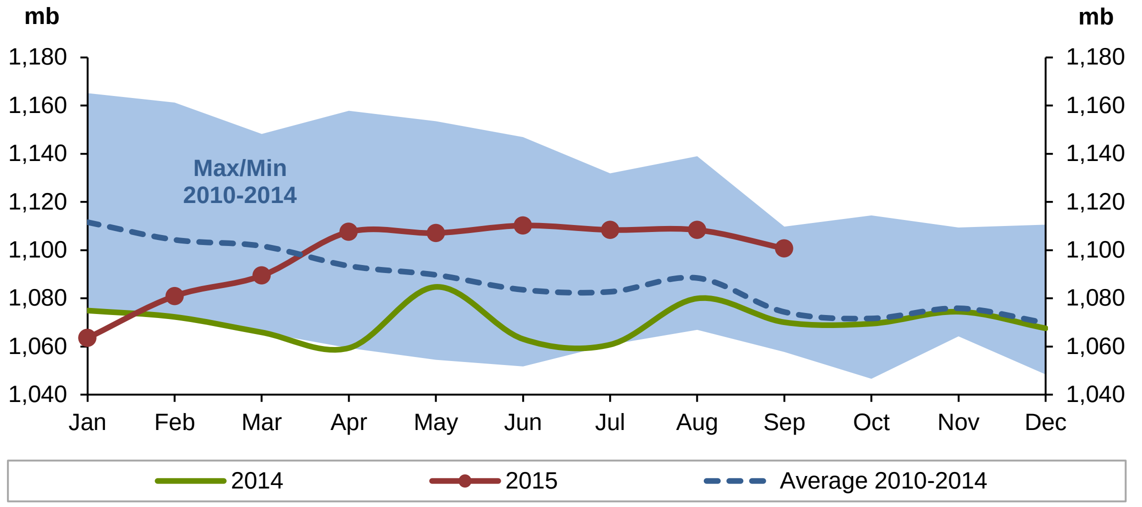
Table 9.1: OECD's commercial stocks, mb

	Jul 15	Aug 15	Sep 15	*Change* Sep 15/Aug 15	Sep 14
Crude oil	1,480	1,477	1,475	-1.4	1,332
Products	1,434	1,466	1,467	1.0	1,417
Total	**2,914**	**2,943**	**2,942**	**-0.4**	**2,749**
Days of forward cover	**63.0**	**63.5**	**63.0**	**-0.5**	**59.1**

EU plus Norway

Preliminary data for September shows that **total European stocks** fell by 7.7 mb to stand at 1,100.7 mb. At this level, they were 30.6 mb or 2.9% above the same time a year ago and 26.4 mb or 2.5% higher than the latest five-year average. Both crude and product stocks fell by 2.4 mb and 5.2 mb, respectively.

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



European crude inventories fell in September to stand at 483.4 mb, which was 14.6 mb or 3.1% above the same period a year ago and 28 mb or 6.1% higher than the seasonal norm. The fall in crude oil stocks was driven by higher refinery runs that hit 10.7 mb/d in September. This is about 80,000 b/d more than in August and around 700,000 b/d higher than a year ago.

European product stocks also fell by 5.2 mb in September to stand at 616.3 mb, which was 16.0 mb or 2.7% above the same time a year ago, but 1.7 mb or 0.3% below the seasonal norm. With the exception of gasoline, all products experienced a drop.

Gasoline stocks rose slightly by 0.2 mb in September to stand at 104.9 mb, which was 2.6 mb or 2.4% below a year earlier and 3.5 mb or 3.2% less than the seasonal norm. The increase in gasoline stocks was driven mainly by lower gasoline demand in the region, combined with higher gasoline output. In contrast, **distillate stocks** fell by 3.7 mb, ending September at 412.9 mb and reversing the build of 8.2 mb in August. Despite this stock draw, distillate stocks were 14.4 mb or 3.6% higher than the previous year at the same time and 21.8 mb, or 5.6%, above the latest five-year average. This fall was driven mainly by strong middle distillate demand in the region. Low distillate imports to the region also contributed to the stock draw.

Residual fuel oil stocks also fell by 1.3 mb/d in September to stand at 75.2 mb, which was 6.5 mb, or 9.4%, above the same month a year ago, though 14.1 mb or 15% lower than the latest five-year average. **Naphtha stocks** fell slightly by 0.4 mb in September to stand at 23.3 mb. At this level, they were 2.3 mb or 8.9% less than the same time a year ago and 5.8 mb or 20.0% lower than the seasonal average.

