OPEC

Monthly Oil Market Report

11 December 2019

Feature article:

Review of 2019 and outlook for 2020

Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

E-mail: prid(at)opec.org

Website: www.opec.org

Disclaimer

Publishing schedule for 2020

Wednesday, 15 January

Wednesday, 12 February

Wednesday, 11 March

Thursday, 16 April

Wednesday, 13 May

Wednesday, 17 June

Tuesday, 14 July

Wednesday, 12 August

Monday, 14 September

Tuesday, 13 October

Wednesday, 11 November

Monday, 14 December

Contributors to the OPEC Monthly Oil Market Report

Chairman of the Editorial Board

HE Mohammad Sanusi Barkindo, Secretary General

Editor-in-Chief

Dr. Ayed S. Al-Qahtani, Director, Research Division
email: aalqahtani(at)opec.org

Editor

Behrooz Baikalizadeh, Head, Petroleum Studies Department
email: bbaikalizadeh(at)opec.org

Analysts

Crude Oil Price Movements	Yacine Sariahmed email: ysariahmed(at)opec.org
Commodity Markets	Hector Hurtado email: hhurtado(at)opec.org
World Economy	Afshin Javan email: ajavan(at)opec.org Imad Al-Khayyat email: ial-khayyat(at)opec.org Asmaa Yaseen email: ayaseen(at)opec.org Joerg Spitzy email: jspitzy(at)opec.org
World Oil Demand	Hassan Balfakeih email: hbalfakeih(at)opec.org
World Oil Supply	Mohammad Ali Danesh email: mdanesh(at)opec.org
Product Markets and Refinery Operations	Tona Ndamba email: tndamba(at)opec.org
Tanker Market *and* Oil Trade	Douglas Linton email: dlinton(at)opec.org
Stock Movements	Aziz Yahyai email: ayahyai(at)opec.org
Technical team	Nadir Guerer email: nguerer(at)opec.org Aziz Yahyai email: ayahyai(at)opec.org Douglas Linton email: dlinton(at)opec.org Viveca Hameder email: vhameder(at)opec.org

Statistical services

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

Editing, production, design and circulation

James Griffin, Maureen MacNeill, Scott Laury, Matthew Quinn, Timothy Spence,
Hataichanok Leimlehner, Liane-Sophie Hamamciyan, Andrea Birnbach

Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) price rose by $3.03, or 5.1%, month-on-month (m-o-m) in November settling at $62.94/b. In November, ICE Brent averaged $3.08, or 5.2%, higher m-o-m at $62.71/b, while NYMEX WTI rose by $3.06, or 5.7%, m-o-m averaging $57.07/b. Year-to-date (y-t-d), ICE Brent averaged $8.79, or 12.1%, lower at $64.08/b, while NYMEX WTI declined by $9.48, or 14.3%, to $56.79/b, both compared to the same period a year earlier. The backwardation price structures of both ICE Brent and DME Oman steepened further in November, particularly in prompt forward months, while the NYMEX WTI market structure slipped into backwardation for most of the month. Hedge funds and other money managers raised their speculative net long positions, reflecting a more positive outlook for the global oil market.

World Economy

The global economic growth forecast remains at 3.0% for both 2019 and 2020. US growth remains at 2.3% for 2019 and 1.8% for 2020. Euro-zone growth remains at 1.2% for 2019 and 1.0% for 2020. Japan's growth forecast is unchanged at 0.9% for 2019, but revised up to 0.6% for 2020, considering a forecast positive net effect from the announced fiscal stimulus. China's growth forecast is unchanged, standing at 6.2% for 2019 and 5.9% for 2020. India's growth forecast is revised down to 5.5% for 2019 and to 6.4% for 2020, after less-than-expected growth in the first three quarters of 2019. Both Brazil's and Russia's forecasts are revised up slightly, after both economies continued accelerating in 3Q19. Brazil's 2019 growth forecast is revised up to 1.0% for 2019 and to 1.7% for 2020. Similarly, Russia's forecast is revised up to 1.1% for 2019 and 1.3% for 2020.

World Oil Demand

World oil demand growth is expected at 0.98 mb/d in 2019, unchanged from last month's report. In the OECD region, OECD Americas is estimated to lead oil demand growth as a result of steady light distillate requirements. China is assessed to lead demand growth globally, as well as within non-OECD countries, in response to steady petrochemical feedstock demand for transportation fuels. In 2020, world oil demand is forecast to increase by 1.08 mb/d, also in line with last month projections. Oil demand growth is forecast to originate largely from Other Asia, followed by China. OECD countries are projected to consume an additional 0.07 mb/d as compared to the current year, while non-OECD countries are expected to remain the driver for oil demand growth in 2020, adding an estimated 1.01 mb/d.

World Oil Supply

Non-OPEC oil supply growth forecast for 2019 remains at 1.82 mb/d, unchanged from last month's report. The US liquids supply growth also remains unchanged at 1.62 mb/d, the an upward revision in 3Q19 is now offset by a lower estimate for 4Q19. Similarly, the non-OPEC oil supply growth forecast for 2020 remains unchanged from last month's forecast at 2.17 mb/d. An upward revision in the UK's oil supply forecast is offset by a downward revision in Russia. The 2020 non-OPEC supply forecast remains subject to some uncertainties, including the degree of spending discipline by US independent oil companies. For 2019, the US, Brazil and Canada remain to be the key drivers for growth, and this will continue in 2020 with the addition of Norway. OPEC NGLs production in 2019 is estimated to have grown by 0.04 mb/d to average 4.80 mb/d and in 2020 is forecast to grow to average 4.83 mb/d. In November, OPEC crude oil production dropped by 193 tb/d m-o-m to average 29.55 mb/d, according to secondary sources.

Product Markets and Refining Operations

Product markets in November lost solid ground as refinery intakes recovered, following peak refinery maintenance which led to higher product availability and contributed to a trend reversal of refinery margins in all main trading hubs. Higher feedstock prices and weaker fuel oil cracks affected by high freight rates weighed further on product markets, particularly in Asia, where refining economics fell sharply to a multi-year record low and entered negative territory.

Tanker Market

Dirty tanker spot freight rates in November remained at robust levels relative to their performance seen for most of this year, although down from the record highs of the previous month. Indeed, October's announcement of sanctions on two subsidiaries of a China's shipping giant, Cosco, surprised the market at a time of seasonal uplift in demand for longer-haul voyages and reduced tonnage availability due to IMO preparations, leading to panic fixing and a sharp spike in rates. As the panic subsided in November and as the market regained balance, rates retreated but remained close to the elevated levels seen in the same month last year. Clean tanker rates also enjoyed a similar upward trend and even managed to retain gains to stand well above the levels achieved this time last year.

Stock Movements

Preliminary data for October showed that total OECD commercial oil stocks fell by 5.1 mb m-o-m to stand at 2,933 mb, which is 82.5 mb higher than the same time one year ago, and 32.8 mb above the latest five-year average. Within the components, crude stocks rose by 18.9 mb m-o-m to stand at 18.3 mb above the latest five-year average, while product stocks decreased by 23.9 mb m-o-m to stand at 14.5 mb above the latest five-year average. In terms of days of forward cover, OECD commercial stocks rose by 0.6 days m-o-m in October to stand at 61.2 days, which is 1.8 days above the same period in 2018, but 0.2 days below the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2019 was unchanged from the previous report to stand at 30.7 mb/d, which is 0.9 mb/d lower than the 2018 level. Demand for OPEC crude in 2020 also remained unchanged from the previous report to stand at 29.6 mb/d, which is around 1.1 mb/d lower than the 2019 level.

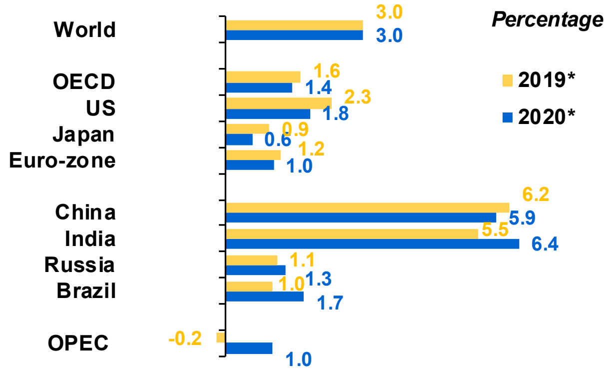
Feature Article

Review of 2019 and outlook for 2020

Global economic growth slowed in 2019, impacted by a variety of challenges. Trade issues not only led to reduction in global final consumption but also caused investment growth to decelerate. On the positive side, global trade slowdown has likely bottomed out, and now the negative trend in industrial production seen in 2019 is expected to reverse in 2020. As a result, global economic growth is forecast at 3.0% for both 2019 and 2020.

Recent progress on various trade agreements such as the conclusion of the Regional Comprehensive Economic Partnership of Asian-Pacific nations may provide the base to re-energize the momentum in global trade, although challenges remain, particularly regarding ongoing trade talks between the US and its trade partners, particularly China.

Graph 1: 2020 real GDP growth for selected countries



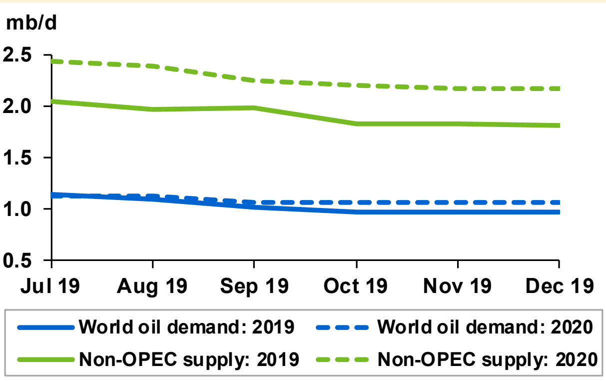
*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

While global monetary policies continue to be accommodative, high debt levels in many major economies represent some risk. Additional challenges are posed by fiscal issues in few EU Member Countries, Brexit, and Japan's ongoing slowdown. Fiscal imbalances in emerging and developing economies may also have a negative effect on global economic growth, while recent social unrest in some economies may add more downward pressure.

Global oil demand is projected to rise by 0.98 mb/d in 2019, mainly due to cooling macro-economic indicators in major economies. Oil demand in the OECD is projected to grow by a marginal 0.02 mb/d in 2019, due to slower-than-expected demand in the Americas and Asia Pacific. Weaker-than-expected diesel requirements in the US amid the slower pace in manufacturing and construction activity have limited demand growth in the current year. In Asia Pacific, significant petrochemical plant turnarounds reduced demand for petrochemical feedstock in 1H19. In non-OECD oil demand in 2019 is anticipated to rise by 0.96 mb/d, primarily as a result of slower-than-expected demand in India due to reduced industrial and transportation fuel requirements in 2Q19 and 3Q19. In 2020, global oil demand is expected to grow by 1.08 mb/d, with the OECD growing by 0.07 mb/d. OECD Americas is anticipated to be the only OECD region in positive demand growth territory next year, supported mainly by petrochemical capacity additions. In the non-OECD region, oil demand growth is projected to be around 1.01 mb/d, with growth projected to improve in Other Asia, Latin America and the Middle East. Indeed, the transportation and petrochemical sectors are expected to continue leading oil demand growth in 2020.

On the supply side**, non-OPEC oil supply** growth in 2019 has been lower than initial market expectations, now standing at 1.82 mb/d compared to the initial projection of 2.10 mb/d in July 2018. Weaker-than-expected growth in Canada, Brazil, Norway, Kazakhstan, China and Russia has been the key contributor to the downward revision, despite the better-than-expected performance of US liquids supply. US oil output is leading this growth with 1.62 mb/d in 2019. In 2020, non-OPEC supply is expected to see a continued slowdown in growth on the back of decreased investment and lower drilling activities in US tight oil. Non-OPEC supply is now forecast to grow by 2.17 mb/d in 2020, representing a downward revision of around 0.27 mb/d from initial forecasts in July 2019 on the back of downward revisions in US oil supply. Nevertheless, incremental production from the US tight plays, particularly in the Permian Basin, as well as from offshore fields in Norway, Brazil, Australia and possibly Guyana, will contribute to the non-OPEC supply in 2020.

Graph 2: World oil demand and non-OPEC supply revisions from initial forecast in 2019 and 2020



Source: OPEC Secretariat.

Evidently, significant and successful effort of countries participating in the Declaration of Cooperation (DoC) have helped the **global oil market** to remain relatively balanced in 2019. Going forward, countries participating in the DoC reaffirmed their continuing commitment to oil market stability as they have decided this month to adjust production further by another 500 tb/d, adding to the previous adjustment of 1.2 mb/d, and now totalling to 1.7 mb/d as of January 2020. This is to stabilize the market in the interests of both consumers and producers, as well as the wellbeing of the global economy.

Table of Contents

Crude Oil Price Movements

*The **OPEC Reference Basket (ORB)** value rebounded in November by $3, or 5.1% m-o-m, its largest percentage gain since April 2019, to settle at $62.94/b. The rise reflects increases in the physical crude benchmarks and firm crude differentials, which were supported by robust seasonal crude demand, particularly from Asia, and higher refinery runs during November in almost all regions to meet winter oil products demand.*

***Crude oil futures prices** rebounded in November to settle at their highest levels since July 2019, on a monthly basis. Oil prices were mainly driven by optimism and positive expectations for a trade agreement between the US and China, as well as the improved outlook for global oil demand amid better-than-expected economic indicators in some major economies. ICE Brent was on average $3.08, or 5.2%, higher m-o-m at $62.71/b, and NYMEX WTI rose m-o-m by $3.06, or 5.7%, to average $57.07/b. Year to date (Y-t-d), ICE Brent was $8.79, or 12.1%, lower at $64.08/b, while NYMEX WTI declined by $9.48, or 14.3%, to $56.79/b, compared with the same period a year earlier. DME Oman crude oil futures prices also increased on robust seasonal demand from Asia Pacific and tight supply of medium sour crude from several regions. DME Oman crude oil futures value rose m-o-m by $2.79, or 4.6%, in November to settle at $63.05/b. Y-t-d, DME Oman was down by $7.16, or 10.1%, at $63.83/b, compared to the same period a year earlier.*

***Hedge funds and other money managers** raised their bullish positions during November in both ICE Brent and NYMEX WTI contracts. Speculators were driven by growing optimism that US-China negotiations could result in a trade deal, and thus limit the negative impact on the global economy and oil demand growth. Money managers were more optimistic about global oil market fundamentals and oil prices.*

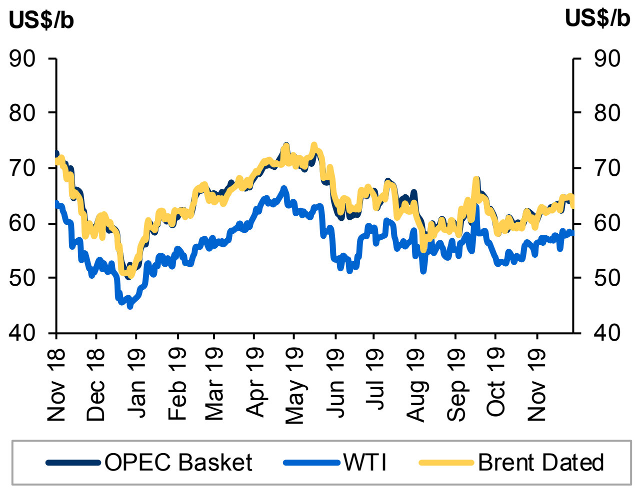
*The ICE Brent and DME Oman backwardation **price structures** steepened further in November, as prompt prices were supported by robust seasonal demand, a tightening sour crude market and freight rates that retreated from the high levels recorded in October. The NYMEX WTI market structure slipped into backwardation on easing congestion in Cushing, Oklahoma, and the Permian Basin, and the first-to-third forward month spread widened further in late November.*

***Light sweet and heavy sour crude differentials** widened significantly in Asia and the USGC on weakening margins for oil products with high sulphur content, as the deadline for the new IMO 2020 regulations to reduce sulphur oxide emissions approaches. However, the light sweet and heavy sour crude spreads narrowed in Europe due to tight sour crude supply.*

OPEC Reference Basket

The **ORB** value rebounded in November by $3, or 5.1% m-o-m, its largest percentage gain since April, to settle at $62.94/b. The rise reflects increases in the physical benchmarks and firm crude differentials, which were supported by robust seasonal crude demand, particularly from Asia, and higher refinery runs during November in almost all regions to meet winter oil products demand. Oil prices recovered in November m-o-m on declining freight rates, which had spiked to record levels in some routes and restricted prompt demand. A tighter sour crude market also gave support and pushed Dubai price structure into deeper backwardation. The front-month to third-month Dubai price spread reached $3.0/b, its highest level in months. Oil prices rose further on growing optimism about the trade negotiations between the US and China.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

Table 1 - 1: OPEC Reference Basket and selected crudes, US$/b

	Oct 19	Nov 19	Change Nov/Oct	%	Year-to-date 2018	2019
Basket	**59.91**	**62.94**	**3.03**	**5.1**	**70.75**	**63.82**
Arab Light	60.99	64.01	3.02	5.0	71.53	64.74
Basrah Light	59.52	62.54	3.02	5.1	69.56	63.44
Bonny Light	61.45	63.69	2.24	3.6	73.19	65.41
Djeno	57.13	61.40	4.27	7.5	69.67	61.43
Es Sider	59.78	63.51	3.73	6.2	70.84	63.48
Girassol	61.34	65.65	4.31	7.0	72.79	65.80
Iran Heavy	57.94	60.73	2.79	4.8	68.97	61.68
Kuwait Export	60.52	63.72	3.20	5.3	69.79	64.07
Merey	45.69	43.44	-2.25	-4.9	65.57	54.40
Murban	60.88	63.48	2.60	4.3	73.17	64.55
Oriente	54.60	63.02	8.42	15.4	67.23	60.30
Rabi Light	58.98	61.24	2.26	3.8	71.37	63.10
Sahara Blend	60.48	63.86	3.38	5.6	72.58	64.17
Zafiro	60.86	65.36	4.50	7.4	72.39	65.39
Other Crudes						
Dated Brent	59.73	63.11	3.38	5.7	72.30	63.95
Dubai	59.46	61.91	2.45	4.1	70.61	63.36
Isthmus	59.13	61.69	2.56	4.3	69.74	63.25
LLS	57.06	61.84	4.78	8.4	71.24	62.60
Mars	54.79	58.24	3.45	6.3	67.88	60.82
Minas	57.36	60.30	2.94	5.1	66.59	60.03
Urals	59.28	64.44	5.16	8.7	71.11	64.14
WTI	53.98	57.25	3.27	6.1	66.35	56.77
Differentials						
Brent/WTI	5.75	5.86	0.11	-	5.95	7.17
Brent/LLS	2.67	1.27	-1.40	-	1.06	1.34
Brent/Dubai	0.27	1.20	0.93	-	1.68	0.59

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

All **ORB component values** settled higher in November in line with their respective crude benchmarks, except Merey crude. ORB component values rose on higher physical crude benchmarks, firm official selling prices and crude differentials, despite weak refining margins. Tight sour crude supply and robust demand from refiners supported Dubai-linked components. The key crude oil physical benchmarks increased in November m-o-m, with North Sea Dated and Dubai rising by $3.38 and $2.45, respectively, to settle at $63.11/b and $61.91/b, and WTI rose by $3.27 m-o-m to settle at $57.25/b.

Light sweet crude **ORB components from West and North Africa** – including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – rose the most amongst other Basket components, increasing by $3.53 on average, or 5.9% m-o-m to $63.53/b, buoyed by strong demand, the high value of competitive grades in other regions, and improved arbitrage opportunities to Asia amid easing freight rates. Higher crude differentials in Northwest Europe and the Mediterranean lent support. Light and medium sweet grades, particularly middle distillate-rich grades, rose further on higher demand for winter products as well as higher demand for low-sulphur products ahead of the IMO 2020 regulations. Crude differentials of some West African grades reached their highest levels in several months.

Latin American ORB component Venezuela's Merey declined further in November, undermined by extremely weak fuel oil margins, while the spread between very low sulphur fuel oil (VLSFO) and high sulphur fuel oil (HSFO) continued to widen. Merey crude values fell by $2.25, or 4.9% m-o-m, to $43.44/b, while Ecuador's Oriente rose in November to $63.02/b, an increase of $8.42, or 15.4%.

The value of **multiple-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, rose by $3.01, or 5.0%, for the month to $62.75/b, supported by a tight medium sour market and strong seasonal demand for December loadings, as well as firm official selling prices. However, weakening global margins of HSFO put downward pressure on sour grades. The front-month Brent/Dubai Exchange for Swaps (EFS Dubai) rose in November by 63¢, to average $3.35/b, and remained above $3/b for the most of the month.

Middle Eastern spot component Murban rose by $2.60 m-o-m, or 4.3%, to $63.48/b, on improving naphtha refining margins and healthy demand, but higher flows from the Atlantic Basin to Asia Pacific limited gains.

On 10 December, the ORB stood at $65.66/b, $2.72 above the November average.

The oil futures market

ICE Brent and NYMEX WTI **crude oil futures** rebounded in November to settle at their highest level since last July, on a monthly basis, mainly driven by optimism and positive expectations for a trade agreement between the US and China, as well as an improved outlook for global oil demand amid better-than-expected economic indicators in some major economies. Oil prices rose further on strong performances in equity markets following signs of progress in trade negotiations that raised optimism over the global economy. Oil markets were also supported by the continuing production adjustments from OPEC and Non-OPEC countries participating in the 'Declaration of Cooperation', with strong conformity levels that contribute to balancing the global oil market.

Nonetheless, the oil price rally was limited by rising US oil supply and swelling crude oil stocks in the US, which continued to increase for five consecutive weeks, to the week of 22 November, adding about 19 mb, to reach the highest level since July, according to EIA data.

In November, **ICE Brent** was on average $3.08, or 5.2%, m-o-m higher at $62.71/b, and **NYMEX WTI** rose m-o-m by $3.06, or 5.7%, to average $57.07/b. Y-t-d, ICE Brent was $8.79, or 12.1%, lower at $64.08/b, while NYMEX WTI declined by $9.48, or 14.3%, to $56.79/b, compared with the same period a year earlier.

DME Oman crude oil futures prices also increased in November on robust seasonal demand from Asia Pacific and tight supply of medium sour crude from several regions. However, the value of the DME Oman prompt month rose less than ICE Brent and NYMEX WTI as weakening HSFO margins and a widening spread between low- and high-sulphur products ahead of the IMO 2020 weighed on sour crude values. DME Oman crude oil futures prices rose m-o-m by $2.79, or 4.6%, in November to settle at $63.05/b. Y-t-d, DME Oman was down by $7.16, or 10.1%, at $63.83/b, compared to the same period a year earlier.

On 10 December, ICE Brent stood at $64.34/b and NYMEX WTI at $59.24/b.

Table 1 - 2: Crude oil futures, US$/b

			Change		*Year-to-date*	
	Oct 19	Nov 19	Nov/Oct	%	2018	2019
NYMEX WTI	54.01	57.07	3.06	5.7	66.27	56.79
ICE Brent	59.63	62.71	3.08	5.2	72.87	64.08
DME Oman	60.26	63.05	2.79	4.6	70.99	63.83
Transatlantic spread (ICE Brent-NYMEX WTI)	***5.63***	***5.64***	***0.01***	***0.2***	***6.60***	***7.29***

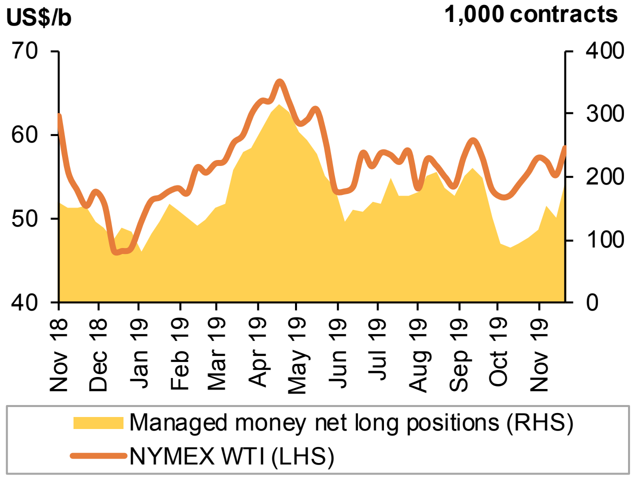
Note: Totals may not add up due to independent rounding.
Sources: CME Group, Dubai Mercantile Exchange, Intercontinental Exchange and OPEC Secretariat.

Hedge funds and other money managers raised their bullish positions during November in both ICE Brent and NYMEX WTI contracts with net long positions in the two contracts rising by 188,869 lots. Speculators were driven by growing optimism about the US-China trade negotiations that could result in a deal, thus limiting the negative impact on the global economy and oil demand growth.

Hedge funds and other money managers almost doubled their net long positions in US NYMEX WTI, raising long positions by 21,065 contracts while reducing heavily their shorts to 39,981 contracts, a decline of 64% and the lowest in two months, according to data from the US Commodity Futures Trading Commission (CFTC).

Money managers were more optimistic about the outlook of NYMEX WTI oil prices despite US crude oil production rising to record levels and US crude oil stocks increasing over several weeks. Hedge funds and money managers increased their net long positions in NYMEX WTI futures and options in the week to 26 November by 93,381 contracts, or 89.2%, to 198,056 contracts, compared to the level registered in the week of 29 October

Graph 1 - 2: NYMEX WTI vs. managed money net long positions

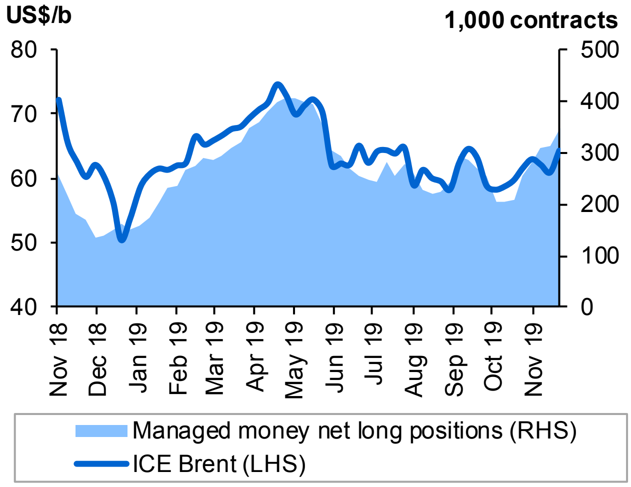


Sources: CFTC, CME Group and OPEC Secretariat.

Money managers also increased their net long positions in ICE Brent in November to their highest level since May, betting on higher oil prices amid improved sentiment about the world economy and global oil demand growth. In the week to 26 November, net long positions for ICE Brent futures and options rose to 349,487 contracts, up 95,488 or 37.6%, compared to the level registered in the week of 29 October. Speculators raised their long positions to 413,977, a rise of 78,246 lots, or 23.3%, during the same period.

Consequently, the long-to-short ratio in both contract ICE Brent and NYMEX WTI speculative positions rose. The long-to-short ratio speculative positions in ICE Brent rose to about 6:1 in the week of 26 November from 4:1 in late October. The NYMEX WTI long-to-short ratio rose to 6:1 for the week ending 26 November from around 2:1 in the week to 29 October.

Graph 1 - 3: ICE Brent vs. Managed money net long positions



Sources: Intercontinental Exchange and OPEC Secretariat.

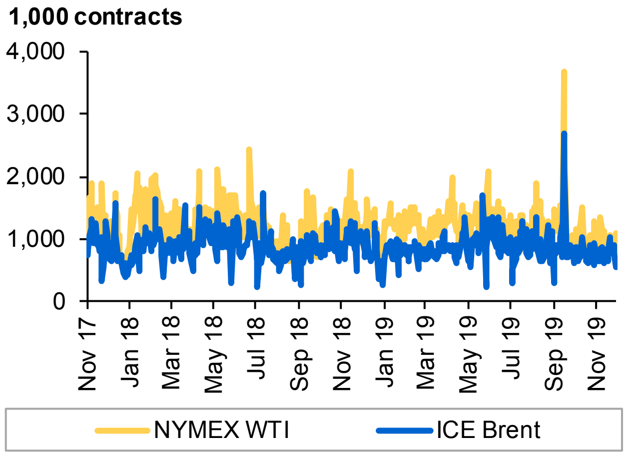
Total futures and options open interest volume in the two exchanges rose by 144,976 contracts from late October to stand at 5.8 million contracts in the week ending 26 November.

The **daily average traded volume** for NYMEX WTI contracts fell further in November by 70,211 lots, or 6.9%, to 942,747 contracts. Daily average traded volume for ICE Brent was little changed, rising slightly by 361 contracts to 771,741 lots.

The **daily aggregate traded volume** for both crude oil futures markets fell by 69.850 contracts m-o-m to stand at 1.7 million futures contracts, or about 1.7 billion b/d of crude oil.

The **total traded volume** for NYMEX WTI was lower again in November at 19.8 million contracts, or 15.0%, while that of ICE Brent was 8.7% lower at 16.2 million contracts.

Graph 1 - 4: NYMEX WTI and ICE Brent daily trading volumes



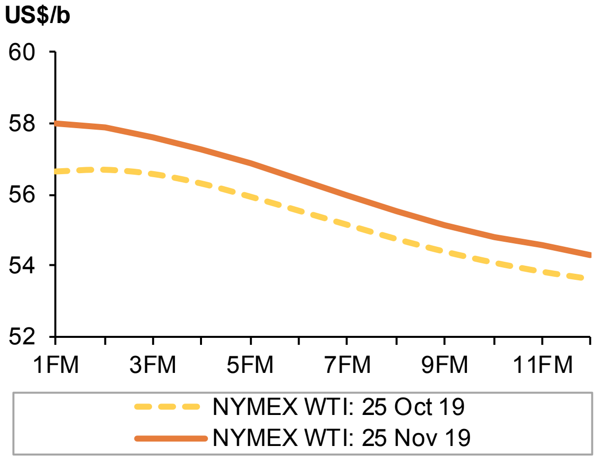
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

The futures market structure

The ICE Brent and DME Oman backwardation **price structures** steepened further in November, as prompt prices were supported by robust seasonal demand, a tightening sour crude market and freight rates easing from the high levels recorded in October. The NYMEX WTI market structure slipped into backwardation despite rising US oil supply and swelling US crude oil stocks.

The forward price structure of **NYMEX WTI** moved to backwardation in November, and the first-to-third month forward spread widened to 56¢ in the second half of the month, as prompt prices found support from the continued easing of crude oil supply congestion in the Cushing trading hub on expanding oil pipeline capacity from the Permian Basin to the US Gulf Coast. Prompt prices rose further on rising US refinery input and utilization rates in November, compared to low levels registered in October due to seasonal refinery maintenance. Moreover, the fall in freight costs from the high levels registered in October, particularly for USGC to Asia routes, gave additional support. However, the rise of US oil supply and increasing crude oil stocks for five consecutive weeks weighed on prices.

Graph 1 - 5: NYMEX WTI forward curves

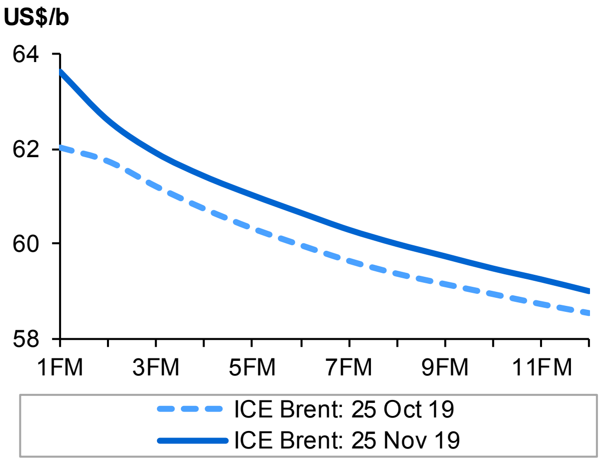


Note: FM = future month.
Sources: CME Group and OPEC Secretariat.

The **ICE Brent** backwardation structure steepened in November, and the ICE Brent first-to-third month spread widened by 68¢ m-o-m, on a monthly average. The backwardation widened on robust seasonal oil demand, higher refinery intakes in main refining centres and easing freight rates from the high levels recorded in October, which invigorated demand for prompt crude cargoes and reduced the supply overhang seen in October in some loading programmes. The ICE Brent backwardation structure strengthened further on renewed optimism about US-China trade negotiations and the potential positive impact on the world economy and global oil demand. In addition, high conformity levels of production adjustments by OPEC and participating non-OPEC countries continue to contribute to the rebalancing of the global oil market.

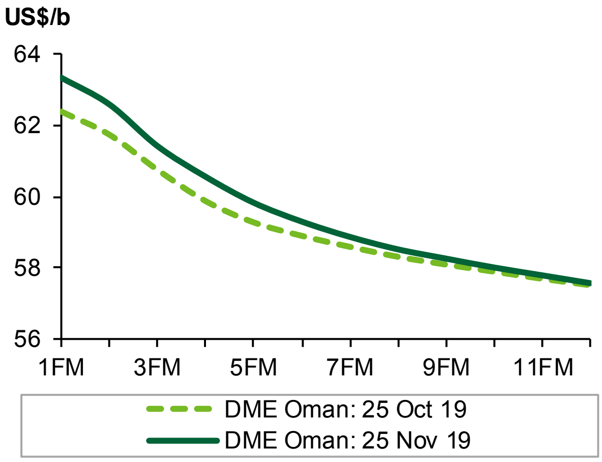
The backwardation structure of **DME Oman** also steepened in November on the tight medium and heavy sour crude market and strong demand for Middle East crude from Asian refiners. The first-to-third month spread widened to \$2.46/b on average in November, an increase of 35¢, m-o-m. Nonetheless, weakening HSFO margins ahead of IMO 2020 put downward pressure on the sour crude market.

Graph 1 - 6: ICE Brent forward curves



Note: FM = future month.
Sources: Intercontinental Exchange and OPEC Secretariat.

Graph 1 - 7: DME Oman forward curves



Note: FM = future month.
Sources: Dubai Mercantile Exchange and OPEC Secretariat.

Regarding the **M1/M3 structure**, North Sea Dated M1/M3 backwardation widened by $1 in November, to average $1.94/b, on a strong physical market and healthy crude demand for December loading in the Atlantic, pushing some crude differential values in the North Sea and West African markets to their highest level in several years. Higher refinery intakes and easing freight costs added additional support to prompt prices. Also, Dubai crude backwardation strengthened further to a new multi-year high in November, supported by the tight medium sour market and strong seasonal demand from the Asia Pacific. The Dubai M1/M3 premium increased to $2.76/b, up by 14¢, on a monthly average. Similarly, in the US, the WTI M1/M3 backwardation spread widened by 11¢ to 12¢/b on higher demand from domestic refiners and improved arbitrage economics on declining freight costs.

The **spread between the ICE Brent and NYMEX WTI** benchmarks was almost unchanged in November to stand at $5.64/b, on a monthly average, as NYMEX WTI prices rose in line with ICE Brent by about $3.1/b. The impact of higher US oil supplies and crude oil stocks on WTI values has been counterbalanced by higher refinery intakes and easing freight rates that contributed to improved US crude arbitrage economics for exports. On a monthly basis, the first month ICE Brent/NYMEX WTI spread widened by 1¢ m-o-m to $5.64/b.

Table 1 - 3: Crude oil futures forward curves, US$/b

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	25 Oct 19	56.66	56.71	56.59	55.55	53.61	-3.05
	25 Nov 19	58.01	57.91	57.63	56.44	54.31	-3.70
	Change	**1.35**	**1.20**	**1.04**	**0.89**	**0.70**	**-0.65**
ICE Brent	25 Oct 19	62.02	61.73	61.20	59.97	58.54	-3.48
	25 Nov 19	63.65	62.62	61.93	60.67	59.01	-4.64
	Change	**1.63**	**0.89**	**0.73**	**0.70**	**0.47**	**-1.16**
DME Oman	25 Oct 19	62.40	61.75	60.76	58.90	57.51	-4.89
	25 Nov 19	63.34	62.59	61.42	59.30	57.57	-5.77
	Change	**0.94**	**0.84**	**0.66**	**0.40**	**0.06**	**-0.88**

Note: FM = future month.
Sources: CME Group, Dubai Mercantile Exchange, Intercontinental Exchange and OPEC Secretariat.

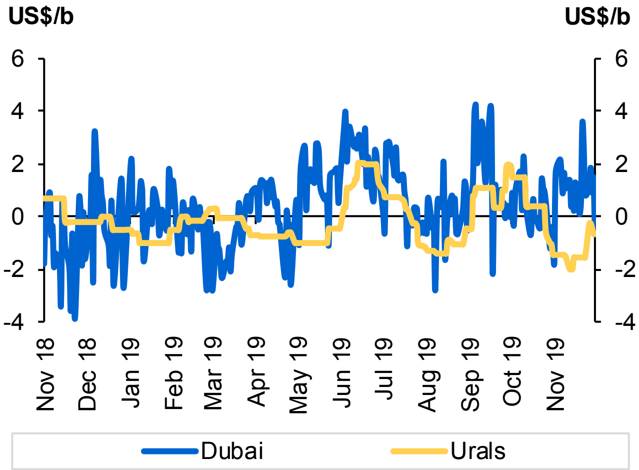
The light sweet/medium sour crude spread

Light sweet and heavy sour crude differentials widened significantly in Asia and the USGC on weakening margins of oil products with high sulphur content, as the deadline of the new IMO 2020 regulations to reduce sulphur oxide emissions approaches. However, the light sweet and heavy sour crude spreads narrowed in Europe due to the tight sour crude market.

In **Europe**, the value of medium sour crude Urals rose firmly in November compared to North Sea Dated, and on a monthly basis, the Urals discount of 45¢/b to North Sea Dated, recorded in October, turned to a premium of $1.33/b. In mid-November, the premium of Urals against North Sea Dated rose to a record high, mainly supported by the tight sour market and lower Urals loading programmes, particularly from the Baltic Sea, as some Russian refiners increased crude runs after the completion of maintenance. Nonetheless, the value of Urals eased in late November due to weak refining margins, particularly HSFO cracks.

In **Asia**, the Tapis premium over Dubai widened further as the value of light and medium sweet grades rose firmly in November on strong demand from Asian refiners and strengthening light distillate values in the Asia Pacific.

Graph 1 - 8: Brent Dated vs. sour grades (Urals and Dubai) spread



Sources: Argus Media, OPEC Secretariat and Platts.

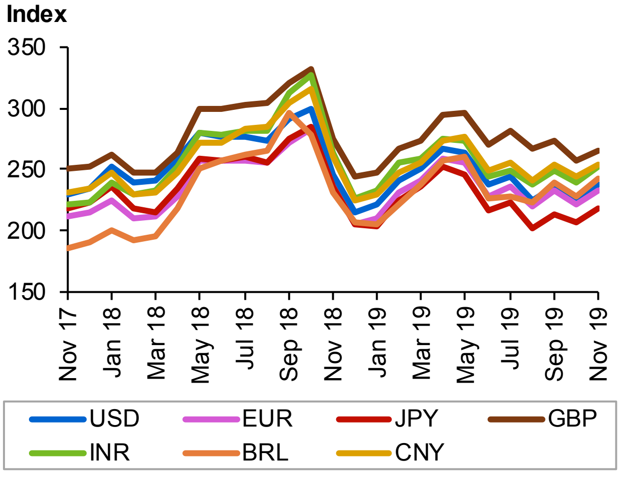
The Tapis premium over Dubai rose by a further $1.56 on a monthly average in November to $8.25/b. The crude quality differential widened on the rising spread between light and heavy product margins ahead of the IMO 2020 regulation. Furthermore, weakening HSFO margins in all markets ahead of IMO 2020 put downward pressure on sour crude values. Also, the premium of VLSFO to HSFO continued to widen significantly. However, the value of sour grades remains relatively strong amid a tight sour crude supply. The North Sea Brent/Dubai spread also widened further by 93¢, to a premium of $1.20/b, on a monthly basis.

On the **USGC**, the premium of Light Louisiana Sweet (LLS) over medium sour Mars rose again in November as the Mars crude value declined significantly amid weak demand and low HSFO margins due to the upcoming IMO 2020. The LLS premium over medium-sour Mars rose by $1.33 m-o-m to $3.60/b.

The impact of the US dollar (USD) and inflation on oil prices

The **USD against major currencies** was mixed in November. Against the pound sterling, the dollar declined on average m-o-m by 2.0%, after a 2.1% decline in the previous month, with the expectation that the results of the upcoming general election will be favourable for the ratification of the Brexit withdrawal agreement. Against the euro, the dollar was stable m-o-m on average, although significant intra-month swings were observed. The dollar declined at the beginning of the month, supported by Brexit developments, but subsequently the dollar strengthened on expectations that no further rate cut by the US Fed will be needed this year in view of strong economic performance. Against the Swiss franc, the dollar decreased slightly by 0.3%. Against the Japanese yen, the dollar advanced by 0.6% m-o-m, after a similar advance in the previous month due to reduced safe haven demand.

Graph 1 - 9: ORB crude oil price index compared with different currencies (base January 2016 = 100)



Sources: IMF and OPEC Secretariat.

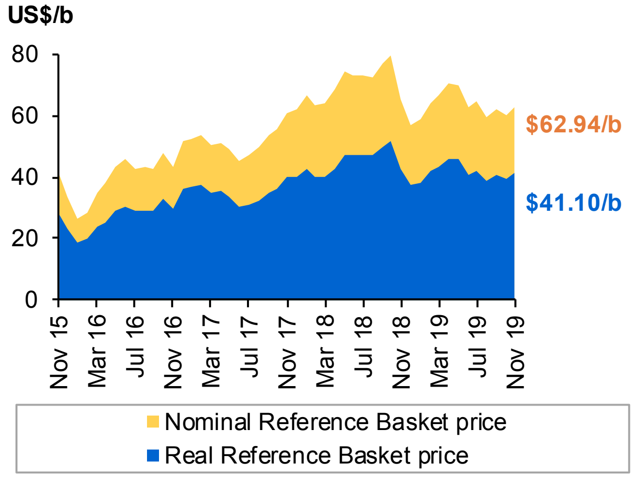
Against the currencies of the largest **emerging market economies**, the dollar was mixed. On average, the USD decreased by 0.7% against the yuan m-o-m, mainly as a result of both the de-escalation of the trade dispute between the US and China, which resulted in the People's Bank of China guiding the yuan higher. Against the rupee, the dollar advanced by 0.6% with the market assessing the impact of the ongoing deceleration in India's economic growth. The USD increased by 1.7% against the Brazilian real, weakened by uncertainties regarding public finance reforms amid a wave of social unrest in Latin America and expectations of further cuts by the Central Bank to its main policy rate amid low inflation readings. Against the Russian ruble, the dollar was down 0.8% amid strengthening energy prices.

In **nominal terms**, the price of the ORB increased by $3.03, or 5.1%, from $59.91/b in October to $62.94/b in November.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to $41.10/b in November from a revised $39.17/b (base June 2001=100) in the previous month.

Over the same period, the **USD** declined by 0.3% against the import-weighted modified Geneva I + USD basket, while inflation eased slightly m-o-m.

Graph 1 - 10: Impact of inflation and currency fluctuations on the spot ORB price (base June 2001 = 100)



Source: OPEC Secretariat.

Commodity Markets

***Energy commodities** generally advanced in November. Gains were seen in crude oil amid ongoing improvements in financial market sentiment given expectations for a potential breakthrough in trade negotiations between China and the US. At the same time, US natural gas benefited from a series of Artic blasts, while in Europe a cold weather front also supported prices, but the upside potential continues to be limited amid comfortable inventory levels. Coal prices declined amid competitive prices for natural gas and expectations of import restrictions in China.*

*In the group of **non-energy commodities**, base metals advanced, supported by the de-escalation of the US-China trade dispute and as global manufacturing activity appeared to regain strength during the last few months. Among precious metals, gold prices declined further on reduced demand for safe haven assets amid declining uncertainties related to the US-China trade dispute and the diminishing odds of a no-deal Brexit.*

Trends in selected commodity markets

The **energy price index** increased by around 5.3% m-o-m in November. Y-t-d it was down on average by 14.1% compared with the same period last year.

The **non-energy index** was up by 2.3% m-o-m, with a small increase in the base metals index and a strong positive contribution from rising agricultural prices. Y-t-d, the non-energy index has fallen by 4.7% compared with the same period last year.

