OPEC

Monthly Oil Market Report

15 January 2020

Feature article:

Monetary policies: Potential impact on the oil market

Organization of the Petroleum Exporting Countries

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Oil Market Highlights

Crude Oil Price Movements

The OPEC Reference Basket (ORB) value rose by $3.54, or 5.6%, month-on-month (m-o-m) in December, to average $66.48/b, the highest value since April 2019. Similarly, ICE Brent increased by $2.46, or 3.9%, m-o-m to average $65.17/b, while NYMEX WTI increased by $2.73, or 4.8%, m-o-m to average $59.80/b. Oil prices were supported by optimism about the outlook of oil market fundamentals, following easing trade tensions between the US and China and continued market stabilization efforts conducted under the Declaration of Cooperation (DoC). The market structure of all three crude benchmarks ICE Brent, NYMEX WTI and DME Oman remained in backwardation. Money managers increased their speculative net long positions on the back of more bullish sentiment.

World Economy

The global economic growth remains at 3.0% for 2019, but is revised up by 0.1 pp to 3.1% for 2020. US growth remains at 2.3% for 2019 and is revised up by 0.1 pp to 1.9% for 2020. Euro-zone growth remains at 1.2% for 2019 and 1.0% for 2020. Japan's growth is revised up by 0.2 pp to 1.1% for 2019, considering better-than-expected growth in the first three quarters and revised up by 0.1 pp to 0.7% for 2020. China's growth is unchanged at 6.2% for 2019 and 5.9% for 2020. Also, India's growth remains at 5.5% for 2019 and at 6.4% for 2020. Brazil's growth remains unchanged at 1.0% for 2019 and is revised up by 0.3 pp to 2.0% for 2020. Russia's growth remains unchanged at 1.1% for 2019 and is revised up by 0.2 pp to 1.5% for 2020. The services sector in the US and other important OECD economies remains an important support factor for 2020 growth, alongside a potential recovery in global manufacturing and improving global trade relations.

World Oil Demand

Global oil demand growth for 2019 is revised lower by 0.05 mb/d compared with the previous month's assessment, and is now estimated at 0.93 mb/d. Demand growth in OECD Americas is revised lower for 1H19 due to sluggish middle distillate demand. Slower-than-expected industrial fuel demand in OECD Asia Pacific also necessitated slight downward revisions. For 2020, oil demand growth is revised up by 0.14 mb/d from the previous month's assessment and is forecast at 1.22 mb/d, mainly reflecting an improved economic outlook for 2020. As a result, total world oil demand is projected to rise from 99.77 mb/d in 2019 to 100.98 mb/d in 2020. Oil demand growth in the OECD region is forecast to increase by 0.09 mb/d supported by OECD America, while non-OECD is expected to lead demand growth by adding 1.13 mb/d mainly in Other Asia, especially India and China.

World Oil Supply

Non-OPEC oil supply growth for 2019 is revised up by 0.04 mb/d from the previous month's assessment and is now estimated at 1.86 mb/d, for an average of 64.34 mb/d. The upward revision is led mainly by US liquids output growth, which is revised up by 46 tb/d, resulting in annual growth of about 1.66 mb/d in 2019. Non-OPEC oil supply growth in 2020 is also revised up by 0.18 mb/d from last month's assessment and is forecast at 2.35 mb/d for an average of 66.68 mb/d. The upward revisions in Norway, Mexico and Guyana are partially offset by downward revisions to the supply forecasts of the US, Russia and other OECD Europe. The US, Brazil, Canada and Australia are the key drivers for growth in 2019, and continue to lead growth in 2020, with the addition of Norway and Guyana. OPEC NGLs production in 2019 is estimated to have grown by 0.04 mb/d to average 4.80 mb/d and for 2020 is forecast to grow to average 4.83 mb/d. In December, OPEC crude oil production dropped by 161 tb/d m-o-m to average 29.44 mb/d, according to secondary sources.

Product Markets and Refining Operations

In December, product markets weakened as feedstock prices firmed and as product inventory levels rose given higher refinery intakes, and lacking winter-related support. With the IMO implementation in January 2020, the high sulphur fuel oil market showed slight gains in the US and in Singapore on the back of declining availability, while very low sulphur fuel oil (VLSFO) prices reached record high levels.

Tanker Market

The tanker market strengthened in December 2019, as freight rates in both dirty and clean segments of the market increased. On average, dirty tanker spot freight rates rose by 29% m-o-m on the back of increased tonnage requirements and high bunker prices. In the clean tanker market, increased tonnage was observed in the different routes, leading to an increase in average clean tanker spot freight rates by 18% m-o-m. Enhanced market activity was seen to drive rates higher on all routes, affecting all tanker sectors in the market. Moreover, freight rates are expected to continue this hike in 1Q20, reflecting the cost of new low sulphur bunker fuel regulations implemented January 1, 2020.