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

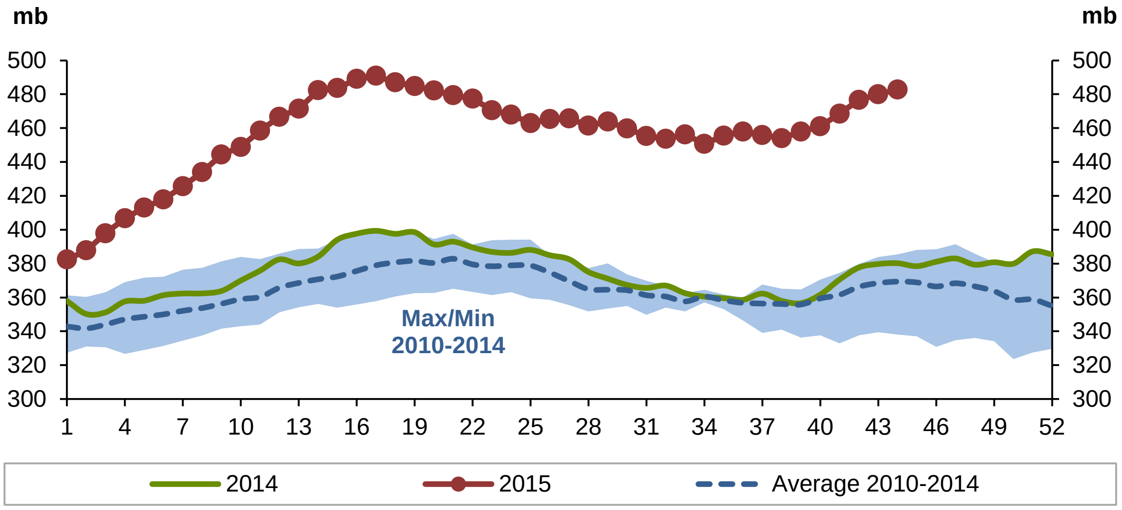
	Jul 15	Aug 15	Sep 15	*Change* Sep 15/Aug 15	Sep 14
Crude oil	**492.1**	**486.8**	**484.4**	**-2.4**	**469.8**
Gasoline	108.6	104.7	104.9	0.2	107.5
Naphtha	23.8	23.8	23.3	-0.4	25.6
Middle distillates	408.4	416.6	412.9	-3.7	398.5
Fuel oils	75.5	76.5	75.2	-1.3	68.8
Total products	616.3	621.5	616.3	-5.2	600.3
Total	**1,108.4**	**1,108.4**	**1,100.7**	**-7.7**	**1,070.1**

Sources: Argus and Euroilstock.

US

Preliminary data for October shows that **total commercial oil stocks** in the US rose slightly by 1.1 mb, following a build during the last two months to stand at 1,303 mb. At this level, they were 163.4 mb or 14.3% above the same period a year ago and 190.2 mb or 17.1% higher than the latest five-year average. Within components, crude rose by 24.9 mb, while products fell by 23.8 mb.

Graph 9.3: US weekly commercial crude oil stocks



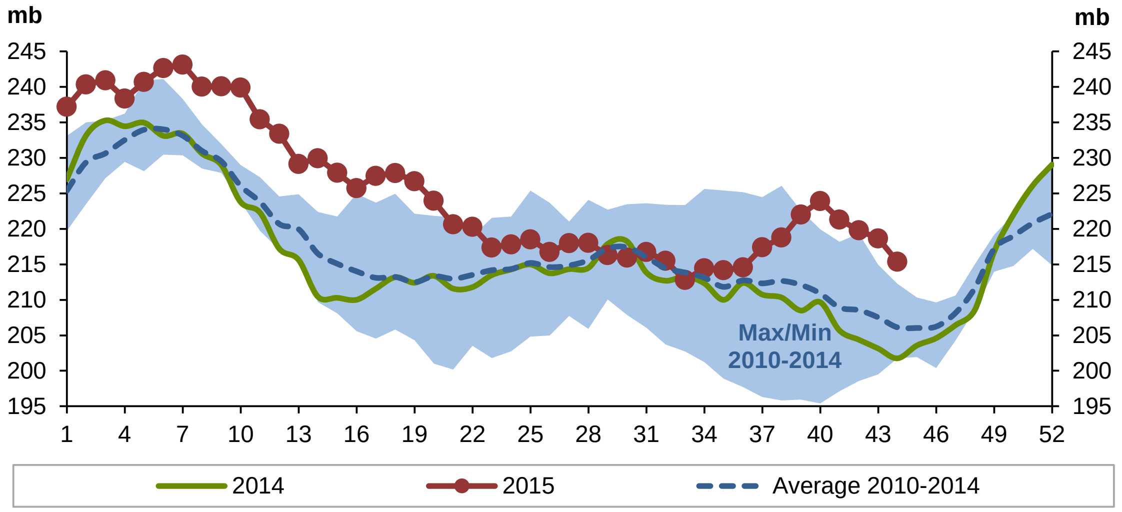
US commercial crude stocks rose in October to stand at 482.8 mb. Commercial crude stocks finished the month at 100.8 mb, or 26.4%, above the same time one year ago and 113.9 mb, or 30.9%, above the latest five-year average. Lower crude oil refinery input contributed to the stock build. Indeed, refinery runs fell by around 700,000 b/d to average 15.5 mb/d. Refineries were running at around 87% of operable capacity in October, 3.2 percentage points (pp) lower than the previous month, and 0.2% lower than the previous year at the same time. A drop in crude oil imports limited a further build in crude oil inventories. Crude at Cushing, Oklahoma, saw a slight stock build in October, ending the month at 53.1 mb.

Total product stocks fell massively by 23.8 mb in October, reversing the build of the previous seven consecutive months. At 819.6 mb, US product stocks were at around 62.5 mb or 8.3% above the level seen at the same time a year ago and showing a surplus of 76.3 mb or 10.3% above the seasonal norm. Within products, the picture was mixed. Gasoline, distillates and jet fuel saw a drop, while residual fuel oil experienced a build.