Table 2 - 1: Commodity prices

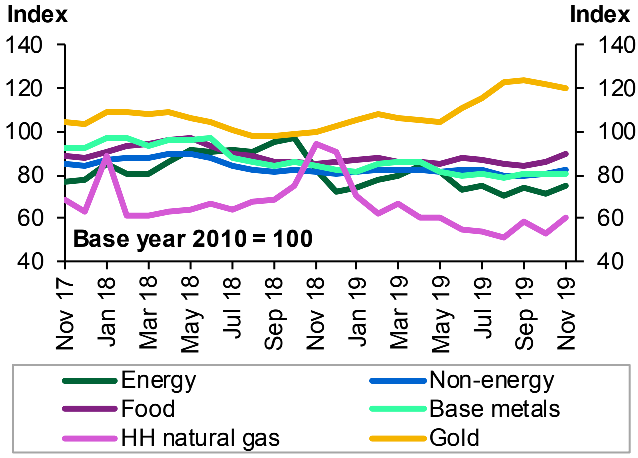
Commodity	Unit	*Monthly averages*			*% Change*	*Year-to-date*	
		Sep 19	Oct 19	Nov 19	Nov 19/Oct 19	2018	2019
Energy*		**73.6**	**70.9**	**74.6**	**5.3**	**88.3**	**75.9**
Coal, Australia	US$/mt	66.0	68.9	67.0	-2.8	107.5	78.9
Crude oil, average	US$/b	60.0	57.3	60.4	5.5	69.7	61.2
Natural gas, US	US$/mbtu	2.6	2.3	2.7	13.7	3.1	2.6
Natural gas, Europe	US$/mbtu	4.2	5.1	5.2	1.8	7.7	4.8
Non-energy*		**79.7**	**80.5**	**82.3**	**2.3**	**85.6**	**81.6**
Base metal*		**80.5**	**80.1**	**80.4**	**0.3**	**91.3**	**81.7**
Precious metals*		**114.9**	**113.4**	**111.4**	**-1.7**	**97.4**	**104.9**

*Note: * World Bank commodity price indices (2010 = 100).*
Sources: World Bank, Commodity price data; OPEC Secretariat.

In November, the **Henry Hub natural gas index** increased on average by 13.7% to $2.65/mmbtu. Prices strengthened at the start of the month as the arrival of cold weather resulted in a strong rise in heating demand. Indeed, prices reached as high as $2.87/mmbtu in the first week of November. However, prices retreated significantly in the second half of November as temperatures moderated. At the end of the month, prices were as low as $2.32/mmbtu.

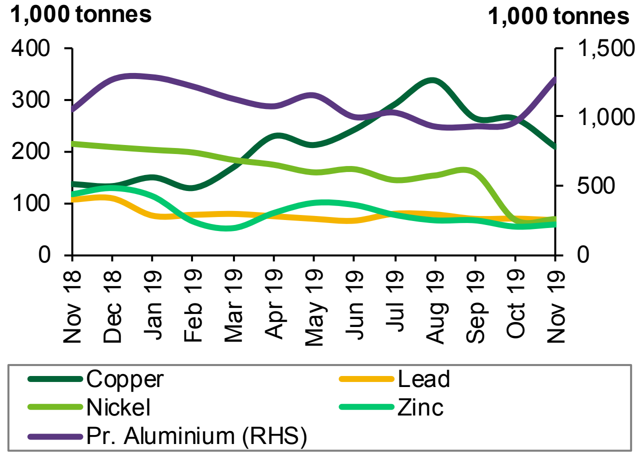
According to the US Energy Information Administration (EIA) most recent storage report, utilities withdrew 19 bcf from working gas underground storage during the week ending 29 November. The withdrawal left total working gas in underground storage at 3,591 bcf, which is 0.3% below the five-year average. At the beginning of November, inventories were at 3,729 bcf and 0.8% above the then five-year average. The combination of strong growth in natural gas production currently running around 10% higher y-o-y, and the expectation of mild average winter temperatures – if materialises – are likely to keep prices subdued.

Graph 2 - 1: Major commodity price indices



Sources: World Bank, Commodity price data; S&P Goldman Sachs; Haver Analytics and OPEC Secretariat.

Graph 2 - 2: Inventories at the LME



Sources: LME, Thomson Reuters and OPEC Secretariat.

Natural gas prices in Europe increased with the **Title Transfer Facility price** rising by 1.8% to $5.15/mmbtu in November. Prices were supported by higher demand due to the arrival of cold weather during the month. However, while some reduction in EU member states storage occurred, levels were still around 94% of working capacity at the end of the month, slightly down from around 97% at the end of October. This bloated storage levels make the upside potential limited. To put levels in some context, at the end of November 2018, storage was 81% full, according to Gas Infrastructure Europe.

Australian thermal coal prices declined in November by 2.8% m-o-m to average $67/mt. Prices were pressured by expectations for a deceleration in the pace of imports into China, which customs data showed declining by 19% m-o-m to 20.78 million tonnes in November. However, this figure is still 8.5% higher than last year's level and y-t-d coal imports have risen by around 10%. It is worth noting that the m-o-m decline in imports stem from a government mandate. At the same time, Chinese coal production has risen by 4.5% y-t-d through October, according to data from the National Bureau of Statistics. Another factor contributing to weaken coal prices is the low prices of competitor fuel natural gas. On the supportive side, thermal power generation has risen strongly y-o-y over the last two months, increasing by 6.0% y-o-y in September and a further 5.9% y-o-y in October, after being subdued for most of 2019.

The **base metal price index** increased on average by 0.3% m-o-m in November, amid mixed movement across the various components. As in October, the de-escalation of the US-China trade dispute and the improvement in financial market sentiment provided support to some base metal prices during the month. Moreover, the pick-up in global manufacturing, with the JP Morgan global manufacturing PMI at a 7-month high of 50.3, slightly in expansion territory, was also supportive of prices. However, some metals, such as Nickel, in previous months supported by the fear of supply disruptions, declined. Nickel prices fell by around 11%, on uncertainty about the implementation of the Indonesian nickel ores export ban.

Copper monthly average prices rose in November by 1.8%. However, prices were volatile during the month. October industrial production figures from China were disappointing, rising by 4.7%, which was worse than the expected 5.4% consensus expectation. This contrasts with better y-o-y figures seen in October. However, the expectation of a tightening physical market supported prices. The International Copper Study estimates that in the first eight months of 2019, the world refined copper balance adjusted for unreported Chinese inventories showed a deficit of 408,000 tonnes. Furthermore, inventories on the London Metal Exchange designated warehouses declined strongly in November to 208,625 from 263,400 tonnes the previous month.

Iron ore prices declined by 4.0% in November to around $85/metric tonne. This is down around 29% from its July monthly average. While earlier in the year, iron ore prices jumped in response to supply disruptions in Brazil, prices have since receded as Brazilian supplies ramped up in the second half. Chinese import data shows that iron ore imports were down 2.4% in November at 90.65 million tonnes. However, in the January–November period, iron ore imports were only down by 0.7%.

In the group of **precious metals**, the index fell by 1.7%, with gold and silver down by 1.6% and 2.7%, respectively, while platinum rose by 0.5%. Prices declined amid optimism surrounding the US-China trade dispute and the reduced odds of a no deal Brexit, which in the past two months have spurred a strong performance in riskier assets, especially equities, reducing demand for safe haven assets.

Investment flows into commodities

Open interest (OI) decreased on average in November for selected US commodity futures, such as natural gas and copper, but increased for precious metals and crude oil. On average, speculative net long positions fell for precious metals, but expanded for natural gas, crude oil and slightly for copper.

Table 2 - 2: CFTC data on non-commercial positions, 1,000 contracts

	Open interest		*Net length*			
	Oct 19	Nov 19	Oct 19	% OI	Nov 19	% OI
Crude oil	2,091	2,137	108	5	160	8
Natural gas	1,226	1,187	-176	-14	-126	-11
Precious metals	834	917	234	28	231	25
Copper	251	230	-48	-19	-29	-13
Total	**4,402**	**4,471**	**-166**	**-1**	**96**	**17**

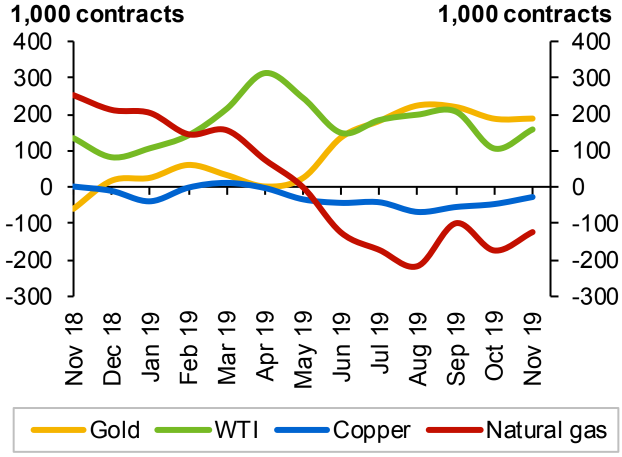
Note: Data on this table is based on monthly average.
Sources: CFTC and OPEC Secretariat.

Henry Hub's natural gas OI fell by 3.2% m-o-m in November, while money managers decreased their net short position by around 28% to reach an average of 125,362 contracts from 176,079 in October, on the arrival of colder than average weather.

Copper's OI increased by 8.3% in November. Money managers cut their net short position by around 40% to around 28,000 contracts from 48,179 the previous month, triggered by improving financial market sentiment and due to a slight pick-up in global manufacturing.

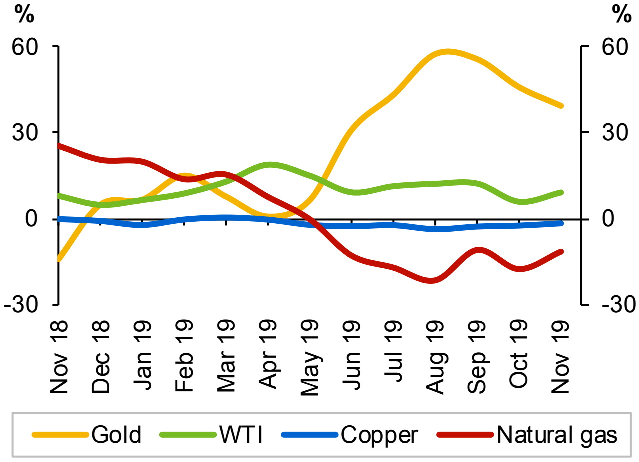
Precious metals' OI increased by 9.9%. Money managers' net long position declined slightly by 1.5% to 230,719, from 234,348 the previous month. While there is reduced safe heaven demand amid improving sentiment in global financial markets, money managers remain significantly bullish on gold.

Graph 2 - 3: Money managers' activity in key commodities, net length



Note: Data on this graph is based on monthly average.
Sources: CFTC and OPEC Secretariat.

Graph 2 - 4: Money managers' activity in key commodities, as % of open interest



Note: Data on this graph is based on monthly average.
Sources: CFTC and OPEC Secretariat.

World Economy

*The **global economic growth forecast** remains unchanged at 3.0% for both 2019 and 2020. Some stabilisation of the global economic downward slope has been confirmed in recent weeks, but other issues, predominately US-related trade uncertainties – particularly within the US-China trade nucleus – remain. This may further negatively impact especially these two economies. The slowdown in India has also continued, as confirmed by 3Q19 GDP growth. Positively, some encouraging developments have recently become apparent in global trade. Potential progress in the ratification of the US Mexico Canada trade agreement in the US Congress, as well as general agreement on the Regional Comprehensive Economic Partnership, the EU-Mercosur trade deal and progress on other bilateral and multilateral agreements are all expected to lead to some recovery in global trade. Furthermore, better-than-expected 3Q19 growth in Brazil and Russia has led to upward revisions. Additionally, the announcement of fiscal stimulus in Japan will likely slightly raise growth in 2020. A tender rebound in global manufacturing activity may also provide support to growth in 2020. At the same time, monetary policies remain accommodative and supportive to global economic development. Finally, a decision by OPEC and non-OPEC participating countries in the Declaration of Cooperation last week to continue striving for a stable and balanced oil market will play an important role in maintaining healthy global economic growth.*

***OECD growth** remains at 1.6% for 2019 and 1.4% for 2020. The 2019 US economic growth forecast remains at 2.3%, while the ongoing slowdown, in combination with continued trade restrictions, has led to the expectation that 2020 US GDP growth will remain unchanged at 1.8%. Euro-zone growth remains the same at 1.2% for 2019 amid confirmation of slowing 2H19 growth carrying over into the coming year. The 2020 forecast also remains unchanged at 1.0%. Japan's 2019 growth forecast remains at 0.9%, while recently announced fiscal stimulus measures are forecast to cushion the 2020 deceleration. The 2020 economic growth forecast has been lifted from 0.3% to 0.6%. The UK's 2019 forecast remains at 1.1% for 2019 and 1.0% in 2020. However, the outcome of the upcoming election and subsequent Brexit dealings will define the economic outcome of 2020 to a large extent.*

*In the **emerging economies**, China's 2019 growth forecast remains at 6.2%. Growth in 2020 remains at 5.9%, with the economy expected to experience a further slowdown, predominantly due to the US-China trade dispute, while ongoing negotiations will need to be carefully monitored. India's growth numbers were revised down considerably, given the ongoing challenges that were confirmed in weaker-than-expected 3Q19 GDP figures. India's 2019 GDP growth is now forecast at 5.5%, compared with 6.1% the previous month and is forecast to accelerate to 6.4% in 2020, compared with 6.7% the previous month. After better-than-expected 3Q19 GDP growth, forecasts for Brazil and Russia were lifted to 1.0% and to 1.1% for 2019 and to 1.7% and 1.3% for 2020, respectively.*

Table 3 - 1: Economic growth rate and revision, 2019-2020*, %

	World	OECD	US	Japan	Euro-zone	UK	China	India	Brazil	Russia
2019	**3.0**	**1.6**	**2.3**	**0.9**	**1.2**	**1.1**	**6.2**	**5.5**	**1.0**	**1.1**
Change from previous month	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	0.2	0.1
2020	**3.0**	**1.4**	**1.8**	**0.6**	**1.0**	**1.0**	**5.9**	**6.4**	**1.7**	**1.3**
Change from previous month	0.0	0.0	0.0	0.3	0.0	0.0	0.0	-0.3	0.1	0.1

*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

OECD

OECD Americas

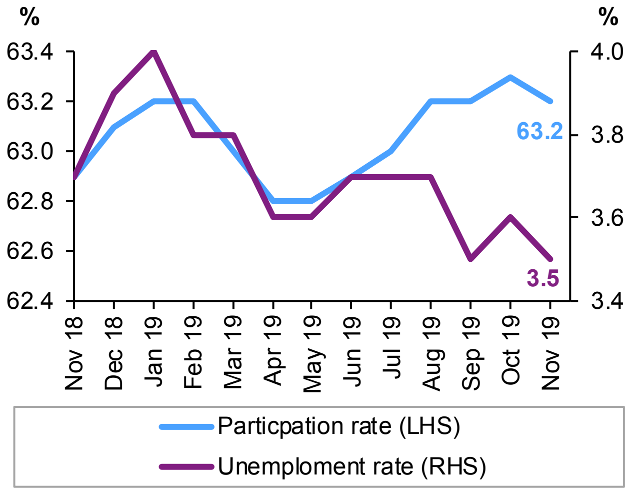
US

The second estimate of **3Q19 US GDP growth** confirmed a slowdown, albeit at a slightly less accentuated rate than initially estimated in the first GDP growth release. US GDP growth stood at 2.1% at a seasonally adjusted rate (SAAR), compared with 1.9% in the first release, according to the Bureau of Economic Analysis. This compares with 2.0% q-o-q SAAR in 2Q19 and 3.1% q-o-q SAAR in 1Q19. It was confirmed that growth remained well supported by consumption, which continued to enlarge the economy – this expanded by 2.9% q-o-q SAAR in 3Q19, after reaching 4.6% q-o-q SAAR in 2Q19. The ongoing strong labour market is an important element in this development. Generally, the services sector is continuing to support economic growth, while the manufacturing side of the economy continues to weaken. With an ongoing solid housing sector and equity market and a generally strong labour market, support is forecast to continue. Investment has, however, continued to decline in 3Q19, when it fell to 0.1% q-o-q SAAR, though this is better than 2Q19 figures, when it declined by 6.3% q-o-q SAAR. This negative trend is also likely related to declining investment in the tight oil sector. Structure and equipment investments, very much bound to the oil sector, have declined considerably in both 2Q19 and 3Q19, with investment into structures declining by 12.0% q-o-q SAAR in 3Q19, compared with 11.1% q-o-q SAAR in 2Q19. Equipment investments additionally fell by 3.8% q-o-q SAAR, after seeing growth of only 0.8% q-o-q SAAR in 2Q19. US Federal Reserve (Fed) monetary policies are expected to remain accommodative, after the key interest rate was lowered three times this year. However, trade uncertainties may continue to negatively impact economic growth. Moreover, an upside for improvement in the labour market is limited, given a multi-decade low unemployment rate. Also, productivity growth remains relatively low, and with no major fiscal stimulus in 2020, compared with 2019 and 2018, growth is likely to continue decelerating.

The **labour market** held up well in November, with the unemployment rate falling again, moving back to 3.5% from 3.6% the previous month.

Non-farm payrolls in November increased significantly again, rising by 266,000, after job additions were revised upward to 156,000 in October. Average hourly earnings for the private sector posted a solid rise of 3.1% in November, almost the same as in October, when they rose by 3.2%. These solid numbers indicate that labour market support to the economy is likely to continue in the very near term. Positively, long-term unemployment declined again to stand at 20.8% in November, compared with 21.5% in October and 22.7% in September. The participation rate stood at 63.2% in November, a 0.1 pp fall from October, which saw the highest level since 2013.

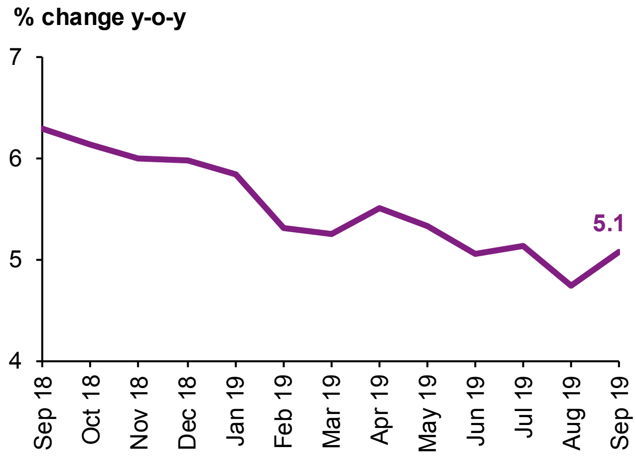
Graph 3 - 1: US monthly labour market



Sources: Bureau of Labor Statistics and Haver Analytics.

Total inflation rose slightly, almost unchanged in September, to stand at 1.7% y-o-y, compared with 1.8% y-o-y in August. Core inflation – excluding volatile items such as food and energy – retracted very slightly in October to stand at 2.3%, compared with 2.4% y-o-y in September and August. The Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), remained unchanged at 1.3% y-o-y in October. The critically important **housing sector** remained well supported, both in price development and in home sales. The yearly change in the **house pricing index** of the Federal Housing Finance Agency (FHFA) moved back to above 5%, as house prices rose by 5.1% y-o-y in September compared with 4.7% y-o-y in August.

Graph 3 - 2: US house prices

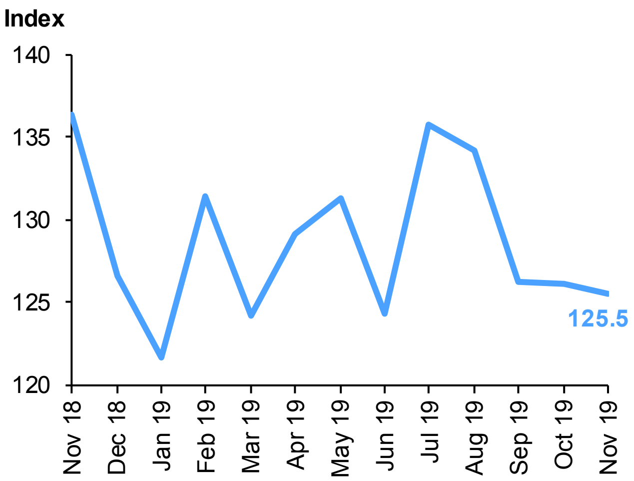


Sources: Federal Housing Finance Agency and Haver Analytics.

Existing home sales also remained relatively strong in September, rising to an annualized level of 5.46 million, after reaching 5.36 million in August. New home sales held up well, rising by 733,000 in October, following a 738,000 rise in September. The S&P CoreLogic Case-Shiller Home Price Index Composite 20 for metropolitan areas rose slightly as well, standing at 2.1% y-o-y in September compared with 2.0% y-o-y in August.

Consumer sentiment continued its downward slope of recent months as it fell in November, marking the fourth consecutive month of contraction. The lead indicator, published by the Conference Board, fell to 125.5 in November from 126.1 in October, compared with 126.3 in September and 134.2 in August. However, given the ongoing strong momentum in the labour market, in combination with an ongoing robust housing and equity market, this is forecast to recover.

Graph 3 - 3: US consumer confidence index

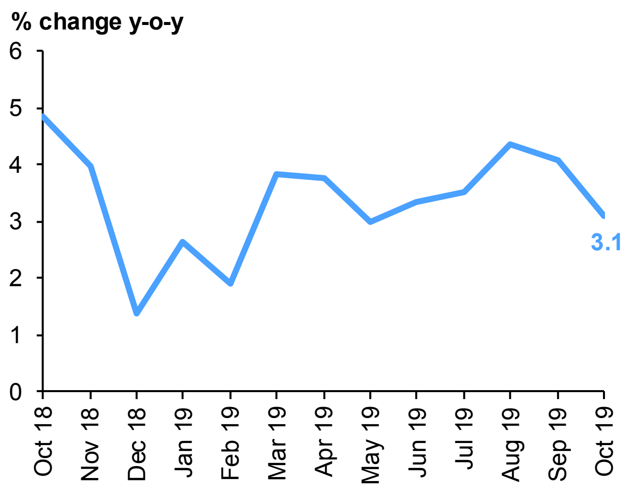


Sources: The Conference Board and Haver Analytics.

The trend in consumer sentiment is to some extent reflected in **retail sales** growth, which retracted in October, but still remained at a good level, rising by 3.1%, compared with 4.1% y-o-y in September and 4.4% y-o-y in August. However, 2018 levels were significantly higher – annual growth of retail sales stood at 4.9% y-o-y on average last year.

Industrial production (IP) remained a weak spot in the US economy, decelerating further in October by 1.1% y-o-y, the largest decline since 2016. The October decline compared with a decline of 0.1% y-o-y in September, after IP rose by 0.4% y-o-y in August.

Graph 3 - 4: US retail sales

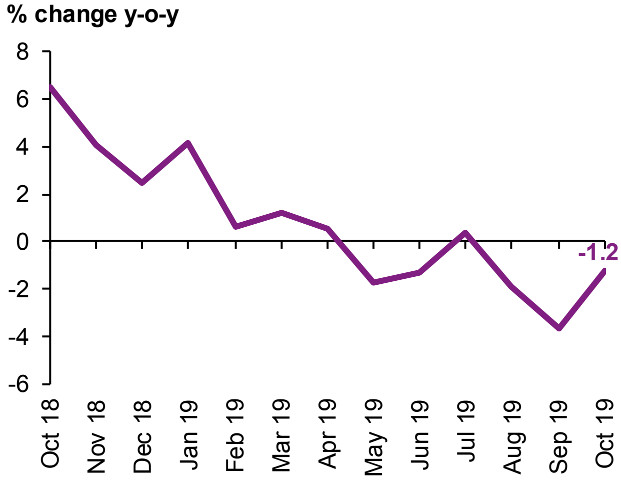


Sources: Census Bureau and Haver Analytics.

This trend is also expected to rebound in 2019, given the expectation of a cyclical recovery in some key sectors, including automotive and somewhat in mining, which is very much impacted by the oil sector. Motor vehicles and parts sales declined by 11.90% y-o-y in October, by far the largest decline since 2009. Mining activity grew by only 2.7% y-o-y, the least since the beginning of 2017, when the mining industry started to recover following the rebalancing of the oil market through OPEC's Declaration of Cooperation.

In this respect, **manufacturing orders**, a good lead indicator of future manufacturing activity, pointed to some recovery. After a considerable decline in September, down by 3.7% y-o-y, the October decline stood at 1.2% y-o-y, translating into a monthly increase of 0.3% m-o-m.

Graph 3 - 5: US manufacturing orders



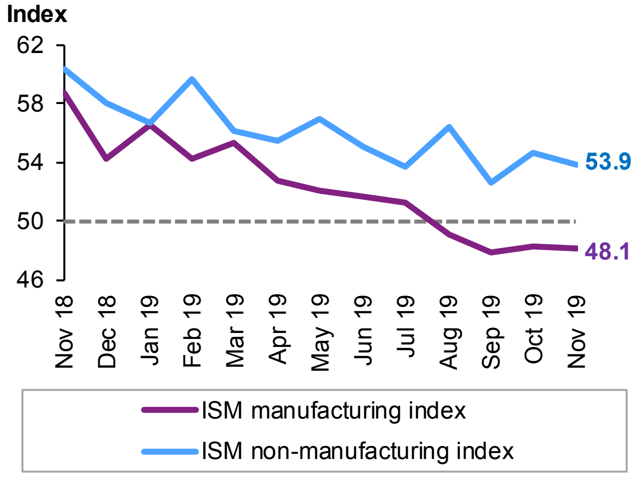
Sources: Census Bureau and Haver Analytics.

November's **Purchasing Managers' Index (PMI)**, as provided by the Institute for Supply Management (ISM), indicated a continued contraction in the manufacturing sector, and while the services sector held up relatively better, the index retracted in this area slightly as well.

The manufacturing PMI remained below the growth-indicating level of 50 to stand at 48.1 in November, compared with 48.3 in October. The services sector index fell to 53.9 in November, compared with 54.7 in October.

The **GDP growth** forecast for 2019 remains unchanged at 2.3%. Taking into account ongoing trade issues and a weakening growth trend in the US economy, the GDP growth forecast for 2020 stands at 1.8%, also unchanged from the previous month. While monetary policies are expected to remain relatively accommodative, domestic policy issues will continue and underlying domestic demand is expected to slow. However, domestic consumption is forecast to provide a very important supporting element to the economy in 2020. Trade-related matters in particular will require close monitoring, as it remains to be seen if ongoing negotiations between the US and China will lead to an improvement in the current situation. Additionally, industrial activity is forecast to recover and show a cyclical rebound.

Graph 3 - 6: US-ISM manufacturing and non-manufacturing indices



Sources: Institute for Supply Management and Haver Analytics.

Mexico

The **Mexican economy's** activity remained relatively anaemic. The GDP in 3Q19 stood at 0.1% q-o-q SAAR, after two consecutive quarters of a slight decline of 0.2% q-o-q SAAR in 2Q19 and 0.4 q-o-q SAAR in 1Q19. While no details for 3Q19 GDP numbers have been made available yet, investments declined by 9.3% q-o-q SAAR in 2Q19, dragging down Mexican growth and reflecting some uncertainty in trade, domestic policy issues and weakness in the oil sector. **Industrial production** fell again in September, declining by 2.0% y-o-y. This compares with -0.9% y-o-y in August and -2.2% y-o-y in July. The trend was very much influenced by a softening trend in the mining sector, the largest contributor of which is the oil sector, which was in steep decline, down by 5.2% y-o-y. After the **PMI** index for manufacturing pointed to some potential recovery in October, it retracted again sharply in November, with the month's PMI again falling clearly below the growth-indicating level of 50 to stand at 48.0, compared with 50.4 in October, 49.1 in September and 49.0 in August.

Weak 3Q19 GDP numbers and ongoing issues in industrial output led to a further downward revision of the GPD growth forecast for both 2019 and 2020. GDP growth in 2019 is now forecast at only 0.2%, compared with 0.4% the previous month, while for 2020 it was revised down to 0.8%, compared with 1.1% the previous month.

OECD Asia Pacific

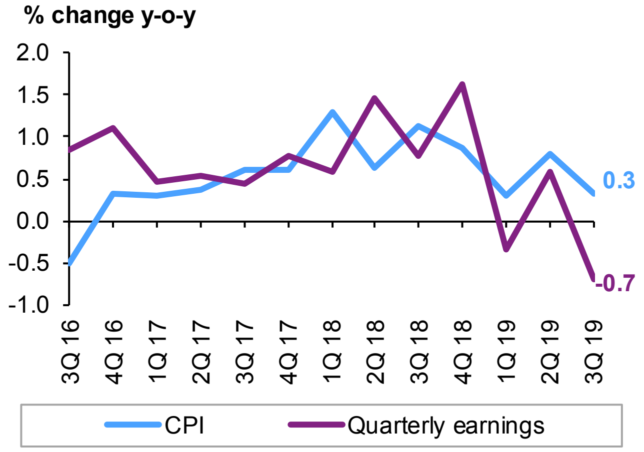
Japan

While **Japan's economy** is impacted by a variety of challenges, which led to a deceleration in 2019, the government recently announced a fiscal stimulus package to counterbalance some of the negative trends in 2020. So far this year's growth pattern was characterised by a decline in global trade, a slowdown in global industrial activity – amid issues in the global car sector – and the most recent hike in Japans' sales tax in 4Q19 from 8% to 10%. While the negative impact of the sales tax increase seems to be less accentuated, domestic demand has been sluggish. Another drag in 4Q19 came from Typhoon Hagibis, which disrupted production and supply in key sectors, including automotive manufacturing. Given this challenge, the government decided that a new fiscal stimulus package in the form of a supplemental budget for the fiscal year 2020 will start in April 2020. The 13.2 trillion yen package, along with further private investment, should support economic growth in 2020. Details have not yet been made available and it will be challenging to invest efficiently in an economy that has already seen a variety of fiscal stimulus measures. Furthermore, capacity utilisation in Japan is still at almost full potential and the labour market also shows full employment. Hence an upside from the current resource base seems limited. Without a great amount of detail on fiscal measures, and based on previous experience, a positive net effect of around 0.3 percentage points to GDP growth in 2020 is forecast at the current stage. In the meantime, the Bank of Japan (BoJ) continued its monetary easing efforts, which, however, seem to have become less effective.

Total **inflation** remained relatively anaemic in October, despite ongoing efforts by the BoJ to lift inflation via unprecedented monetary stimulus. October inflation again stood at 0.2% y-o-y, the same level as in September and August. Core inflation remained relatively stable during the past few months, standing at 0.6% y-o-y in September for a second consecutive month.

The **labour market** remains tight, with the unemployment rate standing at 2.4% in October, the same level as in September. Earnings rose by 0.3% in October, almost matching inflation. This compares with a rise in September earnings of 0.5% y-o-y.

Graph 3 - 7: Japan's CPI vs earnings



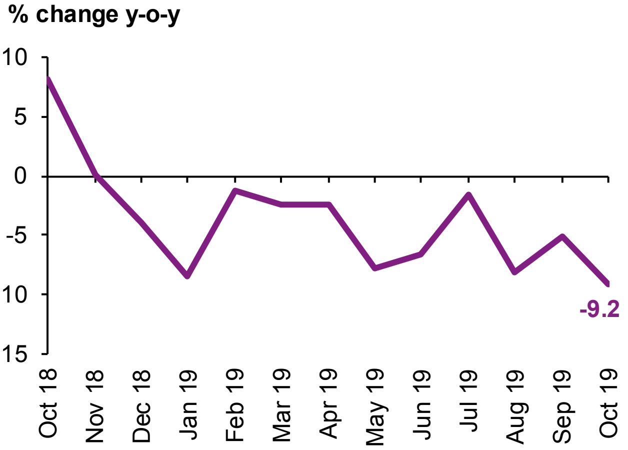
Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Haver Analytics.

The BoJ is expected to continue with its accommodative monetary policies, given the economic growth trend and low inflation. Despite the falling effectiveness of monetary stimulus, there is some possibility that the BoJ will increase its monetary support further and move its interest rates deeper into negative territory.

Given ongoing trade disputes and the rising fragility of the global economy, **export** growth slowed again in October, declining by 9.2% y-o-y on a non-seasonally adjusted rate. This compares with a decline of 5.2% y-o-y in September and -8.2% y-o-y in August.

Correspondingly, and very much impacted by the sales tax increase, **industrial production** declined significantly in October, falling by 6.0% y-o-y compared with 0% y-o-y in September and -2.0% y-o-y in August. Machinery orders fell by 8.1% y-o-y in September, pointing to a further slowdown in the manufacturing sector, in line with declining business sentiment.

Graph 3 - 8: Japan's exports

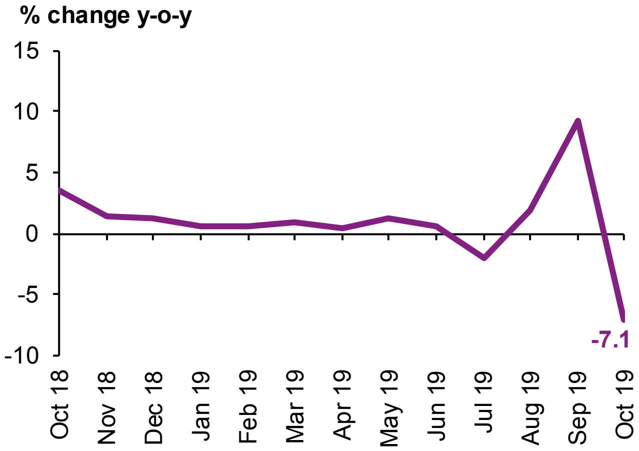


Sources: Ministry of Finance, Japan Tariff Association and Haver Analytics.

Domestic retail demand saw strong growth in both August and September, rising by 1.8% and 9.2% y-o-y, respectively, in anticipation of the sales tax increase. However, due to this, the trend naturally broke and retail demand growth declined by 7.1% y-o-y in October. Positively, consumer confidence rebounded independent of the sales tax increase.

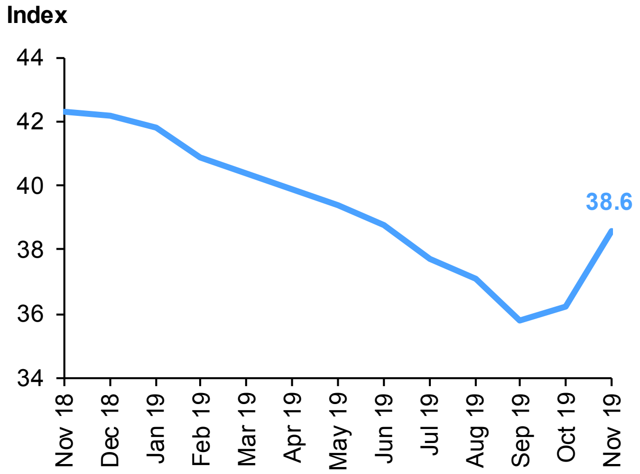
The **consumer confidence** index, published by the Cabinet Office, now stands at 38.6 in November, compared with 36.2 in October and 35.8 in September. This is the second consecutive month of increase, after the index fell for more than a year.

Graph 3 - 9: Japan's retail trade



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

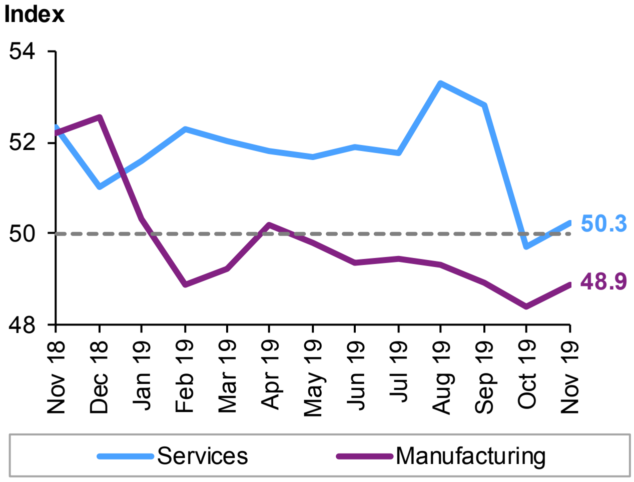
Graph 3 - 10: Japan's consumer confidence index



Sources: Cabinet Office of Japan and Haver Analytics.

A somewhat improving trend was also reflected in the latest November **PMI** numbers. While the manufacturing PMI confirmed an ongoing contraction, it improved marginally. However, considering the negative impact of Typhoon Hagibis mainly on Tokyo and the surrounding area, along with the sales tax increase, the trend remained relatively better than expected. The manufacturing PMI improved to 48.9 in November, compared with 48.4 in October. The PMI for the services sector – which constitutes around two-thirds of the Japanese economy – improved to 50.3, compared with 49.8 in October, but is seemingly still impacted by the sales tax increase.

Graph 3 - 11: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

Japan's 2019 **GDP growth** forecast remains at 0.9%, affected by the sales tax increase and the impact of Typhoon Hagibis, combined with ongoing global trade challenges. Growth for 4Q19 is forecast to be negative. While the underlying sluggish growth trend is expected to continue, it will be somewhat counterbalanced by the fiscal stimulus package. Consequently, GDP growth for 2020 has been revised up and is forecast at 0.6%, compared with 0.3% the previous month.

South Korea

The sluggish trend in the **South Korean economy** somewhat stabilised, supported by a recovery in exports and an improving domestic demand situation. GDP for 3Q19 was reported at 2.0% y-o-y, only slightly below the 2.1% of 2Q19 but above the 1.6% y-o-y seen in 1Q19. Indeed, final consumption, primarily by government, but also by private households, held up well. Government consumption rose by 6.9% y-o-y in 3Q19 compared with 7.1% in 2Q19, reflecting the aim of government to compensate for a decline in underlying growth. Private household consumption rose by 1.8% y-o-y in 3Q19, compared with 2.0% y-o-y in 2Q19. Investment also recovered in 3Q19 as growth stood at 0%. This compares with a decline of 2.2% y-o-y in 2Q19 and -6.7% y-o-y in 1Q19.

Exports remained very weak over the past months, still the weakest area of the South Korean economy, falling considerably again in November, down by 11.0% y-o-y. This compares with an already hefty decline of 11.2% y-o-y in October. Industrial production also remained sluggish, declining by 0.6% y-o-y in October, after seeing growth of 0.7% y-o-y in September. The November **PMI number** for the manufacturing sector, 49.4, reflects an ongoing challenging environment, but also constitutes an improving trend compared with 48.4 in October and 48.0 in September.

It remains to be seen how ongoing trade challenges will affect the economy. For the time being, the 2019 **GDP growth** figure remains unchanged at 1.9%, while in 2020, GDP growth is forecast at 2.1%.

OECD Europe

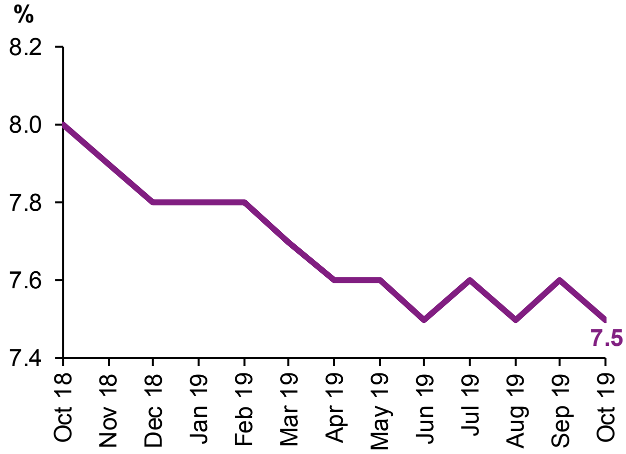
Euro-zone

In the **Euro-zone the low-growth pattern continues**, supported by some rebound in exports and ongoing domestic demand. Moreover, the ongoing accommodative monetary policy of the European Central Bank (ECB) supports credit creation, though mostly in the property sector. The labour market in most economies continued its improving trend and wage growth continued to pick up on average, but this has so far not translated into considerably boosting inflation levels in the Euro-zone, which remain low. While Germany has been continuously affected by global trade challenges in general and by the global car sector slowdown in particular, economic activity showed some rebound recently. German exports picked up again in October, rising by 2.0% y-o-y, after going up by 1.6% y-o-y in September. This may point at some further improvements in 4Q19 German growth. However, industrial production in Germany remained very weak, declining by 5.3% y-o-y in October, led by a decline in manufacturing, which fell by 6.2% y-o-y.

Within the manufacturing sector, motor vehicles again showed a very strong decline of 17.8% y-o-y, compared with a decline of 10.2% y-o-y in September. This coincides with a sharp output decline in the very important capital goods sector of 8.4% y-o-y. While October numbers for the Euro-zone have not been made available by Eurostat, German indicators show they will drop further in October.

In the **labour market**, the Euro-zone's unemployment rate fell to 7.5% in October, compared with 7.6% in September. Unemployment in Germany stood unchanged at 3.1% in October. France's unemployment rate improved to stand at 8.5%, compared with 8.6% over the previous three months. Spain's jobless rate remained at 14.2%. Unemployment in Italy remained below 10% for a fifth consecutive month, declining to 9.7%, compared with 9.9% in September.

Graph 3 - 12: Euro-zone unemployment rate

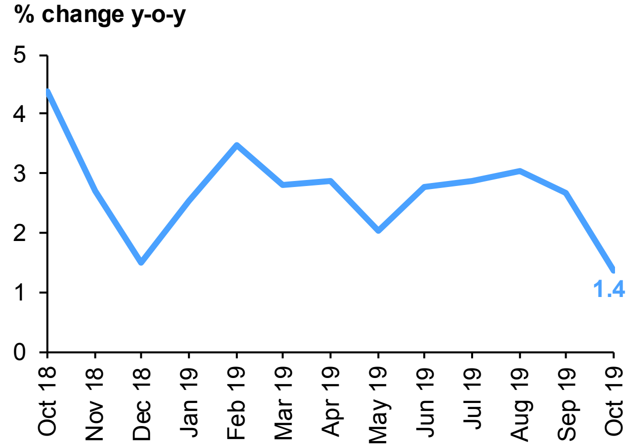


Sources: Statistical Office of the European Communities and Haver Analytics.

Retail trade decelerated again in October. In value terms it stood at 1.4% y-o-y, compared with 2.7% y-o-y in September and 3.0% y-o-y in August. This needs to be monitored, as growth in the sector constitutes an important support factor for the Euro-zone's economy.

In the latest available numbers for September, **industrial production** in the Euro-zone contracted, falling by 1.9% y-o-y. However, this is better than in August, when it declined by 2.6% y-o-y. Given the latest decline in Germany, the trend will probably continue. However with the expectation of a recovery in the automotive sector, the dynamic is forecast to rebound in 2020.

Graph 3 - 13: Euro-zone retail sales

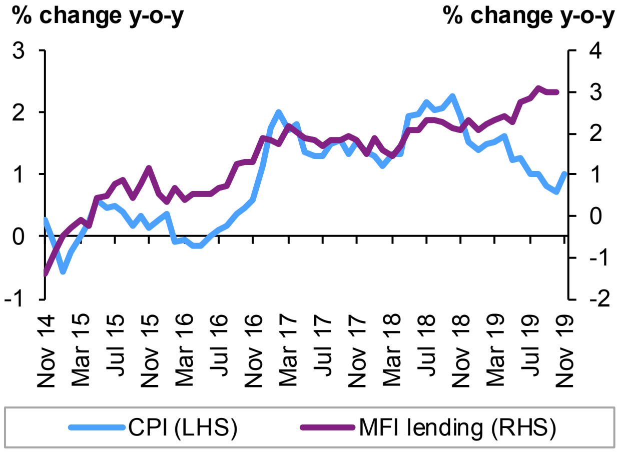


Sources: Statistical Office of the European Communities and Haver Analytics.

The most recent **manufacturing orders** for the Euro-zone point to a continuation of the downward trend. Manufacturing orders declined by 4.4% y-o-y in September, compared with 5.6% y-o-y in August and 4.4% y-o-y in July. It means that all nine available months of 2019 have seen negative or flat growth in both IP and manufacturing orders in the Euro-zone.

Inflation recovered in November to stand at 1.0%, compared with 0.7% y-o-y in October and 0.8% y-o-y in September. The important core inflation rate – the core CPI, excluding energy and food – picked up as well. It stood at 1.3% y-o-y in November, after reaching 1.1% in October and 1.0% in September, showing a positive trend. This is also reflected in support through rising wages in the Euro-zone. Developments in **lending activity** – a motor for investment – continued to grow in October. The latest growth numbers from October stood at 3.0% y-o-y, the same level as in September and compared with 3.1% in August. It should be noted that the highest growth is coming from the real-estate sector. Mortgages account for around 40% of these activities and grew by 3.8% y-o-y in October.

Graph 3 - 14: Euro-zone CPI and lending activity



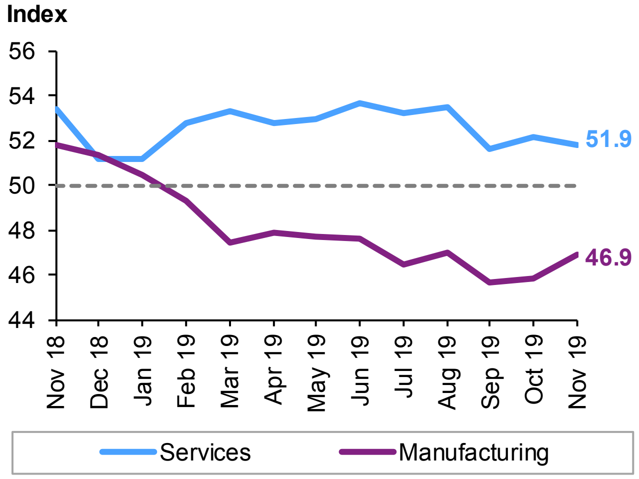
Sources: Statistical Office of the European Communities, European Central Bank and Haver Analytics.