Stock Movements

Preliminary data for November showed that total OECD commercial oil stocks fell by 8.8 mb m-o-m to stand at 2,920 mb, which is 62.7 mb higher than the same time one year ago and 17.5 mb above the latest five-year average. Within the components, crude stocks declined by 0.7 mb to stand at 22.9 mb above the latest five-year average, while product stocks dropped by 8.1 mb to stand at 5.4 mb below the latest five-year average. In terms of days of forward cover, OECD commercial stocks fell by 0.4 days m-o-m in November to stand at 60.6 days, which was 0.9 days above the same period in 2018, but 0.6 days below the latest five-year average.

Balance of Supply and Demand

Demand for OPEC crude in 2019 is revised down by 0.1 mb/d from last month’s report to stand at 30.6 mb/d, around 1.0 mb/d lower than the 2018 level. Demand for OPEC crude in 2020 is also revised down by 0.1 mb/d from last month’s report, to stand at 29.5 mb/d, around 1.2 mb/d lower than the 2019 level.

Feature Article

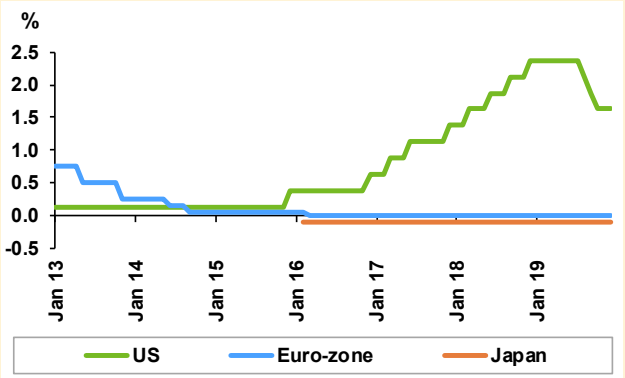
Monetary policies: potential impact on the oil market

In 2019, many central banks in both developed economies and emerging markets reversed the trends of their monetary policies to be more accommodative. The market turmoil experienced at the end of 2018 and the uncertainties related to the trade dispute between China and the US resulted in some deceleration in economic activities and hence called for more supportive monetary policies.

The US Federal Reserve cut its main policy rate by 0.75 percentage points (pp) in 2H19. This was in sharp contrast to Fed policymakers' expectations of a 0.5 pp rise in 2019 at the end of 2018 (***Graph 1***). With the Fed's employment and price objectives met, and considering the expectation of a trade agreement, Fed officials anticipate interest rates to remain steady in 2020.

Similarly, other central banks of major developed economies also reversed course. The European Central Bank (ECB), which had stopped its quantitative easing programme at the end of 2018, restarted in November 2019 with €20 bn in monthly asset purchases – with no clear finish line – and cut its deposit rate by 10 basis points to -0.5%. This also ran in contrast to the expectation of a potential rate hike at the end of 2019. The sharp deceleration in the Euro-zone, including persistently below-target inflation readings, has resulted in expectations that interest rates will remain at current levels for the foreseeable future. In Japan, the Bank of Japan (BoJ) has maintained course, extending its asset purchase programme while keeping rates steady. In spite of the continued support by the BoJ inflation readings of close to zero have spurred discussion about the feasibility of reaching its 2% target in a sustainable way.

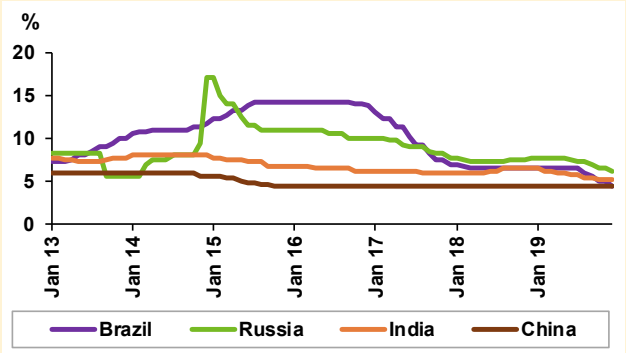
Graph 1: Key policy rates in advanced economies



Sources: Federal Reserve Board, European Central Bank, Bank of Japan and Haver Analytics.

The Fed's shift to a more accommodative stance gave room for many emerging market central banks to ease monetary policy. Some emerging markets that had experienced significant pressure on their currencies a year earlier reduced interest rates significantly (***Graph 2***). The Reserve Bank of India (RBI) cut its main policy rate five times – by 1.35 pp in total – amid a significant drop in core inflation readings and deceleration of economic growth. However, the transmission of those cuts to borrowers continues to be limited. In the case of China, the People's Bank of China (PBoC) reduced the ratio of required reserves (RRR) twice to spur lending, while in January 2020, it has added an additional RRR cut as pressure on the yuan dropped. In Brazil, the Central Bank cut interest rates by 2.0 pp, while Russia cut rates by 1.5 pp, supporting the recoveries in these two economies. The Fed's monetary easing helped to weaken the dollar in 1H19, while EM currencies were particularly sensitive to trade-related developments – two forces that resulted in large swings in risk appetite.