Distillate stocks fell by 10.9 mb in October to end the month at 140.8 mb. At this level, they still indicated a surplus of 20.7 mb or 17.2% from the same period a year ago, and stood 8.5 mb or 6.4% above the latest five-year average. The drop in middle distillate stocks was driven by a decrease of nearly 300,000 b/d in an average output of nearly 4.8 mb/d. A slight increase in distillate demand has also contributed to this build.

Gasoline stocks also fell by 6.7 mb in October, reversing the build of the previous month to stand at 215.3 mb. At this level, gasoline stocks were 12.7 mb or 6.0% higher than the same period a year ago and 7.7 mb or 3.7% above the latest five-year average. The drop came mainly from higher gasoline demand; it increased by around 200,000 b/d. Lower gasoline production also contributed to the drop in gasoline inventories.

Graph 9.4: US weekly gasoline stocks



Jet fuel stocks fell as well by 2.6 mb, ending October at 38.0 mb. At this level, they were 1.7 mb or 4.6% higher than in the same month a year ago, but 4.0 mb or 9.5% below the latest five-year average. In contrast, **residual fuel oil** inventories rose by 2.6 mb to 42.5 mb, which was 5.5 mb or 14.9% higher than the previous year over the same period and 4.7 mb or 12.6% above the seasonal norm.

Table 9.3: US onland commercial petroleum stocks, mb

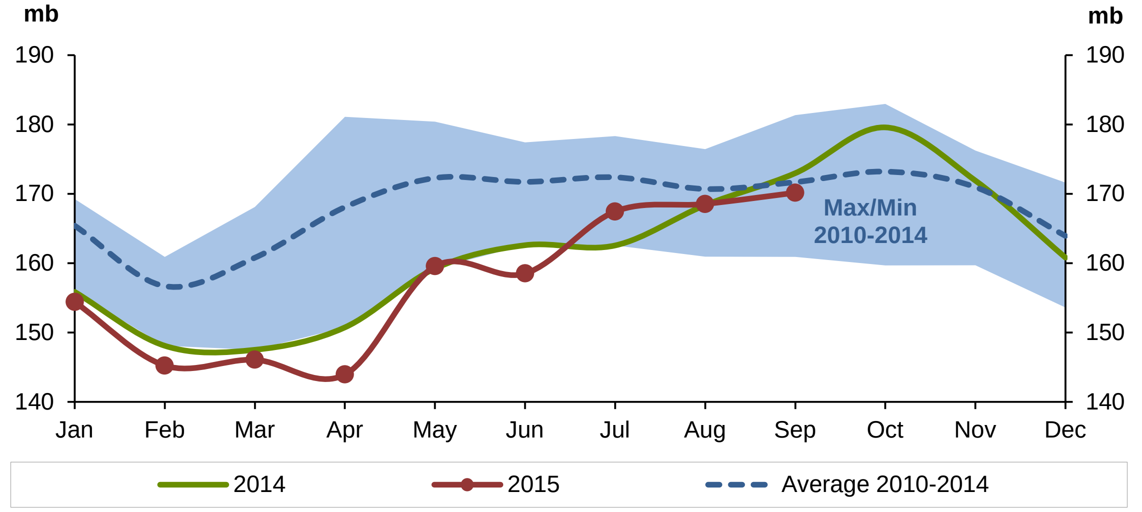
	Aug 15	Sep 15	Oct 15	*Change* Oct 15/Sep 15	Oct 14
Crude oil	457.8	457.9	482.8	24.9	383.0
Gasoline	218.2	222.0	215.3	-6.7	203.7
Distillate fuel	152.1	151.6	140.8	-10.9	120.4
Residual fuel oil	38.7	39.8	42.5	2.6	36.8
Jet fuel	43.1	40.1	38.0	-2.1	36.5
Total	**1,296.1**	**1,301.3**	**1,302.5**	**1.1**	**1,143.0**
SPR	695.1	695.1	695.1	0.0	691.0

Source: US Energy Information Administration.

Japan

In Japan, total **commercial oil stocks** rose by 1.6 mb in September for the third consecutive month to stand at 170.2 mb. At this level, Japanese commercial oil inventories stood 2.8 mb or 1.6% higher than a year ago, but remained 1.5 mb or 0.9% below the five-year average. Within the components, both crude and product inventories rose, by 0.6 mb and 1.0 mb, respectively.

Graph 9.5: Japan's commercial oil stocks



Japanese commercial **crude oil stocks** rose in September, reversing the drop of the previous month to stand at 99.8 mb. With this build, they were 1.6 mb above a year ago at the same time and 3.6 mb above the seasonal norm. The build in crude oil stocks was driven by lower crude throughput, which declined by about 285,000 b/d, or 8.1%, to average 3.2 mb/d. Lower crude oil imports limited a further build in crude oil stocks. Indeed, crude oil imports fell by around 231,000 b/d or 6.6% in September to stand at 3.3 mb/d, which was 2.3% lower than a year ago at the same time.