The Euro-zone's latest November **PMI indicators** reflected mixed development as the services sector retracted slightly, while the improving manufacturing sector remained in contraction territory. The manufacturing PMI stood at 46.9, compared with 45.9 in October. The important PMI for services, the largest sector in the Euro-zone, fell somewhat, standing at 51.9, compared with 52.2 in October.

Ongoing challenges in the Euro-zone keep growth at a low level. Considering the German slowdown, weakness in the banking sector, Brexit and the high sovereign debt levels in some economies, developments in the Euro-zone remain uncertain.

The 2019 **GDP growth** forecast remains unchanged at 1.2%. Given that growth is not expected to accelerate from the current level, GDP growth expectations for 2020 remain at 1.0%, unchanged from the previous month.

Graph 3 - 15: Euro-zone PMIs



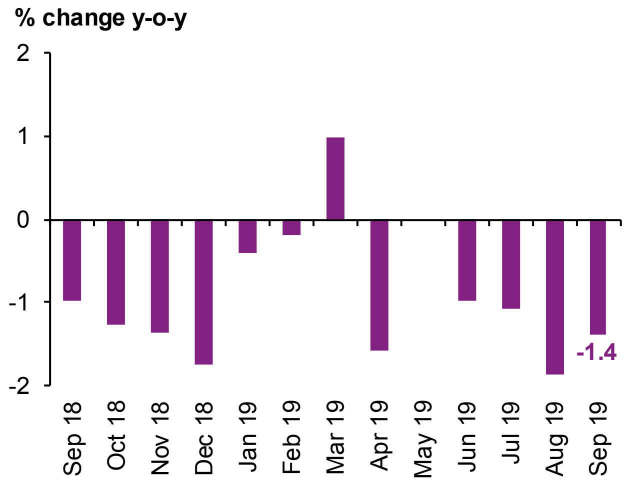
Sources: IHS Markit and Haver Analytics.

UK

The UK's economy remains impacted by Brexit and has been in a constant deceleration in 2019, a trend that is forecast to continue in 2020. Much will depend on the outcome of the general elections and on the consequent decisions about Brexit, as well as the general economy, since the economic programmes of the two major competing parties differ greatly.

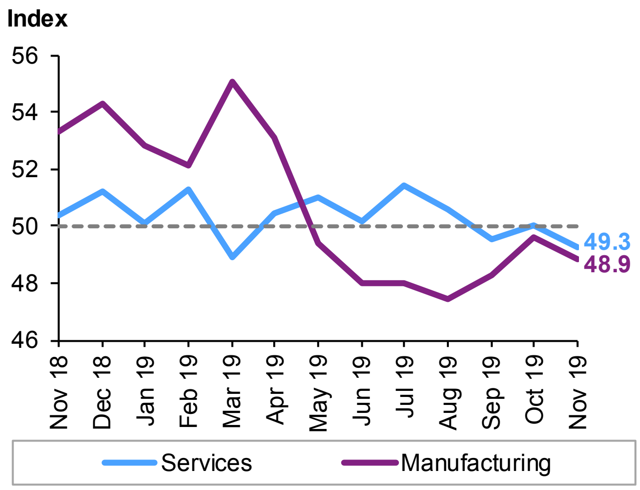
Retail sales in value terms held up well, rising by 3.2% y-o-y in October, compared with 3.3% y-o-y in September and 3.1% y-o-y in August. **Exports** remained flat in September, with growth recorded at 2.1% y-o-y, the same as in August and July. **Industrial production** fell again in September, declining by 1.4% y-o-y, after seeing a decline of 1.9% y-o-y in August.

Graph 3 - 16: UK industrial production



Sources: Office for National Statistics and Haver Analytics.

Graph 3 - 17: UK PMIs



Sources: CIPS, IHS Markit and Haver Analytics.

November **PMI lead indicators** showed another decline in manufacturing, also remaining in contraction territory at 48.9, compared with 49.6 in October, indicating ongoing contraction in the sector. The very important services sector PMI, which constitutes the majority of the UK's economy, fell again to stand at 49.3, below the growth-indicating level of 50.0, compared with 50.0 in October.

GDP growth for 2019 remains at 1.1%. Given ongoing political uncertainties and the slowdown in the economy, the 2020 growth forecast remains unchanged at 1.0%. This assumes no major changes in economic policy after the elections and a non-disruptive and soft Brexit, which given the ongoing uncertainties remains to be seen. Depending on these developments, further downside risk remains considerable.

Non-OECD

BRICs

Table 3 - 2: Summary of macroeconomic performance of BRIC countries, 2019-2020*

	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	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Brazil	1.0	1.7	3.6	3.2	-34.6	-43.6	-5.8	-4.7	79.1	80.0
Russia	1.1	1.3	4.5	4.2	109.7	115.1	2.3	1.5	9.4	9.3
India	5.5	6.4	3.4	4.1	-52.5	-57.1	-3.8	-3.6	48.3	48.0
China	6.2	5.9	2.7	3.3	208.4	145.5	-4.3	-4.5	18.4	21.6

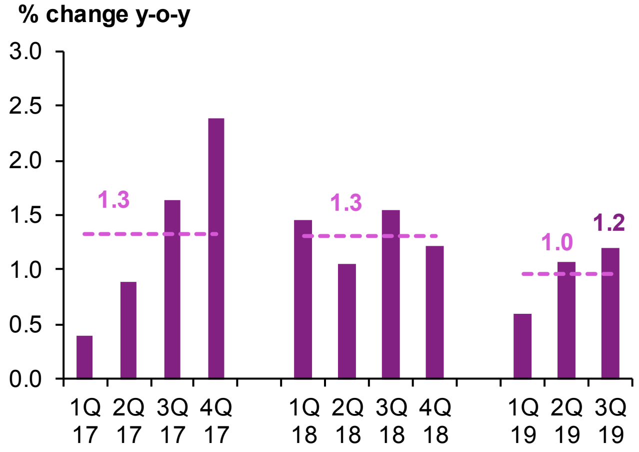
*Note: * 2019 = Estimate and 2020 = Forecast.*

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

Brazil

Brazil's GDP registered growth of 1.2% y-o-y in 3Q19, from 1.1% in the previous quarter. The **economic activity indictor** registered growth of 2.1% y-o-y in September, from a 0.7% y-o-y contraction in August. The **trade surplus** shrank in November 2019 to $3.4 billion, from $4.1 billion in November 2018, as a result of contractions in both exports and imports. **Exports and imports** from fell by 16.0% y-o-y in November. Exports of primary goods, semi-manufactured products, and manufactured products fell by 11.5%, 17.0%, and 23.2% y-o-y in November, respectively. Imports of primary products, semi-manufactured products, declined by 31.8% and 6.0% y-o-y in November, respectively, while the import of manufactured goods went up by 11.7% y-o-y in November. During 1H19, GDP grew by 0.7% y-o-y.

Graph 3 - 18: Brazil's GDP growth



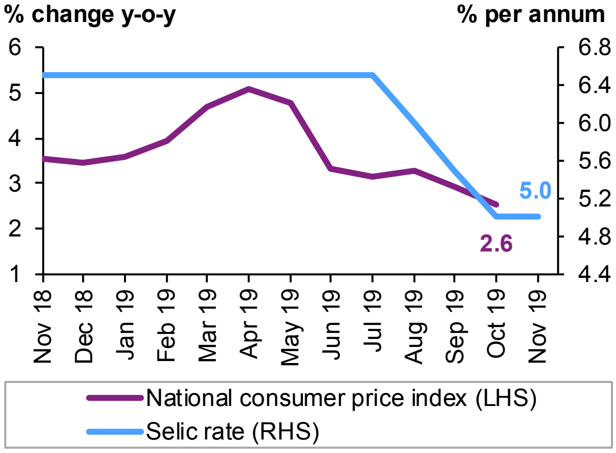
Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

In November, the **real** depreciated by 1.7% m-o-m, following a 0.8% appreciation in October. On a y-o-y comparison, the real was lower by 9.7% to the dollar in November 2019. The real depreciated by 18% in 2018.

Inflation eased from 2.9% in September to 2.6% in October. In September, inflation rose by less than 3%, for the first time since May 2018. Inflation average posted 2.9% in 2018. The central bank left its benchmark **interest rate** unchanged in November at 5.0%, after lowering it in October from 5.5% to 5.0% which is the lowest on record. Reducing interest rates was a result of sluggish GDP growth.

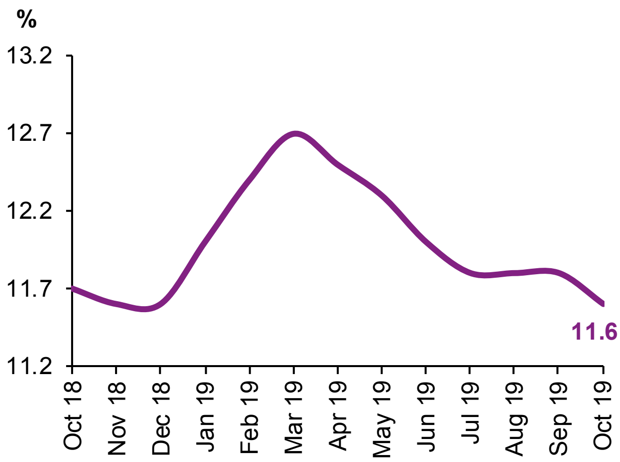
The **unemployment rate** was lower in October at 11.6%, from 11.8% in September. The **consumer confidence** index went down in November to 91.2, from 91.6 in October.

Graph 3 - 19: Brazil's inflation vs. interest rate



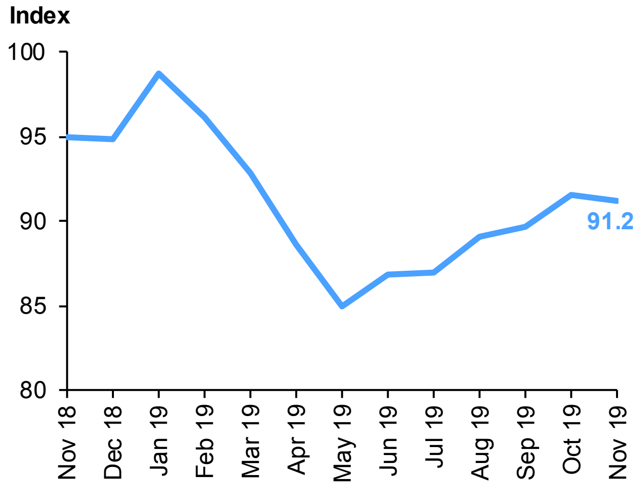
Sources: Banco Central do Brasil, Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

Graph 3 - 20: Brazil's unemployment rate



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

Graph 3 - 21: Brazil's consumer confidence index

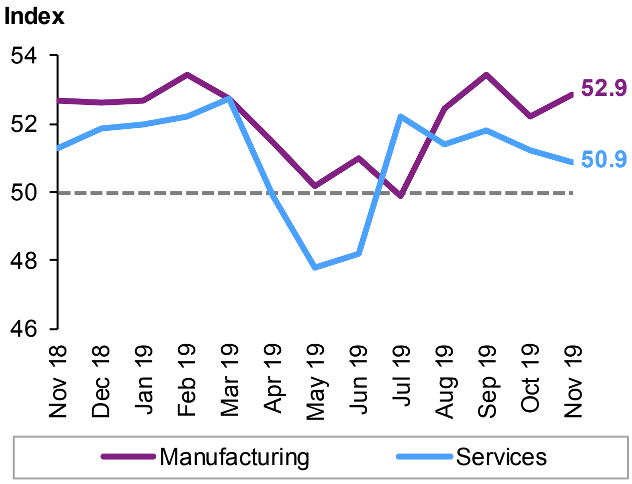


Sources: Fundação Getúlio Vargas and Haver Analytics.

Operations conditions in the **manufacturing sector** continued to improve in November, according to the IHS Markit Brazil manufacturing PMI. The index rose to 52.9 in November, up from 52.2 in October on the back of production rising by its fastest pace in 20 months. The index survey stated that "Brazilian goods producers expect the approval of public reforms, higher sales, better economic conditions, investment and product diversification to support output growth in the year ahead. Moreover, the overall level of positive sentiment climbed to a seven-month high.''

Following the recent approval of the government's pension legislation, the government continued the reform drive by submitting to congress a series of wide-ranging bills, including an overhaul of the country's public sector. The government is also looking to privatize state electric utility company. Exports to Argentina still pose a major challenge to Brazil as export dropped by 32% y-o-y in October.

Graph 3 - 22: Brazil's PMIs



Sources: IHS Markit and Haver Analytics.

The 2Q19 GDP data showed that Brazil narrowly avoided recession after expanding by 0.4% q-o-q and 1.0% y-o-y.

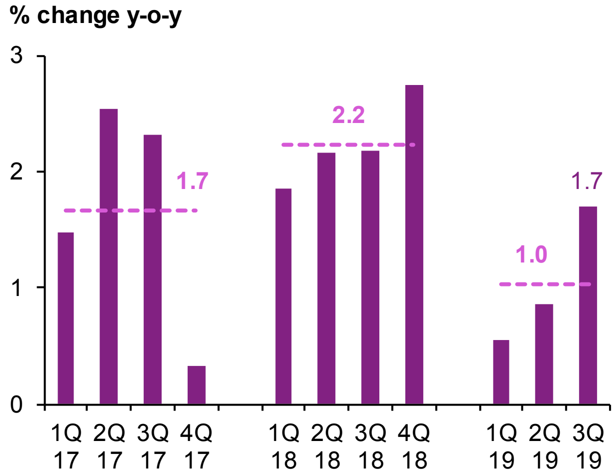
Brazil's **GDP growth** is expected to post growth of 0.8% y-o-y and 1.6% in 2019 and 2020, respectively.

Russia

GDP expanded by 1.7% y-o-y in 3Q19, up from 0.9% in the previous quarter, according to the Federal State Statistics Service. However, details on the components of GDP growth are not published yet. GDP growth registered 0.9% y-o-y in 2Q19, up from 0.5% in 1Q19.

The **balance of trade** in goods was $4.7 billion y-o-y lower in September 2019, going from $18.8 billion down to $14.1 billion. **Exports** dropped by 9.3% y-o-y in September, while **imports** went up by 5.6%.

Graph 3 - 23: Russia's GDP growth



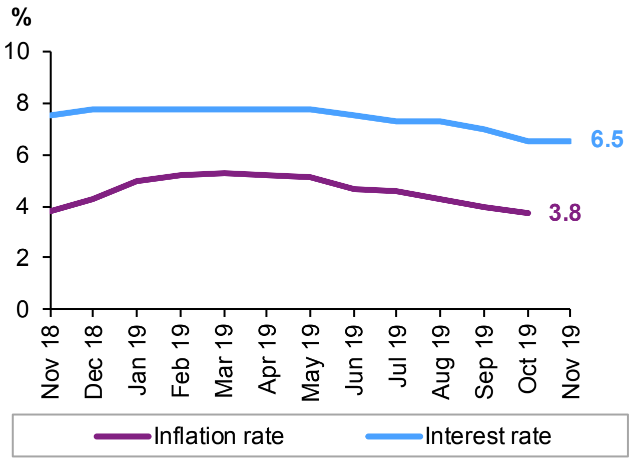
Sources: Federal State Statistics Service and Haver Analytics.

The **ruble** appreciated by 0.8% m-o-m in November, following a 0.9% appreciation in October. On a y-o-y comparison, the ruble was 3.6% higher in November 2019 from its level a year earlier.

Consumer price **inflation** was 3.8% y-o-y in October, compared to 4.0% in September. At the beginning of 2019, inflation stood at 5.0% y-o-y, because of the VAT increase. In March, inflation reached its highest rate since end of 2016 at 5.3% y-o-y.

The central bank kept its benchmark **one-week repo rate** unchanged at 6.5% in November, after lowering it from 7.0% in September to 6.5% in October.

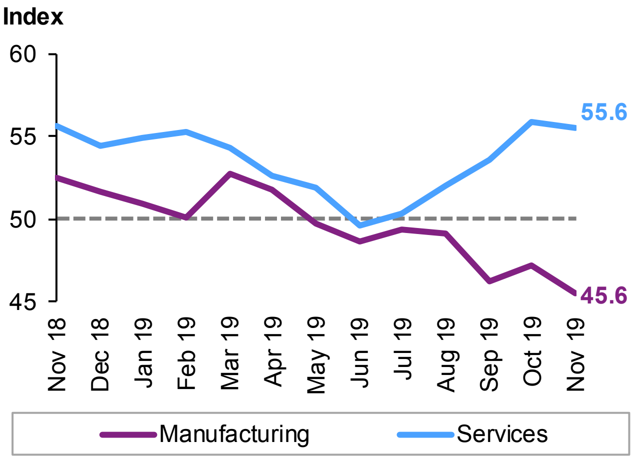
Graph 3 - 24: Russia's inflation vs. interest rate



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

November data continued to signal a deterioration in operating conditions across the **manufacturing sector**, falling to the lowest level since May 2009. The overall decline was a result of a deepening fall in new orders, which dropped by the fastest pace in November since March 2009. The IHS Markit Russia manufacturing PMI stood at 45.6 in November, down from 47.2 a month earlier. The survey report said, "a key factor behind the sustained contraction was a further fall in production midway through the final quarter of 2019. Anecdotal evidence stated that the decrease in output was linked to a slump in client demand and a reduced customer base. The strong rate of decline quickened from that seen in October and was among the sharpest for over a decade."

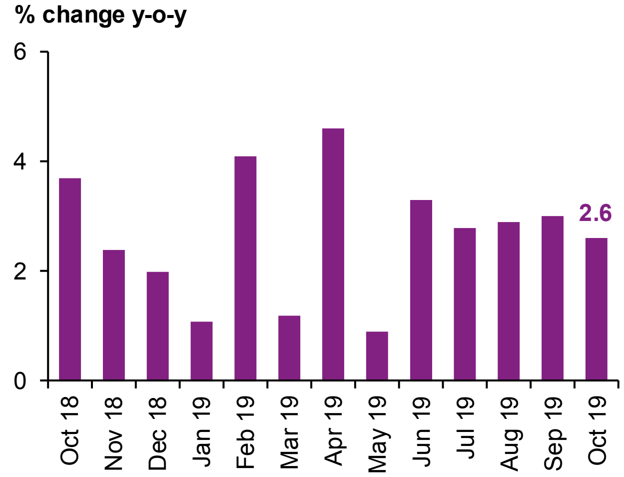
Graph 3 - 25: Russia's PMIs



Sources: IHS Markit and Haver Analytics.

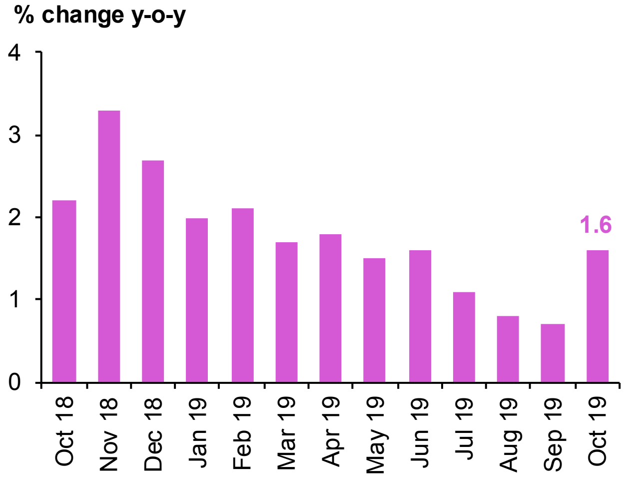
Industrial production increased by 2.6% y-o-y in October, from a 3.0% rise in September. Industrial production stood in the expansion territory since January 2018.

Graph 3 - 26: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 27: Russia's retail sales



Sources: Federal State Statistics Service and Haver Analytics.

Retail trade posted an expansion of 1.6% y-o-y in October, from only 0.7% in September. Retail trade stood in the expansion territory since February 2017.

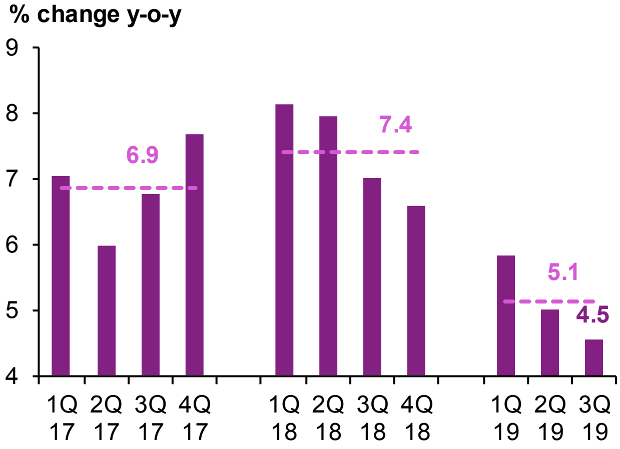
Russia's **GDP** growth forecast points to 1.0% y-o-y in 2019 and 1.2% in 2020.

India

The **Indian economy** grew at its weakest pace since 1Q13, expanding by only 4.5% y-o-y in 3Q19, which is 0.5% below the previous period. The sharp deceleration was mainly due to a fall in factory output and exports, as well as slowing investment.

The government already implemented several fiscal measures to boost growth, but the stimulus impact still slow. Moreover, after reviewing the monetary policy, the Reserve Bank of India (RBI) unexpectedly kept the policy rates unchanged at 5.15% and 4.90%, following five consecutive cuts. Policymakers are concerned about the rising inflation rate, specifically food prices. Moreover, they believe such a "temporary pause" is needed until the 2020-2021 budget is submitted to have a clearer overview.

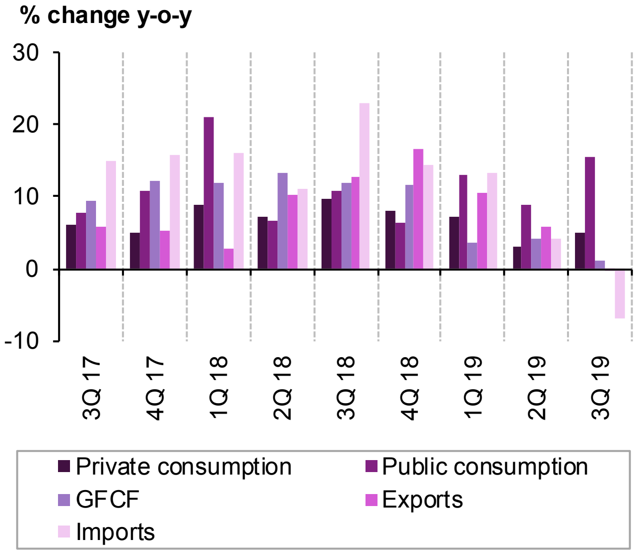
Graph 3 - 28: India's GDP growth



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

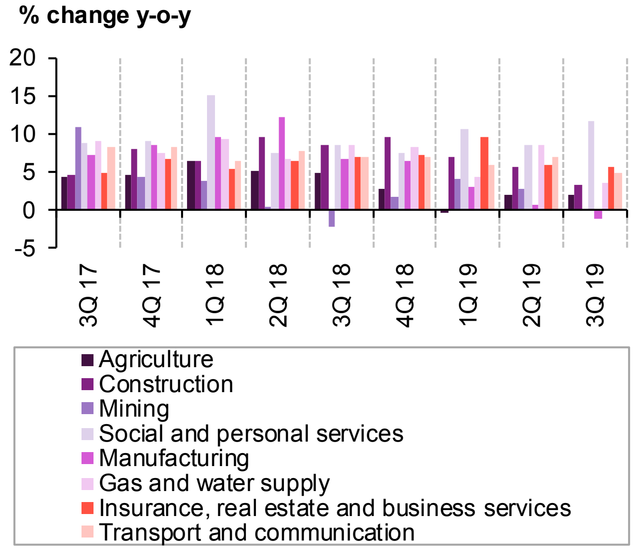
GDP contribution on the **demand side**, gross fixed capital formation (GFCF), which accounted for 31.3% of total GDP (32.5% in 2Q19), notably decelerated (to 1.02% compared with 4.04% in 2Q19). Exports diminished sharply to 0.38% in 3Q19, following a 5.7% rise in 2Q19, mainly due to lower petroleum product shipments. Imports declined at a faster rate of 6.9% in 3Q19 (+4.2% in 2Q19). Contrarily, private consumption, the main driver of growth, rose by 5.064%, about 2% higher than in 2Q19, and accounted for 56.3% of the GDP in 3Q19, compared with 55.1% in 2Q19. Moreover, government spending jumped by 15.6%, after an 8.8% rise in 2Q19 to account for 13.1% of the GDP in 3 Q19 (11.8% in 2Q19).

Graph 3 - 29: India's GDP growth by demand side



Sources: Central Statistics Office and Haver Analytics.

Graph 3 - 30: India's GDP growth by supply side



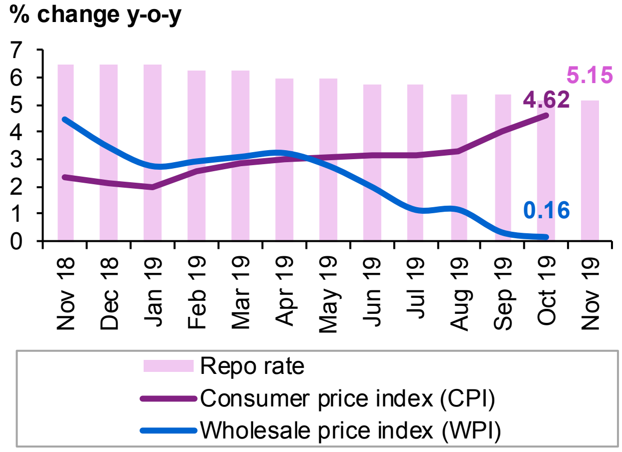
Sources: Central Statistics Office and Haver Analytics.

GDP contribution on the **supply side**, GDP excluding taxes expanded by 0.6% below the previous period. Manufacturing dropped to 1.05% after rising slightly by 0.6% in 2Q19. A slight slowdown was also seen for financial, real estate and professional services (5.8% compared with 5.9% in 2Q19). A deeper slowdown was seen in trade, hotel, transport, communication and services related to broadcasting (4.8% vs 7.1%); construction (3.3% vs 5.7%); utilities (3.6% vs 8.6%); and mining (0.1% vs 2.7%). Contrarily, faster increases were seen for public administration and defence (11.6% vs 8.5%) and agriculture, forestry and fishing (2.1% vs 2%).

India's **CPI inflation** increased to 4.62% y-o-y in October from 3.98% the previous month.

Moreover, India's **wholesale price index (WPI)** decelerated sharply to 0.16% y-o-y in October, following a decline of 0.33% the previous month, due to a deterioration in the prices of both manufactured products and fuel, resulting in a moderate increase in food costs. This is the lowest WPI since a 0.09% fall was seen in June 2016.

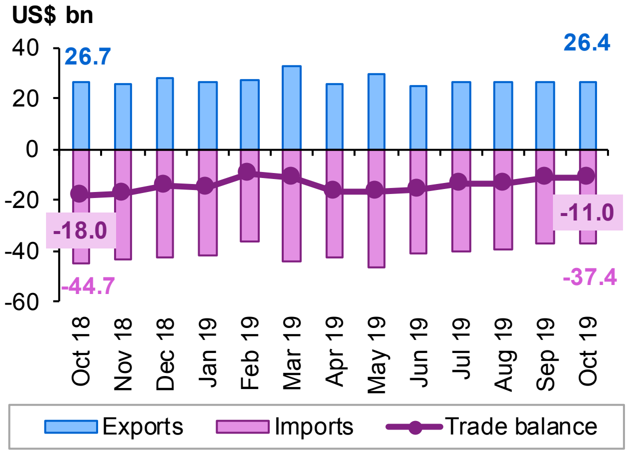
Graph 3 - 31: Repo rate and inflation in India



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

India's **trade deficit** narrowed to $11.01 billion in October 2019 from $18.0 billion in October 2018. However, as a result of petroleum product shipments and a linoleum export decrease, India's exports decline by 0.9% y-o-y to 26.5 billion. Imports slumped by 16.3% y-o-y to $36.8 billion, also due to lower purchases of petroleum and crude products.

Graph 3 - 32: India's trade balance

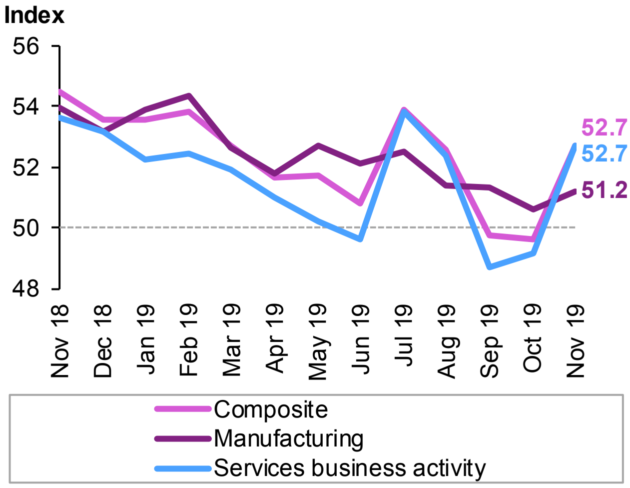


Sources: Ministry of Commerce and Industry and Haver Analytics.

The **IHS Markit India Manufacturing PMI** indicated output growth for the first time in three months as it increased to 52.7 in November from 49.2 in October. The figure signalled a modest recovery in business intake and confidence, as well as a quicker job creation rate. The moderate rebound was strongly associated with an increase in both domestic and overseas demand especially for technology. Nevertheless, the above figure is well below the long-run average of 54.2.

India's **GDP growth** expectation was revised down to 5.5% in 2019 and 6.4% in 2020.

Graph 3 - 33: India's PMI



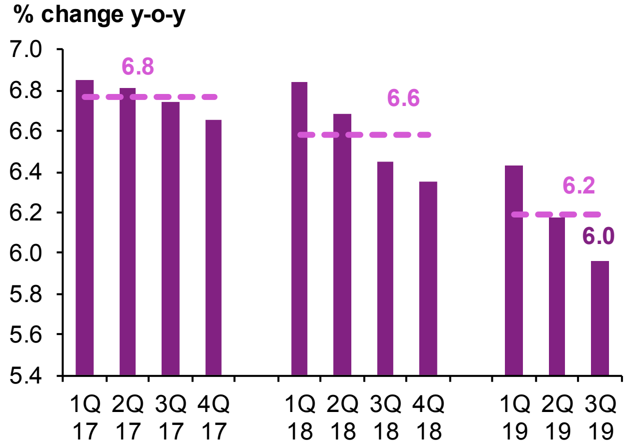
Sources: Nikkei, IHS Markit and Haver Analytics.

China

After a short pickup in September, **China's growth rate** slowed again in October. Growth in industrial value added fell to 4.7% y-o-y in October from 5.8% in September (and 5% in 3Q19). Policy stimulus has had a limited impact so far. However, forthcoming policy easing seems to place more emphasis on infrastructure, though the government may remain relatively restrained since the labour market is holding up.

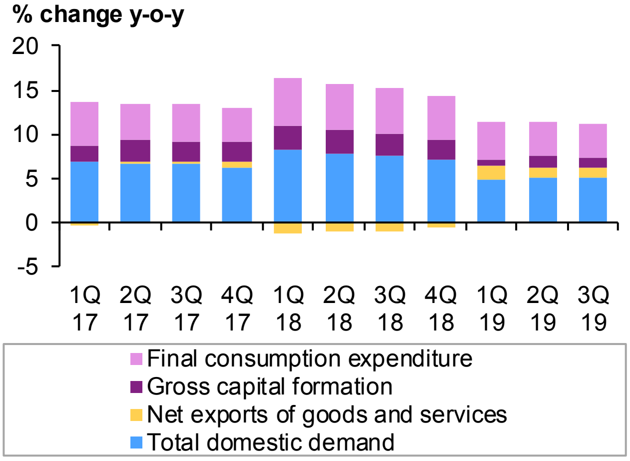
It seems that in the short term, Chinese exports and investment, as well as consumer confidence, will remain under pressure. Meanwhile, a possible "phase one" trade deal with the US signalled more positive signs, though minor escalations are still expected. It is unclear whether delayed tariff hikes will be postponed indefinitely, or if existing tariffs might be lifted soon.

Graph 3 - 34: China's GDP growth



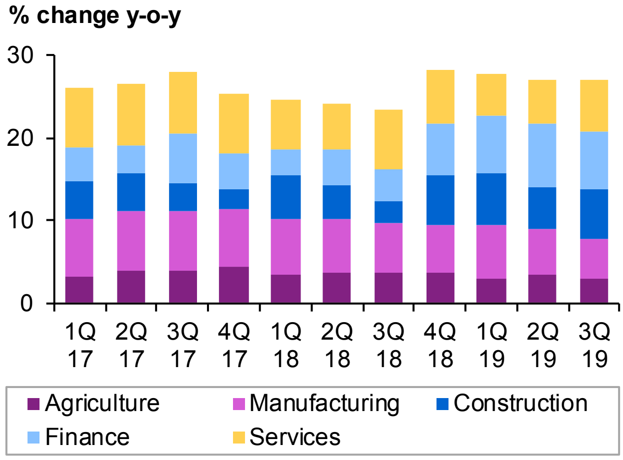
Sources: China's National Bureau of Statistics and Haver Analytics.

Graph 3 - 35: Contribution to China's GDP growth on the demand side



Sources: China National Bureau of Statistics, Haver Analytics and OPEC Secretariat.

Graph 3 - 36: Contribution to China's GDP growth on the supply side

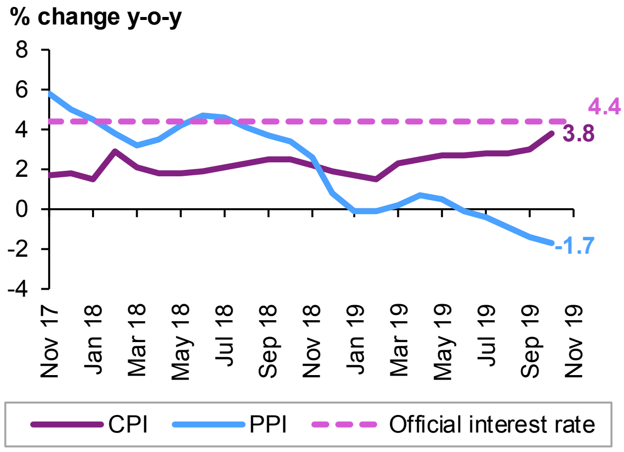


Sources: China National Bureau of Statistics, Haver Analytics and OPEC Secretariat.

China's **CPI inflation** increased to 3.7% in October 2019 from 3.0% in October 2018. This is the highest inflation rate seen since October 2013. However, overall inflationary pressure remains weak.

The **producer price index (PPI)** decreased to 1.7% y-o-y in October, following a 1.4% decrease the previous month. It was the sharpest fall in producer prices since July 2016.

Graph 3 - 37: China's CPI and PPI



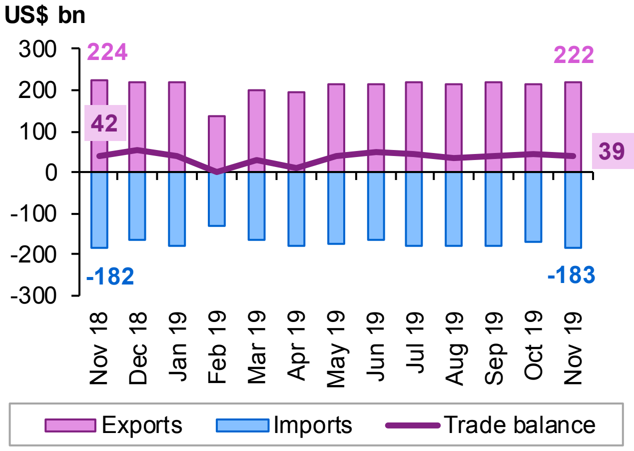
Sources: China Index Academy, China National Bureau of Statistics, Soufan and Haver Analytics.

China's **trade surplus** widened to $36.84 billion in October from $25.47 billion y-o-y. The country's trade surplus with the US narrowed to $26.4 billion in October 2019 from $32.0 billion in October 2018.

Exports dropped by only 0.6% y-o-y in October to $212.91 billion, after a 3.04% fall was seen in September.

Following a 8.45% drop in September, China's October **imports** slumped by only 6.7% from a year earlier to $175.52 billion.

Graph 3 - 38: China's trade balance

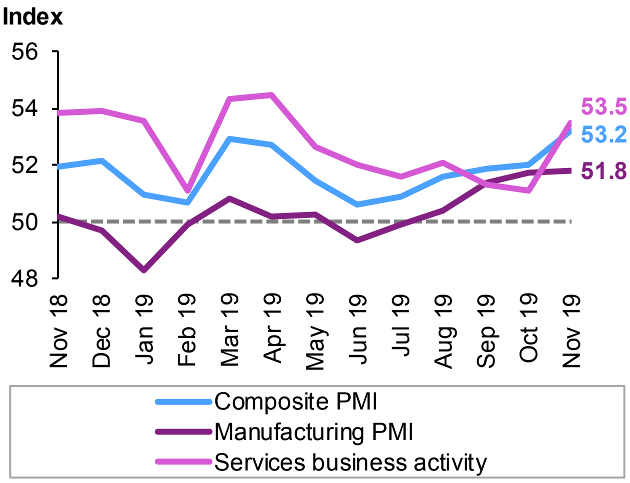


Sources: General Administration of Customs of China and Haver Analytics.

After six months of weakening, the **official NBS Manufacturing PMI** posted 51.8 in November, up from 51.7 in October, as manufacturing activities continued to rebound, supported by an increase in both domestic and foreign demand, as well as the employment sub-index.

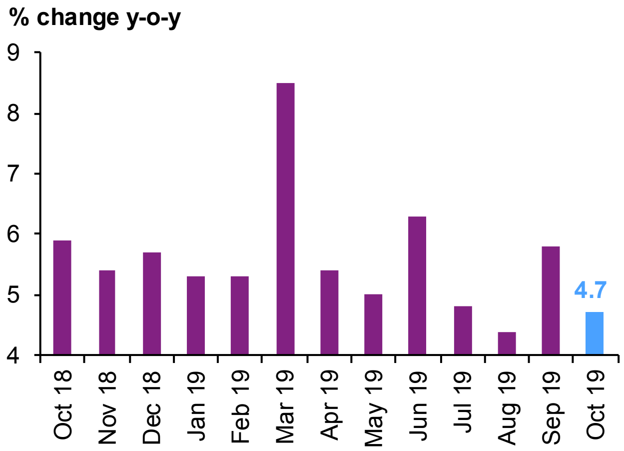
The **Caixin China General Services PMI** reported by Markit rose to 53.4 in November from 51.1 in October. This upsurge, which was the highest since April of this year, was driven by solid expansion in both the manufacturing and services sectors.

Graph 3 - 39: China's PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3 - 40: China's industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

China's **industrial production** dropped to 4.7% y-o-y in October from 5.8% in September.

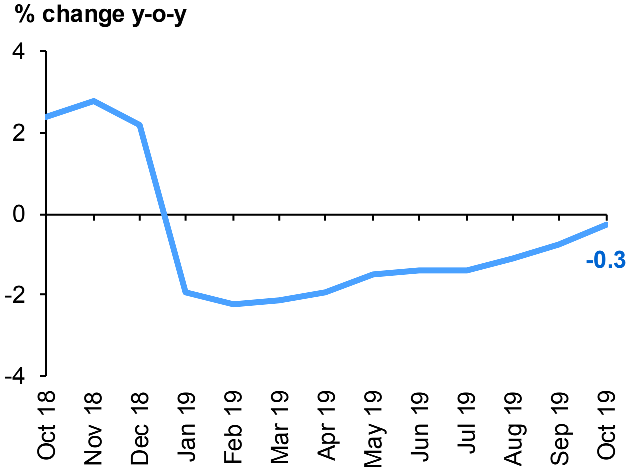
Overall, despite the rebound in both domestic and foreign demand, the uncertainty induced by China-US trade tensions is likely to keep business confidence muted and restrain economic growth. China's **GDP growth** expectation was unchanged from last month at 6.2% in 2019 and 5.9% in 2020.

OPEC Member Countries

Saudi Arabia

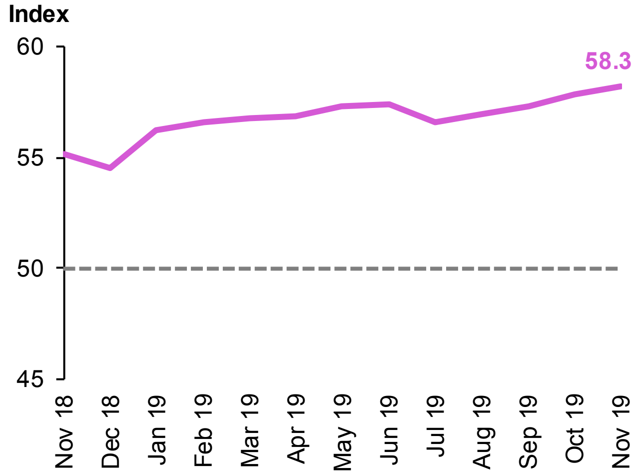
In **Saudi Arabia**, consumer price inflation eased by 0.3% y-o-y in October, from a 0.8% drop in September. This was the tenth consecutive month of inflation easing. Wholesale prices increased by 3.3% y-o-y in October, up from 3.1% in September. Private sector worker productivity in construction posted an increase of 10% y-o-y in 1Q19, its highest ever level. Cement deliveries went up by 13.4% y-o-y in October, from a rise of 13.7% during September, up from 1.0% in August. Total reserve assets at the end of October was 1.83 trillion riyal, from 1.88 trillion riyal in September. In November 2019, business conditions in the non-oil private sector gained further momentum, according to the IHS Markit Saudi Arabia PMI. The index increased from 57.8 in October, to 58.3 in November, highlighting a sustained growth in the private sector. The survey report showed that “a bright spot was a quickening of overall new order growth, which reached its fastest pace since April 2015. Stronger demand conditions helped outweigh continued weakness in job creation and slower output growth”.

Graph 3 - 41: Saudi Arabia’s inflation



Sources: General Authority for Statistics and Haver Analytics.

Graph 3 - 42: Saudi Arabia’s composite PMI

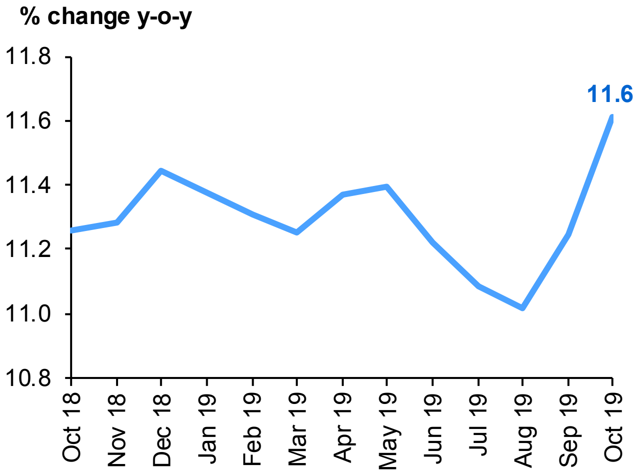


Sources: Emirates NBD, IHS Markit and Haver Analytics.

Nigeria

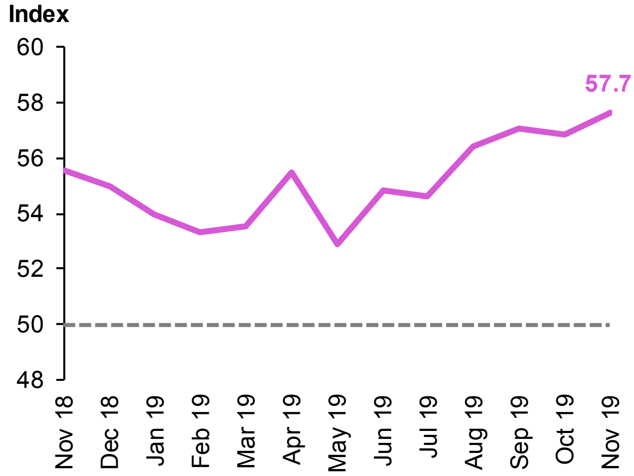
In **Nigeria**, GDP posted growth of 2.1% y-o-y in 3Q19, similar to the previous quarter. This brings the GDP growth in the first three quarter of 2019 to 2.1% y-o-y. Inflation in October increased to highest rate since May 2018. Inflation was 11.6% y-o-y in October, up from 11.2% y-o-y in September. This increase in inflation was partly due to the sharp rise in food prices, especially rice. Food prices surged by 14.1% y-o-y in October and 13.5% in September because of border closures with some neighbouring countries. The Central Bank of Nigeria kept its monetary policy rate intact at 13.50% in November. The private sector continued expanding in November, primarily because of the sharp rise in output and continued increase in new orders. The Stanbic Bank Nigeria PMI rose to a 17-month high in November, posting 57.7, up from 56.9 in October. The survey report showed that “the stronger improvement in the health of the private sector was centred on a substantial rise in business activity, with the rate of growth accelerating to the fastest since mid-2018. Respondents often attributed rises in output to expanded new orders.”