Graph 2: Key policy rates in BRIC countries



Sources: Banco Central do Brasil, Central Bank of the Russian Federation, Reserve Bank of India, China Statistical Information Center and Haver Analytics.

The low interest rate environment is likely to support economic growth expected at 3.1% in 2020. Moreover, some additional support could possibly come from countries with ample fiscal space, taking the opportunity to borrow at very low rates – or sometimes negative rates – to finance infrastructure projects, which is expected to support the demand for oil. Similarly, the continued accommodative monetary policies, coupled with an improvement in financial markets, could provide further support to ongoing increases in non-OPEC supply. Therefore, the collaboration between OPEC and non-OPEC producing countries participating in the 'Declaration of Cooperation' remains essential in maintaining stability in the oil market.

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Crude Oil Price Movements

*The **OPEC Reference Basket (ORB)** value closed 2019 higher m-o-m, climbing more than $3/b in December to settle at $66.48/b, its highest monthly value since April 2019. Oil prices gained for the second consecutive month, amid improved oil market fundamentals including continued market stabilization efforts conducted under the DoC, as well as easing trade tensions between the US and China.*

***Crude oil futures prices** ended the year higher, with ICE Brent rising by $2.46, or 3.9%, to $65.17/b, while NYMEX WTI increased by $2.73, or 4.8%, to $59.80/b m-o-m in December. Moreover, international benchmark Brent crude futures closed the year almost 23% higher than the level registered in late 2018, while NYMEX WTI was up by 34%. However, in terms of the yearly average, oil prices declined in 2019. ICE Brent was $7.53, or 10.5% lower in 2019, at $64.16/b, while NYMEX WTI fell by $7.86, or 12.1%, to $57.04/b, compared to 2018. At the same time, DME Oman crude oil futures prices rose m-o-m in December by $2.72, or 4.3%, to settle at $63.05/b. Y-t-d, DME Oman was lower by $5.89, or 8.4%, at $63.99/b, compared to the same period a year earlier.*

***Hedge funds and other money managers** sharply increased their speculative bets on rising oil prices during December in both ICE Brent and NYMEX WTI. Over the month, money managers raised their bullish positions by a hefty 44% to 694,253 contracts in late December, on expectations of a more balanced global oil market.*

*The **market structure** of all three crude benchmarks **ICE Brent**, **NYMEX WTI** and **DME Oman** remained in backwardation in December, reflecting the improving oil market fundamentals. Tightening supply in the market, due to voluntary and involuntary measures, as well as healthy seasonal oil demand contributed to a further widening of the backwardation in December.*

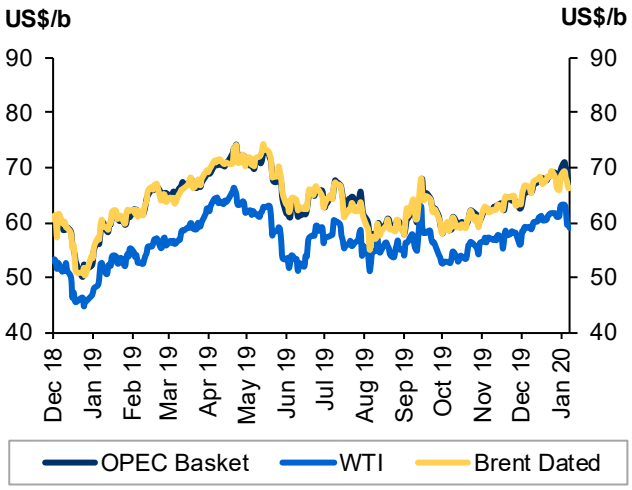
*Despite the tight sour crude market, the **differential between light sweet and heavy sour crudes** widened in Asia and Europe as refiners raised their demand for sweeter grades to comply with the new International Maritime Organization (IMO) low sulphur regulation. The spread between High Sulphur Fuel Oil (HSFO) and Very Low Sulphur Fuel Oil (VLSFO) continued to widen in December to record highs. Yet, the sweet/sour differential narrowed on the US Gulf Coast (USGC).*

OPEC Reference Basket

The **ORB** value closed 2019 higher m-o-m, climbing more than $3/b in December, to settle at $66.48/b, its highest monthly value since April 2019. Oil prices gained for the second consecutive month, amid improved oil fundamental balances and continued market stabilization efforts conducted under the DoC, as well as easing trade tensions between the US and China.

Oil prices rose in the second part of December and extended gains following easing trade tensions between the US and China. It was announced on 13 December that the parties had reached an interim Phase 1 trade deal, which would reduce tariffs on imports between the two, and suspend any further escalation. Nonetheless, spot prices weakened slightly on lacklustre refining margins and high freight rates. Moreover, refinery disruptions in France due to strikes and a fire at Total's Gonfreville refinery in northern France, raised concerns about a reduction in prompt crude demand.

Graph 1 - 1: Crude oil price movement



Sources: Argus Media, OPEC Secretariat and Platts.