Japan's **total product inventories** also rose by 1.0 mb in September for the third consecutive month, to stand at 70.4 mb. At this level, product stocks stood 4.4 mb or 5.9% below the same time a year ago, and showed a deficit of 5.1 mb or 6.8% with the five-year average. The build was driven mainly by lower domestic sales, which fell by around 30,000 b/d or 0.8%, to stand at 3.0 mb/d, but which were 3.7% higher than a year ago at the same time. A decline in refinery output limited a further build in inventories. Refinery output fell by around 200,000 b/d, averaging 3.0 mb/d, or 0.1% lower than a year ago at the same time. Within products, the picture was mixed; gasoline, distillate and residual fuel oil stocks rose, while naphtha experienced stock draws.

Gasoline stocks rose by 0.4 mb in September to end the month at 10.1 mb. However, this figure represents a deficit of 0.2 mb, or 2.3%, compared with the same time a year ago, and is 2.3 mb or 18.4% below the latest five-year average. This build was driven mainly by lower gasoline sales, which declined by 14.2%. **Distillate stocks** also rose by 0.9 mb in September, to stand at 34.4 mb. At this level, distillate stocks were 0.6 mb or 1.6% below the same period a year ago and 1.0 mb or 2.7% below the seasonal average. Within distillate components, jet fuel and gasoil inventories rose by 5.5% and 0.1%, respectively, while kerosene stocks fell by 5.3%.

Total residual **fuel oil stocks** rose by 0.8 mb in September to stand at 15.2 mb, which was 2.1 mb or 12.3% below a year ago and 1.5 mb or 8.7% lower than the latest five-year average. Within fuel oil components, fuel oil B.C stocks rose by 10.8% on the back of lower domestic sales, while fuel oil A stocks fell by 4.1% on the combined effect of lower output and higher domestic sales.

In contrast, **naphtha inventories** fell by 1.1 mb in September to stand at 10.6 mb, which was 1.4 mb or 11.9% below a year ago at the same time and 0.4 mb or 3.9% less than the seasonal norm. This fall was driven mainly by higher domestic sales as increases in output limited further stock draws.

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

	Jul 15	Aug 15	Sep 15	*Change* Sep 15/Aug 15	Sep 14
Crude oil	**103.3**	**99.2**	**99.8**	**0.6**	**98.2**
Gasoline	9.7	9.7	10.1	0.4	10.4
Naphtha	11.9	11.7	10.6	-1.1	12.0
Middle distillates	28.9	33.5	34.4	0.9	35.0
Residual fuel oil	13.6	14.4	15.2	0.8	17.4
Total products	**64.1**	**69.3**	**70.4**	**1.0**	**74.8**
Total**	**167.4**	**168.5**	**170.2**	**1.6**	**173.0**

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

China

The latest information for China showed a drop in total commercial oil inventories of 5.6 mb in September, following a 13.5 mb stock draw in August. At 401.8 mb, Chinese oil inventories were around 1.0 mb above the previous year at the same time. Within the components, commercial crude oil rose by 6.0 mb, while products fell by 11.6 mb.

The build in commercial crude oil stocks could be attributed to higher crude oil imports, which increased by 540,000 b/d or 8.6% to average 6.8 mb/d. Lower crude throughput, down by 1.1% in September, also contributed to the build in crude oil inventories. At 258.4 mb, **commercial crude stocks** represented a deficit of around 8.7 mb over the same period one year earlier.

In contrast, total **product stocks** in China fell by 11.6 mb, ending September at 143.4 mb. Despite this stock draw, product stocks were 9.3 mb higher than a year ago at the same time. The fall in product stocks came from lower refinery output, along with higher demand, especially coming from diesel. Within the products, gasoline and kerosene witnessed builds, while diesel experienced a draw. Diesel stocks fell massively by 13.9 mb to end September at 74.6 mb, though still with a surplus of 15.4 mb above a year ago at the same time. The fall in diesel inventories was mainly attributed to higher domestic demand coming from agriculture and fishing activities. Gasoline stocks rose by 1.3 mb to end September at 52.3 mb. This stock draw was driven by lower domestic consumption backed by a rebound in product prices.

Table 9.5: China's commercial oil stocks, mb

	Jul 15	Aug 15	Sep 15	Change Sep 15/Aug 15	Sep 14
Crude oil	**252.7**	**252.4**	**258.4**	**6.0**	**267.0**
Gasoline	56.5	51.1	52.3	1.3	59.0
Diesel	95.9	88.5	74.6	-13.9	59.3
Jet kerosene	15.8	15.4	16.4	1.0	15.8
Total products	**168.2**	**155.0**	**143.4**	**-11.6**	**134.0**
Total	**420.9**	**407.4**	**401.8**	**-5.6**	**401.1**

Source: OPEC Secretariat analysis.

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of September, **product stocks in Singapore** rose by 2.0 mb, reversing a drop of 0.4 mb in August. At 55.3 mb, product stocks in Singapore were 10.2 mb or 23.8% above the same period a year ago. Within products, the picture was mixed; middle distillates saw a drop, while fuel oil stocks experienced a build. Light distillates remained unchanged.

Light distillate stocks stood at 12.0 mb, which was 1.2 mb or 11.2% above the previous year at the same time. Middle distillate stocks fell slightly by 0.2 mb to finish the month at 13.3 mb, which was 2.4 mb or 21.6% above the same time a year ago. The drop was mainly driven by higher demand in the region. In contrast, residual fuel oil stocks rose by 2.2 mb in September, to end the month at 28.0 mb, which was 6.7 mb or 31% higher than at the same time a year ago.