Graph 3 - 43: Nigeria's inflation



Sources: National Bureau of Statistics and Haver Analytics.

Graph 3 - 44: Nigeria's composite PMI

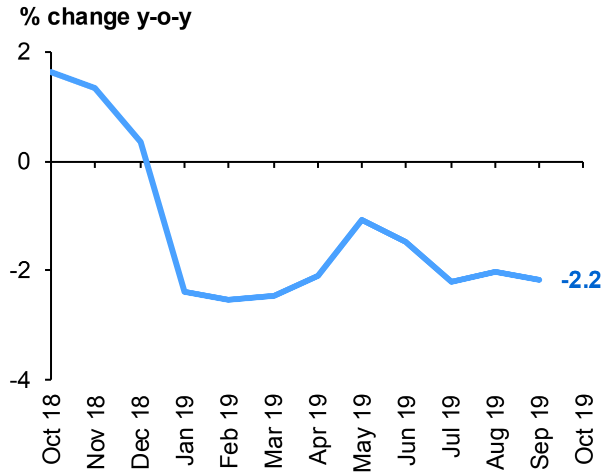


Sources: IHS Markit, Stanbic IBTC Bank and Haver Analytics.

The United Arab Emirates (UAE)

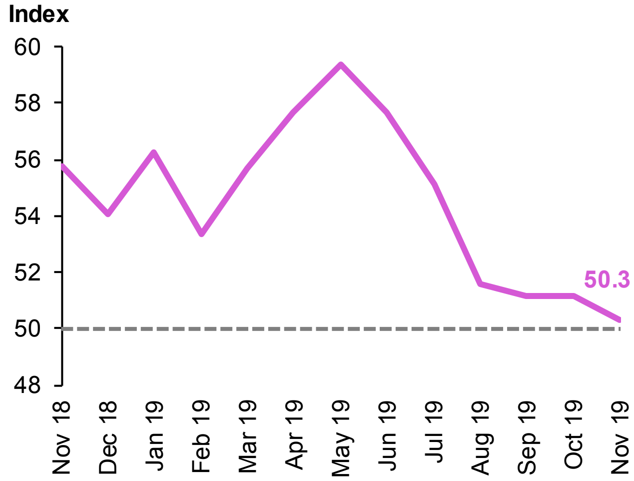
In the **UAE**, net international reserves increased by 13.9% y-o-y in October 2019, to 370 billion dirham. However, it was less than September's level of 373.7 billion dirham. The Dubai financial market general index dropped by 3.4% m-o-m in November, registering 2690.06. The consumer price index eased by 2.2% y-o-y in September, continuing the easing streak that started at the beginning of 2019. The performance of non-oil private sector slowed in November, albeit still in the expansion territory, according to the IHS Markit UAE PMI. The index posted 50.3 in November, from 51.1 in October on the back of low rate of output growth and the drop in new orders.

Graph 3 - 45: UAE's inflation



Sources: National Bureau of Statistics and Haver Analytics.

Graph 3 - 46: UAE's composite PMI



Sources: Emirates NBD, IHS Markit and Haver Analytics.

Other Asia

Thailand

Thailand's GDP grew by 2.4% y-o-y in 3Q19, from 2.3% in the previous quarter. Private consumption growth slowed in 3Q19 to 4.2% y-o-y, from 4.6% in 2Q19. While government consumption accelerated by 1.9% in 3Q19, up from 1.1% in the previous quarter. GFCF showed notable growth in 3Q19 at 2.8% y-o-y, compared to 1.9% in 2Q19. Exports and imports declined during 3Q19. Exports went down by 1.0% y-o-y, and imports decelerated by 6.8% y-o-y. Inflation in Thailand remained muted in November despite rising to 0.2% y-o-y, from 0.1% in October. Energy prices declined by 4.7% y-o-y in November, continuing the contracting streak started in May. Prices of raw food registered slower paced inflation in November at 2.8% y-o-y, from 4.6% in

October. The number of mortgage loans contracted by 16.2% y-o-y in 3Q19, after a 9.8% drop in 2Q19. The housing developers’ sentiment index remained under 50 points in 3Q19. The index stood at 48.2 in 3Q19, compared to 42.2 in 2Q19. The level of productivity index reached an all-time high of 135.8 points in 3Q19, up from 133.5 in the previous quarter. Business conditions in the manufacturing sector worsened in November, according to the IHS Markit Thailand manufacturing PMI. The decline was caused by contractions in production, new business and hiring. The index registered 49.3 in November, compared to 50.0 in October.

Africa

South Africa

In **South Africa**, GDP registered another anaemic rate of growth during 3Q19 at 0.1% y-o-y, down from 0.9% in 2Q19, due to slower growth in private consumption and exports. Private consumption recorded growth of 1.2% y-o-y in 3Q19, from 1.4% in 2Q19. Public consumption growth accelerated to 1.9% y-o-y in 3Q19, up from 1.4% in the previous quarter. GFCF also improved in 3Q19 by 1.3% y-o-y, after a 0.5% drop in 2Q19. Export growth went from a 0.5% y-o-y decline in 2Q19 to an even deeper contraction of 4.1% in 3Q19. Imports contracted by 2.7% y-o-y in 3Q19, after growing by 3.3% in the previous quarter. Inflation eased from 4.1% y-o-y in September, to 3.7% in October, which remains within the reserve bank’s target of between 3% and 6%. The reserve bank kept its repo rate unchanged at 6.50% for the fourth consecutive month in November. The rand appreciated by 0.7% m-o-m versus the dollar in November. On a y-o-y comparison, the rand was 5.1% lower in November 2019. The international liquidity position (net reserves) posted $44.6 billion in October, higher than September’s $44.1 billion. The IHS Markit South Africa PMI reading on November, suggested worsening business conditions for the private sector. The index fell to a four-month low in November at 48.6, from October’s 49.4, on the back of the fast rate of an output decrease and a dip in new business. The index report stated, “South African firms highlighted continued downwards pressure on business activity during the month, as the volume of incoming orders dropped slightly from October. Businesses commonly linked the downturn to softer demand amid poor economic and political sentiment. On the other hand, new orders from foreign customers fell only marginally”.

Latin America

Colombia

In **Colombia**, GDP grew by 3.3% y-o-y in 3Q19, up from 3.0% in the previous quarter. The faster pace of growth was due to improved growth rates in household consumption, government consumption and gross capital formation. Household consumption increased by 5.0% y-o-y in 3Q19, up from 4.4% in 2Q19. In 3Q19, government consumption went up by 3.5% y-o-y, after posting growth of 1.9% in 2Q19. Gross capital formation also contributed to the faster pace of GDP growth in 3Q19, 5.5% y-o-y, up from 4.3% in the previous quarter. Exports growth, however, slowed from 3.7% y-o-y in 2Q19 to 1.9% in 3Q19. Imports increased by a faster pace in 3Q19, at 1.0% y-o-y, from 8.2% in 2Q19. The Davivienda Colombia manufacturing PMI showed that business conditions in the manufacturing sector improved further in November because of the quickest increase in production in 14 months together with a sharp rise in employment, which reached its highest growth in 16 months. The index increased to 52.9 in November, up from October’s 51.1.

Transition region

Poland

In **Poland**, GDP growth accelerated from 4.1% y-o-y in 2Q19, to 4.2% in 3Q19, as a result of faster growth in public consumption and exports. Public consumption grew by 4.9% y-o-y in 3Q19, up from 2.6% in the previous quarter. In 3Q19, household consumption increased by 3.9% y-o-y, slower than the 2Q19’s 4.1%. Gross capital formation barely grew in 3Q19 by 0.3% y-o-y, after posting a 6.7% growth in 2Q19. Exports expanded in 3Q19 by 5.1% y-o-y, compared to 3.1% in the previous quarter, whereas imports went up by 3.7% in 3Q19, from 3.6% in 2Q19. The manufacturing sector remained in contraction during November, according to the IHS Markit Poland manufacturing PMI. The index went from 45.6 in October to 46.7 in November because of another fall in production and new business alongside lower employment in the manufacturing sector.

World Oil Demand

Global oil demand in 2019 *is now anticipated to rise by 0.98 mb/d,* *unchanged from the previous month's report. Total global oil consumption is expected to average 99.80 mb/d. In the* ***OECD****, oil demand growth was left unchanged as compared to last month's MOMR with OECD Americas projected to lead growth in 2019 as the ramping-up of production in ethane crackers should provide solid support to demand for NGLs/LPG. On the other hand, OECD Europe and Asia Pacific are projected to decline y-o-y in line with slower-than-expected industrial activity and significant petrochemical plant turnarounds. In the* ***non-OECD*** *region, oil demand growth was kept in line with last month's projections. China is anticipated to lead demand growth globally in 2019, rising by 0.35 mb/d, followed by Other Asia, which is expected to add 0.30 mb/d y-o-y. Additionally, oil demand growth in Latin America and the Middle East is projected to improve from 2018 levels to increase by 0.04 mb/d and 0.06 mb/d y-o-y, respectively.*

World oil demand in 2020 *is anticipated to increase by 1.08 mb/d to average 100.88 mb/d, also untouched as compared to last month's MOMR. In the* ***OECD*** *region, oil demand is projected to increase by 0.07 mb/d, with OECD Americas being in positive territory, driven largely by steady light distillate demand. In the* ***non-OECD*** *region, growth is anticipated to be around 1.01 mb/d with Other Aisa regaining its leading position in terms of oil demand growth, followed by China. Higher oil requirements in other regions such as Latin America and the Middle East are also projected in 2020 as compared to the current year.*

World oil demand in 2019 and 2020

Table 4 - 1: World oil demand in 2019*, mb/d

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18 Growth	%
Americas	25.55	25.22	25.38	26.03	26.02	25.66	0.12	0.46
of which US	*20.79*	*20.67*	*20.66*	*21.25*	*21.02*	*20.90*	*0.12*	*0.57*
Europe	14.31	13.99	14.23	14.68	14.30	14.30	0.00	-0.03
Asia Pacific	8.08	8.45	7.64	7.73	8.12	7.99	-0.09	-1.14
Total OECD	**47.93**	**47.65**	**47.26**	**48.44**	**48.44**	**47.95**	**0.02**	**0.04**
Other Asia	13.64	13.91	13.96	13.66	14.21	13.93	0.30	2.18
of which India	*4.73*	*5.03*	*4.75*	*4.49*	*5.14*	*4.85*	*0.12*	*2.57*
Latin America	6.53	6.36	6.58	6.83	6.49	6.57	0.04	0.62
Middle East	8.12	8.25	7.90	8.64	7.95	8.18	0.06	0.78
Africa	4.33	4.45	4.42	4.36	4.50	4.43	0.10	2.31
Total DCs	**32.62**	**32.97**	**32.87**	**33.49**	**33.14**	**33.12**	**0.50**	**1.53**
FSU	4.82	4.75	4.74	5.02	5.11	4.91	0.09	1.82
Other Europe	0.74	0.75	0.71	0.75	0.84	0.76	0.02	2.69
China	12.71	12.63	13.19	12.98	13.43	13.06	0.35	2.73
Total "Other regions"	**18.27**	**18.13**	**18.64**	**18.75**	**19.38**	**18.73**	**0.45**	**2.49**
Total world	**98.82**	**98.76**	**98.76**	**100.69**	**100.95**	**99.80**	**0.98**	**0.99**
Previous estimate	98.82	98.76	98.76	100.69	100.95	99.80	0.98	0.99
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Note: * 2019 = Estimate.*

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 4 - 2: World oil demand in 2020*, mb/d

	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19 Growth	%
Americas	25.66	25.43	25.56	26.19	26.18	25.84	0.18	0.69
of which US	*20.90*	*20.85*	*20.80*	*21.37*	*21.17*	*21.05*	*0.15*	*0.71*
Europe	14.30	13.94	14.20	14.66	14.28	14.27	-0.03	-0.21
Asia Pacific	7.99	8.37	7.56	7.66	8.05	7.91	-0.08	-0.99
Total OECD	**47.95**	**47.73**	**47.31**	**48.51**	**48.51**	**48.02**	**0.07**	**0.14**
Other Asia	13.93	14.27	14.32	14.04	14.60	14.31	0.37	2.66
of which India	*4.85*	*5.20*	*4.90*	*4.65*	*5.32*	*5.02*	*0.16*	*3.39*
Latin America	6.57	6.44	6.66	6.91	6.56	6.64	0.07	1.14
Middle East	8.18	8.30	7.95	8.72	8.04	8.25	0.07	0.86
Africa	4.43	4.53	4.52	4.46	4.59	4.52	0.09	2.00
Total DCs	**33.12**	**33.54**	**33.44**	**34.12**	**33.79**	**33.73**	**0.60**	**1.82**
FSU	4.91	4.83	4.81	5.11	5.19	4.99	0.08	1.65
Other Europe	0.76	0.76	0.72	0.76	0.85	0.77	0.01	1.54
China	13.06	12.91	13.50	13.28	13.77	13.37	0.31	2.37
Total "Other regions"	**18.73**	**18.50**	**19.03**	**19.15**	**19.82**	**19.13**	**0.40**	**2.15**
Total world	**99.80**	**99.78**	**99.79**	**101.78**	**102.12**	**100.88**	**1.08**	**1.08**
Previous estimate	99.80	99.78	99.79	101.78	102.12	100.88	1.08	1.08
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Note: * 2019 = Estimate and 2020 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

OECD

OECD Americas

US

US oil demand growth returned to positive territory in September 2019, according to the latest monthly data from the Energy Information Administration (EIA) and following y-o-y declines in August 2019. September 2019 oil requirements grew by 0.14 mb/d y-o-y, mainly supported by demand growth for petroleum products at the light end of the barrel, LPG/NGLs.

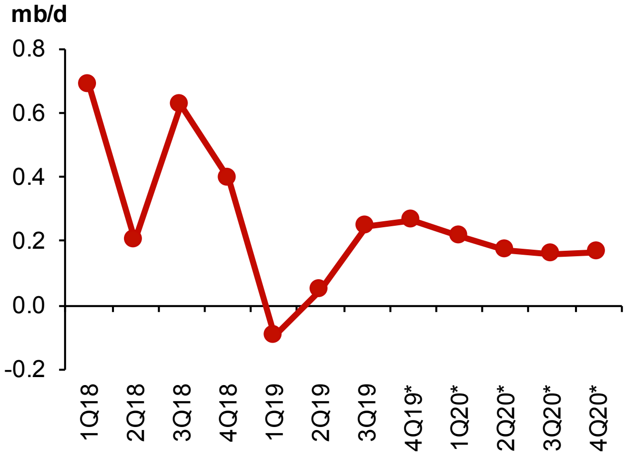
Table 4 - 3: US oil demand, tb/d

	Sep 19	Sep 18	Change 2019/18 tb/d	%
LPG	2,829	2,724	105	3.9
Naphtha	225	251	-26	-10.4
Gasoline	9,169	9,153	16	0.2
Jet/kerosene	1,695	1,704	-9	-0.5
Diesel oil	3,915	4,022	-107	-2.7
Fuel oil	270	349	-79	-22.6
Other products	2,409	2,171	238	11.0
Total	**20,512**	**20,374**	**138**	**0.7**

Sources: US EIA and OPEC Secretariat.

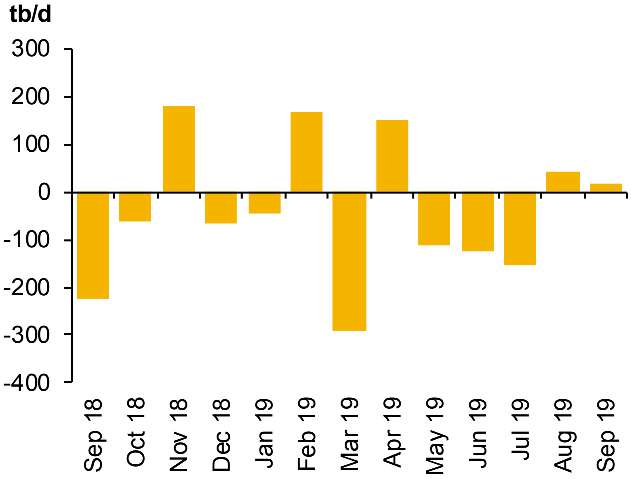
Gasoline demand remained weak despite a low historical base for the same month in 2018, yet it was in line with shrinking light vehicle sales and amid slightly growing mileage – the latter data was, however, largely survey dependent and hence had a lower degree of accuracy. Gasoline demand seems to be underperforming in 2019, as fuel substitution, fuel efficiencies and changing driving patterns have resulted in substantially lower required volumes and declines in growth by approximately 0.2 mb/d as compared to historical norms. With the driving season over, gasoline demand growth was not a main factor behind US oil demand growth in 2019.

Graph 4 - 1: OECD Americas oil demand, y-o-y change



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 4 - 2: US gasoline demand, y-o-y change



Sources: US EIA and OPEC Secretariat.

Diesel, jet/kerosene and residual fuel oil demand continued to decline during September 2019 y-o-y. Data for nine months in 2019 show US oil demand slightly lower as compared to the same period last year.

NGL/LPG requirements, as feedstock for the petrochemical industry, and jet/kerosene are the petroleum product categories with rising demand; the overall losses result from shrinking requirements for all other petroleum categories.

October 2019 demand estimates, which are based on preliminary weekly data, show an increase of around 2.4% y-o-y, with NGL/LPG, jet/kerosene and distillate requirements rising but being partly offset by disappointing gasoline and residual fuel oil demand.

For November 2019, month-to date data imply similar growth of around 2.9% y-o-y. These preliminary data imply that US oil demand will most likely be solid throughout the remainder of 2019, with industrial and, to some extent, also transportation fuels dominating the implied growth share.

The US is projected to again remain the main contributor to 2020 OECD oil demand growth, with the overall risks being balanced to the upside and downside. Anticipated economic growth is the fundamental indicator pointing to the upside, while fuel substitution, vehicle efficiencies, as well as trade-related disputes with China and other entities are factors that may push oil demand to the downside.

Canada

In **Canada**, September 2019 came up increasing y-o-y. Gains in LPG and jet kerosene demand have been partly offset by declines in required naphtha and gasoline. The prospects for 2020 Canadian oil demand are positive, mainly as a result of a growing economy; some existing downside risks relate to vehicle efficiencies and fuel substitution.

Mexico

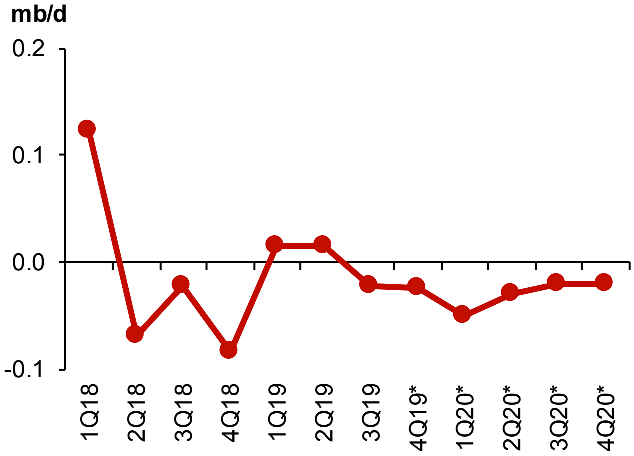
Mexican oil demand shrank for another month in October 2019, dropping by 5.1% y-o-y, for the fifth month in the current year and the second consecutive month. The bulk of oil demand losses during October 2019 originated in diesel, gasoline and residual fuel oil requirements, as a result of weaker economic growth and increasing fuel substitution. The risks for 2020 Mexican oil demand are skewed to the downside, to a large extent, as a result of anticipated fuel substitution in the industrial and transportation sectors.

In 2019, **OECD Americas** oil demand is expected to grow by 0.12 mb/d as compared to 2018. 2020 OECD Americas oil demand is projected to increase by 0.18 mb/d y-o-y.

OECD Europe

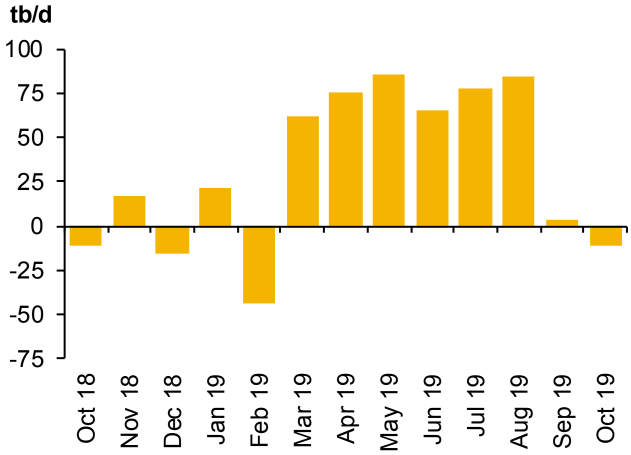
September 2019 data showed growing **European oil demand growth** y-o-y following declines during August 2019. During September 2019, the oil requirements for some main oil consuming countries in the region – France, Turkey, and the Netherlands – were growing y-o-y; oil demand declines in Germany, the UK, Spain and other countries have partly offset overall oil demand growth in the region.

Graph 4 - 3: OECD Europe's oil demand, y-o-y change



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 4 - 4: UK diesel demand, y-o-y change



Sources: Joint Organisations Data Initiative, UK Department for Business, Energy & Industrial Strategy and OPEC Secretariat.

Y-t-d in 2019, OECD Europe oil demand is expected to grow by 0.6% y-o-y; gains originate in additional gasoline, jet/kerosene and diesel requirements in the transportation, industrial and residential sectors, while y-t-d demand for LPG, naphtha and residual fuel fell as compared to the same period of last year. Y-t-d, the momentum in auto sales shows declines as compared to the same period during last year, yet following solid increases in previous years.

Early indications for October 2019 showed gains in oil demand of approximately 0.06 mb/d, 0.07 mb/d and 0.01 mb/d in Germany, France and Italy, respectively, while oil requirements in the UK fell y-o-y by 0.02 mb/d.

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

	Oct 19	Oct 18	Change 2019/18 tb/d	%
LPG	493	399	94	23.5
Naphtha	542	575	-33	-5.7
Gasoline	1,135	1,131	4	0.3
Jet/kerosene	863	870	-7	-0.8
Diesel oil	3,503	3,397	106	3.1
Fuel oil	199	220	-21	-9.8
Other products	658	675	-17	-2.6
Total	**7,392**	**7,267**	**125**	**1.7**

*Note: * Germany, France, Italy and the UK.*
Sources: JODI, UK Department for Business, Energy & Industrial Strategy, Unione Petrolifera and OPEC Secretariat.

The outlook for European oil demand during 2020 points to mild declines y-o-y with risks being skewed to the downside. 2020 European oil demand faces many uncertainties, which concern the region's high historical oil demand baseline, fuel efficiencies and substitution, as well as challenges in relation to unsolved debt and other geopolitical issues.

OECD Europe oil demand is projected to flatten in 2019, while 2020 oil demand in the region is anticipated to decline by 0.03 mb/d as compared to 2019.

OECD Asia Pacific

Japan

Preliminary October 2019 data imply that **oil demand in Japan** dropped by 0.28 mb/d y-o-y for the fourth consecutive month and saw its ninth monthly y-o-y decline so far in 2019.

Table 4 - 5: Japan's domestic sales, tb/d

	Oct 19	Oct 18	Change 2019/18 tb/d	%
LPG	282	328	-46	-14.0
Naphtha	727	796	-69	-8.7
Gasoline	799	834	-35	-4.2
Jet/kerosene	360	432	-72	-16.6
Diesel oil	754	774	-20	-2.6
Fuel oil	246	277	-31	-11.2
Other products	331	338	-7	-2.0
Total	**3,499**	**3,779**	**-280**	**-7.4**

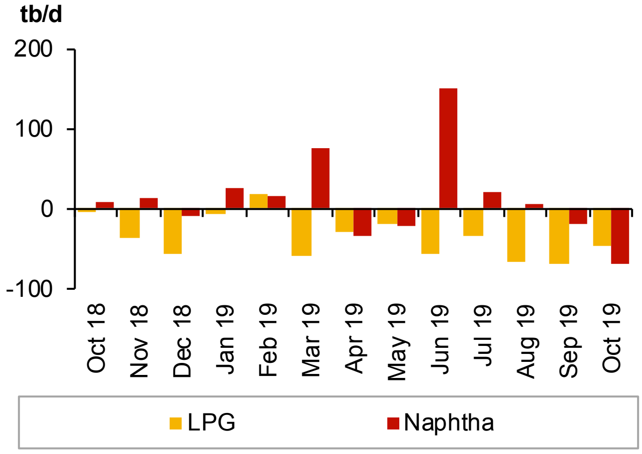
Sources: JODI, Ministry of Energy and Trade and Industry of Japan and OPEC Secretariat.

All main product categories were in negative territory y-o-y, notably for LPG, naphtha, gasoline and jet/kerosene. Declines have also been eminent in crude and residual fuel oil for the power generation sector, mainly as a result of fuel substitution programs.

Graph 4 - 5: OECD Asia Pacific oil demand, y-o-y change

*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 4 - 6: Japan's LPG and naphtha demand, y-o-y change



Sources: Ministry of Economy Trade and Industry of Japan, Joint Organisations Data Initiative and OPEC Secretariat.

Declining overall Japanese oil demand y-t-d in 2019 stems largely from developments related to the country's main economic indicators and is expected to continue during 2020, with forecasts being skewed further to the downside; efficiencies and fuel substitution are the dominating factors towards the downside, while oil use in the industrial sector may soften expected overall losses.

South Korea

In **South Korea**, September 2019 oil demand declined for the first time during the last three months. LPG usage in the industrial and transportation sectors took the lion's share of gains, while declining oil requirements in all other main petroleum product categories more than offset gains.

The outlook for South Korean oil demand during 2020 is positive with risks skewed to the upside, in line with anticipated economic growth, expansions in the country's petrochemical industry and the low 2019 baseline.

Australia

With available data up to September 2019, y-t-d oil demand in **Australia** appears flat, showing practically the same levels as compared to the same period last year.

New Zealand

In **New Zealand**, the smallest oil consuming country in the region, oil demand grew y-t-d by 3.4% y-o-y, with gasoline and diesel being the products with the largest requirement growth.

OECD Asia Pacific oil demand is estimated to decline by 0.09 mb/d in 2019 and expected to fall by 0.08 mb/d y-o-y in 2020.

Non-OECD

China

Chinese oil demand rose in October 2019 by around 0.35 mb/d y-o-y after rising by around 0.22 mb/d y-o-y in September 2019.

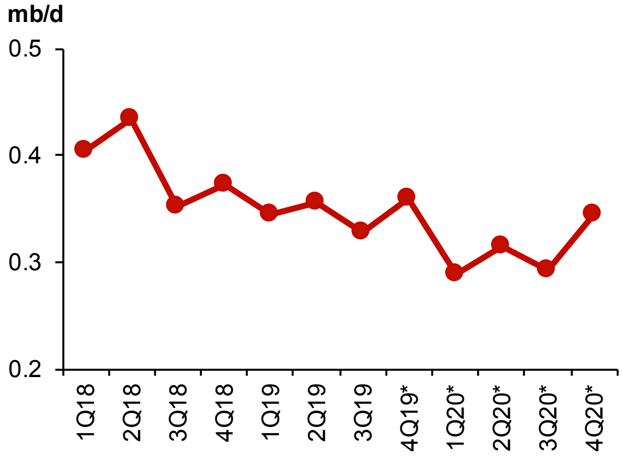
Total petroleum product demand reached around 13.2 mb/d in October. Oil demand growth was determined by rising jet/kerosene, naphtha and diesel.

Jet/kerosene added around 0.11 mb/d y-o-y in October in line with positive air traffic data. Air passenger traffic increased more than 5.0% during the Golden Week, which is in comparison to a nearly 9% increase during the same month last year, depicting slower consumer spending.

Naphtha demand growth hovered around 0.06 mb/d y-o-y in October 2019 amid solid naphtha margins mainly during the first half of the month. Naphtha performance has been very steady with an average increase of 5.5% y-o-y so far in 2019.

Diesel oil gained momentum in October after more than 20 months of consecutive declines, adding around 0.07 mb/d y-o-y.

Graph 4 - 7: Changes in China's apparent oil demand, y-o-y change

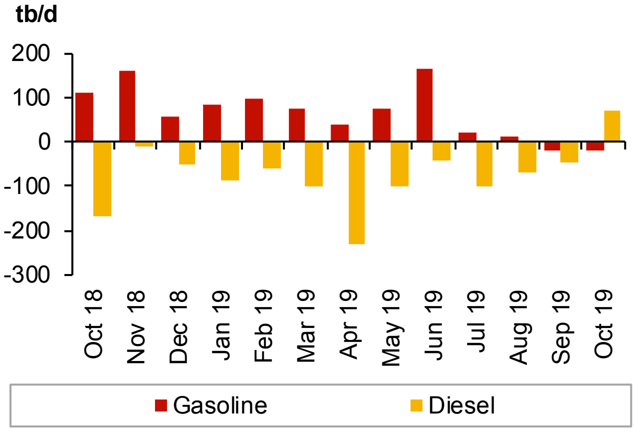


*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

The product was supported by increases in mining and coal production, which boosted trucking activity as a result.

Gasoline demand declined for the second consecutive month amid continued weakness in vehicle sales data. Vehicle sales decreased by more than 4% y-o-y during the month of October, according to the China Passenger Car Association. Those declines came in line with dropping sales of sedans and minivans, which shed around 11% and 13% y-o-y respectively and despite positive gains for Sport Utility Vehicles (SUVs), which added around 2.0% y-o-y and Multipurpose Vehicles (MPVs), which added more than 9% y-o-y. Gasoline consumption dropped by 0.02 mb/d y-o-y in October 2019.

Graph 4 - 8: China's gasoline and diesel demand growth, y-o-y change



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

The overall 2019 and 2020 outlooks are unchanged since last month's MOMR. In 2019, oil demand growth is projected to be slightly slower than 2018 as economic activities cooled down as compared to last year. Vehicle sales and slower manufacturing activity have also impacted petroleum product demand during the current year. In 2020, oil demand is projected to slow further in China as compared to the current year largely in line with lower economic projections as compared to the current year. Additionally, a continuation of fuel quality programs targeting fewer emissions as well as on going fuel substitution with natural gas and coal are assumed in the 2020 projections.

China's oil demand is anticipated to grow by 0.35 mb/d in 2019 and by 0.31 mb/d in 2020.

Other Asia

India

In October 2019, **Indian oil demand** declined by 0.07 mb/d y-o-y. Middle and heavy distillates lost ground primarily in light of the extended effects of the heavy monsoon season, which is limiting demand for transportation and industrial fuels.

Table 4 - 6: India's oil demand, tb/d

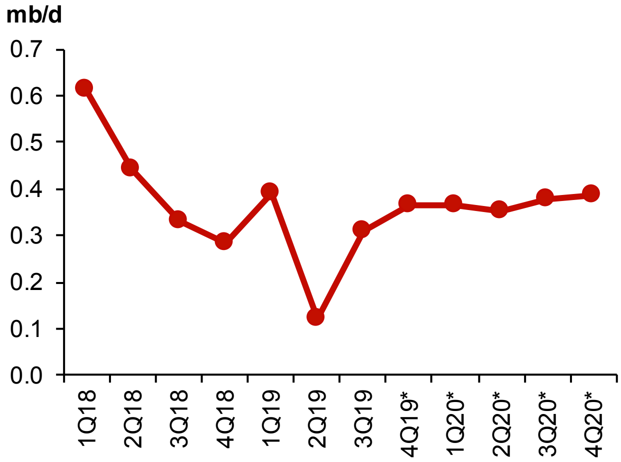
	Oct 19	Oct 18	Change 2019/18 tb/d	%
LPG	939	821	118	14.3
Naphtha	263	318	-55	-17.2
Gasoline	720	662	59	8.9
Jet/kerosene	267	302	-36	-11.8
Diesel oil	1,402	1,513	-111	-7.3
Fuel oil	279	329	-51	-15.3
Other products	594	584	10	1.7
Total	**4,464**	**4,530**	**-66**	**-1.4**

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

On the other hand, LPG requirements increased by more than 0.12 mb/d y-o-y due to the government's policy to support LPG household consumption as an alternative to other fuels.

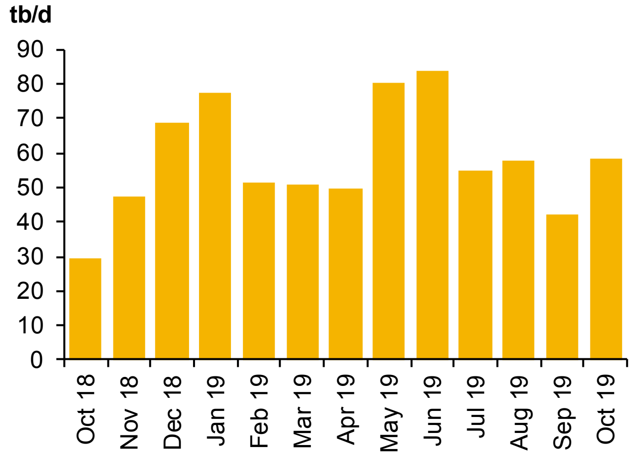
Additionally, gasoline consumption picked up during the month of October, adding around 0.06 mb/d y-o-y, despite dwindling y-t-d vehicle sales data. However, in October, vehicle sales reversed this trend and improved slightly, with sales of passenger vehicles adding around 0.3% y-o-y despite weak overall auto sales in 2019. Diesel demand plummeted by as much as 0.11 y-o-y in October, dropping for the third consecutive month, mainly as a result of the extended monsoon season, which limited demand in the industrial and transportation sector in addition to a significant slowdown in commercial vehicle sales in 2019.

Graph 4 - 9: Other Asia's oil demand, y-o-y change



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 4 - 10: India's gasoline demand, y-o-y change



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

Jet/kerosene declined by 0.04 mb/d y-o-y as demand for jet fuel was outweighed by declines in household kerosene requirements for cooking.

Y-t-d, Indian oil demand growth remains well below last year's average level during the same period, by 0.16 mb/d, mainly as a result of slower road construction activity, which curtailed demand for asphalt during 2Q19 as well as the heavy monsoon season, which impacted demand growth for various petroleum products during 3Q19.

Thailand

Rising **Thailand**'s diesel and gasoline requirements in 2019, with data up to September, have been marginally counterbalanced by declining naphtha and residual fuel oil demand, mainly as a result of slower-than-expected manufacturing activity.

Oil demand growth has been stable in 2019, adding 0.02 mb/d so far this year.

Indonesia

In **Indonesia**, in cumulative terms, oil demand has grown by around 0.04 mb/d in 2019 with data up to September amid rising industrial and transportation fuels. Demand in all of the main petroleum categories was in positive territory with the exception of jet/kerosene and residual fuel oil.

With a few monthly data points still remaining in 2019, **oil demand in Other Asia** is anticipated to post positive gains but remains lower than last year's growth levels. Going forward, oil demand is expected to find some support from year's end petrochemical feedstock demand as well as a possible rebound in Indian demand after slow 3Q data largely due to the heavy monsoon season. In 2020, anticipated improvements in economic conditions are projected to support middle distillate demand, particularly in manufacturing and industrial activity, whereas the transportation sector is projected to provide support for gasoline and jet fuel requirements in 2020.

Oil demand in the region is projected to rise by 0.30 mb/d in 2019 and by around 0.37 mb/d in 2020.

Latin America

Brazil

Oil demand in **Brazil** increased by a solid 0.13 mb/d y-o-y in October 2019. Total oil demand in the country hovered around 2.88 mb/d in October.

Table 4 - 7: Brazil's oil demand*, tb/d

			Change 2019/18	
	Oct 19	Oct 18	tb/d	%
LPG	234	229	5	2.2
Naphtha	147	146	1	0.7
Gasoline	675	620	55	8.8
Jet/kerosene	118	123	-5	-4.3
Diesel oil	1,099	1,026	72	7.1
Fuel oil	66	65	1	1.1
Other products	537	538	-1	-0.3
Total	**2,875**	**2,748**	**127**	**4.6**

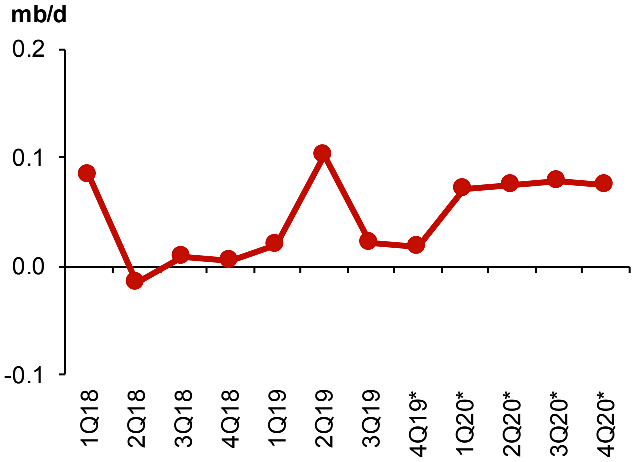
*Note: * = Inland deliveries.*

Sources: JODI, Agencia Nacional do Petroleo, Gas Natural e Biocombustiveis and OPEC Secretariat.

Most products, particularly diesel and gasoline, registered gains with the exception of jet/kerosene. Gasoline consumption increased for the fourth consecutive month and for the fifth time this year, adding nearly 0.06 mb/d y-o-y in October, the highest monthly gain in 2019. This is despite higher retail prices as compared to ethanol, which theoretically reduces gasoline advantage to ethanol as prices remained favouring ethanol. However, the exceptionally low base line of total gasoline demand during the same month last year and the higher base for ethanol has positively affected demand growth for gasoline. Total demand for gasoline reached 0.68 mb/d in October.

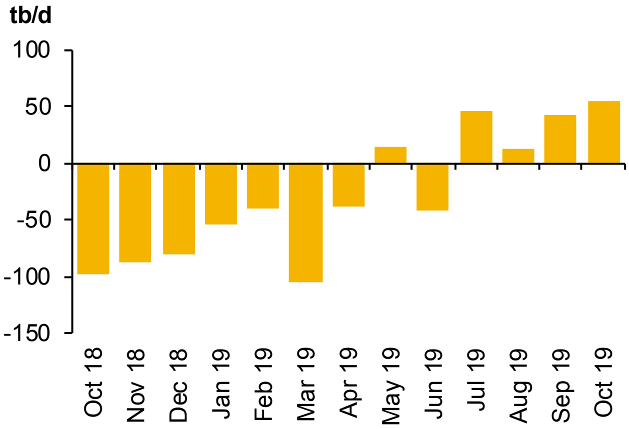
Ethanol, in contrast, was flat y-o-y as total demand for the product reached nearly 0.42 mb/d, the second highest on record. Diesel gained momentum during the month of October, increasing by 0.07 mb/d y-o-y. This increase occurred in line with higher industrial output in various sectors. Brazil's manufacturing PMI, as reported by IHS Markit, registered 52.2 points, remaining in positive territory for the third consecutive month and for the tenth time so far in 2019.

Graph 4 - 11: Latin America's oil demand, y-o-y change



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 4 - 12: Brazil's gasoline demand, y-o-y change



Sources: Agencia Nacional do Petroleo, Gas e Biocombustiveis of Brazil, Joint Organisations Data Initiative and OPEC Secretariat.

Argentina

In **Argentina**, demand has increased for the second consecutive month as all petroleum products recorded steady gains. Oil demand increased by 0.03 mb/d y-o-y during the month of September 2019, registering the second highest level of monthly growth in 2019.This is despite economic woes within the country. On a cumulative basis, 2019 oil demand growth recorded declines y-o-y of around 0.04 mb/d. Product categories showing positive demand growth figures were naphtha and jet/kerosene, while gasoline, LPG, diesel and residual fuel oil incurred declines.

Ecuador

In **Ecuador**, oil demand decreased during October, dropping by 0.03 mb/d y-o-y. Those declines were led by dropping demand for diesel, gasoline and residual fuel oil, while jet/kerosene and LPG were the only products in positive territory.

For the rest of 2019 and 2020, expectations for **oil demand growth in Latin America** are similar to last month's projections with a better economic outlook in 2020 as compared to 2019, supporting better oil demand growth projections. Oil demand growth should be supported by demand for transportation fuels as well as industrial fuels. Most of the gains in oil demand growth are anticipated to come from Brazil as it remains the region's largest consumer of petroleum products.

Oil demand growth in the region is projected to increase by 0.04 mb/d in 2019 and by 0.07 tb/d in 2020.

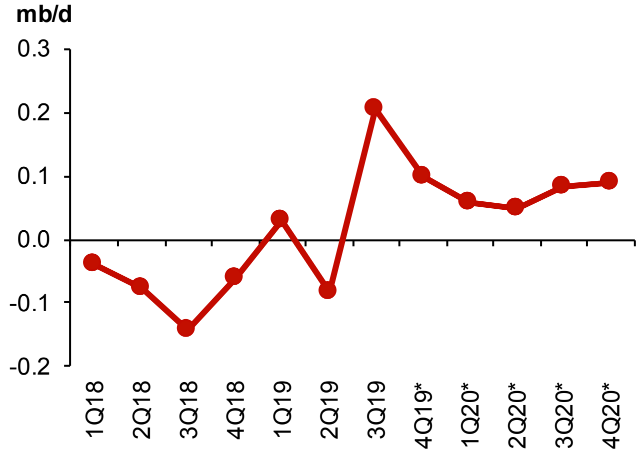
Middle East

Saudi Arabia

In the Middle East, oil demand requirements registered solid gains during the month of October with oil demand in **Saudi Arabia** increasing sharply for the fourth straight month. Oil demand has now improved in six out of ten months in 2019 in Saudi Arabia, impacting total Middle East oil demand positively, mainly in 2H19. The improvement in oil requirements in Saudi Arabia stems primarily from continued increases in the consumption of industrial fuels direct crude for burning and diesel.

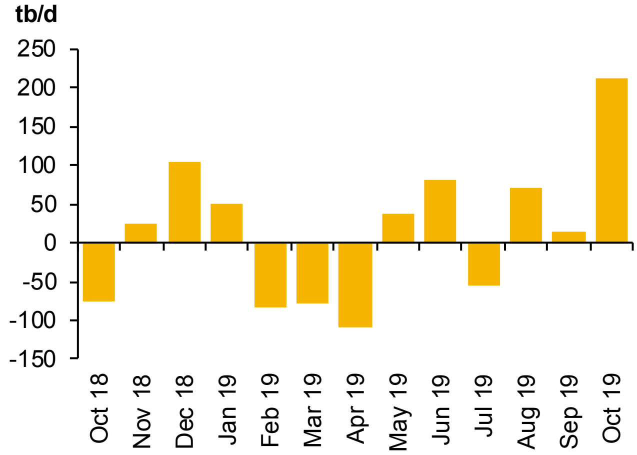
Looking at the product mix, in addition to industrial fuels, jet/kerosene and gasoline were also in the positive, while residual fuel oil declined y-o-y. Direct crude for burning and diesel were supported by additional power generation consumption and a progressing construction sector as the recovering economy was encouraged by the low base line of comparison during the same month last year.

Graph 4 - 13: Middle East oil demand, y-o-y change



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 4 - 14: Saudi Arabia's crude direct use, y-o-y change



Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

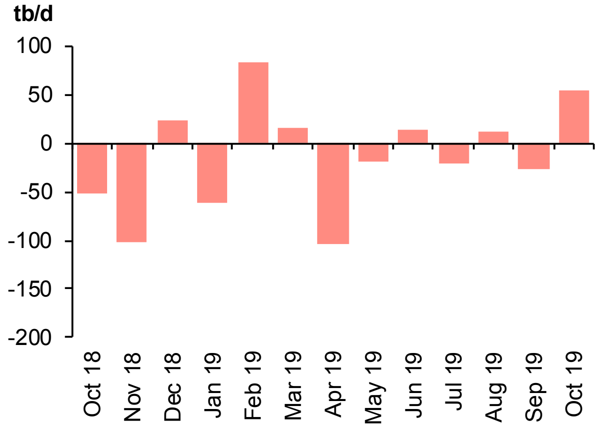
In cumulative terms, with data up to October, oil demand in Saudi Arabia has increased, only to reach a growth level of around 0.04 mb/d as compared to the same period in 2018. The improvement in power generation and desalination plant fuels led to a decent increase in the overall consumption of the country. However, this level of growth remains lower than the historical oil demand growth average of around 0.12 tb/d seen in the periods prior to 2016. Replacing direct crude for power generation with natural gas in addition to the economic reforms within the country have contributed to the slower-than-expected oil demand picture over the recent past.

Iraq

In October 2019, **oil demand growth in Iraq** flipped into positive territory after six months of declines, as data indicated a steady increase of around 0.03 mb/d from the levels seen in October 2018.

Total product consumption is assumed at 0.76 mb/d. All product categories saw positive performances apart from residual fuel oil, which declined mainly as a result of displacement with other fuels. Residual fuel oil dropped by 0.05 mb/d y-o-y.