Nonetheless, in 2019, the ORB value fell by $5.74, or 8.2%, compared to 2018, to settle at $64.04/b. This is its lowest level in three years as oil prices felt pressure over the year by the trade dispute between the US and China, which has contributed to a weakening global economy and slowing oil demand growth in 2019. Furthermore, the fast growth of non-OPEC oil supply, particularly from US shale production, that grew more than global oil demand growth over the year, also weighed on oil prices.

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

			Change		*Annual average*	
	Nov 19	Dec 19	Dec/Nov	%	2018	2019
Basket	**62.94**	**66.48**	**3.54**	**5.6**	**69.78**	**64.04**
Arab Light	64.01	67.45	3.44	5.4	70.59	64.96
Basrah Light	62.54	65.83	3.29	5.3	68.62	63.64
Bonny Light	63.69	68.18	4.49	7.0	72.11	65.63
Djeno	61.40	66.05	4.65	7.6	68.59	61.80
Es Sider	63.51	67.60	4.09	6.4	69.78	63.81
Girassol	65.65	69.69	4.04	6.2	71.72	66.11
Iran Heavy	60.73	63.80	3.07	5.1	67.97	61.85
Kuwait Export	63.72	66.26	2.54	4.0	68.90	64.25
Merey	43.44	49.94	6.50	15.0	64.47	54.04
Murban	63.48	66.66	3.18	5.0	72.20	64.72
Oriente	63.02	67.54	4.52	7.2	66.10	60.89
Rabi Light	61.24	64.08	2.84	4.6	70.30	63.18
Sahara Blend	63.86	68.10	4.24	6.6	71.44	64.49
Zafiro	65.36	69.74	4.38	6.7	71.36	65.74
Other Crudes						
Dated Brent	63.11	66.90	3.79	6.0	71.22	64.19
Dubai	61.91	64.86	2.95	4.8	69.68	63.48
Isthmus	61.69	60.28	-1.41	-2.3	68.74	63.00
LLS	61.84	63.57	1.73	2.8	70.16	62.68
Mars	58.24	60.81	2.57	4.4	66.82	60.82
Minas	60.30	62.78	2.48	4.1	65.44	60.25
Urals	64.44	67.09	2.65	4.1	70.13	64.38
WTI	57.25	59.81	2.56	4.5	65.16	57.02
Differentials						
Brent/WTI	5.86	7.09	1.23	-	6.05	7.17
Brent/LLS	1.27	3.33	2.06	-	1.06	1.51
Brent/Dubai	1.20	2.04	0.84	-	1.54	0.71

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

All **ORB component values** strengthened further in December, underpinned by rising relevant crude benchmarks, a strong physical market, as well as firm official selling prices (OSP) and crude differentials, particularly for lighter grades. ORB component values settled higher, despite widening backwardation in both the Brent and Dubai structures, weaker refining margins and high freights cost that put some pressure on physical prompt demand. The key crude oil physical benchmarks rose m-o-m in December, with North Sea Dated and Dubai rising by $3.79 and $2.95, respectively, to settle at $66.90/b and $64.86/b, and WTI rose by $2.56 m-o-m to settle at $59.81/b.

Light sweet crude **ORB components from West and North Africa** – including Bonny Light, Djeno, Es Sider, Girassol, Rabi Light, Sahara Blend and Zafiro – increased by $4.10 on average, or 6.5% m-o-m, to $67.63/b. Crude differentials remained high in the Atlantic Basin supported by healthy demand, particularly from Europe, as refiners sought suitable grade quality to produce IMO-compliant fuel. However, high freight rates and weak refining margins, particularly for gasoline, limited gains.

In terms of **Latin American ORB components,** Venezuela's Merey jumped 15% m-o-m in December, despite lower demand for bitumen-rich grades and weak margins of HSFO. Merey crude values rose by $6.50, m-o-m, to $49.94/b. Ecuador's Oriente rose in December to $67.54/b, an increase of $4.52, or 7.2%.

The **value of multiple-region destination grades**, including Arab Light, Basrah Light, Iran Heavy and Kuwait Export, rose by $3.08, or 4.9%, for the month to $65.84/b, underpinned by firm demand for medium sour grades in Asia, while the sour market remained tight. Furthermore, rising freight costs supported Asian demand for shorter-haul cargoes and limited arbitrage opportunity from other regions. Higher official selling prices for lighter grades added support. Furthermore, the front-month Brent/Dubai Exchange for Swaps (EFS Dubai) declined in December by 63¢, to average $2.71/b, and traded all month below $3/b, indicating a strong Middle East sour crude complex compared to Atlantic Basin crudes. Nonetheless, the new IMO 2020 regulation continued to put downward pressure on HSFO margins, while it supported lower sulphur compliant fuel.

Middle Eastern spot component Murban rose by $3.18 m-o-m, or 5.0%, to $66.66/b in December. Light sour grades like Murban rose in the first part of the month on healthy demand for February loadings. Murban crude traded at a premium to its OSP, despite multi-year high OSP values. However, the value of Murban differentials weakened in the second part of the month due to weak naphtha margins and a potential higher supply of the grade as maintenance at the UAE's Ruwais refining complex is expected in early 2020.