Product stocks in Amsterdam-Rotterdam-Antwerp (ARA) fell by 1.1 mb in September, reversing the build of the previous four consecutive months. At 49.8 mb, product stocks are 12.9 mb or 35% higher than at the same time a year ago. The drop in ARA product stocks was mainly driven by low water levels on the Rhine, which has disrupted flows in the hub. Within products, the picture was mixed; gasoil and jet oil experienced builds, while gasoline, naphtha and fuel oil witnessed draws.

Gasoil rose by 0.2 mb in September to end the month at 26.3 mb, which was 5.1 mb or 23.9% higher than the same month a year ago. Jet oil also rose by 0.5 mb, ending September at 6.1 mb, which was 2.0 mb or 49% above a year ago in the same period. In contrast, gasoline stocks fell by 0.7 mb in September to stand at 7.9 mb, which is nearly 57% higher than the same period a year ago. Both naphtha and fuel oil fell by around 0.5 mb in September to stand at 2.3 mb and 6.1 mb, respectively.

Balance of Supply and Demand

Demand for OPEC crude in 2015 remained unchanged from the previous report to stand at 29.6 mb/d, which is 0.6 mb/d higher than last year's level. For 2016, demand for OPEC crude also remained unchanged at 30.8 mb/d, which is 1.2 mb/d higher than the current year.

Forecast for 2015

Demand for OPEC crude in 2015 remained unchanged from the previous month at 29.6 mb/d, representing an increase of 0.6 mb/d from the 2014 level. All the quarters remained broadly unchanged versus the last assessment. The first quarter fell by 0.6 mb/d, while the second quarter grew by 0.3 mb/d. The third and the fourth quarters are expected to see growth of 0.8 mb/d and 1.9 mb/d, respectively, versus the same quarters of last year.

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

	2014	1Q15	2Q15	3Q15	4Q15	2015
(a) World oil demand	**91.35**	**91.97**	**92.04**	**93.44**	**93.96**	**92.86**
Non-OPEC supply	56.52	57.91	57.47	56.82	56.77	57.24
OPEC NGLs and non-conventionals	5.83	5.86	5.94	6.13	6.13	6.01
(b) Total supply excluding OPEC crude	**62.35**	**63.77**	**63.41**	**62.94**	**62.89**	**63.25**
Difference (a-b)	**29.01**	**28.20**	**28.63**	**30.49**	**31.06**	**29.61**
OPEC crude oil production	30.07	30.33	31.19	31.54		
Balance	1.07	2.13	2.56	1.04		

Totals may not add up due to independent rounding.

Forecast for 2016

Demand for OPEC crude in 2016 remained unchanged from the previous month. All the quarters also remained unchanged from the previous report. Demand for OPEC crude next year is projected to increase by 1.2 mb/d, to average 30.8 mb/d. The first and the second quarters are expected to increase by 2.0 mb/d and 1.6 mb/d, respectively, while the third and the fourth quarters are projected to increase by 1.0 mb/d and 0.3 mb/d, respectively.

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

	2015	1Q16	2Q16	3Q16	4Q16	2016
(a) World oil demand	**92.86**	**93.28**	**93.31**	**94.65**	**95.17**	**94.11**
Non-OPEC supply	57.24	56.98	56.87	56.94	57.64	57.11
OPEC NGLs and non-conventionals	6.01	6.14	6.18	6.21	6.22	6.18
(b) Total supply excluding OPEC crude	**63.25**	**63.12**	**63.05**	**63.14**	**63.85**	**63.29**
Difference (a-b)	**29.61**	**30.16**	**30.27**	**31.51**	**31.32**	**30.82**

Totals may not add up due to independent rounding.