Graph 4 - 15: Iraq's crude direct use, y-o-y change



Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

Other countries in the region

Oil demand increased in **Kuwait**, particularly in relation to petrochemical feedstock as well as transportation fuels. Oil demand increased by a solid 0.13 mb/d in September 2019, as compared to the same month in 2018.

A similar trend was observed in the **UAE**, where gains were recorded across the barrel.

For the rest of 2019 and 2020, **Middle East oil demand** growth is expected to be challenged by many aspects, mostly related to geopolitical issues and economic transformation policies, including subsidy reduction programs. Oil demand is anticipated to rise in Saudi Arabia, Iraq, the UAE and Kuwait in 2020. Transportation fuels, particularly gasoline, and industrial fuels, predominantly diesel and residual fuel oil, are projected to play a significant part in the total oil demand growth of the region. Oil demand growth in the Middle East is anticipated to increase by 0.06 mb/d in 2019 and by 0.07 mb/d in 2020.

World Oil Supply

*The **non-OPEC oil supply growth estimate for 2019** remained unchanged at 1.82 mb/d, for an annual average of 64.30 mb/d. The downward revisions to production data from the UK, other OECD Europe, India and Indonesia were fully offset by upward production adjustments in Thailand and Russia. US liquids output in 3Q19 was revised up due to higher-than-expected output in September. In contrast, the supply forecast for 4Q19 was revised down by 75 tb/d. Hence, the expected y-o-y growth of 1.62 mb/d remained unchanged. The US, Brazil, China, Canada, Australia and the UK are forecast to be the key drivers of growth in 2019, while Mexico and Norway are expected to experience the largest declines.*

*The **non-OPEC oil supply growth forecast for 2020** also remained unchanged from last month's assessment and will grow by 2.17 mb/d for an average of 66.46 mb/d. The upward revision in the UK oil supply forecast was offset by a downward revision in Russia's supply. The US, Brazil, Norway, Canada, Australia, Russia and Kazakhstan are expected to be the main growth drivers for next year, while Mexico, Indonesia, Egypt and Colombia are forecast to see the largest declines. The 2020 non-OPEC supply forecast remains subject to many uncertainties, mainly the trend of investment discipline by US independents, the timing of debottlenecking of pipeline constraints in Canada, drilling and completion activity in the US, and Mexico's efforts to overcome natural decline.*

***OPEC NGL production** in 2019 is expected to grow by 0.04 mb/d to average 4.80 mb/d. In 2020, OPEC NGLs are forecast to grow by 0.03 mb/d y-o-y to average 4.83 mb/d.*

*In November, **OPEC crude oil production** fell by 193 tb/d m-o-m to average 29.55 mb/d, according to secondary sources. **Non-OPEC supply, including OPEC NGLs**, rose by 0.61 mb/d m-o-m, to average 70.22 mb/d, up by 1.28 mb/d y-o-y.*

*As a result, preliminary data indicates that **global oil supply** increased in November by 0.41 mb/d m-o-m to average 99.78 mb/d.*

Table 5 - 1: Non-OPEC supply forecast comparison in 2019–2020*, mb/d

Region	2019	Change 2019/18	2020	Change 2020/19
OECD Americas	25.65	1.57	27.13	1.48
OECD Europe	3.73	-0.11	3.93	0.19
OECD Asia Pacific	0.48	0.07	0.55	0.07
Total OECD	**29.87**	**1.54**	**31.61**	**1.74**
Other Asia	3.43	-0.13	3.39	-0.04
Latin America	5.39	0.20	5.64	0.25
Middle East	3.21	0.00	3.25	0.04
Africa	1.54	0.04	1.57	0.03
Total DCs	**13.57**	**0.11**	**13.85**	**0.27**
FSU	14.35	0.06	14.44	0.09
Other Europe	0.12	0.00	0.12	-0.01
China	4.10	0.09	4.12	0.02
Non-OPEC production	62.02	1.79	64.13	2.11
Processing gains	2.28	0.03	2.33	0.05
Non-OPEC supply	**64.30**	**1.82**	**66.46**	**2.17**

*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

Monthly main revisions to the non-OPEC supply growth forecast

Non-OPEC supply in 2019 is estimated to grow by 1.82 mb/d, unchanged for the second consecutive month despite having few upward and downward revisions in supply from the previous assessment, and is expected to average 64.30 mb/d for the year.

The US supply growth estimate remained unchanged at annual growth of 1.62 mb/d compared to last month's assessment, despite the upward revision in 3Q19 following higher than expected output in September. The supply forecast for 4Q19 was revised down by 75 tb/d to average 18.87 mb/d.

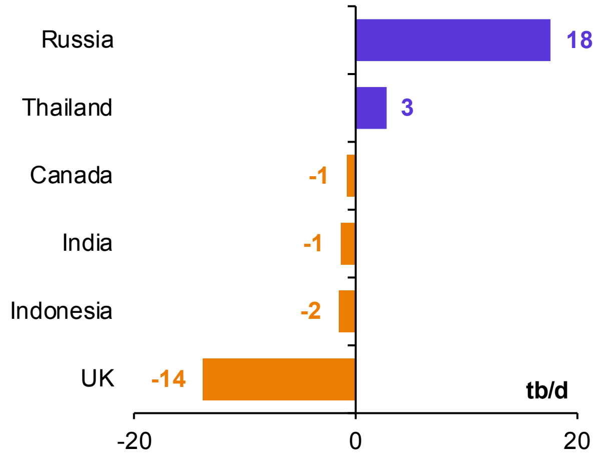
Canada's oil production growth also remained unchanged at 0.10 mb/d on a yearly basis, as actual production levels in 3Q19 were revised up by 17 tb/d, while 4Q19 was revised down by 30 tb/d due to expected lower output resulting from ongoing production curtailments in Alberta.

The UK oil supply estimate for 4Q19 was revised down by 64 tb/d, following lower-than-expected oil output in October. Estimated annual growth was revised down by 0.02 mb/d to average 0.05 mb/d.

Despite downward revisions in actual oil production data of India and Indonesia by 5 tb/d and 6 tb/d, respectively, in 3Q19, annual growth remained unchanged in these two countries.

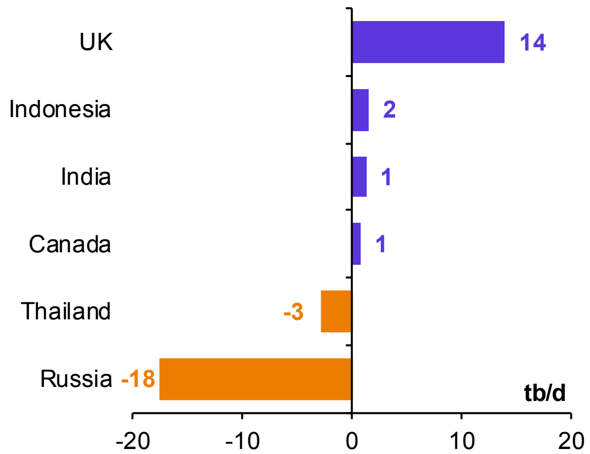
Finally, following higher-than-expected oil output in October and November in Russia, production in 4Q19 was revised up by 70 tb/d to average 11.41 mb/d. This led to an upward revision in annual growth for Russia by 0.02 mb/d to average 0.08 mb/d for 2019 (***Graph 5 - 1***).

Graph 5 - 1: Monthly oil market report Dec 19/Nov 19 revisions in 2019* annual supply changes



*Note: * 2019 = Estimate.*
Source: OPEC Secretariat.

Graph 5 - 2: Monthly oil market report Dec 19/Nov 19 revisions in 2020* annual supply changes

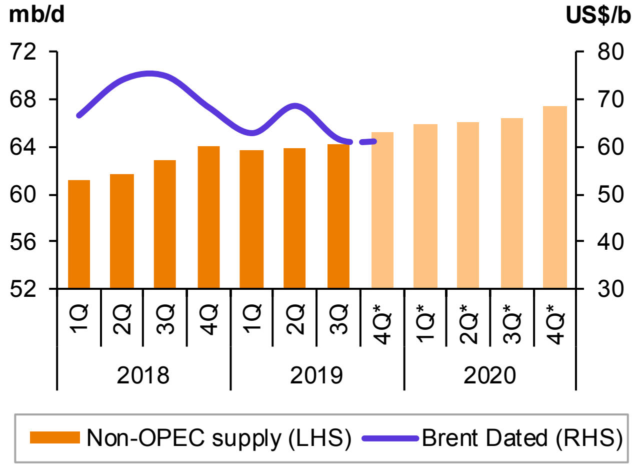


*Note: * 2020 = Forecast.*
Source: OPEC Secretariat.

Non-OPEC supply in 2020 is forecast to grow by 2.17 mb/d, unchanged from the previous month's assessment, and is expected to average 66.46 mb/d for the year.

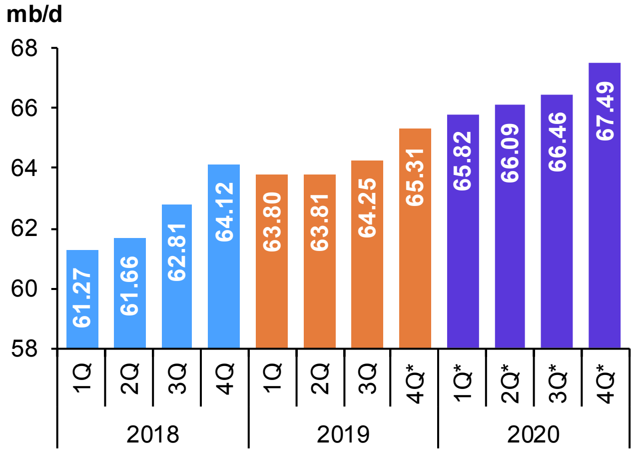
The upward revision in the UK by 14 tb/d offset by downward revision of 18 tb/d in Russia (***Graph 5 - 2***).

Graph 5 - 3: Non-OPEC quarterly liquids supply and Dated Brent



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 4: Non-OPEC quarterly oil supply



*Note: * 4Q19-4Q20 = Forecast.*
Source: OPEC Secretariat.

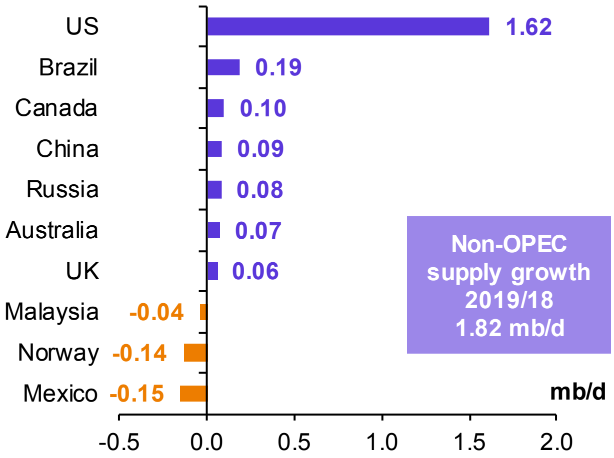
Non-OPEC oil supply in 2019 and 2020

Table 5 - 2: Non-OPEC oil supply in 2019*, mb/d

							Change 2019/18	
	2018	1Q19	2Q19	3Q19	4Q19	2019	Growth	%
Americas	24.08	25.07	25.59	25.71	26.22	25.65	1.57	6.53
of which US	*16.71*	*17.78*	*18.29*	*18.38*	*18.87*	*18.33*	*1.62*	*9.69*
Europe	3.84	3.84	3.61	3.59	3.88	3.73	-0.11	-2.77
Asia Pacific	0.41	0.43	0.48	0.51	0.51	0.48	0.07	18.11
Total OECD	**28.33**	**29.34**	**29.68**	**29.81**	**30.62**	**29.87**	**1.54**	**5.43**
Other Asia	3.56	3.51	3.46	3.32	3.42	3.43	-0.13	-3.58
Latin America	5.19	5.17	5.25	5.53	5.60	5.39	0.20	3.79
Middle East	3.21	3.22	3.22	3.22	3.20	3.21	0.00	0.09
Africa	1.50	1.51	1.51	1.53	1.61	1.54	0.04	2.40
Total DCs	**13.46**	**13.41**	**13.44**	**13.60**	**13.83**	**13.57**	**0.11**	**0.81**
FSU	14.29	14.55	14.16	14.34	14.37	14.35	0.06	0.44
of which Russia	*11.35*	*11.53*	*11.36*	*11.42*	*11.41*	*11.43*	*0.08*	*0.73*
Other Europe	0.12	0.12	0.12	0.12	0.12	0.12	0.00	-2.34
China	4.02	4.10	4.13	4.10	4.09	4.10	0.09	2.17
Total "Other regions"	**18.43**	**18.77**	**18.41**	**18.56**	**18.58**	**18.58**	**0.15**	**0.79**
Total non-OPEC production	**60.22**	**61.52**	**61.53**	**61.98**	**63.03**	**62.02**	**1.79**	**2.98**
Processing gains	2.25	2.28	2.28	2.28	2.28	2.28	0.03	1.24
Total non-OPEC supply	**62.47**	**63.80**	**63.81**	**64.25**	**65.31**	**64.30**	**1.82**	**2.92**
Previous estimate	62.47	63.80	63.81	64.18	65.39	64.30	1.82	2.92
Revision	0.00	0.00	0.00	0.07	-0.08	0.00	0.00	0.00

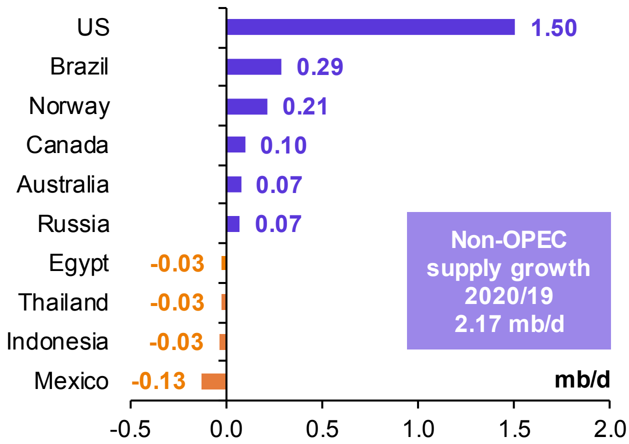
*Note: * 2019 = Estimate.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Graph 5 - 5: Annual supply changes for selected countries in 2019*



*Note: * 2019 = Estimate.*
Source: OPEC Secretariat.

Graph 5 - 6: Annual supply changes for selected countries in 2020*



*Note: * 2020 = Forecast.*
Source: OPEC Secretariat.

Table 5 - 3: Non-OPEC oil supply in 2020*, mb/d

	2019	1Q20	2Q20	3Q20	4Q20	2020	Change 2020/19 Growth	%
Americas	25.65	26.64	26.92	27.34	27.62	27.13	1.48	5.76
of which US	*18.33*	*19.23*	*19.82*	*20.03*	*20.25*	*19.84*	*1.50*	*8.21*
Europe	3.73	3.95	3.81	3.83	4.11	3.93	0.19	5.16
Asia Pacific	0.48	0.54	0.53	0.57	0.57	0.55	0.07	14.89
Total OECD	**29.87**	**31.13**	**31.26**	**31.73**	**32.30**	**31.61**	**1.74**	**5.83**
Other Asia	3.43	3.38	3.39	3.39	3.39	3.39	-0.04	-1.22
Latin America	5.39	5.62	5.59	5.60	5.74	5.64	0.25	4.61
Middle East	3.21	3.21	3.25	3.26	3.28	3.25	0.04	1.11
Africa	1.54	1.58	1.57	1.57	1.56	1.57	0.03	2.02
Total DCs	**13.57**	**13.78**	**13.80**	**13.82**	**13.98**	**13.85**	**0.27**	**2.01**
FSU	14.35	14.32	14.44	14.36	14.64	14.44	0.09	0.60
of which Russia	*11.43*	*11.34*	*11.50*	*11.51*	*11.64*	*11.50*	*0.07*	*0.61*
Other Europe	0.12	0.12	0.12	0.12	0.11	0.12	-0.01	-4.32
China	4.10	4.12	4.13	4.10	4.13	4.12	0.02	0.46
Total "Other regions"	**18.58**	**18.57**	**18.69**	**18.58**	**18.88**	**18.68**	**0.10**	**0.54**
Total non-OPEC production	**62.02**	**63.49**	**63.75**	**64.12**	**65.15**	**64.13**	**2.11**	**3.41**
Processing gains	2.28	2.33	2.33	2.33	2.33	2.33	0.05	2.37
Total non-OPEC supply	**64.30**	**65.82**	**66.09**	**66.46**	**67.49**	**66.46**	**2.17**	**3.37**
Previous estimate	64.30	65.82	66.09	66.46	67.49	66.46	2.17	3.37
Revision	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Note: * 2019 = Estimate and 2020 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

OECD

Following robust growth of 2.62 mb/d in 2018, **OECD oil supply in 2019** is estimated to grow by 1.54 mb/d y-o-y and average 29.87 mb/d, unchanged from last month's assessment. OECD Americas and Asia Pacific are forecast to grow by 1.57 mb/d and 0.07 mb/d, respectively, while OECD Europe was revised down by 18 tb/d and now is forecast to decline by 0.11 mb/d.

For **2020**, yearly growth was revised up by 19 tb/d to 1.74 mb/d and average 31.61 mb/d. OECD Americas, Europe and Asia Pacific are forecast to grow by 1.48 mb/d, 0.19 mb/d and 0.07 mb/d, respectively.

OECD Americas

US

US liquids output in September (excluding processing gains) showed an increase of 0.28 mb/d m-o-m to average 18.82 mb/d, up by 1.36 mb/d y-o-y, while crude oil output increased by 0.07 mb/d m-o-m to average 12.46 mb/d, higher by 965 tb/d y-o-y. Production of NGLs in September was up by 0.26 mb/d m-o-m to average 4.99 mb/d, higher by 0.35 mb/d y-o-y. Preliminary indications show that the output of other non-conventional liquids, mainly ethanol, was down in September by 45 tb/d m-o-m to average 1.37 mb/d, but was higher by 41 tb/d compared to a year ago.

The EIA's latest US monthly production information for September 2019 showed a mild increase of 66 tb/d for crude oil production (including lease condensate) to average 12.46 mb/d, compared to the previous month's robust increase of 574 tb/d (revised down by 25 tb/d by the EIA). Onshore Lower 48 production in September grew by 109 tb/d m-o-m, primarily due to increasing production from Texas and New Mexico (totalling 93 tb/d).

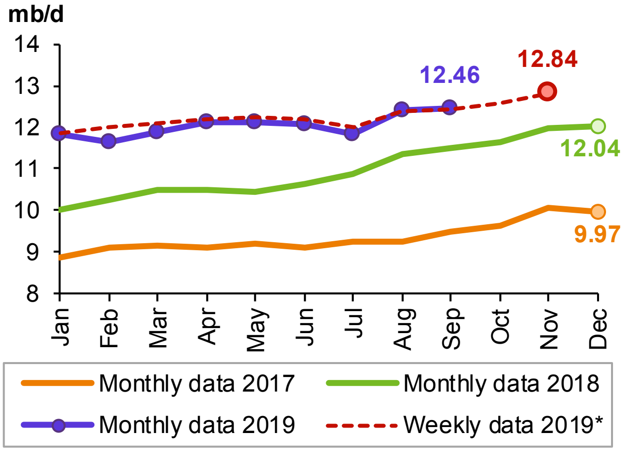
Crude oil output increased on the West Coast (PADD 5), mainly in Alaska (+67 tb/d); in the Rocky Mountains (PADD 4), mainly in Wyoming (+10 tb/d); in the Midwest (PADD 2), primarily in Oklahoma (+43 tb/d); and on the East Coast (PADD 1), primarily in West Virginia. On the Gulf Coast (PADD 3), total production – despite increasing output in onshore fields, particularly in Texas and New Mexico – declined by 114 tb/d m-o-m in the GoM to average 1,895 tb/d.

Table 5 - 4: US crude oil production by state, tb/d

State	Aug 19	Sep 19	*Change* Sep 19/Aug 19
Alaska	382	449	*67*
Colorado	521	514	*-7*
Oklahoma	562	605	*43*
New Mexico	935	956	*21*
North Dakota	1,440	1,400	*-40*
Federal Offshore - Gulf of Mexico (GoM)	2,009	1,895	*-114*
Texas	5,155	5,227	*72*
Total US crude oil production	**12,397**	**12,463**	***66***

Sources: US EIA and OPEC Secretariat.

Graph 5 - 7: US monthly crude oil production in 2017-2019 vs. weekly forecast in 2019

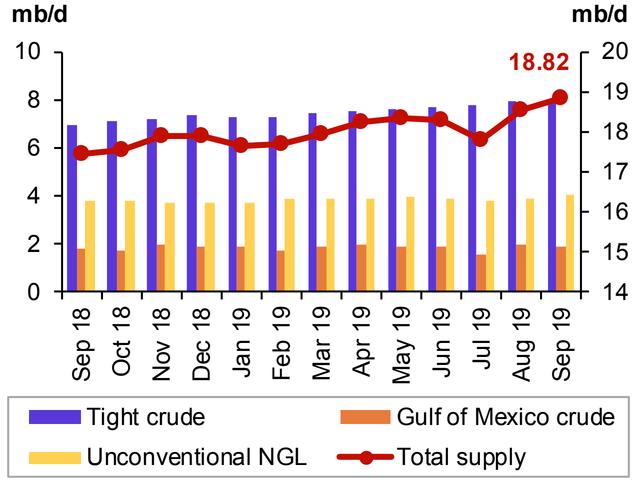


*Note: * 2019 = Estimate.*
Sources: US EIA and OPEC Secretariat.

US crude oil production in 2019 is likely to grow by 1.20 mb/d y-o-y to average 12.19 mb/d. The share of tight crude, out of the forecast growth of 1.20 mb/d in 2019, is estimated at 1.16 mb/d, to average 7.67 mb/d; and for the GoM, it is 0.13 mb/d, averaging 1.89 mb/d. Conventional crude (non-shale), including Alaska's production, is projected to decline by 0.10 mb/d, to average 2.63 mb/d.

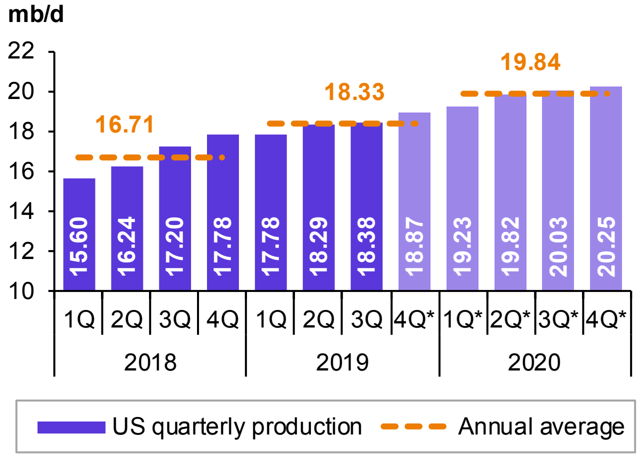
US crude oil production in 2020 is forecast to grow by 1.02 mb/d y-o-y to average 13.20 mb/d. Judging by the current trend of decline in the US oil rig count and discipline in E&P spending by independents, US crude oil output, particularly from tight oil regions, will definitely be affected. Although the backlog of more than 6,000 drilled but uncompleted horizontal wells in tight oil regions provides support because of lower costs, crude production – despite the opening of new pipelines in the Permian Basin – is forecast to increase y-o-y by 0.89 mb/d from onshore fields to average 11.18 mb/d, and 0.13 mb/d from offshore fields in GoM to average 2.02 mb/d. Tight crude growth is forecast to slow to 0.97 mb/d for next year and average 8.64 mb/d. With regard to non-tight crude, Lower 48 onshore crude oil output is forecast to decline by around 0.09 mb/d to average 2.54 mb/d.

Graph 5 - 8: US monthly liquids supply by key component



Source: US EIA and OPEC Secretariat.

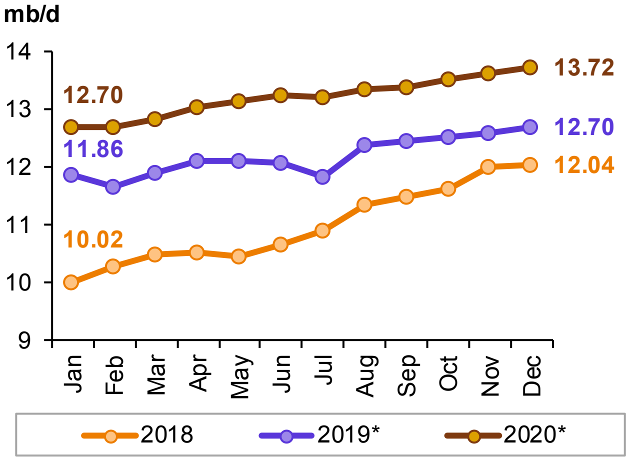
Graph 5 - 9: US total liquids supply quarterly



Note: * 4Q19-4Q20 = Forecast.
Sources: US EIA and OPEC Secretariat.

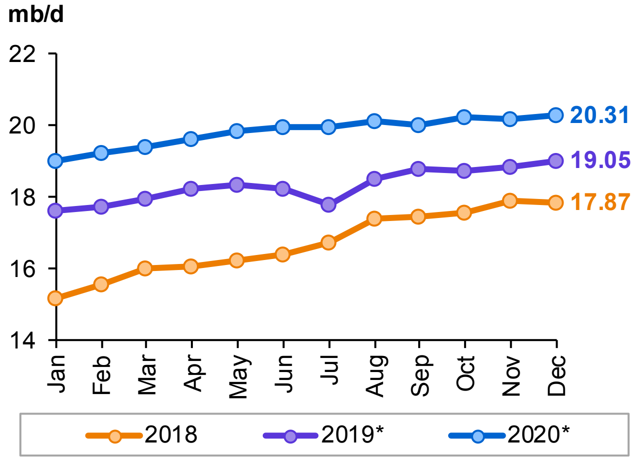
US liquids supply in 2019 is estimated to average 18.33 mb/d, representing y-o-y growth of 1.62 mb/d, unchanged from the previous month's assessment. Although the US liquids supply has been revised up by 75 tb/d in 3Q19, however this was offset by a downward revision to 4Q19.

Graph 5 - 10: US monthly crude oil supply



Note: * 2019 = Estimate and 2020 = Forecast.
Source: OPEC Secretariat.

Graph 5 - 11: US monthly total liquids supply



Note: * 2019 = Estimate and 2020 = Forecast.
Source: OPEC Secretariat.

Besides expected y-o-y growth of 1.20 mb/d for crude oil, NGL production – mainly from unconventional sources of rich gas – is expected to grow by 0.42 mb/d to average 4.80 mb/d, while other liquids output, mainly biofuels, is estimated to remain unchanged from last year at 1.35 mb/d.

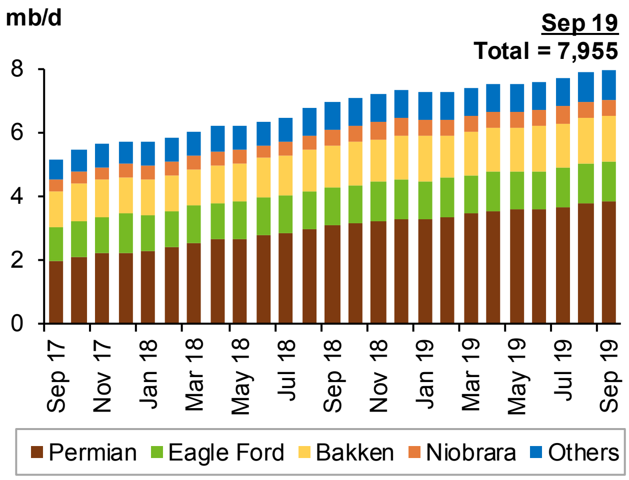
Table 5 - 5: US liquids production breakdown, mb/d

	2017	2018	Change 2018/17	2019*	Change 2019/18	2020*	Change 2020/19
Tight crude	4.96	6.51	*1.55*	7.67	*1.16*	8.64	*0.97*
Gulf of Mexico crude	1.68	1.76	*0.08*	1.89	*0.13*	2.02	*0.13*
Conventional crude oil	2.71	2.72	*0.01*	2.63	*-0.10*	2.54	*-0.09*
Unconventional NGLs	3.02	3.60	*0.57*	3.98	*0.40*	4.43	*0.45*
Conventional NGLs	0.76	0.77	*0.01*	0.81	*0.02*	0.83	*0.02*
Biofuels + Other liquids	1.27	1.35	*0.08*	1.35	*0.00*	1.37	*0.02*
US total supply	**14.40**	**16.71**	***2.31***	**18.33**	***1.62***	**19.84**	***1.50***

*Note: * 2019 = Estimate and 2020 = Forecast.*
Sources: US EIA, Rystad Energy and OPEC Secretariat.

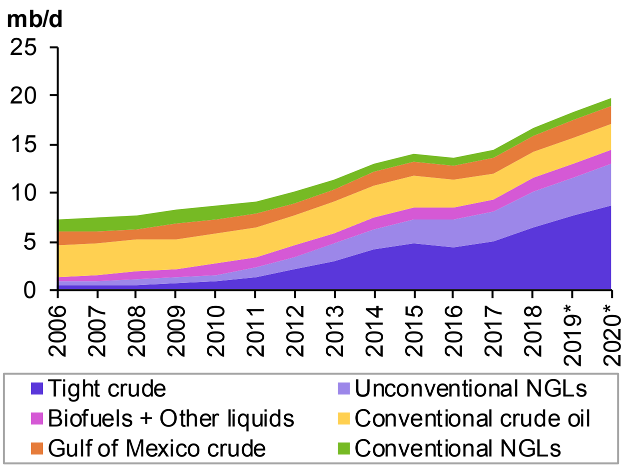
US tight crude output in September 2019 increased by an estimated 86 tb/d m-o-m to average 7.96 mb/d, an increase of 0.98 mb/d y-o-y according to preliminary estimates. The main m-o-m growth in US tight crude output from shale and tight formations through horizontal wells came from the Permian Midland as well as the Delaware basins in Texas, adding a total of 95 tb/d to average 3.86 mb/d.

Graph 5 - 12: US tight crude output breakdown



Souces: US EIA, Rystad Energy and OPEC Secretariat.

Graph 5 - 13: US liquids production breakdown



*Note: * 2019 = Estimate and 2020 = Forecast.*
Sources: US EIA, Rystad Energy and OPEC Secretariat.

Tight crude output in Eagle Ford declined by 7 tb/d to average 1.22 mb/d in September. Tight crude output from Bakken shale in North Dakota declined by 40 tb/d m-o-m, due to heavy seasonal rains and disruptions to completion operations, to average 1.41 mb/d. While production from Niobrara shale in Colorado fell to an average 0.53 mb/d, production from other tight plays, particularly in Oklahoma and Wyoming, rose by 43 tb/d in September m-o-m to average 0.94 mb/d.

For **2020**, **US tight crude and unconventional NGLs** are forecast to continue to dominate non-OPEC supply growth. Due to ongoing spending discipline by independent companies as well as lower drilling activity, a slowdown in y-o-y growth is anticipated compared to 2019. This could lead producers to try to maintain production growth by completing drilled horizontal wells, but not drilled but uncompleted wells, in all tight oil regions to reduce costs.

Table 5 - 6: US tight oil production growth, mb/d

Shale play	2018		2019*		2020*	
tb/d	Production	*Y-o-y change*	Production	*Y-o-y change*	Production	*Y-o-y change*
Permian tight	2.81	*0.97*	3.66	*0.85*	4.31	*0.65*
Bakken shale	1.25	*0.20*	1.40	*0.15*	1.56	*0.16*
Eagle Ford shale	1.18	*0.09*	1.22	*0.04*	1.26	*0.04*
Niobrara shale	0.46	*0.12*	0.52	*0.06*	0.57	*0.05*
Other tight plays	0.80	*0.17*	0.87	*0.07*	0.93	*0.06*
Total	**6.51**	***1.55***	**7.67**	***1.16***	**8.64**	***0.97***

*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

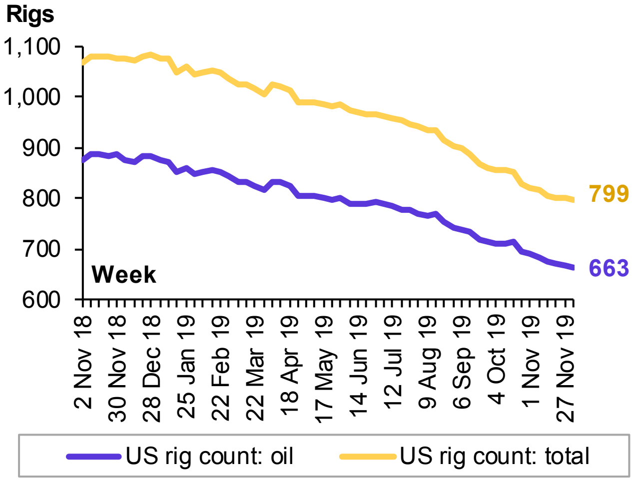
US rigs, wells and drilled-but-uncompleted wells (DUCs)

The overall **US rig count** declined by 276 units, or 26%, y-o-y to 799 rigs in the week ending 6 December. Out of the active 799 rigs, 777 were onshore and 22 were offshore. US oil rigs dropped by 214 units, or 24%, y-o-y to average 663 oil rigs (***Graph 5 - 14***).

US gas rigs dropped by 65 units, or 33%, y-o-y to 133 rigs. Total horizontal rigs (oil and gas) decreased by 238 units, or 26%, y-o-y to stand at 695 horizontal rigs.

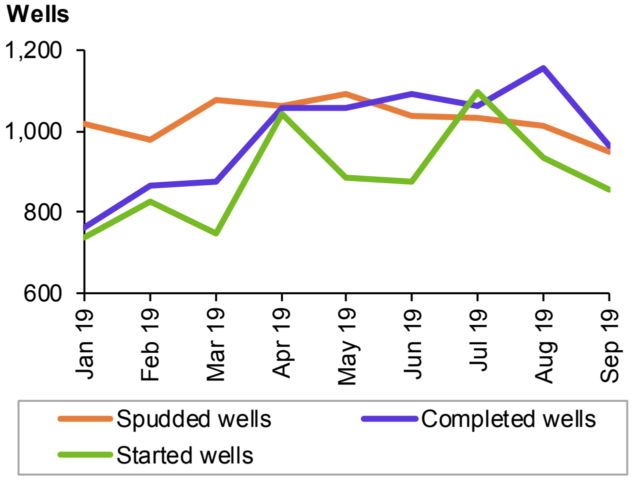
With regard to drilling and completion (D&C) in all US shale plays, 951 wells were spudded in September 2019, down by 63 wells m-o-m, while 962 wells were completed in the same month, 193 fewer wells than completed in August. The number of completed wells in 3Q19 was down by 30 wells q-o-q to 3,179 wells (***Graph 5 - 15***).

Graph 5 - 14: US weekly oil rig count



Sources: Baker Hughes and OPEC Secretariat.

Graph 5 - 15: Spudded, completed and started wells in the US shale plays



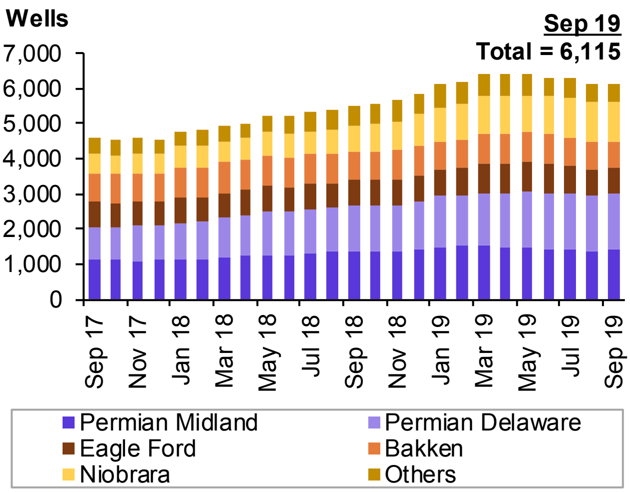
Sources: Rystad Energy and OPEC Secretariat.

The number of drilled horizontal oil wells in 3Q19 declined by around 6%, or 196 wells, to total 2,997 wells. By comparison, 14,236 horizontal oil wells were drilled in the US in 2014, while in 2018 the number declined to 11,814 wells. A total of 12,417 wells were completed in 2014, while in 2018 the total declined to 10,476 wells, although the productivity of these wells was higher than the wells completed in 2014 due to upgraded completion metrics. The total number of completed wells in the first three quarters of 2019 reached 8,893 wells, an increase of 1,124 wells y-o-y.

In ***Graph 5 - 16***, the US tight oil horizontal DUCs count development shows that the DUCs count has been decreasing in recent months.

Total DUCs count in March 2019 peaked at 6,404. Since then 289 DUCs have been taken from inventories across all regions, bringing the number to 6,115 in September.

Graph 5 - 16: US horizontal DUCs count by shale play

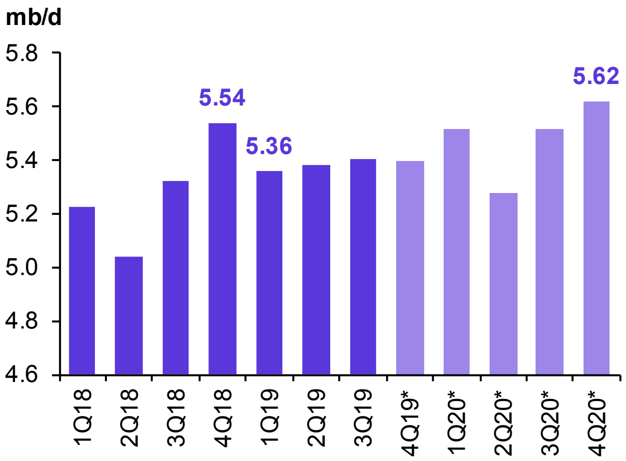


Sources: Rystad Energy and OPEC Secretariat.

Canada

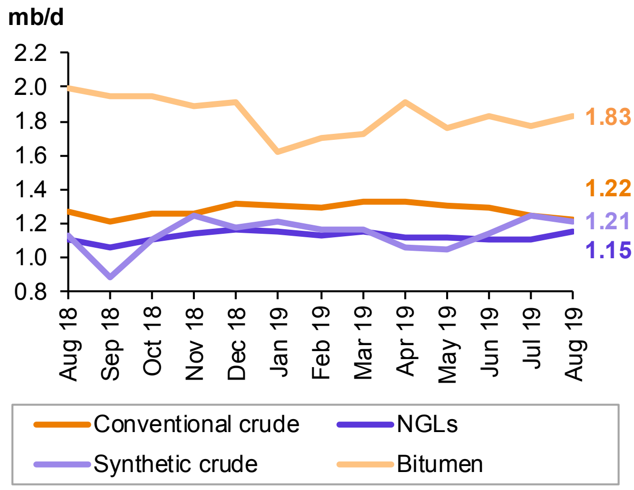
Canada's liquids supply in August 2019 rose by 0.05 mb/d m-o-m to average 5.46 mb/d, according to official data, which is 0.08 mb/d lower than a year earlier. Non-conventional oil production increased by 20 tb/d m-o-m to average 3.04 mb/d in August, lower by 0.08 mb/d y-o-y, while conventional oil output declined by 30 tb/d m-o-m to average 1.22 mb/d.

Graph 5 - 17: Canada quarterly oil production



Note: 4Q19-4Q20 = Forecast.
Sources OPEC Secretariat.

Graph 5 - 18: Canada monthly production development by type



Sources: National Energy Board and OPEC Secretariat.

Alberta's provincial government has exempted increases in conventional crude oil production from curtailment limits. With regard to the oil sands breakdown, while synthetic crude declined by 0.04 mb/d m-o-m, mainly attributed to the start of upgrader maintenance, production of bitumen rose by 0.06 mb/d to average 1.83 mb/d in August.

NGLs output in August also increased by 0.04 mb/d to average 1.15 mb/d. Synthetic crude production in September is estimated to have declined by 0.24 mb/d to average 0.97 mb/d, mainly due to the lower rate in Horizon and other upgraders. The preliminary 3Q19 production data at 5.40 mb/d shows that Canada's liquids supply has gradually increased by 0.02 mb/d in every quarter since 1Q19.

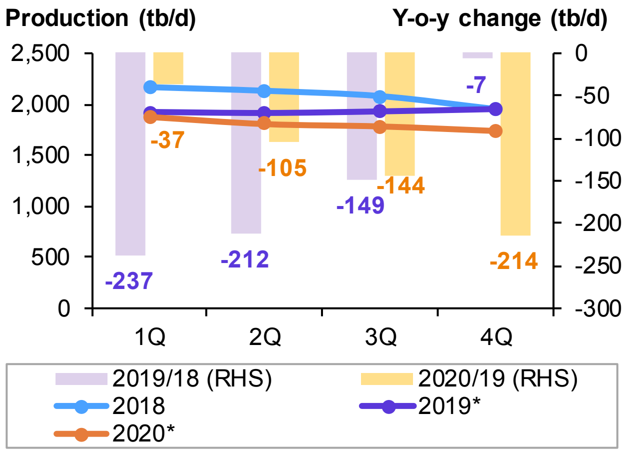
Canada's oil supply growth estimation in **2019** and forecast for **2020** remain unchanged at 0.10 mb/d, for each year.

Mexico

Mexico's average liquids output in October 2019 fell by 0.02 mb/d m-o-m and averaged 1.92 mb/d, down by 0.07 mb/d y-o-y. Crude oil production declined by 28 tb/d m-o-m, due to planned maintenance at Ku-Maloob-Zaap (KMZ), to an average of 1.66 mb/d, and was down by 92 tb/d y-o-y. NGL output was up by 9 tb/d m-o-m to average 259 tb/d.

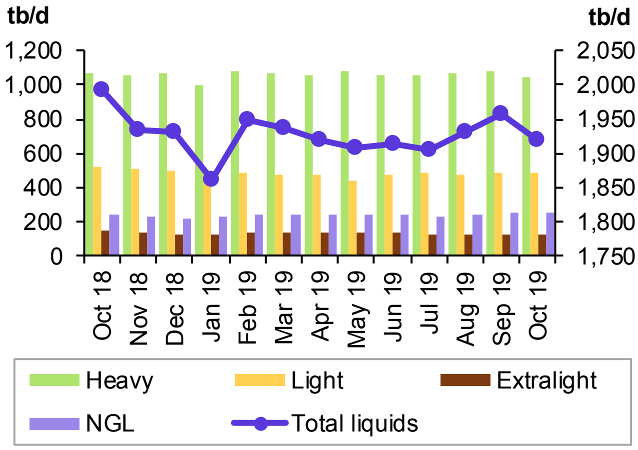
According to preliminary production data for November, output has increased m-o-m possibly due to the production start-up of the first project of 17 PEMEX priority fields – the 70 tb/d Xikin field - which should help to limit the estimated heavy annual decline. Oil output has increased since June 2019, mainly in Ku-Maloob-Zaap and other regions. Mexico's liquids supply in 3Q19 increased q-o-q with an average of 1.93 mb/d. Mexico's supply growth in **2019** is estimated to contract by 0.15 mb/d, y-o-y.

Graph 5 - 19: Mexico's quarterly liquids supply



Note: * 2019 = Estimate and 2020 = Forecast.
Source: OPEC Secretariat.

Graph 5 - 20: Mexico's monthly liquids and crude production by type



Sources: PEMEX and OPEC Secretariat.

Half of the declines for **2020** are forecast from the Cantarell, Abkatún-Pol-Chuc and Tsimin-Xux projects. Part of the total annual decline will be offset by the new incremental production capacity that is coming on line next year, although this capacity is not so remarkable.

Overall, Mexico's oil supply in 2020 will decline further by 0.13 mb/d to average 1.80 mb/d. This forecast is subject to change due to uncertainty regarding the implementation of new projects.

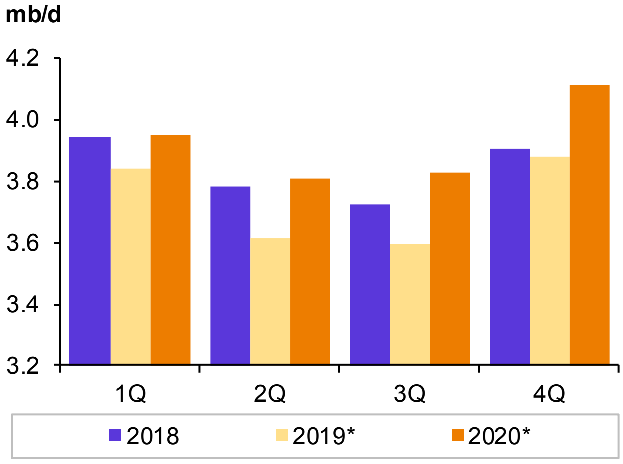
OECD Europe

OECD Europe's preliminary oil supply in October rose by 0.19 mb/d m-o-m, due to higher output in Norway, to average 3.69 mb/d, lower by 0.21 mb/d y-o-y.