On 14 January, the ORB stood at $65.63/b, $0.85 below the December average.

The oil futures market

Oil futures prices ended the year on a strong note, with international benchmark ICE Brent crude futures closing 2019 with a rise of almost 23% compared to levels registered in late-2018, while NYMEX WTI was up by 34%. Oil prices rose in the first half of 2019 and reached the highest yearly level in late-April, supported by a more balanced global oil market and heightened geopolitical tensions in the Middle East. OPEC and non-OPEC participating countries in the DoC played an important role in helping balance the global oil market in 2019. However, oil prices fell in the second half of the year due to the weakening global economy and oil demand growth amid escalating trade tensions between the US and China. US benchmark NYMEX WTI rose firmly in the second half of 2019, underpinned by new pipeline capacity, which contributed to an easing of the market overhang in Cushing, Oklahoma, and in the Permian Basin.

In December, crude futures prices continued to rise on greater optimism about the outlook for oil market fundamentals, after OPEC and non-OPEC participating countries decided to proceed with an additional production adjustment in order to help balance the global oil market. Oil futures rose further in the second half of the month after the US and China agreed on an interim Phase 1 trade deal, which added more confidence to the market. The countries announced that they would reduce tariffs on imports, and suspend any further escalation, which should be positive for the global economy, and thus, for global oil demand growth.

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

			Change		*Annual average*	
	Nov 19	Dec 19	Dec/Nov	%	2018	2019
NYMEX WTI	57.07	59.80	2.73	4.8	64.90	57.04
ICE Brent	62.71	65.17	2.46	3.9	71.69	64.16
DME Oman	63.05	65.77	2.72	4.3	69.88	63.99
Transatlantic spread (ICE Brent-NYMEX WTI)	***5.64***	***5.37***	***-0.27***	***-4.8***	***6.79***	***7.12***

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

ICE Brent in December was $2.46, or 3.9% higher, at $65.17/b, while **NYMEX WTI** increased $2.73, or 4.8%, to average $59.80/b. However, for the year, ICE Brent was $7.53, or 10.5%, lower at $64.16/b, while NYMEX WTI was down by $7.86, or 12.1%, at $57.04/b, compared to a year earlier.

Oil prices were also supported by declining US crude oil stocks, which fell three times in four weeks. US crude oil stocks fell by more than 22 mb between the week of 22 November and 27 December, to reach a level of around 430 mb.

DME Oman crude oil futures prices in December rose m-o-m by $2.72, or 4.3%, to settle at $63.05/b, as the East of Suez market continued to be supported by healthy seasonal demand from Asia-Pacific and the tight supply of medium sour crudes. For the year, DME Oman was lower by $5.89, or 8.4%, at $63.99/b, compared to the same period a year earlier.

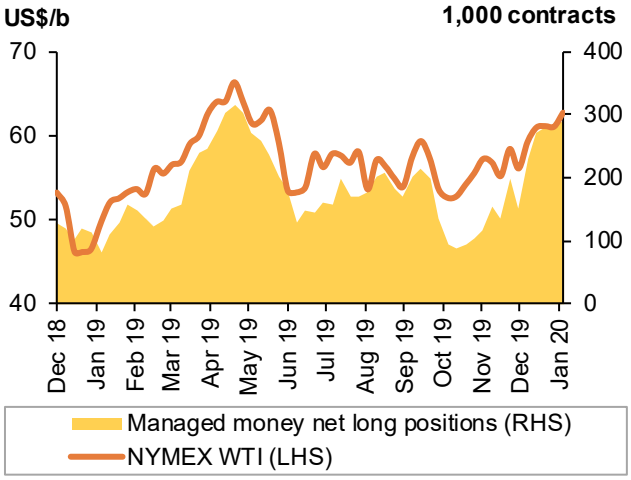
On 14 January, ICE Brent stood at $64.49/b and NYMEX WTI at $58.23/b.

Hedge funds and other money managers sharply increased their speculative bets on rising oil prices over the month in both ICE Brent and NYMEX WTI, on expectations of a more balanced global oil market, and on growing optimism about the world economy and oil demand growth after the US and China reached an interim Phase One trade deal. Over the month, money managers raised their bullish positions by a hefty 44% to 694,253 contracts in late December.

NYMEX WTI net length positions rose a hefty 89%, or 133,412 contracts, to 283,723 lots during the four weeks of December, according to the US Commodity Futures Trading Commission (CFTC). This level has not been reached since April, when NYMEX WTI front price attained its 2019 peak at $63.30/b. This is due to a combination of a rise of 113,227lots in long positions and a reduction of 20,185 contracts in short positions. During this period, the NYMEX WTI front month price increased by about 9%, rallying to its highest level since September 2019.

Money managers were more bullish about the outlook for NYMEX WTI on declining US crude oil stocks and rising US crude oil exports, which could increase further after the US and China agree its interim Phase One trade deal.