Graph 10.1: Balance of supply and demand

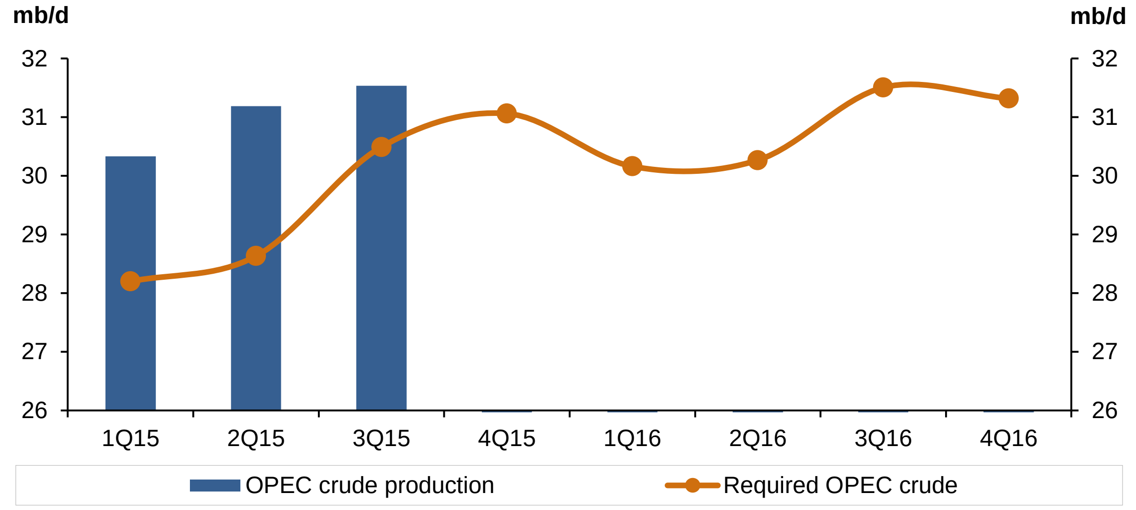


Table 10.3: World oil demand and supply balance, mb/d

	2012	2013	2014	1Q15	2Q15	3Q15	4Q15	2015	1Q16	2Q16	3Q16	4Q16	2016
World demand													
OECD	45.9	46.0	45.7	46.5	45.4	46.2	46.6	46.2	46.7	45.6	46.3	46.7	46.3
Americas	23.6	24.1	24.2	24.2	24.1	24.8	25.0	24.5	24.5	24.4	25.1	25.3	24.8
Europe	13.8	13.6	13.4	13.5	13.6	13.8	13.4	13.6	13.5	13.6	13.8	13.4	13.6
Asia Pacific	8.5	8.4	8.2	8.8	7.7	7.6	8.2	8.1	8.6	7.6	7.5	8.0	7.9
DCs	28.3	29.2	29.9	30.0	30.7	31.3	30.5	30.6	30.7	31.4	32.0	31.3	31.4
FSU	4.4	4.5	4.5	4.4	4.2	4.6	4.9	4.5	4.4	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	11.2	10.8	10.8	11.4	11.0	11.5	11.1
(a) Total world demand	**89.0**	**90.4**	**91.4**	**92.0**	**92.0**	**93.4**	**94.0**	**92.9**	**93.3**	**93.3**	**94.6**	**95.2**	**94.1**
Non-OPEC supply													
OECD	21.1	22.2	24.2	25.0	24.8	24.5	24.4	24.7	24.6	24.5	24.5	24.9	24.6
Americas	16.7	18.2	20.1	20.9	20.6	20.4	20.4	20.6	20.4	20.5	20.5	20.8	20.5
Europe	3.8	3.6	3.6	3.7	3.8	3.6	3.6	3.7	3.7	3.6	3.5	3.7	3.6
Asia Pacific	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
DCs	12.0	12.0	12.2	12.5	12.4	12.2	12.1	12.3	12.2	12.3	12.4	12.5	12.3
FSU	13.4	13.6	13.5	13.7	13.6	13.5	13.6	13.6	13.5	13.4	13.3	13.5	13.4
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	4.3	4.3	4.3	4.3	4.3	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	52.9	54.3	56.5	57.9	57.5	56.8	56.8	57.2	57.0	56.9	56.9	57.6	57.1
OPEC NGLs + non-conventional oils	5.6	5.6	5.8	5.9	5.9	6.1	6.1	6.0	6.1	6.2	6.2	6.2	6.2
(b) Total non-OPEC supply and OPEC NGLs	**58.4**	**59.9**	**62.3**	**63.8**	**63.4**	**62.9**	**62.9**	**63.3**	**63.1**	**63.0**	**63.1**	**63.9**	**63.3**
OPEC crude oil production (secondary sources)	31.2	30.2	30.1	30.3	31.2	31.5							
Total supply	89.6	90.2	92.4	94.1	94.6	94.5							
Balance (stock change and miscellaneous)	0.6	-0.2	1.1	2.1	2.6	1.0							
OECD closing stock levels (mb)													
Commercial	2,683	2,589	2,738	2,815	2,904	2,942							
SPR	1,547	1,584	1,579	1,582	1,584	1,583							
Total	4,230	4,174	4,317	4,397	4,488	4,525							
Oil-on-water	879	909	924	864	916	924							
Days of forward consumption in OECD													
Commercial onland stocks	58	57	59	62	63	63							
SPR	34	35	34	35	34	34							
Total	92	91	93	97	97	97							
Memo items													
FSU net exports	9.0	9.1	9.0	9.3	9.4	8.9	8.6	9.0	9.1	9.1	8.7	8.5	8.8
(a) - (b)	**30.6**	**30.4**	**29.0**	**28.2**	**28.6**	**30.5**	**31.1**	**29.6**	**30.2**	**30.3**	**31.5**	**31.3**	**30.8**

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

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

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

* *This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the October 2015 issue.*
This table shows only where changes have occurred.