For **2019**, OECD Europe's oil supply is forecast to see a contraction of 0.11 mb/d to average 3.73 mb/d, revised down by 0.02 mb/d following the lower UK supply forecast for 4Q19. The projected annual growth of 0.06 mb/d for the UK is expected to be offset by production declines in other countries, particularly Norway. North Sea oil production is forecast to see a gradual ramp-up from 4Q19 onward, owing to the start-up of Norway's giant Johan Sverdrup field.

Therefore, for **2020**, total growth of 0.19 mb/d y-o-y and an average oil supply of 3.93 mb/d is forecast.

Graph 5 - 21: OECD Europe quarterly liquids supply



Note: * 2019 = Estimate and 2020 = Forecast.
Source: OPEC Secretariat.

While Norway's output is forecast to grow by 0.21 mb/d, the UK's and Denmark's production is projected to decline by 0.01 mb/d each, while oil production in other OECD Europe will grow by 0.01 mb/d to average 0.73 mb/d.

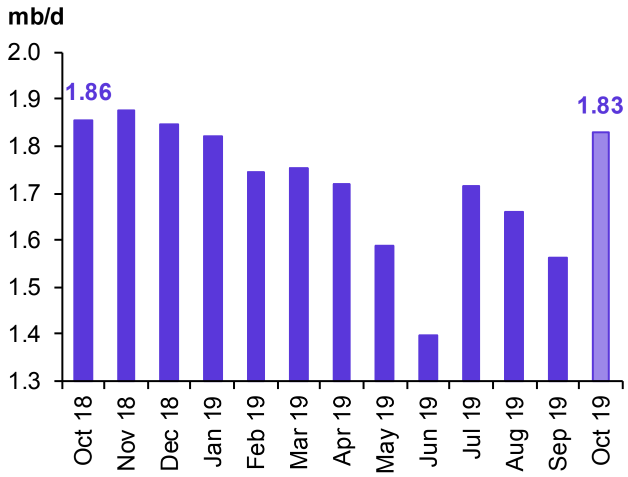
Norway

Norwegian liquids supply in October rose by 0.27 mb/d m-o-m to average 1.83 mb/d. Average daily liquids production in October included 1.52 mb/d of crude oil and 0.31 mb/d of NGLs (including 30 tb/d of condensate).

According to the Norwegian Petroleum Directorate (NPD), oil production in October 2019 was 4.5% higher than the NPD's forecast, and 3.2% below the forecast so far this year. The main reason for the higher output in October was due to the early start-up of production in Johan Sverdrup, which was one month ahead of schedule. Moreover, liquids output for October 2019 was expected to rise as fields returned from maintenance, mainly in Ekofisk and in Gullfaks.

Despite lower NGLs output from the Troll field due to storage constraints, Norway's NGLs output in October was boosted by 49 tb/d m-o-m to average 309 tb/d, following higher winter gas production.

Graph 5 - 22: Norway monthly liquids output

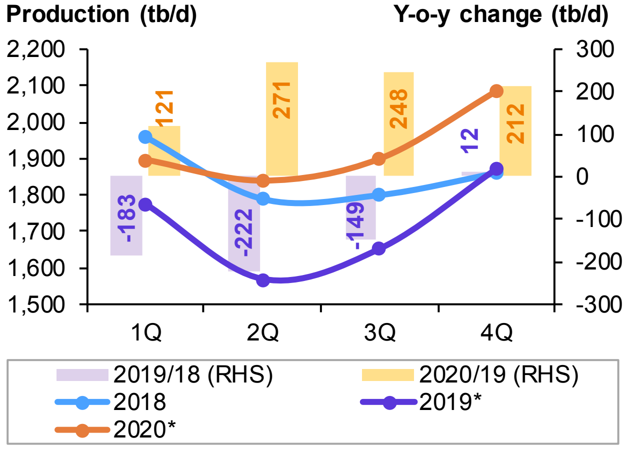


Sources: Norwegian Petroleum DirectorateOPEC Secretariat.

Following a deep y-o-y contraction in Norway oil supply growth in 2019, liquids supply is expected to grow by 0.21 mb/d to average 1.93 mb/d, which is still lower than the level of average liquids output in 2017 at 1.97 mb/d.

Johan Sverdrup is forecast to account for 50% of the new production. In addition, 20% of the new production will come from the ramp-up of the Valhall and Oseberg projects and the start-up of Njord, Yme and Martin Linge. Maintenance is scheduled for 2Q20 and again for 4Q20.

Graph 5 - 23: Norway's quarterly liquids supply



*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

UK

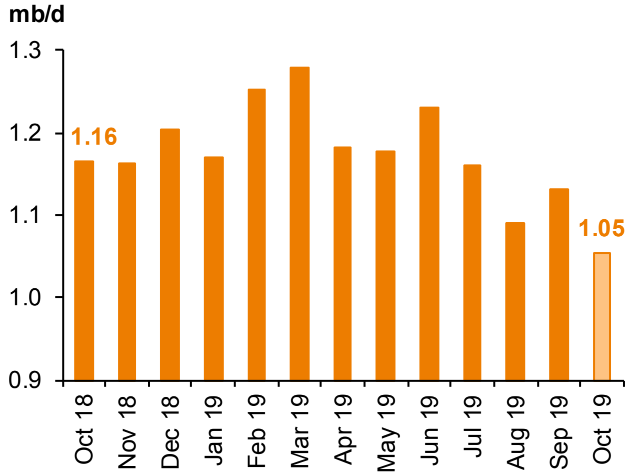
UK crude oil output in October 2019 declined m-o-m by 0.08 mb/d to an average of 1.05 mb/d, lower by 0.11 mb/d, y-o-y.

Crude oil and NGLs output declined by 69 tb/d and 8 tb/d in October to average 1.00 mb/d and 79 tb/d, respectively.

For crude, two separate outages were reported from Buzzard, the UK's largest field. However, production is expected to recover in November.

For **2019**, UK liquids supply growth is forecast at a slower pace compared to a year ago, at 0.06 mb/d y-o-y, to average 1.18 mb/d, revised down by 0.01 mb/d due to a downward revision in the 4Q19 supply forecast by 54 tb/d.

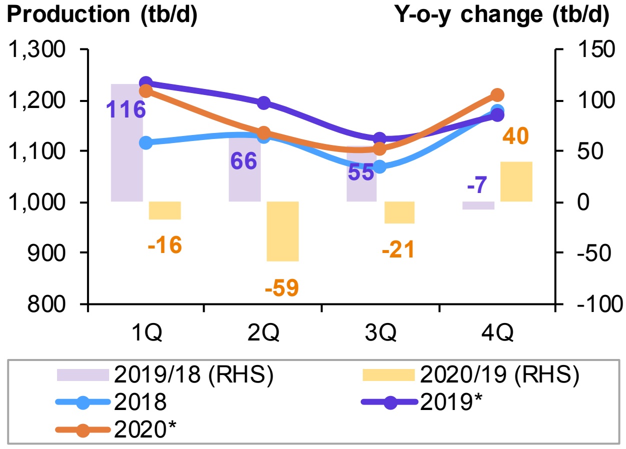
Graph 5 - 24: UK monthly liquids output



Sources: Oil and Gas Authority and OPEC Secretariat.

For **2020**, despite the expected growth from new projects – Mariner, Clair, Lancaster and the start-up of Liberator – UK oil supply is forecast to see an overall contraction of 0.01 mb/d in 2020 to average 1.17 mb/d. The main projects in decline include Buzzard, Elgin/Franklin, Golden Eagle Area, Western Isles, Greater Catcher and ETAP. These will account for more than 40% of total UK declines in 2020. Maintenance is expected to occur in 2Q20 and 3Q20, with production resuming in 4Q20.

Graph 5 - 25: UK quarterly liquids supply



*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

Developing Countries (DCs)

Total developing countries' (DCs) oil supply for 2019 remained unchanged from last month's assessment to average 13.57 mb/d, representing y-o-y growth of 0.11 mb/d. Latin America is forecast to see y-o-y growth of 0.20 mb/d, driven by new production ramp-ups in Brazil. In Africa, the anticipated y-o-y growth of 0.04 mb/d will come mainly from Ghana and the Sudans (including South Sudan and Sudan). Oil supply in the Middle East is expected to remain unchanged y-o-y at 3.21 mb/d. As before, Other Asia will see an annual contraction of 0.13 mb/d.

For **2020**, oil supply in DCs is expected to increase by 0.27 mb/d to average 13.85 mb/d, also unchanged from the last monthly assessment. The key driver remains Latin America with y-o-y forecast growth of 0.25 mb/d due to projects being ramped up in Brazil. While production is forecast to increase in the Middle East and Africa by 0.04 mb/d and 0.03 mb/d, respectively, to average 3.25 mb/d and 1.57 mb/d, production in Other Asia, despite projected growth in India and Malaysia, is forecast to decline by 0.04 mb/d to average 3.39 mb/d.

Table 5 - 7: Developing countries' liquids supply, mb/d

	1Q	2Q	3Q	4Q	Yearly	*Change Y-o-y*
2018	13.44	13.51	13.39	13.51	13.46	*0.07*
2019*	13.41	13.44	13.60	13.83	13.57	*0.11*
2020*	13.78	13.80	13.82	13.98	13.85	*0.27*

*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

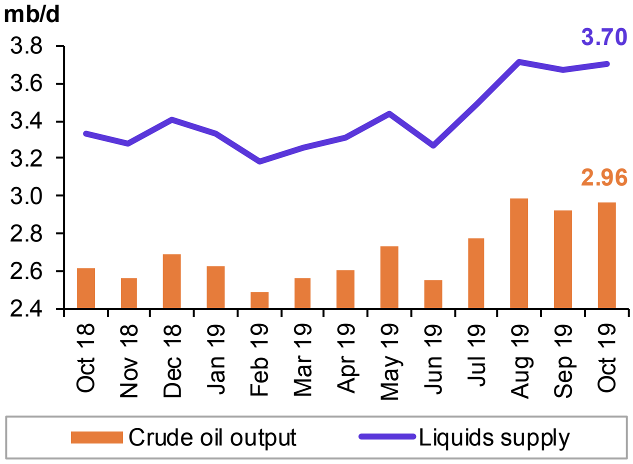
Latin America

Brazil

Brazil's crude oil output in October 2019 rose by 36 tb/d m-o-m to average 2.96 mb/d, a robust y-o-y growth of 0.35 mb/d according to the Agência Nacional do Petróleo, mainly due to higher output from two FPSOs operating in the Lula Field. Production of NGLs and biofuels was steady in October at 0.11 mb/d and 0.63 mb/d, respectively.

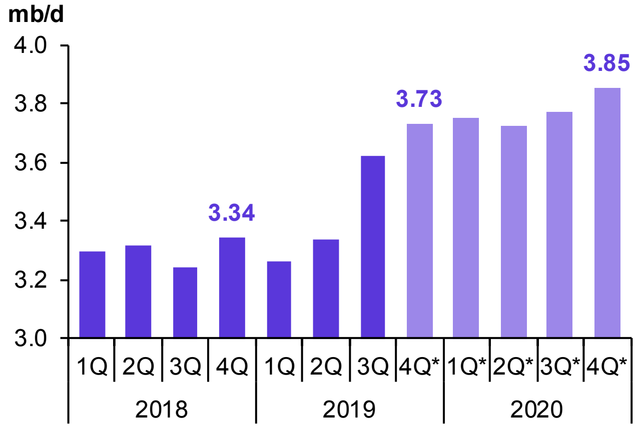
Brazil's total liquids supply in October rose by 0.03 mb/d to average 3.70 mb/d, higher by 0.37 mb/d y-o-y. With new project ramp-ups, particularly in the Lula and Búzios fields, Brazil's **liquids supply** in **2019** is forecast to average 3.49 mb/d (including biofuels), representing y-o-y growth of 0.19 mb/d.

Graph 5 - 26: Brazil's crude oil and liquids supply



Sources: National Agency of Petroleum, Natural Gas and Biofuels; and OPEC Secretariat.

Graph 5 - 27: Brazil's quarterly liquids supply



*Note: * 4Q19-4Q20 = Forecast.*
Sources: National Agency of Petroleum, Natural Gas and Biofuels; and OPEC Secretariat.

The supply forecast for **2020** shows y-o-y growth of 0.29 mb/d for an average of 3.78 mb/d, unchanged from last month's assessment. More than 80% of the estimated addition from new projects is expected to come from the Búzios (x-Franco), Lara and Lula fields. Mature fields such as Parque das Baleia, Marlim Sul (South), Roncador, Mero (Libra NW), and Marlim Leste account for more than 50% of the estimated 0.12 mb/d total decline in Brazil's supply during 2020. Annual maintenance is expected to slow growth in 2Q20 and in 3Q20.

FSU

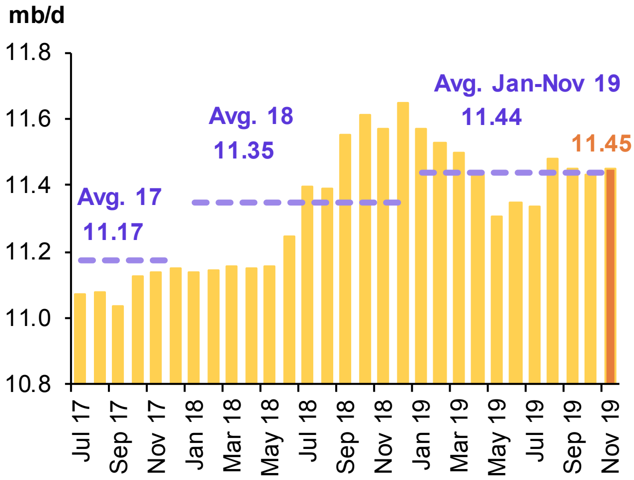
FSU oil supply in 2019 is forecast to increase by 0.06 mb/d y-o-y to average 14.35 mb/d, revised up by 18 tb/d from last month's assessment due to the upward revision of 70 tb/d in Russia's supply forecast for 4Q19. In Russia and Kazakhstan, oil supply is expected to increase by 0.08 mb/d and 0.01 mb/d y-o-y to average 11.43 mb/d and 1.82 mb/d, respectively, while oil output is likely to decline in Azerbaijan and FSU Others by 0.02 mb/d and 0.01 mb/d, respectively.

For **2020**, the FSU oil supply forecast is revised down by 0.01 mb/d and is now expected to grow by 0.09 mb/d y-o-y, to average 14.44 mb/d.

Russia

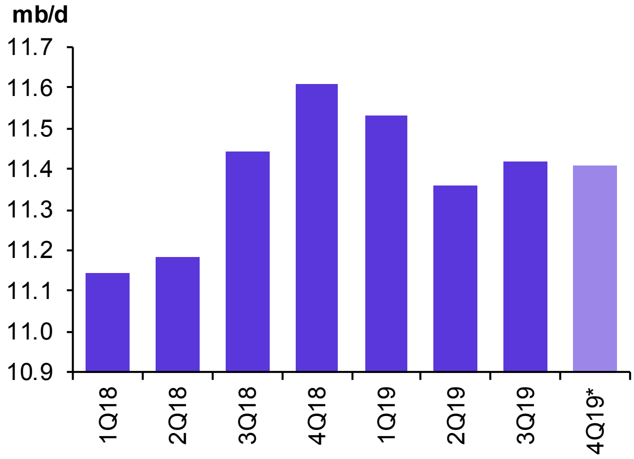
Preliminary data for **Russian liquids supply in November 2019** shows an increase of 0.02 mb/d m-o-m to average 11.45 mb/d, down by 0.12 mb/d y-o-y. Part of the higher production in recent months is due to rising condensate output from gas fields, which usually see a production increase before winter.

Graph 5 - 28: Russia's monthly liquids supply



Sources: Nefte Compass and OPEC Secretariat.

Graph 5 - 29: Russia's quarterly liquids output



*Note: * 4Q19 = Forecast.*
Sources: Nefte Compass and OPEC Secretariat.

Russia's annual oil supply growth in **2019** is revised up by 18 tb/d following output in 4Q19 that was higher by 70 tb/d than expected in our forecast. Production is now estimated to grow by 0.08 mb/d y-o-y to average 11.41 mb/d.

Caspian

Kazakhstan

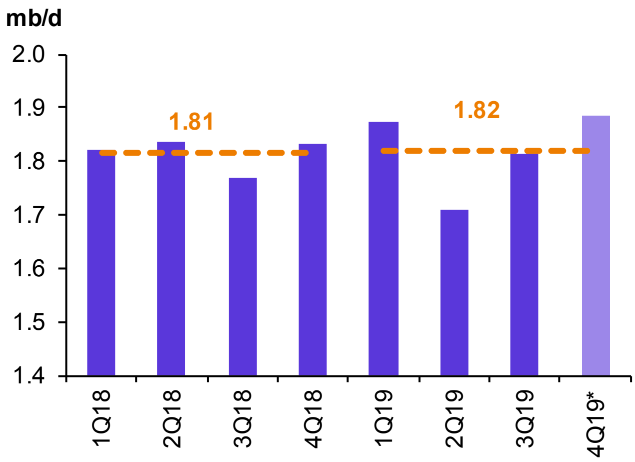
Kazakhstan's liquids output in **October** recovered by 0.07 mb/d m-o-m to average 1.84 mb/d, higher y-o-y by 0.13 mb/d. Crude oil production in October increased by 62 tb/d to average 1.57 mb/d. NGL output also was up by 4 tb/d to average 271 tb/d, the same as a year ago.

Our forecast for November was estimated at 1.87 mb/d but it seems that the unplanned production shut-in that began in the middle of the month in the Kashagan field will result in lower output than expected in the forecast.

Kazakhstan's oil supply in the current year will grow by 0.01 mb/d to average 1.82 mb/d.

For **2020**, Kazakhstan plans to start production from a satellite oil field, Kalamkas-Sea, as well as ramp up production in the Kashagan field.

Graph 5 - 30: Kazakhstan's quarterly liquids output



*Note: * 4Q19 = Forecast.*
Sources: Nefte Compass and OPEC Secretariat.

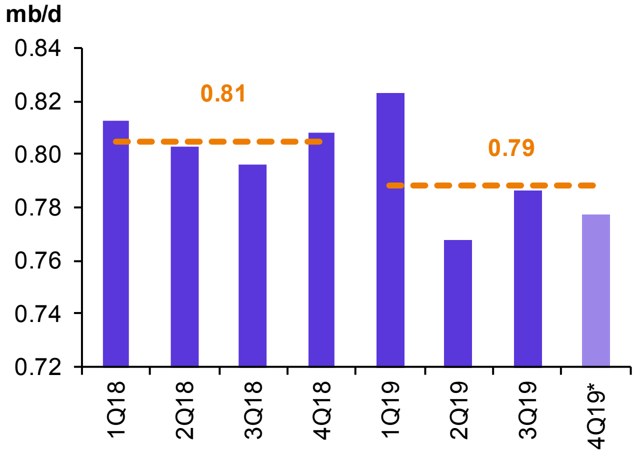
Azerbaijan

Azerbaijan's liquids output in October was down by 36 tb/d m-o-m to average 0.75 mb/d, due to shut-in production in the West Chirag platform. Oil production in 3Q19 was higher by 0.02 mb/d q-o-q to average 0.79 mb/d, and showed a y-o-y decline of 0.01 mb/d.

Azerbaijan's November total liquids output is expected to recover by 0.04 mb/d to average 0.79 mb/d.

For **2019**, oil supply in Azerbaijan is expected to decline by 0.02 mb/d to average 0.79 mb/d, unchanged from last month's assessment.

Graph 5 - 31: Azerbaijan's quarterly liquids supply



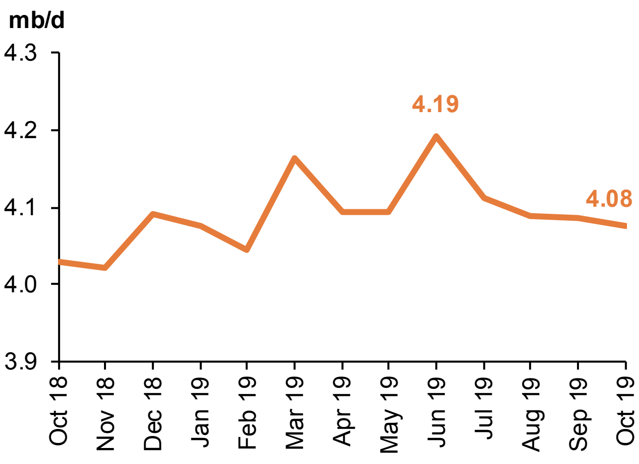
*Note: * 4Q19 = Forecast.*
Sources: JODI and OPEC Secretariat.

China

China's liquids production in October 2019 declined by 10 tb/d m-o-m to an average 4.08 mb/d, up by 47 tb/d y-o-y, according to official data.

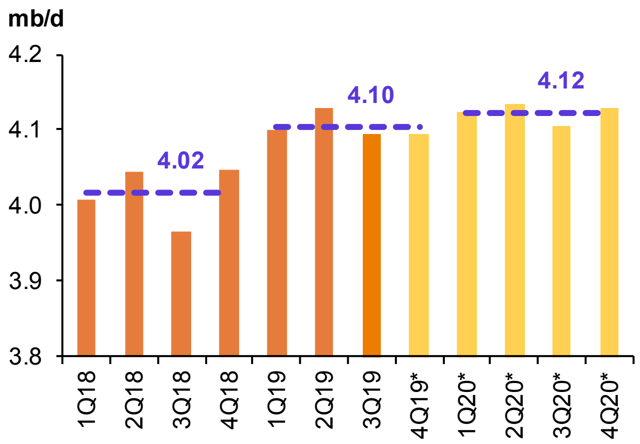
Crude oil output in October decreased by 12 tb/d to an average of 3.79 mb/d, which was only 5 tb/d higher y-o-y. Domestic crude oil output by CNPC will support the country's oil production during winter. Nevertheless, our forecast shows that oil supply in 4Q19 will fall by 0.01 mb/d to average 4.09 mb/d. Production from Shaanxi and Xinjiang are showing m-o-m growth, while oil production at several mature fields is declining.

Graph 5 - 32: China's monthly liquids output



Sources: China National Petroleum Corporation and OPEC Secretariat.

Graph 5 - 33: China's quarterly liquids output



*Note: * 4Q19-4Q20 = Forecast.*
Sources: China National Petroleum Corporation and OPEC Secretariat.

China's liquids production in **2019** is expected to grow by 0.09 mb/d to average 4.10 mb/d, unchanged from last month.

However for **2020**, oil production growth is forecast to slow to 0.02 mb/d, for an average of 4.12 mb/d, due to a lack of new oil prospects and rising exploration costs. Future oil production will depend on foreign investor spending in the upstream sector amid the US-China trade dispute.

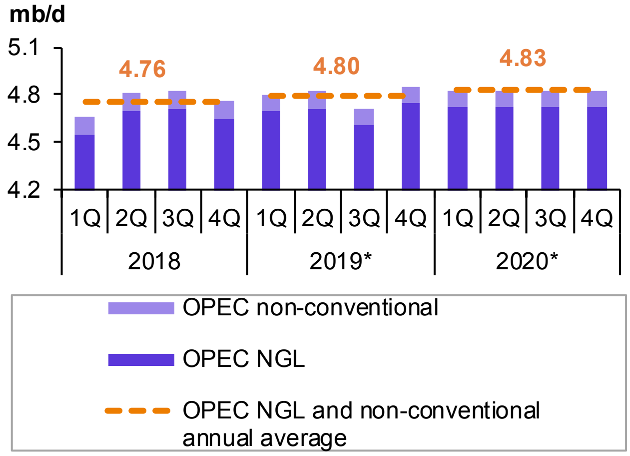
OPEC NGLs and non-conventional oils

OPEC NGLs and non-conventional liquids in 2019 are forecast to grow by 0.04 mb/d to average 4.80 mb/d, unchanged from last month's assessment, following growth of 0.12 mb/d in 2018.

NGL output in October recovered by 0.19 mb/d m-o-m to average 4.75 mb/d. Preliminary production data for **November 2019** shows an increase of 0.06 mb/d to average 4.81 mb/d compared to a month earlier, an increase of 0.09 mb/d y-o-y.

For **2020**, the preliminary forecast indicates growth of 0.03 mb/d to average 4.83 mb/d.

Graph 5 - 34: OPEC NGL and non-conventional liquids output



*Note: * 2019 = Estimate and 2020 = Forecast.*
Sources: OPEC Secretariat.

Table 5 - 8: OPEC NGL + non-conventional oils, mb/d

	2018	2019	Change 19/18	1Q20	2Q20	3Q20	4Q20	2020	Change 20/19
Total OPEC	**4.76**	**4.80**	0.04	4.83	4.83	4.83	4.83	**4.83**	0.03

Note: 2019 = Estimate and 2020 = Forecast.
Source: OPEC Secretariat.

OPEC crude oil production

According to secondary sources, total **OPEC-14 preliminary crude oil production** averaged 29.55 mb/d in November, lower by 193 tb/d m-o-m. Crude oil output increased mostly in Ecuador, Kuwait and Libya, while production decreased in Saudi Arabia, Angola, Iraq and Iran I.R.

Table 5 - 9: OPEC crude oil production based on *secondary sources*, tb/d

	2017	2018	1Q19	2Q19	3Q19	Sep 19	Oct 19	Nov 19	Nov/Oct
Algeria	1,047	1,042	1,026	1,019	1,021	1,020	1,019	1,027	*7*
Angola	1,634	1,505	1,443	1,420	1,390	1,404	1,358	1,284	*-75*
Congo	252	317	326	332	325	334	324	311	*-13*
Ecuador	530	519	526	530	544	550	457	530	*73*
Equatorial Guinea	133	125	115	114	119	122	126	134	*8*
Gabon	200	187	209	212	204	197	207	184	*-23*
Iran, I.R.	3,813	3,553	2,726	2,404	2,189	2,163	2,147	2,102	*-45*
Iraq	4,446	4,550	4,635	4,699	4,750	4,732	4,698	4,639	*-59*
Kuwait	2,708	2,745	2,715	2,693	2,655	2,658	2,648	2,705	*58*
Libya	811	951	965	1,154	1,103	1,162	1,166	1,188	*23*
Nigeria	1,658	1,718	1,736	1,786	1,844	1,851	1,804	1,798	*-6*
Saudi Arabia	9,954	10,311	10,019	9,769	9,452	8,796	10,001	9,850	*-151*
UAE	2,916	2,986	3,068	3,067	3,082	3,083	3,105	3,102	*-3*
Venezuela	1,911	1,354	975	776	714	644	685	697	*12*
Total OPEC	**32,014**	**31,864**	**30,484**	**29,974**	**29,392**	**28,716**	**29,744**	**29,551**	***-193***

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

Table 5 - 10: OPEC crude oil production based on *direct communication*, tb/d

	2017	2018	1Q19	2Q19	3Q19	Sep 19	Oct 19	Nov 19	Nov/Oct
Algeria	1,059	1,040	1,027	1,017	1,025	1,024	1,023	1,026	*3*
Angola	1,632	1,473	1,421	1,424	1,318	1,369	1,391	1,273	*-118*
Congo	263	323	345	340	334	327	316	385	*69*
Ecuador	531	517	529	531	546	547	467	546	*79*
Equatorial Guinea	129	120	108	114	109	109	119	90	*-29*
Gabon	210	193	214	225	220	216	212	..	*..*
Iran, I.R.	3,867	..	..	..	..	..	..	..	*..*
Iraq	4,469	4,410	4,540	4,565	4,630	4,620	4,576	4,595	*19*
Kuwait	2,704	2,737	2,712	2,681	2,636	2,650	2,633	2,706	*73*
Libya	..	..	..	..	..	..	..	..	*..*
Nigeria	1,536	1,602	1,689	1,721	1,794	1,796	1,780	..	*..*
Saudi Arabia	9,959	10,317	10,053	9,752	9,503	9,129	10,303	9,890	*-412*
UAE	2,967	3,008	3,055	3,050	3,068	3,070	3,070	3,065	*-5*
Venezuela	2,035	1,510	1,289	1,045	864	749	761	912	*151*
Total OPEC	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	***..***

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

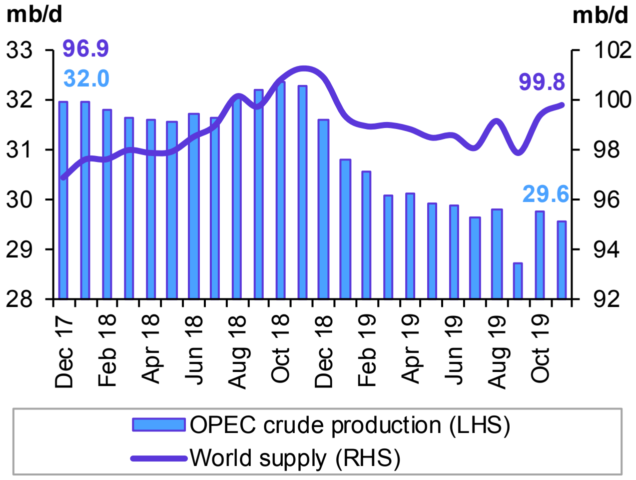
World oil supply

Preliminary data indicates that **global oil supply** in November increased by 0.41 mb/d to average 99.78 mb/d, compared to the previous month.

Non-OPEC supply (including OPEC NGLs) increased by 0.61 mb/d compared to the previous month to average 70.22 mb/d in November, higher by 1.28 mb/d y-o-y. Preliminary incremental production in November was mainly driven by the US, Canada, Norway, the UK, Russia, Azerbaijan and OPEC NGLs.

The **share of OPEC crude oil in total global production** decreased by 0.3 pp to 29.6% in November 2019 compared to the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 35: OPEC and world oil supply



Source: OPEC Secretariat.

Product Markets and Refinery Operations

***Product markets** in November lost ground as refinery intakes recovered following peak refinery maintenance season that led to higher product availability. This caused a trend reversal of refinery margins in **all main trading hubs**.*

*Higher feedstock prices, and weakening fuel oil cracks affected by high freight rates weighed further on product markets. This was particularly evident in **Asia** where refining economics fell sharply to multi-year lows and entered negative territory.*

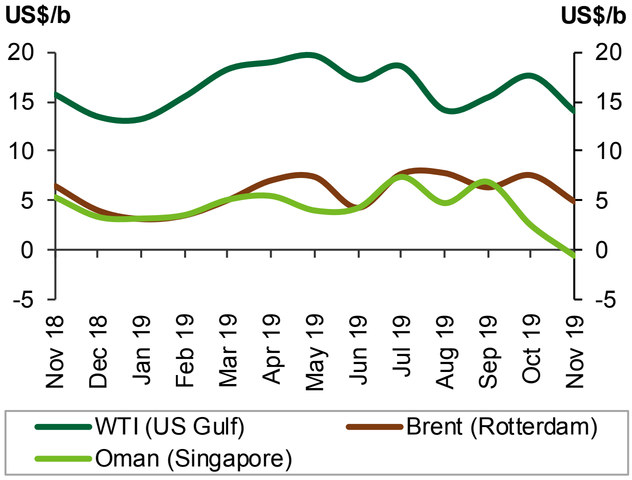
Refinery margins

US refinery margins declined in November reversing the three-month upward trend. The drop was the second largest negative m-o-m performance y-t-d. All main products markets weakened, but the greatest loss came from the gasoil segment.

Despite reports of a short-lived cold front across some parts of the US during the month, heating oil demand remained subdued and failed to provide any significant upside to product markets.

US refinery margins for WTI averaged $14.10/b in November, down by $3.51 m-o-m and by $1.63 y-o-y.

Graph 6 - 1: Refining margins



Sources: Argus Media and OPEC Secretariat.

European refining economics suffered losses as the main refined product markets lost ground affected by poor performance at the middle and bottom of the barrel. Most of the weakness derived from the fuel oil segment as strong supplies from Russia, amid high price volatility for the product, and higher refinery outputs related to restored operations, contributed to the downturn. The resumption of operations at processing units in Europe, particularly in France, contributed to the rise in refinery intakes, despite the closure of Rotterdam's 88 tb/d Gunvor refinery, reportedly due to economic reasons.

Refinery margins for Brent in Europe averaged $4.85/b in November, down by $2.69 compared to a month earlier and $1.57 y-o-y.

Asian refining margins fell sharply and remained in negative territory for the third consecutive week. Margins were down to a multi-year low of minus $0.59/b compared to $2.46/b in October and $5.28/b a year earlier.

In recent weeks, a combination of unfavourable factors placed Asian product markets under scrutiny, particularly for fuel oil and middle distillates. Higher feedstock prices and the effects of trade tariffs also played a role as fuel oil margins deteriorated to unprecedented levels affected by a hike in freight rates. This dented demand amid a growing bearish sentiment around consumption of this product ahead of IMO 2020 implementation.

In addition, a general decline in arbitrage opportunities for all products, as refineries in the Atlantic basin returned online after the peak maintenance season, negatively impacted exports from the region, while domestic demand in China and India declined y-o-y. Refinery margins for Oman in Asia lost $3.04 m-o-m to average minus $0.59/b in November. They were lower by $5.86 y-o-y.

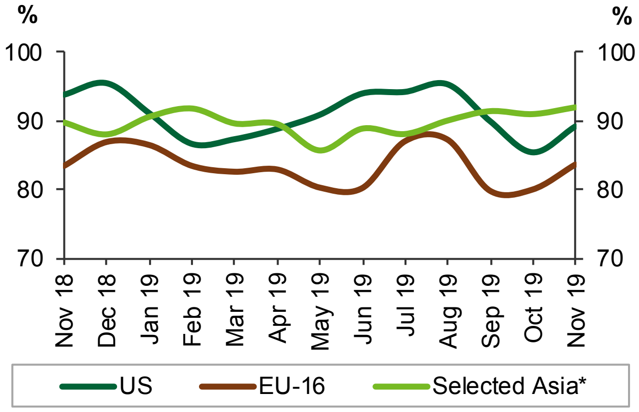
Refinery operations

In the **US**, refinery utilization rates increased, averaging 89.20%, which corresponds to a throughput of 16.77 mb/d. This represented a rise of 3.7 pp, or 702 tb/d, compared to the previous month. Y-o-y, the November refinery utilization rate was up by 4.57 pp, with throughputs up by 39 tb/d.

European refinery utilization averaged 83.66% in November, corresponding to a throughput of 10.37 mb/d. This is a m-o-m rise of 3.7 pp, or 460 tb/d. Y-o-y utilization rates fell by 0.18 pp and throughputs were up by 22 tb/d.

In **Selected Asia** – comprising Japan, China, India and Singapore – refinery utilization rates rose, averaging 91.9% in November, corresponding to a throughput of 26.04 mb/d. Compared to the previous month, throughputs were up by 1.0 pp and 280 tb/d. Meanwhile, y-o-y they were up by 2.21 pp and by 1.4 mb/d.

Graph 6 - 2: Refinery utilization rates



*Note: * Includes Japan, China, India, Singapore and South Korea.*
Sources: Argus Media, EIA, Euroilstock, Petroleum Association of Japan, and OPEC Secretariat.

Product markets

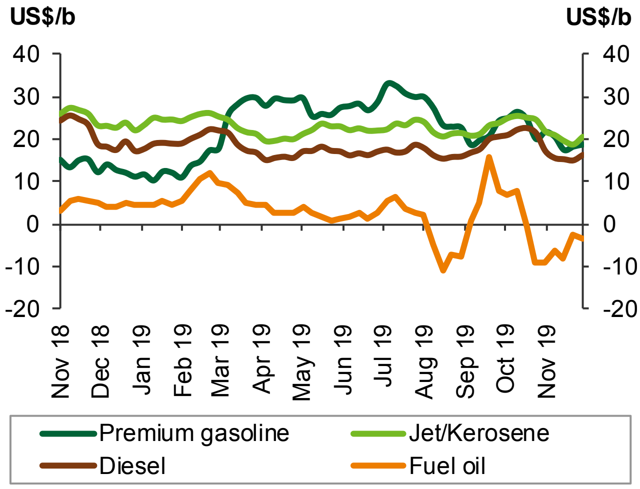
US market

US gasoline cracks continued to drop, a reflection of the solid stock builds in US gasoline inventory levels towards the end of the month. Although gasoline exports were higher and supportive m-o-m, the negative impact from the seasonal domestic demand loss, coupled with stronger refinery outputs, offset any possibility for an upside in US gasoline markets.

Moreover, during the month an unplanned outage following damage at Chevron's El Segundo refinery Fluid Catalytic Cracking unit contributed to higher volume requirements into the US West Coast, which prevented a steeper downturn in gasoline prices.

In November, the gasoline crack spread lost $4.61 m-o-m to average $18.90/b, but was up by $4.70 y-o-y.

Graph 6 - 3: US Gulf crack spread vs. WTI



Sources: Argus Media and OPEC Secretariat.

The USGC **jet/kerosene crack spread** continued to weaken**,** affected by a supply surge amid bearish market sentiment attributed to slower jet fuel demand typically seen in the off-peak air travel season. Furthermore, for most of November, US jet fuel stock levels remained essentially flat, with a slight decline during the last week of the month =, which kept losses capped. The US jet/kerosene crack spread against WTI averaged $19.66/b, down by $4.70 m-o-m and by $6.22 y-o-y.

US **gasoil crack spreads** performed negatively, as the US gasoil balance expanded, with demand declining by 236 tb/d and supply increasing by 238 tb/d in America compared with the previous month. The US gasoil crack spread averaged $15.22/b, down by $5.69 m-o-m and by $7.99 y-o-y.

US **fuel oil crack spreads** weakened further in November moving deeper into negative territory, despite gaining traction towards the end of the month to finish on a more stable note. The negative performance is attributed to the spike in freight rates that had a negative impact on global fuel oil demand. In November, the US fuel oil crack spread averaged minus 5.63¢, down by $5.10 m-o-m and by $11.07 y-o-y.

European market

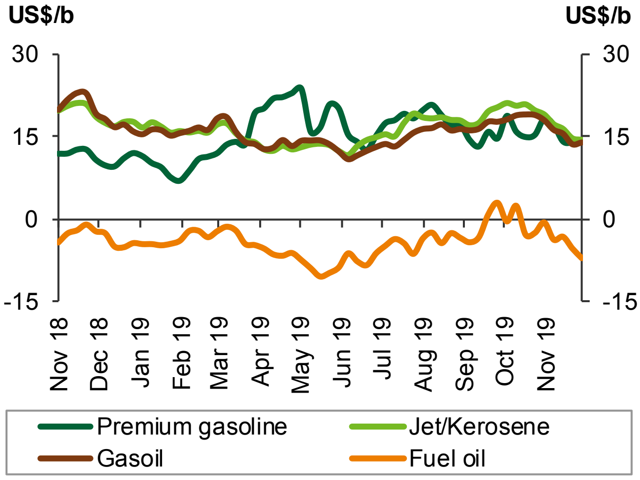
Gasoline crack spreads witnessed losses as exports declined and lower gasoline prices in the US pressured Northwest Europe-US volume flows.

In addition, a rise in Amsterdam-Rotterdam-Antwerp (ARA) gasoline inventory levels amid higher refinery outputs following the end of major repair works contributed to a weaker European gasoline market.

The gasoline crack spread averaged $15.11/b in November, down by $1.41 m-o-m, but up by $2.99 y-o-y.

The **jet/kerosene crack spreads** edged lower during the month as ample volume arrivals from the Middle East kept the local market well supplied.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus Media and OPEC Secretariat.

This led to a considerably longer balance over the month. The jet fuel balance in the region was up by 200 tb/d m-o-m, which weighed on jet fuel prices. The Rotterdam jet/kerosene crack spread averaged $15.93/b, down by $4.48 m-o-m and by $4.51 y-o-y.

European **gasoil crack spreads** lost ground in November, pressured by increased domestic gasoil production amid plentiful arbitrage arrivals from Russia. This was despite the open arbitrage window to Brazil, which prevented further weakening. The gasoil crack spread averaged $15.03/b, which was lower by $3.71 m-o-m and by $6.66 y-o-y.

At the bottom of the barrel, **fuel oil 3.5% crack spreads** in Rotterdam underwent a steep fall pressured by a decline in fuel oil demand that further added to stock levels. High sulphur fuel oil prices dropped by $6.00/b and drove high sulphur fuel oil crack deeper into negative territory. In Europe, fuel oil cracks averaged minus $33.79/b in November, losing $9.38 m-o-m and $27.84 y-o-y.

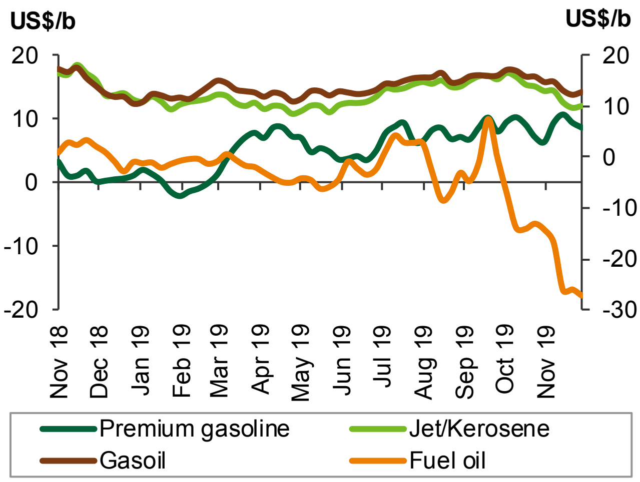
Asian market

The **Asian gasoline 92 crack spread** against Dubai strengthened slightly. Support was provided by an opening of strong export opportunities given favourable economics to the US West Coast following the outage at a FCC unit in California's 274 tb/d El Segundo refinery.

In addition, heavy maintenance in India and Korea helped secure the positive performance despite a continued slowdown in domestic demand from Japan.

The Singapore gasoline crack spread against Oman averaged $9.48/b in November, slightly up by 90¢ m-o-m and by $6.63 y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus Media and OPEC Secretariat.

Singapore light distillate **naphtha crack spreads** continued to perform positively as a drop in arrivals from the Middle East, reportedly down by nearly 80%, supported naphtha markets in Singapore. Simple refinery intake cuts in recent months, attributed to the hefty planned refinery repair work in October, led to continued pressure on inventory levels and aided the upside. The Singapore naphtha crack spread against Oman averaged minus $2.15/b, having increased by 17¢ m-o-m, and by $6.63 y-o-y.

In the middle of the barrel, **jet/kerosene crack spreads** in Asia edged higher supported by healthy demand, particularly from China, as air travel activities picked up momentum during the month.

The Singapore jet/kerosene crack spread against Oman averaged $12.98/b, down by $2.94 m-o-m and by $4.20 y-o-y.

The Singapore **gasoil crack spread** trended downwards as overall exports from Asia declined considerably in November relative to the previous month. This was mainly due to lower deliveries from Singapore, Japan and Taiwan, despite healthy outflows from South Korea, China and India. Slower gasoil regional consumption, and higher refinery throughputs, within and outside the region, contributed to gasoil stock builds. This placed Asian gasoil prices and ultimately cracks under pressure. In India, the prolonged monsoon season, with resulting widespread flooding, affected construction and mining activities, and freight movements, which weighed on diesel markets. The Singapore gasoil crack spread against Oman averaged $13.49/b, down by $3.35 m-o-m and by $2.77 y-o-y.

The Singapore **fuel oil crack spread** deteriorated further following the slump witnessed in October as HSFO prices fell sharply despite the market tightness, while the regional demand from the bunker sector waned further affected by the hike in freight rates. High sulphur fuel oil prices declined by $8.22/b to $38.41 in November, down by 44% y-o-y. Singapore fuel oil cracks against Oman averaged minus $23.50, down by $10.57 m-o-m and by $25.99 y-o-y.

Table 6 - 1: Short-term prospects for product markets and refinery operations

Event	Time frame	Asia	Europe	US	Observations
End of autumn maintenance season	Dec 19	↓ Some negative impact on product markets	↓ Some negative impact on product markets	↓ Some negative impact on product markets	Will most likely continue to pressure product markets globally as product outputs rise, while providing some support to crude markets.
Holiday season	Dec 19	↑ Some positive impact on product markets (short term)	↑ Some positive impact on product markets (short term)	↑ Some positive impact on product markets (short term)	Should provide some support to jet fuel and road transport fuels, mainly in the US.
Colder temperatures in the US and Europe	Dec 19	↑ Some positive impact on heavier product markets	↑ Some positive impact on heavier product markets	↑ Some positive impact on heavier product markets	Could provide some upside potential to kerosene markets in Asia, as well as gasoil markets in the Atlantic basin driven by increased heating oil consumption.

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				Refinery utilization, %			
	Sep 19	Oct 19	Nov 19	Change Nov/Oct	Sep 19	Oct 19	Nov 19	Change Nov/Oct
US	**16.74**	**16.07**	**16.77**	**0.70**	**89.98**	**85.51**	**89.20**	**3.7 pp**
Euro-16	**9.88**	**9.91**	**10.37**	**0.46**	**79.74**	**79.93**	**83.66**	**3.7 pp**
France	0.96	0.99	1.07	0.08	76.76	79.00	85.44	6.4 pp
Germany	1.75	1.77	1.78	0.02	80.07	80.71	81.43	0.7 pp
Italy	1.39	1.25	1.33	0.09	67.79	61.00	65.21	4.2 pp
UK	0.99	1.02	1.11	0.09	75.10	77.99	84.86	6.9 pp
Selected Asia*	**25.52**	**25.76**	**26.04**	**0.28**	**91.37**	**90.95**	**91.93**	**1.0 pp**

*Note: * Includes Japan, China, India, Singapore and South Korea.*
Sources: EIA, Euroilstock, Petroleum Association of Japan, FGE, and OPEC Secretariat.