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



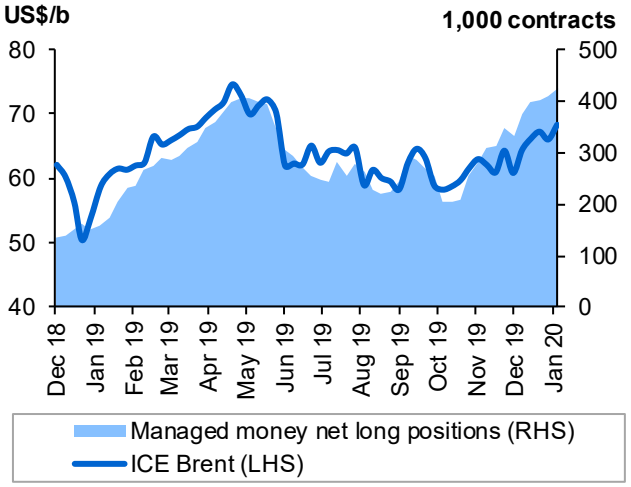
Sources: CFTC, CME Group and OPEC Secretariat.

Similarly, hedge funds and money managers made bullish bets on rising **ICE Brent** crude oil prices, increasing their combined futures and options net length positions to 410,530 contracts in the last week of December. This is the highest level in 2019, and a rise of about 23% over the month, according to the Intercontinental Exchange.

Long speculative positions in ICE Brent increased by 22% to 486,509, while short positons increased by 21% to 75,979 lots.

Consequently, the **long-to-short ratio** in both ICE Brent and NYMEX WTI contract speculative positions increased. The long-to-short ratio speculative positions in ICE Brent rose to about 7:1 in December, on average, from 6:1 in late November. The NYMEX WTI long-to-short ratio rose to 8:1 for the week ending 31 December from around 4:1 in the last week of November.

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



Sources: Intercontinental Exchange and OPEC Secretariat.

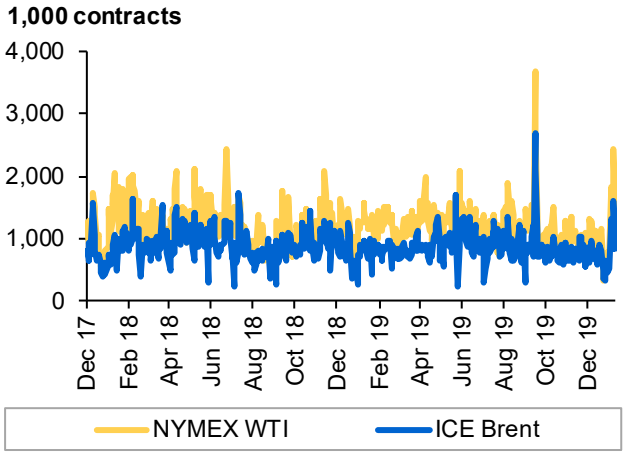
Total futures and options open interest volume on the two exchanges rose by 118,020 contracts from early December to stand at 5.8 million contracts in the week ending 31 December.

The **daily average traded volume** for NYMEX WTI contracts fell again in December by 22,404 lots, or 2.4%, to 920,343 contracts. Daily average traded volume for ICE Brent fell by 77,427 contracts, or 10.0%, to 694,314 lots.

The **daily aggregate traded volume** for both crude oil futures markets fell by 99.831 contracts m-o-m to stand at 1.6 million futures contracts, or about 1.6 billion b/d of crude oil.

The **total traded volume** for NYMEX WTI was lower in December at 19.3 million contracts, a drop of 2.4%, and that of ICE Brent was 10.0% lower at 14.6 million contracts.

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



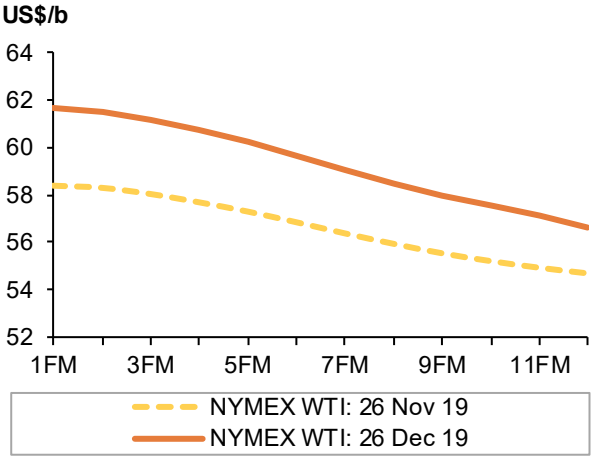
Sources: CME Group, Intercontinental Exchange and OPEC Secretariat.

The futures market structure

The market structure of all three crude benchmarks, ICE Brent, NYMEX WTI and DME Oman, remained in backwardation in December, reflecting the oil market rebalancing and improving oil fundamentals. Tightening supply in the market, due to voluntary and involuntary measures, as well as healthy seasonal oil demand contributed to a further widening of the backwardation in December.