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

		2011	2012	2013	2014	4Q13	1Q14	2Q14	3Q14	4Q14	1Q15	2Q15	3Q15
Closing stock levels, mb													
OECD onland commercial		**2,617**	**2,683**	**2,589**	**2,738**	**2,589**	**2,611**	**2,681**	**2,749**	**2,738**	**2,815**	**2,904**	**2,942**
	Americas	1,308	1,365	1,316	1,446	1,316	1,317	1,387	1,416	1,446	1,483	1,537	1,561
	Europe	914	912	881	886	881	885	889	897	886	939	938	932
	Asia Pacific	395	405	392	405	392	409	405	436	405	392	429	449
OECD SPR		**1,536**	**1,547**	**1,584**	**1,579**	**1,584**	**1,585**	**1,580**	**1,577**	**1,579**	**1,582**	**1,584**	**1,583**
	Americas	697	696	697	692	697	697	692	692	692	692	695	696
	Europe	426	436	470	470	470	470	469	469	470	470	471	469
	Asia Pacific	414	415	417	417	417	418	419	417	417	420	418	418
OECD total		**4,154**	**4,230**	**4,174**	**4,317**	**4,174**	**4,196**	**4,260**	**4,326**	**4,317**	**4,397**	**4,488**	**4,525**
Oil-on-water		**825**	**879**	**909**	**924**	**909**	**954**	**914**	**952**	**924**	**864**	**916**	**924**
Days of forward consumption in OECD													
OECD onland commercial		**57**	**58**	**57**	**58**	**57**	**58**	**58**	**59**	**59**	**62**	**63**	**63**
	Americas	53	55	55	57	55	55	57	57	60	61	62	62
	Europe	68	68	66	67	68	66	65	67	66	69	68	70
	Asia Pacific	47	48	46	48	44	53	52	52	46	51	57	55
OECD SPR		**33**	**34**	**33**	**34**	**35**	**35**	**34**	**34**	**34**	**35**	**34**	**34**
	Americas	30	30	29	29	29	29	28	28	29	29	28	28
	Europe	29	30	31	32	36	35	34	35	35	35	34	35
	Asia Pacific	50	50	48	50	47	54	54	50	48	54	55	51
OECD total		**90**	**92**	**90**	**92**	**91**	**94**	**93**	**93**	**93**	**97**	**97**	**97**

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

	2012	2013	2014	3Q15	4Q15	2015	Change 15/14	1Q16	2Q16	3Q16	4Q16	2016	Change 16/15
US	10.0	11.2	13.0	13.5	13.4	13.6	0.6	13.4	13.5	13.5	13.7	13.5	-0.1
Canada	3.8	4.0	4.3	4.3	4.4	4.4	0.0	4.5	4.4	4.5	4.6	4.5	0.1
Mexico	2.9	2.9	2.8	2.6	2.6	2.6	-0.2	2.6	2.5	2.5	2.5	2.5	-0.1
OECD Americas*	**16.7**	**18.2**	**20.1**	**20.4**	**20.4**	**20.6**	**0.5**	**20.4**	**20.5**	**20.5**	**20.8**	**20.5**	**0.0**
Norway	1.9	1.8	1.9	1.9	1.9	1.9	0.0	2.0	1.9	1.9	2.0	1.9	0.0
UK	1.0	0.9	0.9	0.9	0.9	0.9	0.1	0.9	0.9	0.9	1.0	0.9	0.0
Denmark	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other OECD Europe	0.7	0.7	0.7	0.7	0.6	0.7	0.0	0.6	0.6	0.6	0.6	0.6	0.0
OECD Europe	**3.8**	**3.6**	**3.6**	**3.6**	**3.6**	**3.7**	**0.1**	**3.7**	**3.6**	**3.5**	**3.7**	**3.6**	**0.0**
Australia	0.5	0.4	0.4	0.4	0.4	0.4	-0.1	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**	**-0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.0**
Total OECD	**21.1**	**22.2**	**24.2**	**24.5**	**24.4**	**24.7**	**0.5**	**24.6**	**24.5**	**24.5**	**24.9**	**24.6**	**0.0**
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	0.8	0.9	0.0	0.8	0.9	0.9	0.9	0.9	0.0
Indonesia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.0
Malaysia	0.7	0.7	0.7	0.7	0.7	0.8	0.1	0.8	0.8	0.8	0.8	0.8	0.0
Thailand	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
Vietnam	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Asia others	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Other Asia	**3.6**	**3.5**	**3.5**	**3.5**	**3.5**	**3.6**	**0.1**	**3.6**	**3.6**	**3.7**	**3.7**	**3.6**	**0.1**
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	3.0	3.0	3.0	0.2	3.1	3.1	3.2	3.3	3.2	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
L. 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**	**5.1**	**5.1**	**5.2**	**0.1**	**5.1**	**5.1**	**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**	**1.2**	**-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	0.2	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**	**2.3**	**2.4**	**2.3**	**2.3**	**2.3**	**0.0**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**0.0**
Total DCs	**12.0**	**12.0**	**12.2**	**12.2**	**12.1**	**12.3**	**0.1**	**12.2**	**12.3**	**12.4**	**12.5**	**12.3**	**0.0**
FSU	**13.4**	**13.6**	**13.5**	**13.5**	**13.6**	**13.6**	**0.0**	**13.5**	**13.4**	**13.3**	**13.5**	**13.4**	**-0.2**
Russia	10.5	10.6	10.7	10.8	10.7	10.8	0.1	10.7	10.6	10.6	10.7	10.7	-0.1
Kazakhstan	1.6	1.6	1.6	1.6	1.6	1.6	0.0	1.6	1.6	1.6	1.6	1.6	0.0
Azerbaijan	0.9	0.9	0.9	0.8	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	0.3	0.4	0.0
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
China	4.2	4.2	4.3	4.3	4.3	4.3	0.1	4.3	4.3	4.4	4.4	4.4	0.0
Non-OPEC production	**50.7**	**52.2**	**54.4**	**54.6**	**54.6**	**55.1**	**0.7**	**54.8**	**54.7**	**54.7**	**55.4**	**54.9**	**-0.1**
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	**52.9**	**54.3**	**56.5**	**56.8**	**56.8**	**57.2**	**0.7**	**57.0**	**56.9**	**56.9**	**57.6**	**57.1**	**-0.1**
OPEC NGL	5.4	5.4	5.6	5.9	5.9	5.8	0.2	5.9	5.9	5.9	5.9	5.9	0.2
OPEC non-conventional	0.2	0.2	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)	**5.6**	**5.6**	**5.8**	**6.1**	**6.1**	**6.0**	**0.2**	**6.1**	**6.2**	**6.2**	**6.2**	**6.2**	**0.2**
Non-OPEC & OPEC (NGL+NCF)	**58.4**	**59.9**	**62.3**	**62.9**	**62.9**	**63.3**	**0.9**	**63.1**	**63.0**	**63.1**	**63.9**	**63.3**	**0.0**