Table 6 - 3: Refinery crude throughput, mb/d

	2016	2017	2018	4Q18	1Q19	2Q19	3Q19	4Q19
Total OECD	**37.47**	**38.16**	**38.05**	**37.95**	**37.31**	**37.19**	**38.41**	**38.16**
OECD Americas	**18.78**	**19.10**	**19.31**	**19.15**	**18.36**	**19.07**	**19.58**	**19.26**
of which US	16.51	16.88	17.32	17.33	16.46	17.14	17.43	16.86
OECD Europe	**11.91**	**12.25**	**11.99**	**11.94**	**12.08**	**11.66**	**12.29**	**12.32**
of which:								
France	1.14	1.17	1.10	1.15	1.12	0.98	1.06	1.08
Germany	1.93	1.91	1.80	1.65	1.76	1.70	1.82	1.78
Italy	1.30	1.40	1.35	1.35	1.24	1.33	1.45	1.32
UK	1.09	1.10	1.06	1.14	1.08	1.03	1.05	1.10
OECD Asia Pacific	**6.78**	**6.82**	**6.74**	**6.87**	**6.87**	**6.45**	**6.54**	**6.58**
of which Japan	3.28	3.22	3.11	3.20	3.19	2.94	3.05	2.99
Total Non-OECD	**41.46**	**42.28**	**43.50**	**43.89**	**43.88**	**43.37**	**43.85**	**44.73**
of which:								
China	10.77	11.35	12.03	12.25	12.63	12.66	12.95	13.41
Middle East	6.93	7.04	7.26	7.46	7.22	7.12	6.95	7.23
Russia	5.58	5.59	5.72	5.73	5.71	5.38	5.89	5.81
Latin America	4.66	4.51	4.22	4.07	4.02	4.03	3.98	3.91
India	4.74	4.79	4.89	4.89	5.11	4.97	4.96	5.12
Africa	2.20	2.21	2.22	2.18	2.16	2.22	2.21	2.22
Total world	**78.93**	**80.45**	**81.55**	**81.84**	**81.19**	**80.56**	**82.26**	**82.88**

Note: Totals may not add up due to independent rounding.
Sources: OPEC Secretariat, JODI, AFREC, APEC, EIA, IEA, Euroilstock, Petroleum Association of Japan, Ministry data, including Ministry of Energy of the Russian Federation, Ministry of Petroleum and Natural Gas of India.

Table 6 - 4: Refined product prices, US$/b

		Oct 19	Nov 19	Change Nov/Oct	Average 2018	Year-to-date 2019
US Gulf (Cargoes FOB):						
Naphtha*		55.10	56.79	1.69	68.51	56.63
Premium gasoline	*(unleaded 93)*	77.49	76.15	-1.34	85.78	80.14
Regular gasoline	*(unleaded 87)*	68.83	68.95	0.12	80.17	73.05
Jet/Kerosene		78.34	76.91	-1.43	85.35	79.27
Gasoil	*(0.2% S)*	74.89	72.47	-2.42	80.99	74.55
Fuel oil	*(3.0% S)*	42.32	35.84	-6.48	60.17	53.78
Rotterdam (Barges FoB):						
Naphtha		53.92	58.59	4.67	66.47	55.34
Premium gasoline	*(unleaded 98)*	76.25	78.22	1.97	87.34	79.72
Jet/Kerosene		80.14	79.04	-1.10	86.93	80.22
Gasoil/Diesel	*(10 ppm)*	78.47	78.14	-0.33	85.94	79.42
Fuel oil	*(1.0% S)*	58.86	58.57	-0.29	62.33	59.70
Fuel oil	*(3.5% S)*	35.32	29.32	-6.00	59.04	50.42
Mediterranean (Cargoes FOB):						
Naphtha		52.79	56.62	3.83	65.79	54.25
Premium gasoline**		69.39	71.75	2.36	79.08	71.45
Jet/Kerosene		77.45	75.46	-1.99	85.10	77.89
Diesel		78.10	77.28	-0.82	85.66	79.01
Fuel oil	*(1.0% S)*	62.46	62.64	0.18	63.53	62.85
Fuel oil	*(3.5% S)*	40.90	29.53	-11.37	60.36	52.16
Singapore (Cargoes FOB):						
Naphtha		57.14	59.76	2.62	67.24	56.51
Premium gasoline	*(unleaded 95)*	74.19	76.11	1.92	79.93	72.24
Regular gasoline	*(unleaded 92)*	68.04	71.39	3.35	77.66	69.28
Jet/Kerosene		75.38	74.89	-0.49	84.81	77.21
Gasoil/Diesel	*(50 ppm)*	76.30	75.40	-0.90	84.67	77.67
Fuel oil	*(180 cst)*	46.63	38.41	-8.22	65.24	58.66
Fuel oil	*(380 cst 3.5% S)*	46.25	38.19	-8.06	64.74	58.11

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

Tanker Market

Dirty tanker spot freight rates *in November remained at robust levels relative to the lacklustre performance seen for most of this year, but were down from the record highs seen in the previous month. At the end of September, an announcement of sanctions on two subsidiaries of China's shipping giant Cosco surprised the market at a time of seasonal uplift in demand for longer haul voyages and reduced tonnage availability due to IMO preparations, leading to panic fixing and a sharp spike in freight rates. The market regained balance in November, allowing rates to retreat, but closer to the elevated levels seen in the same month last year.*

Clean tanker rates *also enjoyed a similar upward trend and even managed to move above the levels achieved this time last year.*

For the tanker market as a whole, shippers are counting on rates remaining buoyant on into the ***new year****.*

Spot fixtures

Global spot fixtures maintained the previous month's levels in November, edging up 0.07 mb/d, or 0.3% m-o-m, but remained below last year's robust levels, down 2.0 mb/d, or 9%, from the same month a year ago.

Table 7 - 1: Spot fixtures, mb/d

	Sep 19	Oct 19	Nov 19	Change Nov 19/Oct 19
All areas	**19.51**	**19.91**	**19.98**	**0.07**
OPEC	13.13	13.44	14.12	0.68
Middle East/East	8.17	8.03	8.10	0.06
Middle East/West	1.13	1.34	1.62	0.28
Outside Middle East	3.82	4.07	4.41	0.34

Sources: Oil Movements and OPEC Secretariat.

OPEC spot fixtures averaged 14.12 mb/d in November, some 5%, or 680 tb/d, higher than in the previous month, but still 2%, or 320 tb/d, lower y-o-y.

Fixtures from the **Middle East-to-West** jumped by almost 21%, or 280 tb/d, to average 1.62 mb/d in November and even managed to outpace last year's level by 2%.

Middle East-to-East fixtures were slightly higher, edging up 0.8% to 8.10 mb/d. Compared to the same month last year, rates on the route fell by 3% or 240 tb/d.

Outside of the Middle East, fixtures averaged 4.41 mb/d in November, an increase of 340 tb/d, or 10.4%, from the previous month, but fell 830 tb/d, or 17%, compared with the same month last year.

Sailings and arrivals

OPEC sailings rose 1% m-o-m in November to average 25.51 mb/d. Sailings from the **Middle East** were 1%, or 200 tb/d, higher to average 18.71 mb/d in November.

Crude arrivals were largely negative in November. Arrivals in Europe led declines, down 3%, or 330 tb/d, and were similarly lower compared to the same month last year. Arrivals in North America fell 1.4%, or 130 tb/d, and were more than 3% lower compared to the same month last year. Arrivals in the Far East were relatively flat from October, but were almost 10% lower compared to November 2018. The only bright spot was West

Asia, where arrivals were 2% higher than in the previous month but were marginally lower compared to the same month last year.

Table 7 - 2: Tanker sailings and arrivals, mb/d

	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
Sailings				
OPEC	25.02	25.21	25.51	0.30
Middle East	18.29	18.50	18.71	0.20
Arrivals				
North America	9.50	9.50	9.37	-0.13
Europe	12.18	11.72	11.39	-0.33
Far East	8.23	8.24	8.22	-0.02
West Asia	4.37	4.39	4.48	0.09

Sources: Oil Movements and OPEC Secretariat.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot freight rates fell back in November following the spike in prices seen in the previous month, but were still substantially higher than pre-spike levels. At WS92 points, the **Middle East-to-East** route was down 32% in November compared to the previous month but some 47% higher than in the September. Y-o-y, rates on the route were broadly in line with those seen in November 2018.

Freight rates registered for tankers operating on the **Middle East-to-West** routes in November were down 33% m-o-m, but were 84% higher than pre-spike levels. At WS56 points, rates on the route were also 37% higher than the same month last year.

West Africa-to-East routes in November also showed a similar pattern, down 27% m-o-m, to stand at WS95 points, representing a gain of almost 50% over the levels seen in September 2019 and 4% higher compared to November 2018.

Table 7 - 3: Dirty VLCC spot tanker freight rates, Worldscale (WS)

	Size *1,000 DWT*	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
Middle East/East	230-280	62	135	92	-43
Middle East/West	270-285	30	83	56	-27
West Africa/East	260	64	130	95	-35

Sources: Argus Media and OPEC Secretariat.

Suezmax

After more than doubling in the previous month, **Suezmax average spot freight rates** had more room to return some of the gains while still remaining at higher levels compared to levels seen prior to the spike in freight rates.

Rates for tankers operating on the West Africa-to-US Gulf Coast (USGC) route averaged WS106 points, representing a m-o-m decline of 36% in November, but 55% higher than the levels seen in September. Y-o-y, however, rates were down 12%.

The Northwest Europe (NWE)-to-USGC route declined 40% m-o-m to average WS90 points, which was some 78% higher than pre-spike levels in September 2019, but 11% lower y-o-y.

Table 7 - 4: Dirty Suezmax spot tanker freight rates, WS

	Size *1,000 DWT*	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
West Africa/US Gulf Coast	130-135	68	166	106	-60
Northwest Europe/US Gulf Coast	130-135	51	151	90	-61

Sources: Argus Media and OPEC Secretariat.

Aframax

The **Aframax** sector showed a modest improvement compared to the same month last year despite across the board m-o-m declines. The Indonesia-to-East route was 37% lower to average WS137 points, but still represented a gain of 3% y-o-y. The intra-Mediterranean route was down 20% to average WS156 points, while the Mediterranean-to-NWE route shed just 2% to average WS151 points. Both routes, however, saw y-o-y gains of 1% and 5%, respectively.

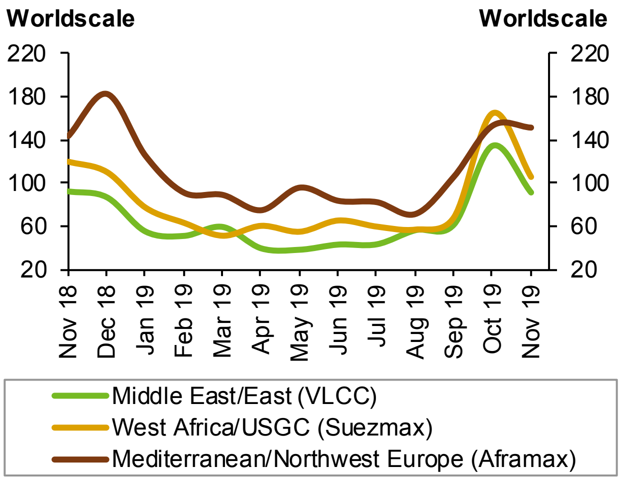
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

	Size *1,000 DWT*	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
Indonesia/East	80-85	91	174	137	-37
Caribbean/US East Coast	80-85	133	188	155	-34
Mediterranean/Mediterranean	80-85	110	176	156	-20
Mediterranean/Northwest Europe	80-85	106	153	151	-2

Sources: Argus Media and OPEC Secretariat.

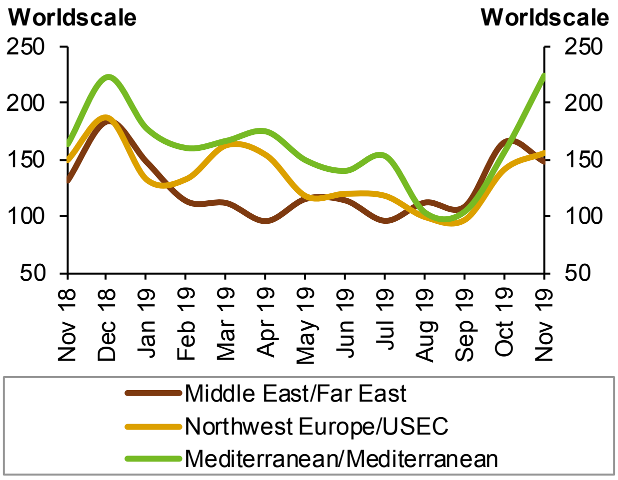
Only the Caribbean-to-US East Coast route experienced a loss compared to the same month last year. Rates averaged WS155 points, which was 18% lower m-o-m and down 26% y-o-y.

Graph 7 - 1: Crude oil spot tanker freight rates, monthly average



Sources: Argus Media and Platts.

Graph 7 - 2: Products spot tanker freight rates, monthly average



Sources: Argus Media and OPEC Secretariat.

Clean tanker freight rates

The **clean spot tanker** market enjoyed a positive turn in November, with all but the Middle East-to-East route showing further gains.

Clean tanker spot freight rates **West of Suez** averaged WS205 points, representing an overall gain of 32% over the previous month. The **Mediterranean-to-Mediterranean** and **Mediterranean-to-NWE** routes saw increases of around 40% to average WS225 points and WS235 points, respectively. Meanwhile, rates on the **NWE-to-USEC** route rose 10% to WS156 points.

On the **East of Suez** route, clean tanker spot freight rates edged 4% lower m-o-m in November to average WS158 points, with the **Singapore-to-East** route increasing 3% m-o-m to average WS168 points, while the **Middle East-to-East** route declined 10% m-o-m to average WS148 points, which was still 13% higher than the same month last year.

Table 7 - 6: Clean spot tanker freight rates, WS

	Size *1,000 DWT*	**Sep 19**	**Oct 19**	**Nov 19**	***Change*** **Nov 19/Oct 19**
East of Suez					
Middle East/East	30-35	109	165	148	-17
Singapore/East	30-35	139	163	168	4
West of Suez					
Northwest Europe/US East Coast	33-37	96	141	156	15
Mediterranean/Mediterranean	30-35	104	157	225	68
Mediterranean/Northwest Europe	30-35	112	167	235	68

Sources: Argus Media and OPEC Secretariat.

Oil Trade

*Preliminary data indicates that **US** crude oil imports fell by 4% m-o-m in November to average 6.0 mb/d. Y-o-y, imports were 21% lower than the same period last year. Year-to-date, US crude imports have averaged 6.8 mb/d, a decline of 1.0 mb/d or 13% compared with the same period last year. US crude exports averaged 3.0 mb/d in November according to preliminary data, remaining above 3 mb/d for the third straight month, but were some 0.2 mb/d or 5% lower compared with the previous month. Y-o-y, crude exports were 0.6 mb/d or 27% higher.*

*According to the most recent available data, **China's** crude oil imports jumped in October to average 10.7 mb/d, a new record high following a m-o-m gain of 0.7 mb/d or 7%. Compared with the same month last year, they were 1.6 mb/d or 17% higher. As a result, the 2019 yearly average has been pushed above the 10.0 mb/d mark, representing a gain of 1.0 mb/d over the same period last year. Product exports from China fell back from strong performance the month before, averaging 1.4 mb/d. In terms of major products, declines were led by diesel and fuel oil, as well as LPG.*

***India's** crude imports averaged 4.6 mb/d in October, representing an increase of 11% or 0.5 mb/d m-o-m. Compared with the same month last year, they were almost 9% or 0.4 mb/d lower. Year-to-date, India's crude oil imports averaged 4.5 mb/d for October, broadly in line with the same period in 2018. Meanwhile, India's product imports declined from the record high seen the previous month to average 996 tb/d in October. So far this year, the country's net product exports have averaged 352 tb/d, some 40% lower than in the same period last year.*

***Japan's** crude oil imports in October were unchanged from the previous month, averaging 2.8 mb/d. This is around 11% or 0.3 mb/d lower y-o-y. So far in 2019, Japan's crude imports have averaged 3.0 mb/d, representing a decline of 1.5% compared with the first ten months of 2018. Product imports to Japan, including LPG, averaged 845 tb/d in October, representing an increase of 89 tb/d or 12% compared with the previous month. Gains were seen in naphtha, gasoline and gasoil, while fuel oil and kerosene showed declines.*

*The latest available data shows **OECD Europe** crude imports averaged 12.0 mb/d in August, reflecting an increase of 219 tb/d m-o-m and a gain of 491 tb/d y-o-y. In the first eight months of this year, OECD Europe crude imports have averaged 11.4 mb/d, representing a gain of 1% compared with the same period last year. Product imports increased by 278 tb/d, or 4%, to average 7.8 mb/d in August. Gains were led by gasoil and gasoline, while naphtha and kerosene saw declines.*

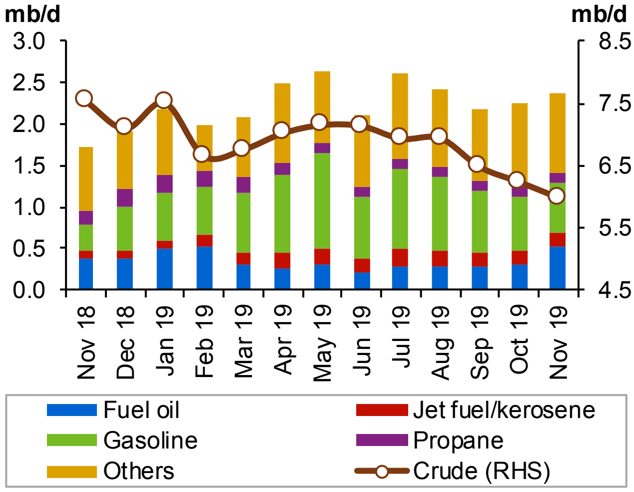
US

Preliminary data indicates that **US crude oil imports** fell by 4% m-o-m in November to average 6.0 mb/d. Y-o-y, imports were 21% lower than the same period last year. Year-to-date, US crude imports have averaged 6.8 mb/d, a decline of 1.0 mb/d or 13% compared with the same period last year.

US **crude exports** averaged 3.0 mb/d in November, according to preliminary data, remaining above 3 mb/d for the third straight month, but some 0.2 mb/d or 5% lower compared with the previous month. Y-o-y, crude exports were 0.6 mb/d or 27% higher. In the year through to November, US crude exports have averaged 2.9 mb/d, representing a gain of 0.9 mb/d or 44%.

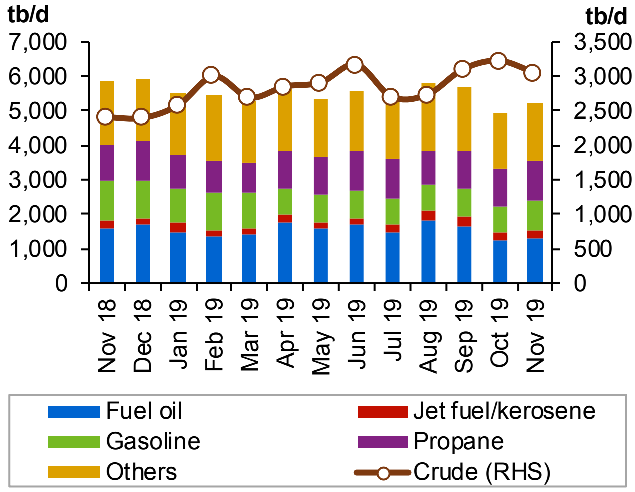
As a result, US **net crude imports** averaged 2.9 mb/d in November. Y-o-y, US net crude exports were down almost 2 mb/d, or 33%, compared with the same period last year.

Graph 8 - 1: US imports of crude and petroleum products



Sources: US EIA and OPEC Secretariat.

Graph 8 - 2: US exports of crude and petroleum products



Sources: US EIA and OPEC Secretariat.

US **product imports** rose by 133 tb/d or just under 6% in November to average 2.4 mb/d. Compared with the same month last year, they were 648 tb/d or 37% higher. In the first 11 months of the year, product imports into the US have averaged 2.3 mb/d, representing a gain of almost 5% compared with the same period last year.

US **product exports** averaged 5.2 mb/d in November, representing an increase of 5% or 0.3 mb/d m-o-m but a decline of 11% or 0.7 mb/d y-o-y. In the year to November, product exports from the US have averaged 5.4 mb/d, around 1% lower than in the same period in 2018.

As a result, US **net product exports** averaged 2.8 mb/d in November, almost 32% or 1.3 mb/d lower than in the same month of 2018.

Combined, **net crude and product imports** averaged only 93 tb/d in November, according to preliminary data, compared with 993 tb/d in November 2018 and 2.7 mb/d in the same month of 2017. Monthly data released by the EIA shows that the US was a net liquids exporter for the first time in September 2019.

Table 8 - 1: US crude and product net imports, tb/d

	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
Crude oil	3,386	3,021	2,934	-87
Total products	-3,475	-2,720	-2,841	-121
Total crude and products	**-89**	**302**	**93**	**-209**

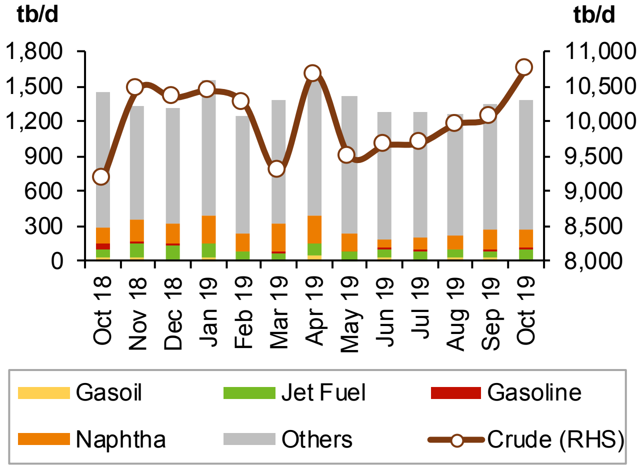
Sources: US EIA and OPEC Secretariat.

China

China's crude oil imports jumped in October to average 10.7 mb/d, a new record high following a m-o-m gain of 0.7 mb/d or 7%. Compared with the same month last year, they were 1.6 mb/d or 17% higher. As a result, the 2019 yearly average has been pushed above 10.0 mb/d, representing a gain of 1.0 mb/d over the same period last year.

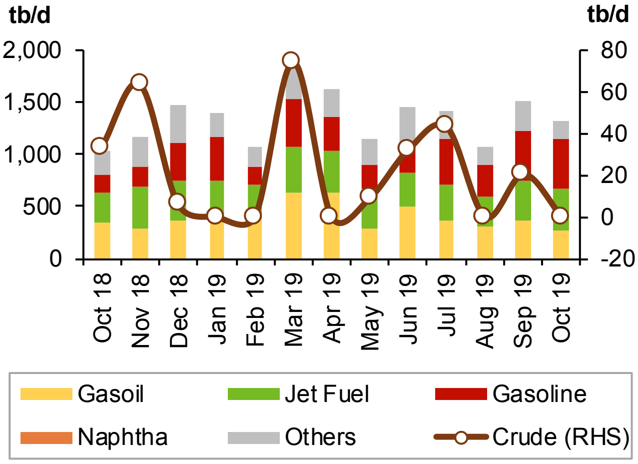
Saudi Arabia remained the top **crude supplier** to China in October, with a share of 18.5% or 2.0 mb/d in imports, an increase of 14% over the previous month. Russia came in second with a 15% share, followed by Iraq with 11%, Brazil with 8% and Angola with 7%.

Graph 8 - 3: China's imports of crude and petroleum products



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

Graph 8 - 4: China's exports of crude and petroleum products



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

China's product imports averaged 1.4 mb/d in October, representing a slight gain of 30 tb/d, or 2%, over the previous month. Gains were led by gasoline and jet fuel, which were 45% and 44% higher m-o-m, offsetting losses by naphtha and diesel. Year-to-date, China's product imports have declined by 3% compared with the same period last year.

Product exports from the country fell back from strong performance the month before, averaging 1.3 mb/d. This represented a decline of 13% or 196 tb/d m-o-m, but an increase of 28% or 289 tb/d y-o-y. In terms of major products, declines were led by diesel and fuel oil, as well as LPG. Year-to-date, China's product exports have increased by almost 10% compared with the same period last year.

As a result, China was a marginal **net product importer** in October, with net exports of 54 tb/d, compared with net exports of 172 tb/d the previous month and net imports of 425 tb/d in the same month last year.

Table 8 - 2: China's crude and product net imports, tb/d

	Aug 19	Sep 19	Oct 19	Change Oct 19/Sep 19
Crude oil	9,959	10,042	10,746	704
Total products	190	-172	54	226
Total crude and products	**10,148**	**9,870**	**10,801**	**930**

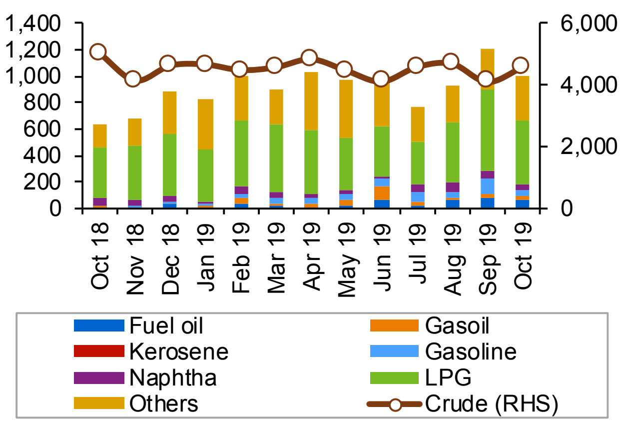
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

India's crude imports averaged 4.6 mb/d in October, representing an increase of 11% or 0.5 mb/d m-o-m. Compared with the same month last year, they were nearly 9% or 0.4 mb/d lower. Year-to-date to October, India's crude oil imports have averaged 4.5 mb/d, broadly in line with the same period in 2018.

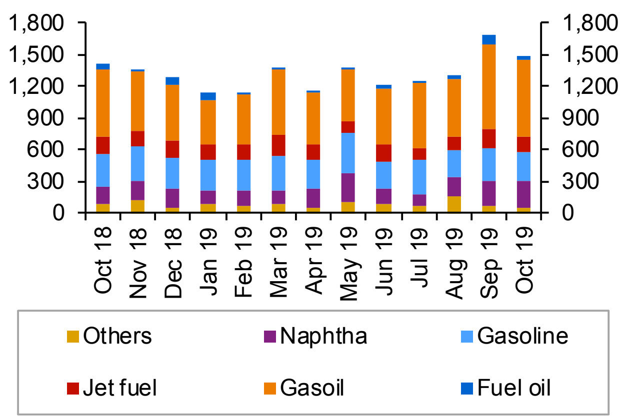
Meanwhile, India's **product imports** declined from the record high seen the previous month, averaging 996 tb/d in October. This represents a decline of 18% m-o-m but still a notable gain of 59% y-o-y. All major products saw declines m-o-m, led by LPG and gasoline. Y-t-d, total product imports averaged 960 tb/d in the year to October, some 24% higher than the same period last year.

Graph 8 - 5: India's imports of crude and petroleum products



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

Graph 8 - 6: India's exports of petroleum products



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

India's **product exports** were lower in October, down by 12% or 196 tb/d compared with the high level seen the previous month to average 1.4 mb/d. In terms of major products, diesel, gasoline and fuel oil contributed to the losses, while naphtha managed an increase of almost 10%. So far this year, India's product exports up to October have averaged 1.3 mb/d, representing an increase of around 3%.

As a result, India's **net product exports** have averaged 352 tb/d so far this year, some 40% lower than in the same period last year.

Table 8 - 3: India's crude and product net imports, tb/d

	Aug 19	Sep 19	Oct 19	*Change* Oct 19/Sep 19
Crude oil	4,672	4,104	4,558	454
Total products	-389	-473	-491	-18
Total crude and products	**4,283**	**3,631**	**4,067**	**436**

Note: India data table does not include information for crude import and product export by Reliance Industries.
Sources: Petroleum Planning & Analysis Cell of India and OPEC Secretariat.

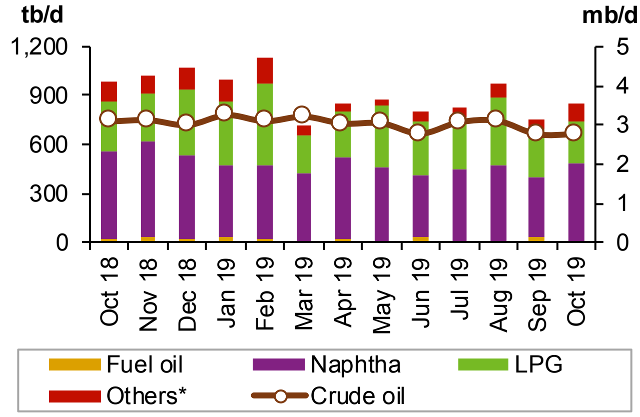
Japan

Japan's crude oil imports in October were unchanged from the previous month, averaging 2.8 mb/d. This is around 10% or 0.3 mb/d lower y-o-y. So far in 2019, Japan's crude imports have averaged 3.0 mb/d, representing a decline of 1.5% compared with the first ten months of 2018.

The United Arab Emirates was the **top supplier of crude** to Japan in October, averaging 1.0 mb/d, representing a share of almost 38%. Saudi Arabia held second position with 32%, followed by Kuwait with over 9%.

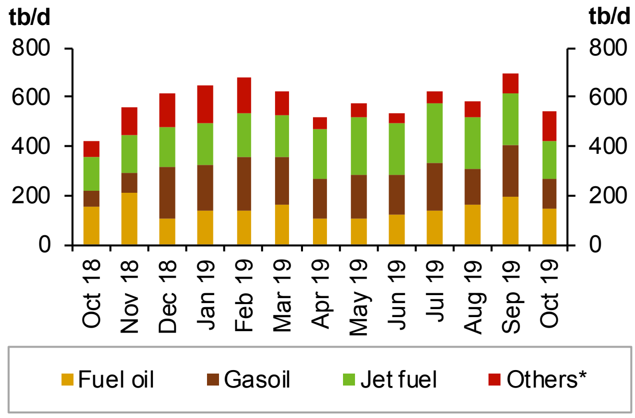
Product imports to Japan, including LPG, averaged 845 tb/d in October, representing an increase of 89 tb/d or 12% compared with the previous month. Gains were seen in naphtha, gasoline and gasoil, while fuel oil and kerosene showed declines. So far this year, total product imports have averaged 876 tb/d, representing a decline of 87 tb/d or 9% compared with the same period last year.

Graph 8 - 7: Japan's imports of crude and petroleum products



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

Graph 8 - 8: Japan's exports of petroleum products



*Note: * Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

Meanwhile, **product exports**, including LPG, averaged 539 tb/d in October, representing a decline of 153 tb/d or 22% from the previous month. Gasoil, jet fuel, and fuel oil contributed to the losses, offsetting gains seen in gasoline and LPG. So far this year, Japan's product exports have averaged 601 mb/d, an increase of just over 11% compared with the same period last year.

As a consequence, Japan's **net product imports** averaged 275 tb/d over the first ten months of 2019, representing a decline of 147 tb/d or 35% compared with the same period last year.

Table 8 - 4: Japan's crude and product net imports, tb/d

	Aug 19	Sep 19	Oct 19	*Change* Oct 19/Sep 19
Crude oil	3,102	2,764	2,764	0
Total products	390	64	306	242
Total crude and products	**3,492**	**2,828**	**3,069**	**242**

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

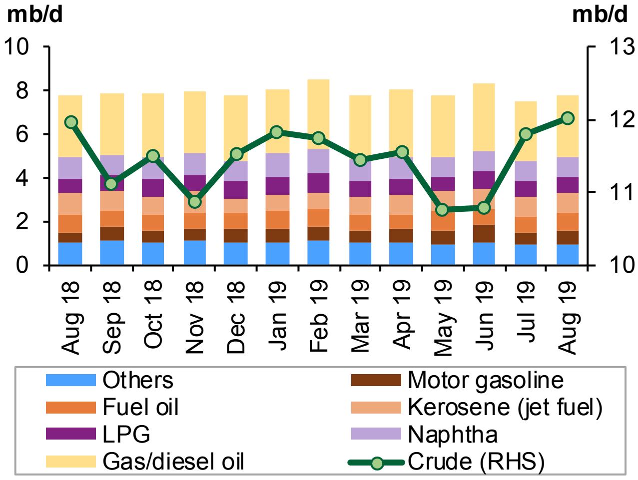
OECD Europe

The latest available data shows **OECD Europe crude imports** averaged 12.0 mb/d in August, reflecting an increase of 219 tb/d m-o-m and a gain of 491 tb/d y-o-y. In the first eight months of this year, they averaged 11.4 mb/d, representing a gain of 1% compared with the same period last year.

Crude exports averaged 2.0 mb/d in August, representing a marginal increase of 52 tb/d or 3% m-o-m and a decline of 111 tb/d or 5% y-o-y. So far this year, OECD Europe crude exports have averaged just under 2.0 mb/d in the first eight months of the year, down 106 tb/d from the same period in 2018.

As a result, **OECD Europe net crude imports** averaged 9.4 mb/d year-to-date through to August. This represents an increase of 236 tb/d or 3% over the same period in 2018.

Graph 8 - 9: OECD Europe imports of crude and petroleum products



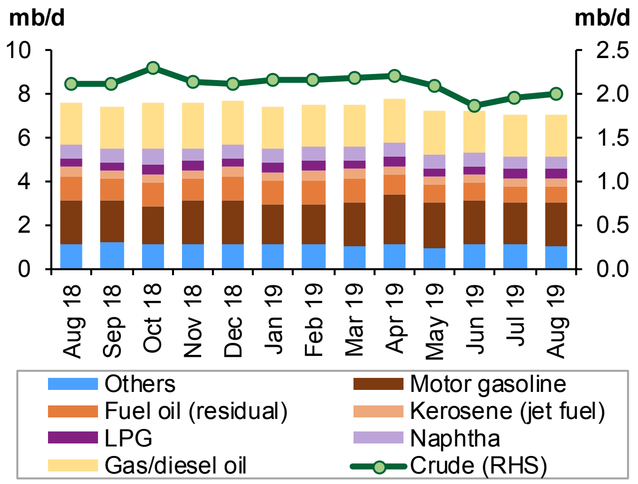
Sources: IEA and OPEC Secretariat.

Product imports increased by 278 tb/d, or 4%, to average 7.8 mb/d in August. Gains were led by gasoil and gasoline, while naphtha and kerosene saw declines. Fuel oil and LPG imports were also higher. So far this year, product imports into OECD Europe have averaged 7.9 mb/d, representing a decline of 201 tb/d or 2% compared with the same period in 2018.

OECD Europe **product exports** averaged 7.1 mb/d in August, broadly flat m-o-m but some 8% lower compared with the same month last year. Increases in motor gasoline and fuel oil were offset by losses in naphtha and kerosene. In the first eight months of the year, OECD Europe product exports averaged 7.1 mb/d, representing a decline of 440 tb/d or around 6% compared with the second half of 2018.

Consequently, **OECD Europe net product imports** have averaged 764 tb/d year-to-date to August, representing an increase of 24% compared with the previous year.

Graph 8 - 10: OECD Europe exports of crude and petroleum products



Sources: IEA and OPEC Secretariat.

Table 8 - 5: OECD Europe's crude and product net imports, tb/d

	Jun 19	Jul 19	Aug 19	*Change* Aug 19/Jul 19
Crude oil	8,937	9,855	10,022	167
Total products	1,088	447	764	317
Total crude and products	**10,025**	**10,302**	**10,786**	**484**

Sources: IEA and OPEC Secretariat.

FSU

Total crude oil exports from the Former Soviet Union (FSU) rose by 6.6% in October to average 7.6 mb/d, representing an increase of 468 t/bd. Crude exports through the **Transneft system** increased by 234 tb/d, or 5%, compared with the previous month to average 4.6 mb/d.

Total shipments from the Black Sea declined by 59 tb/d m-o-m, or almost 9%, to average 627 tb/d in October. Total Baltic Sea exports increased by 139 tb/d m-o-m, or around 10%, with shipments from Ust-Luga doubling to 719 tb/d, while Primorsk exports fell by 221 tb/d or 20%. Meanwhile, shipments via the Druzhba pipeline edged down 50 tb/d to average 1.0 mb/d. Kozmino shipments increased by 150 tb/d m-o-m, or 25%, to average 751 tb/d. Exports to China via the ESPO pipeline averaged 637 tb/d, an increase of 53 tb/d or 9% m-o-m.

In the **Lukoil system**, exports via the Barents Sea edged down by 9 tb/d to 149 tb/d in October, while those from the Baltic Sea remained unchanged at 6 tb/d.

Russia's Far East total exports edged up 7 tb/d from the previous month to average 396 tb/d.

Central Asia's total exports averaged 230 tb/d, a 35 tb/d, or 13%, increase from the previous month.

Black Sea total exports rose by 93 tb/d m-o-m to average 1.5 mb/d, with Novorossiyk port terminal (CPC) driving the increase, while the Supsa port terminal saw a marginal decline.

In the **Mediterranean**, BTC supplies rose compared with the previous month, up 77 tb/d m-o-m or 13%, to average 646 tb/d.

FSU total product exports increased by 134 mb/d or less than 5% in October to average 3.0 mb/d for the month. Movements were mixed, with VGO, gasoil and jet fuel seeing gains, while naphtha and gasoline experienced losses.

Table 8 - 6: Recent FSU exports of crude and petroleum products by sources, tb/d

			2018	2Q19	3Q19	Sep 19	Oct 19
Transneft system							
	Europe	**Black Sea total**	**544**	**646**	**707**	**686**	**627**
		Novorossiysk port terminal - total	544	646	707	686	627
		of which: Russian oil	383	459	508	474	379
		Others	160	187	199	211	248
		Baltic Sea total	**1,306**	**1,721**	**1,383**	**1,460**	**1,599**
		Primorsk port terminal - total	758	1,010	1,124	1,101	880
		of which: Russian oil	758	1,010	1,124	1,101	880
		Others	0	0	0	0	0
		Ust-Luga port terminal - total	549	711	259	359	719
		of which: Russian oil	375	537	111	216	557
		Others	173	174	148	144	162
		Druzhba pipeline total	**997**	**468**	**1,012**	**1,064**	**1,015**
		of which: Russian oil	965	448	965	1,009	974
		Others	32	21	47	55	41
	Asia	**Pacific ocean total**	**619**	**698**	**670**	**600**	**751**
		Kozmino port terminal - total	619	698	670	600	751
		China (via ESPO pipeline) total	**577**	**603**	**600**	**584**	**637**
		China Amur	577	603	600	584	637
	Russia's crude exports		**4,043**	**4,136**	**4,373**	**4,395**	**4,629**
Lukoil system							
	Europe &	**Barents Sea total**	**135**	**130**	**161**	**140**	**149**
	North America	Varandey offshore platform	135	130	161	140	149
	Europe	**Baltic Sea total**	**7**	**6**	**6**	**6**	**6**
		Kalinigrad port terminal	7	6	6	6	6
Other routes							
	Asia	**Russian Far East total**	**371**	**388**	**353**	**389**	**396**
		Aniva Bay port terminal	119	114	96	126	98
		De Kastri port terminal	252	274	257	263	298
		Central Asia total	**233**	**233**	**213**	**195**	**230**
		Kenkiyak-Alashankou	233	233	213	195	230
	Europe	**Black Sea total**	**1,386**	**1,306**	**1,438**	**1,386**	**1,479**
		Novorossiysk port terminal (CPC)	1,323	1,247	1,373	1,306	1,402
		Supsa port terminal	61	59	65	80	77
		Batumi port terminal	2	0	0	0	0
		Kulevi port terminal	0	0	0	0	0
		Mediterranean Sea total	**693**	**649**	**621**	**570**	**646**
		Baku–Tbilisi–Ceyhan (BTC)	693	649	621	570	646
Russian rail							
		Russian rail	**32**	**32**	**29**	**29**	**42**
		of which: Russian oil	32	32	29	29	42
		Others	0	0	0	0	0
	FSU crude exports		**6,901**	**6,880**	**7,194**	**7,108**	**7,576**
Products							
		Gasoline	212	241	306	232	180
		Naphtha	517	505	517	499	560
		Jet	37	44	40	34	44
		Gasoil	1,006	908	932	904	947
		Fuel oil	930	913	986	1,012	973
		VGO	277	236	178	223	334
	FSU product exports		**2,980**	**2,846**	**2,958**	**2,904**	**3,038**
FSU oil exports			**9,881**	**9,727**	**10,151**	**10,012**	**10,614**

Sources: Argus Nefte Transport and Argus Global Markets.

Stock Movements

*Preliminary data for October showed that total **OECD commercial oil stocks** fell by 5.1 mb m-o-m to stand at 2,933 mb, which was 83 mb higher than the same time one year ago and 33 mb above the latest five-year average. Within the components, crude stocks rose by 18.9 mb, while product stocks fell by 23.9 mb, m-o-m. OECD crude stocks stood at 18 mb above the latest five-year average, while product stocks indicated a surplus of 15 mb. In terms of days of forward cover, OECD commercial stocks rose by 0.6 days m-o-m in October to stand at 61.2 days, which was 1.8 days above the same period in 2018, but 0.2 days below the latest five-year average.*

*Preliminary data for November showed that **US total commercial oil stocks** fell by 15.6 mb m-o-m to stand at 1,263.8 mb, which was 1.6 mb above the same period a year ago, and 3.9 mb higher than the latest five-year average. Within the components, crude stocks rose slightly by 0.3 mb, while product stocks fell by 15.9 mb, m-o-m.*

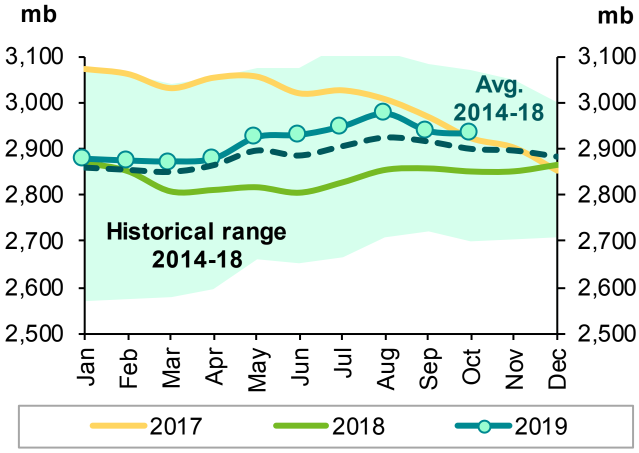
OECD

Preliminary data for October showed that **total OECD commercial oil stocks** fell by 5.1 mb m-o-m to stand at 2,933 mb, which was 82.5 mb higher than the same time one year ago and 32.8 mb above the latest five-year average.

Within the components, crude stocks rose by 18.9 mb, while product stocks fell by 23.9 mb, m-o-m. It should be noted that the overhang of total OECD commercial oil stocks has been reduced by around 267 mb since the 'Declaration of Cooperation' began at the beginning of 2017.

Within the regions, OECD Americas and OECD Europe witnessed stock draws from the previous month, while OECD Asia Pacific saw a stock build.

Graph 9 - 1: OECD commercial oil stocks



Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US EIA.

OECD **commercial crude stocks** rose by 18.9 mb m-o-m in October, ending the month at 1,471 mb, which was 34.7 mb higher than the same time a year ago and 18.3 mb higher than the latest five-year average. Compared to the previous month, OECD Americas rose by 20.3 mb, while crude stocks in OECD Europe and OECD Asia Pacific fell by 0.4 mb and 1.1 mb, respectively.

In contrast, OECD **total product inventories** fell by 23.9 mb m-o-m in October to stand at 1,462 mb, which was 47.8 mb above the same time a year ago and 14.5 mb above the latest five-year average. Within the OECD regions, product stocks in OECD Asia Pacific rose by 2.9 mb, while OECD Americas and Europe stocks fell by 26.4 mb and 0.3 mb, m-o-m, respectively.

In terms of **days of forward cover**, OECD commercial stocks rose by 0.6 days m-o-m in October to stand at 61.2 days, which was 1.8 days above the same period in 2018, but 0.2 days below the latest five-year average. Within the regions, OECD Americas was 0.9 days below the latest five-year average to stand at 60.4 days in October. OECD Europe's stocks were 1.6 days higher than the latest five-year average to finish the month at 70.4 days. OECD Asia Pacific stocks were 1.7 days below the latest five-year average to stand at 48.8 days.

Table 9 - 1: OECD's commercial stocks, mb

	Aug 19	Sep 19	Oct 19	Change Oct 19/Sep 19	Oct 18
Crude oil	1,466	1,453	1,471	18.9	1,437
Products	1,511	1,486	1,462	-23.9	1,414
Total	**2,977**	**2,938**	**2,933**	**-5.1**	**2,851**
Days of forward cover	**61.6**	**60.7**	**61.2**	**0.6**	**59.5**

Note: Totals may not add up due to independent rounding.
Sources: Argus Media, Euroilstock, IEA, METI, OPEC Secretariat and US EIA.