The **NYMEX WTI** backwardation structure steepened in December, with the first month versus the third month time spread averaging around 40¢/b, widening by 24¢ from November, as oil congestion in Cushing, Oklahoma, and the Permian Basin continued to ease. Prompt prices were supported by healthy domestic demand as US refineries raised their crude runs in December, in conjunction with strong demand for crude exports. For the week ending 27 December, US crude oil exports reached 4.5 mb/d, a new weekly record high. The backwardation structure also strengthened on declining US crude oil stocks, particularly in the Cushing trading hub. US crude oil stocks fell by more than 22 mb between the week of 22 November and 27 December.

Graph 1 - 5: NYMEX WTI forward curves

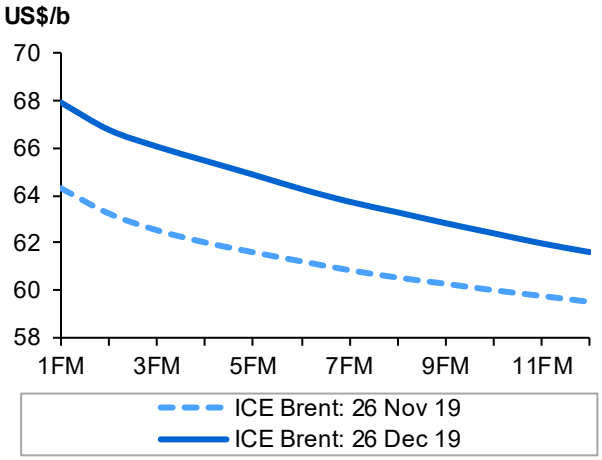


Note: FM = future month.
Sources: CME Group and OPEC Secretariat.

The **ICE Brent** crude futures structure steepened further in December, with the ICE Brent first-to-third month spread widening by 4¢ to an average of $1.66/b, reflecting the global oil market rebalancing and the improving outlook for oil fundamentals, as OPEC and non-OPEC participating countries agreed to proceed for an additional production adjustment in 1Q20, and as trade tensions eased between the US and China, which added more confidence to market. The market structure strengthened on robust seasonal crude demand and the market also priced in the impact of IMO 2020, which could support oil demand.

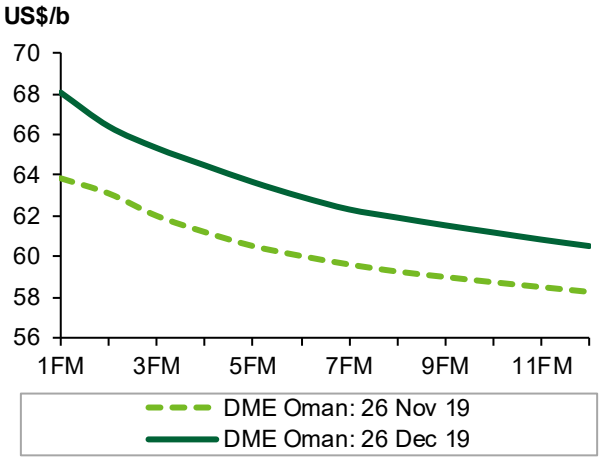
The structure of **DME Oman** remained in steep backwardation amid a tight medium sour crude market and strong seasonal demand from the Asia-Pacific. Nonetheless, rising freight rates in December for almost all the main maritime routes limited arbitrage opportunities for export and dampened prompt prices.

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.

In terms of the **M1/M3 structure**, North Sea Dated M1/M3 backwardation widened by 61¢ in December, to average $2.55/b, as prompt prices continued to see support from strong physical markets and healthy crude demand in the Atlantic Basin. Crudes in the North Sea and West Africa enjoyed sustained demand as refiners looked for sweeter grades to comply with the IMO 2020 sulphur limitation rule. Tight supply in Northwest Europe also added support, and Forties crude differentials rose to multi-year highs. Similarly, in the US, the WTI M1/M3 backwardation spread widened by 26¢ to 38¢/b on lower US crude oil stocks and rising domestic demand as US refinery runs increased, as well as due to high demand for exports. However, the Dubai crude backwardation narrowed slightly, as rising freight rates limited arbitrage opportunities for export and dampened prompt prices. The Dubai M1/M3 premium narrowed to $2.63/b, down by 12¢, on a monthly average.

The **spread between the ICE Brent and NYMEX WTI** benchmarks narrowed slightly in December, averaging $5.37/b on a monthly basis, as NYMEX WTI rose more than ICE Brent. NYMEX WTI gained support from easing supply congestion in Cushing, Oklahoma, and the Permian Basin, as well as from healthy domestic demand, strong crude demand for export, and declining US crude oil stocks over several weeks.