** Chile has been included in OECD Americas.*

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

Table 10.7: World Rig Count

	2011	2012	2013	2014	*Change* 14/13	4Q14	1Q15	2Q15	3Q15	Sep 15	Oct 15	*Change* Oct/Sep
US	1,880	1,919	1,761	1,862	101	1,912	1,380	909	866	848	790	-58
Canada	423	364	354	380	26	406	309	99	191	183	185	2
Mexico	94	106	106	86	-20	78	67	59	42	39	38	-1
Americas	2,398	2,390	2,221	2,327	106	2,396	1,755	1,067	1,098	1,070	1,013	-57
Norway	17	17	20	17	-3	16	17	18	18	17	15	-2
UK	16	18	17	16	-1	17	18	14	13	14	14	0
Europe	118	119	135	145	10	148	132	116	109	109	108	-1
Asia Pacific	17	24	27	26	-1	25	21	17	16	16	16	0
Total OECD	**2,532**	**2,533**	**2,383**	**2,499**	**116**	**2,569**	**1,908**	**1,200**	**1,222**	**1,195**	**1,137**	**-58**
Other Asia	239	217	219	228	9	229	214	203	201	202	197	-5
Latin America	195	180	166	172	6	174	161	143	149	154	137	-17
Middle East	129	136	102	108	6	105	103	98	100	100	101	1
Africa	2	7	16	28	12	29	22	12	8	8	3	-5
Total DCs	**565**	**539**	**503**	**536**	**33**	**537**	**499**	**456**	**458**	**464**	**438**	**-26**
Non-OPEC rig count	**3,097**	**3,071**	**2,886**	**3,034**	**149**	**3,106**	**2,408**	**1,656**	**1,681**	**1,659**	**1,575**	**-84**
Algeria	31	36	47	48	1	48	52	52	51	51	49	-2
Angola	7	9	11	15	4	14	15	12	8	7	12	5
Ecuador	13	20	26	24	-2	21	17	15	12	11	6	-5
Iran**	54	54	54	54	0	54	54	54	54	54	54	0
Iraq**	36	58	83	79	-4	59	57	53	47	49	50	1
Kuwait**	32	31	32	38	6	43	51	49	44	43	40	-3
Libya**	3	9	15	10	-4	8	6	3	1	1	1	0
Nigeria	36	36	37	34	-3	36	35	29	28	29	28	-1
Qatar	8	8	9	10	2	10	9	8	7	6	6	0
Saudi Arabia	100	112	114	134	20	143	154	155	154	156	156	0
UAE	21	24	28	34	6	38	38	39	41	42	50	8
Venezuela	122	117	121	116	-5	106	108	105	114	117	113	-4
OPEC rig count	**461**	**513**	**576**	**596**	**20**	**579**	**595**	**575**	**561**	**566**	**565**	**-1**
Worldwide rig count*	**3,559**	**3,584**	**3,462**	**3,631**	**169**	**3,685**	**3,002**	**2,231**	**2,242**	**2,225**	**2,140**	**-85**
of which:												
Oil	2,195	2,594	2,611	2,795	184	2,820	2,214	1,616	1,606	1,592	1,529	-63
Gas	1,257	886	746	743	-3	776	690	516	536	535	513	-22
Others	103	106	109	95	-14	91	100	98	99	98	98	0

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

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

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Disclaimer

OPEC Basket average price
US$/b

up 0.19 in October

October 2015	45.02
September 2015	44.83
Year-to-date	**51.99**

October OPEC crude production
mb/d, according to secondary sources

down 0.26 in October

October 2015	31.38
September 2015	31.64

Economic growth rate
per cent

	World	OECD	US	Japan	Euro-zone	China	India
2015	3.1	2.0	2.4	0.8	1.5	6.8	7.4
2016	3.4	2.1	2.5	1.2	1.5	6.4	7.6

Supply and demand
mb/d

2015		**15/14**	**2016**		**16/15**
World demand	92.9	1.5	World demand	94.1	1.3
Non-OPEC supply	57.2	0.7	Non-OPEC supply	57.1	–0.1
OPEC NGLs	6.0	0.2	OPEC NGLs	6.2	0.2
Difference	**29.6**	**0.6**	**Difference**	**30.8**	**1.2**

OECD commercial stocks
mb

	Jul 15	Aug 15	Sep 15	Sep 15/Aug 15	Sep 14
Crude oil	1,480	1,477	1,475	–1.4	1,332
Products	1,434	1,466	1,467	1.0	1,417
Total	**2,914**	**2,943**	**2,942**	**–0.4**	**2,749**
Days of forward cover	63.0	63.5	63.0	–0.5	59.1

Next report to be issued on 10 December 2015.