OECD Americas

OECD Americas total commercial stocks fell by 6.1 mb m-o-m in October to settle at 1,548 mb, which was 13.1 mb above a year ago and 22.5 mb above the latest five-year average. Within the components, crude stocks rose by 20.3 mb, while products stocks fell by 26.4 mb, m-o-m.

Commercial crude oil stocks in OECD Americas rose by 20.3 mb m-o-m in October to stand at 818 mb, which was 17.5 mb higher than the same time a year ago and 27.6 mb higher than the latest five-year average. This build can be attributed to lower refinery runs in the US.

In contrast, **total product stocks** in OECD Americas fell by 26.4 mb m-o-m in October to stand at 730 mb, which was 4.4 mb lower than the same time one year ago and 5.1 mb less than the latest five-year average. Higher consumption in the region was behind the product stock draw.

OECD Europe

OECD Europe's total commercial stocks fell by 0.7 mb m-o-m in October, ending the month at 978 mb, which was 66.8 mb higher than the same time a year ago and 34.6 mb higher than the latest five-year average. Crude and product stocks fell by 0.4 mb and 0.3 mb, m-o-m, respectively.

OECD Europe's **commercial crude stocks** fell by 0.4 mb m-o-m in October, ending the month at 441 mb, which was 26.7 mb above a year earlier and 30.8 mb higher than the latest five-year average. The drop was driven by higher refinery throughput in the EU-16 countries, which rose by 30 tb/d to stand at 9.91 mb/d.

OECD Europe's **commercial product stocks** also fell by 0.3 mb m-o-m to end October at 537 mb, which was 40.1 mb higher than the same time a year ago and 3.8 mb above the latest five-year average. The drop came on the back of relatively higher consumption in the region.

OECD Asia Pacific

OECD Asia Pacific's total commercial oil stocks rose by 1.8 mb m-o-m in October to stand at 407 mb, which was 2.6 mb higher than a year ago, yet 24.3 mb below the latest five-year average. Within the components, crude stocks fell by 1.1 mb, while product stock rose by 2.9 mb, m-o-m.

OECD Asia Pacific's **crude inventories** fell by 1.1 mb m-o-m to end October at 213 mb, which was 9.5 mb lower than one year ago and 40.1 mb below the latest five-year average.

In contrast, OECD Asia Pacific's **total product inventories** rose by 2.9 mb m-o-m to end October at 195 mb, which was 12.1 mb higher than the same time a year ago and 15.9 mb above the latest five-year average.

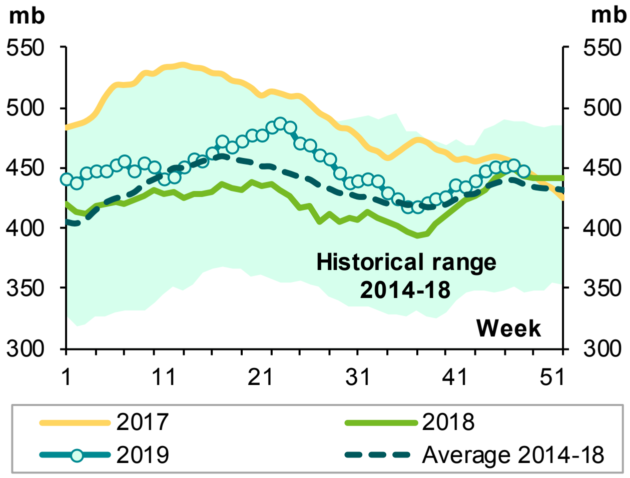
US

Preliminary data for November showed that **US total commercial oil stocks** fell by 15.6 mb m-o-m to stand at 1,263.8 mb, which was 1.6 mb, or 0.1%, above the same period a year ago, and 3.9 mb, or 0.3%, higher than the latest five-year average. Within the components, crude stocks rose slightly by 0.3 mb, while product stocks fell by 15.9 mb, m-o-m.

US **commercial crude stocks** rose in November to stand at 447.1 mb, which was 2.3 mb, or 0.5%, below the same time last year, but 5.9 mb, or 1.3%, above the latest five-year average. The build could have been driven by higher supply as refinery throughput rose to a level of 16.77 mb/d. Inventories in Cushing, Oklahoma, fell by almost 4.0 mb to end November at 43.8 mb.

In contrast**, total product stocks** in November fell by 15.9 mb m-o-m to stand at 816.7 mb, which was 3.9 mb, or 0.5%, above the level seen at the same time in 2018, but 2.0 mb, or 0.2%, below the latest five-year average. Within the components, gasoline, distillate and residual fuel oil saw stock builds, while jet fuel, propylene and other unfinished oil registered stock draws.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: US EIA and OPEC Secretariat.

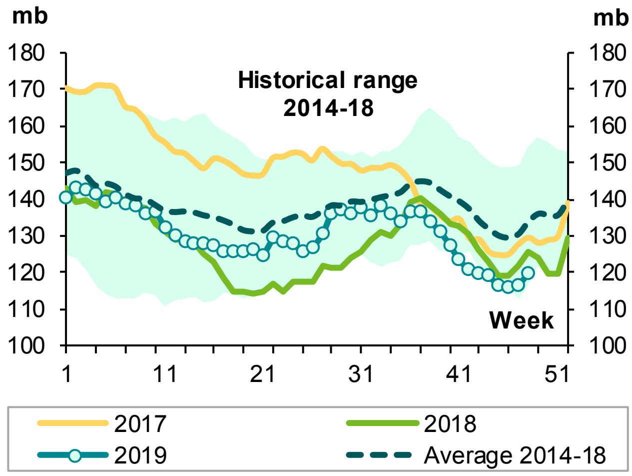
Gasoline stocks rose in November by 12.1 mb m-o-m to settle at 229.4 mb, which was 0.9 mb, or 0.4%, lower than levels seen at the same time last year, but 3.1 mb, or 1.4%, higher than the latest five-year average. This monthly increase came mainly on the back of lower demand, which fell by 281 tb/d to average 9.18 mb/d.

Distillate stocks also rose by 0.3 mb m-o-m in November to end the month at 119.5 mb, which was 7.1 mb, or 5.6%, lower than the same period a year ago, and 21.5 mb, or 15.2%, below the latest five-year average. The stock build could be mainly attributed to lower demand, which decreased by around 50 tb/d to average 4.20 mb/d.

Residual fuel stocks rose by 0.7 mb m-o-m to end November at 29.5 mb, which was 0.3 mb, or 0.9%, less than the same time a year ago and 6.5 mb, or 18.1%, lower than the latest five-year average.

In contrast, **jet fuel stocks** fell by 1.1 mb m-o-m to stand at 38.3 mb in November, which was 1.0 mb, or 2.5%, less than the same time a year ago and 1.6 mb, or 4.0%, lower than the latest five-year average.

Graph 9 - 3: US weekly distillate inventories



Sources: US EIA and OPEC Secretariat.

Table 9 - 2: US commercial petroleum stocks, mb

	Sep 19	Oct 19	Nov 19	Change Nov 19/Oct 19	Nov 18
Crude oil	**426.5**	**446.8**	**447.1**	**0.3**	**449.4**
Gasoline	231.9	217.2	229.4	12.1	230.2
Distillate fuel	131.7	119.1	119.5	0.3	126.5
Residual fuel oil	29.9	28.8	29.5	0.7	29.8
Jet fuel	44.4	39.4	38.3	-1.1	39.3
Total products	**878.1**	**832.6**	**816.7**	**-15.9**	**812.8**
Total	**1,304.5**	**1,279.4**	**1,263.8**	**-15.6**	**1,262.2**
SPR	**644.8**	**641.0**	**635.2**	**-5.8**	**649.6**

Sources: US EIA and OPEC Secretariat.

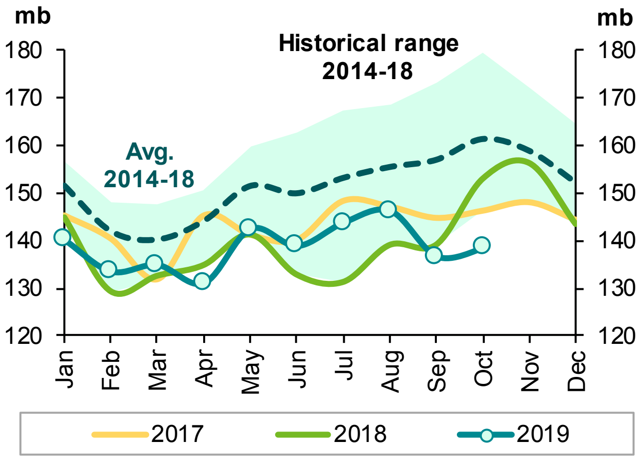
Japan

In **Japan**, **total commercial oil stocks** rose by 1.8 mb m-o-m in October to settle at 138.5 mb, which was 14.5 mb, or 9.5%, lower than one year ago and 22.7 mb, or 14.1%, below the latest five-year average. Within the components, crude stocks fell by 1.1 mb, while products stocks rose by 2.9 mb, m-o-m.

Japanese **commercial crude oil stocks** fell by 1.1 mb m-o-m in October to stand at 74.1 mb, which was 14.6 mb, or 16.4%, above the same period a year ago and 19.6 mb, or 20.9%, below the latest five-year average. The drop was driven mainly by slightly lower crude imports to average 2.76 mb/d. However, lower refinery throughput limited a further drop in crude oil stocks.

By contrast, Japan's **total product inventories** rose by 2.9 mb m-o-m to end October at 64.4 mb, which was 0.1 mb higher than the same month last year, but 3.1 mb, or 4.6%, below the latest five-year average. All product categories experienced stock builds.

Graph 9 - 4: Japan's commercial oil stocks



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

Gasoline stocks rose by 0.6 mb m-o-m to stand at 10.2 mb in October, which was 0.2 mb, or 2.4%, lower than a year ago, yet 0.1 mb higher than the latest five-year average. The build was mainly driven by lower domestic sales, which declined by 9.5% from the previous month. Lower gasoline output, which decreased by 3.6%, limited a further build in gasoline stocks.

Distillate stocks rose by 1.3 mb m-o-m, reversing the drop of last month, to stand at 31.4 mb in October. This was 0.2 mb, or 0.7%, higher than the same time a year ago, yet 1.7 mb, or 5.1%, lower than the latest five-year average. Within the distillate components, jet fuel and kerosene stocks rose by 3.4% and 9.3% m-o-m, respectively. The builds in both products were driven by higher output combined with lower domestic sales. In contrast, gas oil stocks fell by 3.9% m-o-m in October.

Total residual fuel oil stocks rose by 0.5 mb m-o-m in October to stand at 13.3 mb, which was unchanged from the same period a year ago, but was 0.9 mb, or 6.4%, lower than the latest five-year average. Within the components, fuel oil A and fuel B.C stocks rose by 7.0% and 2.2% m-o-m, respectively, on the back of lower production.

Table 9 - 3: Japan's commercial oil stocks*, mb

	Aug 19	Sep 19	Oct 19	*Change* Oct 19/Sep 19	Oct 18
Crude oil	**81.0**	**75.1**	**74.1**	**-1.1**	**88.6**
Gasoline	10.1	9.6	10.2	0.6	10.5
Naphtha	11.4	9.0	9.5	0.4	9.4
Middle distillates	31.4	30.1	31.4	1.3	31.2
Residual fuel oil	12.3	12.8	13.3	0.5	13.3
Total products	**65.1**	**61.5**	**64.4**	**2.9**	**64.3**
Total**	**146.1**	**136.7**	**138.5**	**1.8**	**153.0**

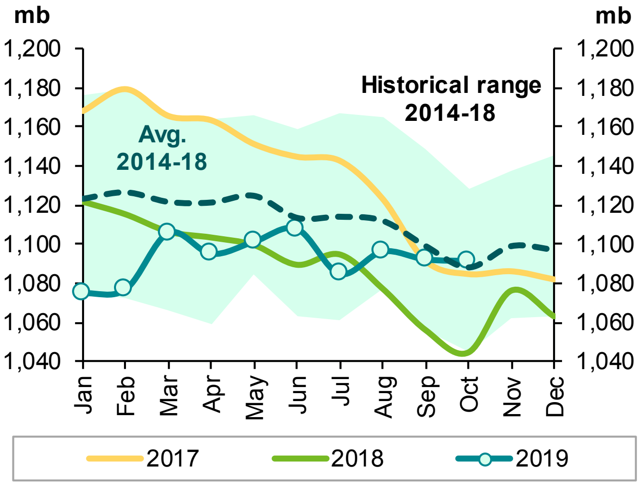
*Note: * At the end of the month.*
*** Includes crude oil and main products only.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

EU plus Norway

Preliminary data for October showed that **total European commercial oil stocks** fell slightly by 0.7 mb m-o-m to stand at 1,091.4 mb, which was 47.1 mb, or 4.5%, above the same time a year ago, and 3.3 mb, or 0.3%, above than the latest five-year average. Within the components, crude and product stocks fell by 0.4 mb and 0.3 mb, m-o-m, respectively.

European **crude inventories** fell in October to stand at 477.5 mb, which was 5.4 mb, or 1.1%, higher than the same period a year ago, and 1.5 mb, or 0.3%, higher than the latest five-year average. The drop was driven by higher refinery throughput in the EU-16 countries, which rose by 30 tb/d to stand at 9.91 mb/d.

Graph 9 - 5: EU-15 plus Norway's total oil stocks



Sources: Argus, Euroilstock and OPEC Secretariat.

European **total product stocks** fell by 0.3 mb m-o-m, ending October at 613.9 mb, which was 41.6 mb, or 7.3%, higher than the same time a year ago, and 1.7 mb, or 0.3%, higher than the latest five-year average. The fall in product stocks could be attributed to relatively higher demand in the region. Within products, residual fuel experienced a stock build, while distillates, gasoline and naphtha witnessed stock draws in October versus the previous month.

Distillate stocks fell by 0.1 mb m-o-m in October for the second consecutive month to stand at 415.3 mb, which was 36.6 mb, or 9.7%, higher than the same time last year and 6.3 mb, or 1.5%, above the latest five-year average.

Gasoline stocks fell by 0.2 mb m-o-m in October for the second consecutive month to stand at 109.5 mb, which was 3.9 mb, or 3.7%, higher than the same time a year ago, and 0.5 mb, or 0.5%, above the latest five-year average.

Naphtha stocks fell by 0.4 mb in October, ending the month at 27.7 mb, which was 2.0 mb, or 6.9%, below last year's October level, yet 1.7 mb, or 6.7%, higher than the latest five-year average.

In contrast**, residual fuel stocks** rose in October by 0.3 mb m-o-m to stand at 61.4 mb, which was 3.2 mb, or 5.4%, higher than the same time one year ago, but 6.8 mb, or 10.0%, below the latest five-year average.

Table 9 - 4: EU-15 plus Norway's total oil stocks, mb

	Aug 19	Sep 19	Oct 19	Change Oct 19/Sep 19	Oct 18
Crude oil	**479.2**	**477.9**	**477.5**	**-0.4**	**472.1**
Gasoline	109.8	109.7	109.5	-0.2	105.6
Naphtha	29.0	28.2	27.7	-0.4	29.8
Middle distillates	417.2	415.4	415.3	-0.1	378.7
Fuel oils	61.0	61.1	61.4	0.3	58.3
Total products	**617.1**	**614.3**	**613.9**	**-0.3**	**572.3**
Total	**1,096.2**	**1,092.1**	**1,091.4**	**-0.7**	**1,044.3**

Sources: Argus, Euroilstock and OPEC Secretariat.

Singapore, Amsterdam-Rotterdam-Antwerp (ARA) and Fujairah

Singapore

At the end of October, **total product stocks in Singapore** rose by 2.2 mb m-o-m, reversing the drop of last month, to stand at 44.6 mb, which was 7.4 mb, or 19.9%, above the same period a year ago. Within products, light distillates and fuel oil experienced stock builds, while middle distillates registered a stock draw when compared to the previous month.

Light distillate and fuel oil stocks rose in October by 1.6 mb and 2.2 mb, m-o-m, respectively. At 11.7 mb, light distillates stood at 0.5 mb, or 4.1%, lower than the same time one year ago. Fuel oil stocks ended October at 21.7 mb, which was 6.2 mb, or 40%, higher than last year's October level.

In contrast, **middle distillate stocks** fell by 1.6 mb m-o-m to end October at 11.2 mb, which was 1.7 mb, or 17.9%, higher the same period a year ago. This drop may have been driven by higher exports from the hub.

ARA

Total product stocks in ARA fell by 2.9 mb m-o-m in October to settle at 40.6 mb, which was 0.2 mb, or 0.5%, higher than the same time a year ago. Within products, naphtha and jet oil experienced stock builds, while gasoline, gasoil and fuel oil stocks registered stock draws when compared to the previous month.

Naphtha and jet oil stocks rose by 0.5 mb and 0.6 mb m-o-m in October to stand at 2.2 mb and 5.7 mb, respectively. Naphtha stocks were unchanged from last year's level at the same time. Jet oil stocks were 0.8 mb, or 16.3%, higher than last year's level.

Gasoline and gasoil stocks fell by 1.3 mb and 1.4 mb m-o-m in October to stand at 6.8 mb and 19.3 mb, respectively. Gasoline stocks were 1.6 mb, or 19%, lower than last year's level at the same time. Gasoil stocks were 0.5 mb, or 2.7%, higher than last year's level.

Fuel oil stocks fell by 1.3 mb in October m-o-m to stand at 6.6 mb, which was 0.5 mb, or 8.2%, higher than the same time a year ago.

Fujairah

During the week ending 2 December 2019, **total oil product stocks in Fujairah** fell by 2.45 mb w-o-w to stand at 20.82 mb, according to data from FEDCom and S&P Global Platts. At this level, total oil stocks were 2.50 mb higher than the same time a year ago. Within products, light and heavy distillates witnessed stock draws, while middle distillates registered stock builds when compared with the previous week's data.

Light distillate stocks fell by 0.25 mb w-o-w to stand at 4.66 mb, which was 5.35 mb lower than a year ago at the same time.

Heavy distillate stocks fell by 2.55 mb to stand at 12.79 mb, which was 6.79 mb higher than the same level one year ago.

In contrast, **middle distillates** rose by 0.35 mb w-o-w to stand at 3.37 mb, which was 1.06 mb higher than the same week in 2018.

Balance of Supply and Demand

***Demand for OPEC crude in 2019** remains unchanged from the previous report at 30.7 mb/d, which is 0.9 mb/d lower than 2018 levels. According to secondary sources, OPEC crude production averaged 30.5 mb/d in 1Q19, about 0.3 mb/d higher than the demand for OPEC crude in the same period, while in 2Q19 OPEC crude production averaged 30.0 mb/d, around 0.2 mb/d lower than the demand for OPEC crude. In 3Q19, OPEC crude production averaged 29.4 mb/d, around 2.3 mb/d lower than the demand for OPEC crude.*

***Demand for OPEC crude in 2020** also remains unchanged from the previous report at 29.6 mb/d. This is 1.1 mb/d lower than the 2019 level.*

Balance of supply and demand in 2019

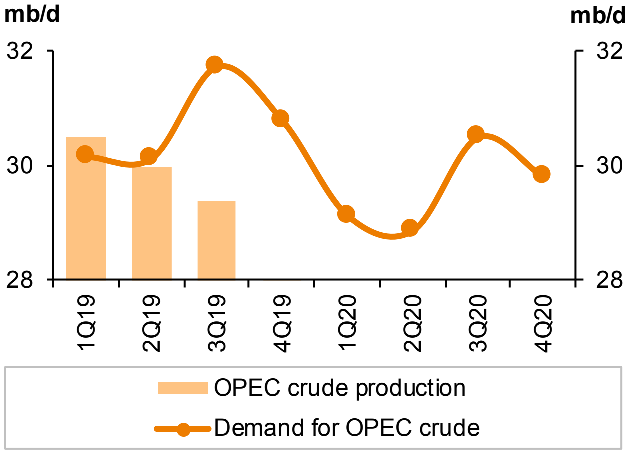
Demand for OPEC crude in 2019 remains unchanged from the previous report at 30.7 mb/d, which is 0.9 mb/d lower than the 2018 level.

Compared with the previous monthly report, both 1Q19 and 2Q19 were unchanged, while 3Q19 was revised down by 0.1 mb/d. Demand for OPEC crude in 4Q19 was revised up by 0.1 mb/d.

When compared to the same quarters in 2018, demand for OPEC crude in 1Q19 and 2Q19 was 1.9 mb/d and 1.5 mb/d lower. While 3Q19 shows a drop of 0.1 mb/d, the 4Q19 remained at the same level as 4Q18.

According to secondary sources, OPEC crude production averaged 30.5 mb/d in 1Q19, about 0.3 mb/d higher than the demand for OPEC crude in the same period, while in 2Q19 OPEC crude production averaged 30.0 mb/d, around 0.2 mb/d lower than the demand for OPEC crude. In 3Q19 OPEC crude production averaged 29.4 mb/d, around 2.3 mb/d lower than the demand for OPEC crude.

Graph 10 - 1: Balance of supply and demand, 2019–2020*



*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

Table 10 - 1: Supply/demand balance for 2019*, mb/d

	2018	1Q19	2Q19	3Q19	4Q19	2019	Change 2019/18
(a) World oil demand	**98.82**	**98.76**	**98.76**	**100.69**	**100.95**	**99.80**	**0.98**
Non-OPEC supply	62.47	63.80	63.81	64.25	65.31	64.30	1.82
OPEC NGLs and non-conventionals	4.76	4.80	4.82	4.71	4.86	4.80	0.04
(b) Total non-OPEC supply and OPEC NGLs	**67.24**	**68.60**	**68.63**	**68.97**	**70.17**	**69.09**	**1.86**
Difference (a-b)	**31.59**	**30.16**	**30.14**	**31.73**	**30.79**	**30.71**	**-0.88**
OPEC crude oil production	**31.86**	**30.48**	**29.97**	**29.39**			
Balance	**0.27**	**0.33**	**-0.16**	**-2.34**			

*Notes: * 2019 = Estimate*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Balance of supply and demand in 2020

Demand for OPEC crude in 2020 also remains unchanged from the previous report at 29.6 mb/d. This is around 1.1 mb/d lower than the 2019 level.

Compared with the last monthly report, all the quarters were unchanged.

When compared to the same quarters in 2019, demand for OPEC crude in both 1Q20 and 4Q20 is forecast to be 1.0 mb/d lower each, while 2Q20 and 3Q20 show drops of 1.3 mb/d and 1.2 mb/d, respectively.

Table 10 - 2: Supply/demand balance for 2020*, mb/d

	2019	1Q20	2Q20	3Q20	4Q20	2020	*Change* 2020/19
(a) World oil demand	**99.80**	**99.78**	**99.79**	**101.78**	**102.12**	**100.88**	**1.08**
Non-OPEC supply	64.30	65.82	66.09	66.46	67.49	66.46	2.17
OPEC NGLs and non-conventionals	4.80	4.83	4.83	4.83	4.83	4.83	0.03
(b) Total non-OPEC supply and OPEC NGLs	**69.09**	**70.65**	**70.91**	**71.28**	**72.31**	**71.29**	**2.20**
Difference (a-b)	**30.71**	**29.13**	**28.88**	**30.50**	**29.81**	**29.58**	**-1.12**

*Notes: * 2019 = Estimate and 2020 = Forecast.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

Appendix

Table 11 - 1: World oil demand and supply balance, mb/d

	2016	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
World demand													
OECD	47.00	47.54	47.93	47.65	47.26	48.44	48.44	47.95	47.73	47.31	48.51	48.51	48.02
Americas	24.89	25.07	25.55	25.22	25.38	26.03	26.02	25.66	25.43	25.56	26.19	26.18	25.84
Europe	13.98	14.32	14.31	13.99	14.23	14.68	14.30	14.30	13.94	14.20	14.66	14.28	14.27
Asia Pacific	8.14	8.15	8.08	8.45	7.64	7.73	8.12	7.99	8.37	7.56	7.66	8.05	7.91
DCs	31.56	32.13	32.62	32.97	32.87	33.49	33.14	33.12	33.54	33.44	34.12	33.79	33.73
FSU	4.63	4.70	4.82	4.75	4.74	5.02	5.11	4.91	4.83	4.81	5.11	5.19	4.99
Other Europe	0.70	0.72	0.74	0.75	0.71	0.75	0.84	0.76	0.76	0.72	0.76	0.85	0.77
China	11.80	12.32	12.71	12.63	13.19	12.98	13.43	13.06	12.91	13.50	13.28	13.77	13.37
(a) Total world demand	**95.69**	**97.41**	**98.82**	**98.76**	**98.76**	**100.69**	**100.95**	**99.80**	**99.78**	**99.79**	**101.78**	**102.12**	**100.88**
Non-OPEC supply													
OECD	24.86	25.71	28.33	29.34	29.68	29.81	30.62	29.87	31.13	31.26	31.73	32.30	31.61
Americas	20.59	21.49	24.08	25.07	25.59	25.71	26.22	25.65	26.64	26.92	27.34	27.62	27.13
Europe	3.85	3.82	3.84	3.84	3.61	3.59	3.88	3.73	3.95	3.81	3.83	4.11	3.93
Asia Pacific	0.43	0.39	0.41	0.43	0.48	0.51	0.51	0.48	0.54	0.53	0.57	0.57	0.55
DCs	13.54	13.40	13.46	13.41	13.44	13.60	13.83	13.57	13.78	13.80	13.82	13.98	13.85
FSU	13.85	14.05	14.29	14.55	14.16	14.34	14.37	14.35	14.32	14.44	14.36	14.64	14.44
Other Europe	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12
China	4.09	3.97	4.02	4.10	4.13	4.10	4.09	4.10	4.12	4.13	4.10	4.13	4.12
Processing gains	2.19	2.22	2.25	2.28	2.28	2.28	2.28	2.28	2.33	2.33	2.33	2.33	2.33
Total non-OPEC supply	**58.68**	**59.48**	**62.47**	**63.80**	**63.81**	**64.25**	**65.31**	**64.30**	**65.82**	**66.09**	**66.46**	**67.49**	**66.46**
OPEC NGLs + non-conventional oils	4.58	4.64	4.76	4.80	4.82	4.71	4.86	4.80	4.83	4.83	4.83	4.83	4.83
(b) Total non-OPEC supply and OPEC NGLs	**63.26**	**64.12**	**67.24**	**68.60**	**68.63**	**68.97**	**70.17**	**69.09**	**70.65**	**70.91**	**71.28**	**72.31**	**71.29**
OPEC crude oil production (secondary sources)	32.21	32.01	31.86	30.48	29.97	29.39							
Total supply	95.47	96.13	99.10	99.08	98.60	98.36							
Balance (stock change and miscellaneous)	-0.23	-1.28	0.27	0.33	-0.16	-2.34							
OECD closing stock levels, *mb*													
Commercial	3,002	2,855	2,865	2,871	2,930	2,938							
SPR	1,600	1,568	1,550	1,556	1,547	1,544							
Total	**4,601**	**4,422**	**4,416**	**4,427**	**4,477**	**4,482**							
Oil-on-water	1,102	1,025	1,058	1,013	995	1,012							
Days of forward consumption in OECD, *days*													
Commercial onland stocks	63	60	60	61	60	61							
SPR	34	33	32	33	32	32							
Total	**97**	**92**	**92**	**94**	**92**	**93**							
Memo items													
(a) - (b)	**32.43**	**33.30**	**31.59**	**30.16**	**30.14**	**31.73**	**30.79**	**30.71**	**29.13**	**28.88**	**30.50**	**29.81**	**29.58**

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

Table 11 - 2: World oil demand and supply balance: changes from last month's table*, mb/d

	2016	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
World demand													
OECD	-	-	-	-	-	-	-	-	-	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Non-OPEC supply													
OECD	-	-	-	-	-	0.07	-0.15	-0.02	-	-	-	-	-
Americas	-	-	-	-	-	0.09	-0.09	-	-	-	-	-	-
Europe	-	-	-	-	-	-0.02	-0.05	-0.02	-	-	-	-	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	0.07	0.02	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	0.07	-0.08	-	-	-	-	-	-
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	**-**	**-**	**-**	**-**	**-**	**0.07**	**-0.08**	**-**	**-**	**-**	**-**	**-**	**-**
OPEC crude oil production (secondary sources)	**-**	**-**	**-**	**-**	**-**	**-**							
Total supply	-	-	-	-	-	0.08							
Balance (stock change and miscellaneous)	-	-	-	-	-	0.08							
OECD closing stock levels (mb)													
Commercial	-	-	-	-	-1	-7							
SPR	-	-	-	-	-	-1							
Total	-	-	-	-	-1	-8							
Oil-on-water	-	-	-	-	-	-							
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-							
SPR	-	-	-	-	-	-							
Total	**-**	**-**	**-**	**-**	**-**	**-**							
Memo items													
(a) - (b)	**-**	**-**	**-**	**-**	**-**	**-0.07**	**0.08**	**-**	**-**	**-**	**-**	**-**	**-**

*Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the November 2019 issue.*

This table shows only where changes have occurred.

Source: OPEC Secretariat.

Table 11 - 3: OECD oil stocks and oil on water at the end of period

	2016	2017	2018	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19
Closing stock levels, mb												
OECD onland commercial	**3,002**	**2,854**	**2,863**	**2,969**	**2,854**	**2,805**	**2,803**	**2,856**	**2,863**	**2,868**	**2,930**	**2,938**
Americas	1,598	1,498	1,542	1,571	1,498	1,468	1,471	1,541	1,542	1,508	1,565	1,555
Europe	989	943	922	965	943	959	944	925	922	980	976	978
Asia Pacific	415	412	399	433	412	378	388	390	399	380	389	405
OECD SPR	**1,600**	**1,568**	**1,550**	**1,578**	**1,568**	**1,576**	**1,573**	**1,569**	**1,550**	**1,556**	**1,547**	**1,544**
Americas	697	665	651	676	665	667	662	662	651	651	647	647
Europe	481	480	479	479	480	486	489	485	479	487	483	480
Asia Pacific	421	423	420	423	423	422	422	422	420	417	417	418
OECD total	**4,602**	**4,421**	**4,413**	**4,547**	**4,421**	**4,381**	**4,376**	**4,424**	**4,413**	**4,424**	**4,477**	**4,482**
Oil-on-water	**1,102**	**1,025**	**1,058**	**998**	**1,025**	**1,036**	**1,014**	**1,041**	**1,058**	**1,013**	**995**	**1,012**
Days of forward consumption in OECD, days												
OECD onland commercial	**63**	**60**	**60**	**62**	**60**	**59**	**58**	**59**	**60**	**60**	**60**	**61**
Americas	64	59	60	62	59	58	57	60	61	59	60	60
Europe	69	66	65	67	67	67	64	65	66	69	67	68
Asia Pacific	51	51	50	52	48	49	50	48	47	50	50	50
OECD SPR	**34**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**33**	**32**	**32**
Americas	28	26	26	27	26	26	26	26	26	25	25	25
Europe	34	34	34	33	34	34	33	34	34	34	33	34
Asia Pacific	52	52	53	50	49	54	54	52	50	54	54	51
OECD total	**97**	**92**	**93**	**94**	**92**	**92**	**91**	**92**	**93**	**93**	**92**	**93**

Sources: Argus Media, Euroilstock, IEA, JODI, METI, OPEC Secretariat and US EIA.

Table 11 - 4: Non-OPEC supply and OPEC natural gas liquids, mb/d

	2016	2017	2018	3Q19	4Q19	2019	Change 19/18	1Q20	2Q20	3Q20	4Q20	2020	Change 20/19
US	13.6	14.4	16.7	18.4	18.9	18.3	1.6	19.2	19.8	20.0	20.3	19.8	1.5
Canada	4.5	4.9	5.3	5.4	5.4	5.4	0.1	5.5	5.3	5.5	5.6	5.5	0.1
Mexico	2.5	2.2	2.1	1.9	1.9	1.9	-0.2	1.9	1.8	1.8	1.7	1.8	-0.1
OECD Americas	**20.6**	**21.5**	**24.1**	**25.7**	**26.2**	**25.7**	**1.6**	**26.6**	**26.9**	**27.3**	**27.6**	**27.1**	**1.5**
Norway	2.0	2.0	1.9	1.7	1.9	1.7	-0.1	1.9	1.8	1.9	2.1	1.9	0.2
UK	1.0	1.0	1.1	1.1	1.2	1.2	0.1	1.2	1.1	1.1	1.2	1.2	0.0
Denmark	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
Other OECD Europe	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
OECD Europe	**3.9**	**3.8**	**3.8**	**3.6**	**3.9**	**3.7**	**-0.1**	**4.0**	**3.8**	**3.8**	**4.1**	**3.9**	**0.2**
Australia	0.3	0.3	0.3	0.4	0.4	0.4	0.1	0.5	0.5	0.5	0.5	0.5	0.1
Other Asia Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
OECD Asia Pacific	**0.4**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**	**0.1**	**0.5**	**0.5**	**0.6**	**0.6**	**0.6**	**0.1**
Total OECD	**24.9**	**25.7**	**28.3**	**29.8**	**30.6**	**29.9**	**1.5**	**31.1**	**31.3**	**31.7**	**32.3**	**31.6**	**1.7**
Brunei	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
India	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.9	0.9	0.8	0.0
Indonesia	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
Malaysia	0.7	0.7	0.7	0.6	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Thailand	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Vietnam	0.3	0.3	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Asia others	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Other Asia	**3.7**	**3.6**	**3.6**	**3.3**	**3.4**	**3.4**	**-0.1**	**3.4**	**3.4**	**3.4**	**3.4**	**3.4**	**0.0**
Argentina	0.7	0.6	0.6	0.7	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.0
Brazil	3.1	3.3	3.3	3.6	3.7	3.5	0.2	3.8	3.7	3.8	3.9	3.8	0.3
Colombia	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.8	0.9	0.9	0.0
Trinidad & Tobago	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Latin America others	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.2	0.2	0.3	0.3	0.2	0.0
Latin America	**5.1**	**5.2**	**5.2**	**5.5**	**5.6**	**5.4**	**0.2**	**5.6**	**5.6**	**5.6**	**5.7**	**5.6**	**0.2**
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
Oman	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
Qatar	2.0	1.9	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yemen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Middle East	**3.3**	**3.1**	**3.2**	**3.2**	**3.2**	**3.2**	**0.0**	**3.2**	**3.2**	**3.3**	**3.3**	**3.3**	**0.0**
Cameroon	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
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
Egypt	0.7	0.7	0.7	0.6	0.7	0.7	0.0	0.7	0.6	0.6	0.6	0.6	0.0
Ghana	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Sudans	0.3	0.2	0.2	0.3	0.3	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.0
Africa other	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
Africa	**1.5**	**1.5**	**1.5**	**1.5**	**1.6**	**1.5**	**0.0**	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	**0.0**
Total DCs	**13.5**	**13.4**	**13.5**	**13.6**	**13.8**	**13.6**	**0.1**	**13.8**	**13.8**	**13.8**	**14.0**	**13.8**	**0.3**
FSU	**13.9**	**14.1**	**14.3**	**14.3**	**14.4**	**14.4**	**0.1**	**14.3**	**14.4**	**14.4**	**14.6**	**14.4**	**0.1**
Russia	11.1	11.2	11.3	11.4	11.4	11.4	0.1	11.3	11.5	11.5	11.6	11.5	0.1
Kazakhstan	1.6	1.7	1.8	1.8	1.9	1.8	0.0	1.9	1.9	1.8	1.9	1.8	0.0
Azerbaijan	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.8	0.0
FSU others	0.4	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	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	**4.1**	**4.0**	**4.0**	**4.1**	**4.1**	**4.1**	**0.1**	**4.1**	**4.1**	**4.1**	**4.1**	**4.1**	**0.0**
Non-OPEC production	**56.5**	**57.3**	**60.2**	**62.0**	**63.0**	**62.0**	**1.8**	**63.5**	**63.8**	**64.1**	**65.2**	**64.1**	**2.1**
Processing gains	2.2	2.2	2.3	2.3	2.3	2.3	0.0	2.3	2.3	2.3	2.3	2.3	0.1
Non-OPEC supply	**58.7**	**59.5**	**62.5**	**64.3**	**65.3**	**64.3**	**1.8**	**65.8**	**66.1**	**66.5**	**67.5**	**66.5**	**2.2**
OPEC NGL	4.5	4.5	4.7	4.6	4.8	4.7	0.0	4.7	4.7	4.7	4.7	4.7	0.0
OPEC Non-conventional	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
OPEC (NGL+NCF)	**4.6**	**4.6**	**4.8**	**4.7**	**4.9**	**4.8**	**0.0**	**4.8**	**4.8**	**4.8**	**4.8**	**4.8**	**0.0**
Non-OPEC & OPEC (NGL+NCF)	**63.3**	**64.1**	**67.2**	**69.0**	**70.2**	**69.1**	**1.9**	**70.6**	**70.9**	**71.3**	**72.3**	**71.3**	**2.2**

Note: OECD Americas includes Chile.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

	2016	2017	2018	Change 2018/17	4Q18	1Q19	2Q19	3Q19	Oct 19	Nov 19	Change Nov/Oct
US	509	875	1,031	*157*	1,073	1,045	990	920	842	811	*-31*
Canada	131	207	191	*-15*	177	185	83	131	144	136	*-8*
Mexico	26	17	27	*9*	32	26	34	38	45	50	*5*
OECD Americas	665	1,099	1,249	*150*	1,282	1,257	1,106	1,089	1,031	997	*-34*
Norway	17	15	15	*0*	17	15	17	18	18	18	*0*
UK	9	9	7	*-2*	8	13	16	16	15	14	*-1*
OECD Europe	96	92	85	*-7*	90	92	159	190	175	147	*-28*
OECD Asia Pacific	7	15	21	*5*	23	24	29	31	32	29	*-3*
Total OECD	**768**	**1,206**	**1,355**	***149***	**1,396**	**1,372**	**1,295**	**1,310**	**1,238**	**1,173**	***-65***
Other Asia*	204	208	222	*14*	224	232	225	217	214	209	*-5*
Latin America	111	112	123	*11*	123	128	122	123	112	114	*2*
Middle East	75	68	65	*-4*	62	66	69	67	69	69	*0*
Africa	43	38	45	*7*	50	54	52	50	62	60	*-2*
Total DCs	**432**	**426**	**454**	***28***	**460**	**481**	**468**	**457**	**457**	**452**	***-5***
Non-OPEC rig count	**1,200**	**1,632**	**1,809**	***177***	**1,855**	**1,853**	**1,763**	**1,767**	**1,695**	**1,625**	***-70***
Algeria	54	54	50	*-4*	47	47	49	42	43	39	*-4*
Angola	6	3	4	*1*	5	5	5	4	2	3	*1*
Congo	2	2	3	*1*	4	4	4	3	2	2	*0*
Ecuador	4	6	8	*2*	11	9	8	9	7	7	*0*
Equatorial Guinea**	1	1	1	*0*	1	1	1	1	1	1	*0*
Gabon	1	1	3	*3*	4	7	6	7	8	9	*1*
Iran**	143	156	157	*2*	157	157	157	157	157	157	*0*
Iraq	43	49	59	*10*	61	65	75	77	77	77	*0*
Kuwait	44	54	51	*-3*	45	44	44	46	46	48	*2*
Libya	1	1	5	*4*	9	11	15	16	16	16	*0*
Nigeria	6	9	13	*5*	12	14	14	16	18	20	*2*
Saudi Arabia	125	118	117	*-1*	123	118	115	118	106	107	*1*
UAE	51	52	55	*4*	57	58	59	64	70	64	*-6*
Venezuela	58	49	32	*-17*	26	25	23	25	25	25	*0*
OPEC rig count	**537**	**553**	**558**	***5***	**563**	**565**	**576**	**585**	**578**	**575**	***-3***
World rig count***	**1,737**	**2,185**	**2,368**	***183***	**2,418**	**2,418**	**2,338**	**2,352**	**2,273**	**2,200**	***-73***
of which:											
Oil	1,313	1,678	1,886	*209*	1,934	1,936	1,827	1,833	1,787	1,746	*-41*
Gas	370	466	448	*-17*	453	455	482	486	451	418	*-33*
Others	54	42	33	*-9*	31	26	29	32	35	36	*1*

*Note: * Other Asia includes Indonesia.*
*** Estimated data when Baker Hughes Incorporated did not report the data.*
**** Data excludes China and FSU.*
Totals may not add up due to independent rounding.

Sources: Baker Hughes Incorporated and OPEC Secretariat's estimates.

Glossary of Terms

Abbreviations

b	barrels
b/d	barrels per day
bp	basis points
bb	billion barrels
bcf	billion cubic feet
cu m	cubic metres
mb	million barrels
mb/d	million barrels per day
mmbtu	million British thermal units
mn	million
m-o-m	month-on-month
mt	metric tonnes
q-o-q	quarter-on-quarter
pp	percentage points
tb/d	thousand barrels per day
tcf	trillion cubic feet
y-o-y	year-on-year
y-t-d	year-to-date

Acronyms

ARA	Amsterdam-Rotterdam-Antwerp
BoE	Bank of England
BoJ	Bank of Japan
BOP	Balance of payments
BRIC	Brazil, Russia, India and China
CAPEX	capital expenditures
CCI	Consumer Confidence Index
CFTC	Commodity Futures Trading Commission
CIF	cost, insurance and freight
CPI	consumer price index
DCs	developing countries
DUC	drilled, but uncompleted (oil well)
ECB	European Central Bank
EIA	US Energy Information Administration
Emirates NBD	Emirates National Bank of Dubai
EMs	emerging markets
EV	electric vehicle
FAI	fixed asset investment
FCC	fluid catalytic cracking
FDI	foreign direct investment
Fed	US Federal Reserve
FID	final investment decision
FOB	free on board
FPSO	floating production storage and offloading
FSU	Former Soviet Union
FX	Foreign Exchange
FY	fiscal year
GDP	gross domestic product
GFCF	gross fixed capital formation
GoM	Gulf of Mexico
GTLs	gas-to-liquids
HH	Henry Hub
HSFO	high-sulphur fuel oil
ICE	Intercontinental Exchange
IEA	International Energy Agency
IMF	International Monetary Fund
IOCs	international oil companies
IP	industrial production
ISM	Institute of Supply Management
LIBOR	London inter-bank offered rate
LLS	Light Louisiana Sweet
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LR	long-range (vessel)
LSFO	low-sulphur fuel oil

MCs	(OPEC) Member Countries
MED	Mediterranean
MENA	Middle East/North Africa
MOMR	(OPEC) Monthly Oil Market Report
MPV	multi-purpose vehicle
MR	medium-range or mid-range (vessel)
NBS	National Bureau of Statistics
NGLs	natural gas liquids
NPC	National People's Congress (China)
NWE	Northwest Europe
NYMEX	New York Mercantile Exchange
OECD	Organisation for Economic Co-operation and Development
OPEX	operational expenditures
OIV	total open interest volume
ORB	OPEC Reference Basket
OSP	Official Selling Price
PADD	Petroleum Administration for Defense Districts
PBoC	People's Bank of China
PMI	purchasing managers' index
PPI	producer price index
RBI	Reserve Bank of India
REER	real effective exchange rate
ROI	return on investment
SAAR	seasonally-adjusted annualized rate
SIAM	Society of Indian Automobile Manufacturers
SRFO	straight-run fuel oil
SUV	sports utility vehicle
ULCC	ultra-large crude carrier
ULSD	ultra-low sulphur diesel
USEC	US East Coast
USGC	US Gulf Coast
USWC	US West Coast
VGO	vacuum gasoil
VLCC	very large crude carriers
WPI	wholesale price index
WS	Worldscale
WTI	West Texas Intermediate
WTS	West Texas Sour

OPEC Basket average price *US$/b*

up 3.03 in November	November 2019	62.94
	October 2019	59.91
	Year-to-date	**63.82**

November OPEC crude production *mb/d, according to secondary sources*

down 0.19 in November	November 2019	29.55
	October 2019	29.74

Economic growth rate *per cent*

	World	OECD	US	Japan	Euro-zone	China	India
2019	3.0	1.6	2.3	0.9	1.2	6.2	5.5
2020	3.0	1.4	1.8	0.6	1.0	5.9	6.4

Supply and demand *mb/d*

2019		**19/18**	**2020**		**20/19**
World demand	99.8	1.0	World demand	100.9	1.1
Non-OPEC supply	64.3	1.8	Non-OPEC supply	66.5	2.2
OPEC NGLs	4.8	0.0	OPEC NGLs	4.8	0.0
Difference	**30.7**	**–0.9**	**Difference**	**29.6**	**–1.1**

OECD commercial stocks *mb*

	Aug 19	Sep 19	Oct 19	Oct 19/Sep 19	Oct 18
Crude oil	1,466	1,453	1,471	18.9	1,437
Products	1,511	1,486	1,462	–23.9	1,414
Total	**2,977**	**2,938**	**2,933**	**–5.1**	**2,851**
Days of forward cover	61.6	60.7	61.2	0.6	59.5

Next report to be issued on 15 January 2020.