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

		1FM	2FM	3FM	6FM	12FM	12FM-1FM
NYMEX WTI	26 Nov 19	58.41	58.32	58.06	56.87	54.71	-3.70
	26 Dec 19	61.68	61.48	61.16	59.63	56.66	-5.02
	Change	**3.27**	**3.16**	**3.10**	**2.76**	**1.95**	**-1.32**
ICE Brent	26 Nov 19	64.27	63.21	62.51	61.21	59.51	-4.76
	26 Dec 19	67.92	66.76	66.05	64.25	61.57	-6.35
	Change	**3.65**	**3.55**	**3.54**	**3.04**	**2.06**	**-1.59**
DME Oman	26 Nov 19	63.83	63.08	61.97	59.99	58.21	-5.62
	26 Dec 19	68.07	66.41	65.35	62.96	60.54	-7.53
	Change	**4.24**	**3.33**	**3.38**	**2.97**	**2.33**	**-1.91**

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

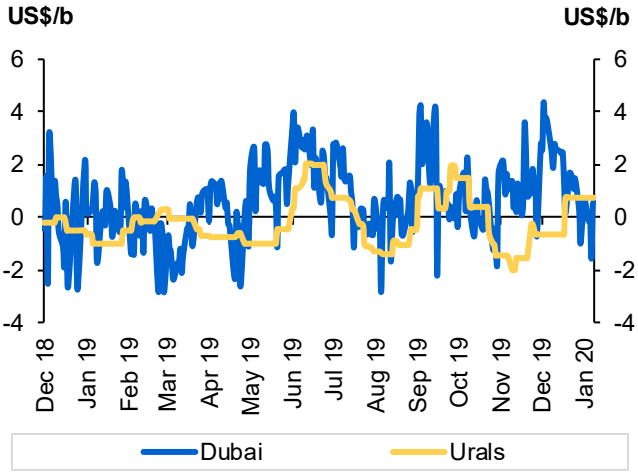
The light sweet/medium sour crude spread

Despite the tight sour crude market, the differential between **light sweet and heavy sour crudes** widened in Asia and Europe as refiners raised their demand for sweeter grades to comply with the new IMO low sulphur regulation, and the spread between HSFO and VLSFO continued to widen in December to reach record highs. However, the sweet/sour differential narrowed in the USGC.

In **Europe**, the discount of Urals medium sour crude differentials to light sweet North Sea Dated tumbled to its lowest level for eight years due to lack of demand in Northwest Europe amid refinery disruptions in France, an important buyer of Urals, after strikes and a fire at Total's Gonfreville refinery in northern France. The Urals value also fell on weakening HSFO margins for most of December and limited arbitrage opportunities to Asia after freight rates rose. The Urals spread to North Sea Dated narrowed by $1.14, to average 19¢/b. On the other hand, the strong value of sweet North Sea crudes, buoyed by tight supplies, also contributed to widening quality differentials.

In **Asia**, the Tapis premium over Dubai continued to increase in December as domestic light sweet crudes became more competitive for local refiners due to a widening spread between Brent and Dubai.

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



Sources: Argus Media, OPEC Secretariat and Platts.

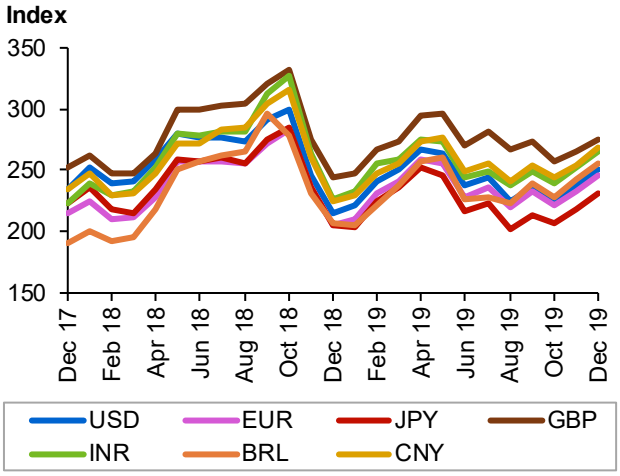
Furthermore, high freight costs for main routes limited arbitrage opportunities from other regions and encouraged refiners in Asia-Pacific to increase purchases of short-haul cargoes. At the same time, the spread between HSFO and compliant fuel also widened. The Tapis/Dubai spread widened by $1.08 to $9.33/b. The North Sea Dated/Dubai spread widened by 84¢ to $2.04/b from $1.20/b the previous month. Demand for heavy sweet crude also rose on the back of increasing demand for blending to meet the new IMO regulation fuel.

However, in the **USGC**, the premium of Light Louisiana Sweet (LLS) over medium sour Mars narrowed slightly as Mars crude performed better than LLS. However, the spread between light sweet and heavy sour crude remained wide in the USGC as margins for HSFO continued to fall, while margins of VLSFO strengthened on strong demand. The LLS premium over medium-sour Mars fell by 84¢ m-o-m to $2.76/b.

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

The **US dollar** (USD) generally declined in December **against major currencies**. Against the pound sterling, the USD declined on average m-o-m by 1.9% after declines of 2.0% and 2.1% the previous two months, respectively, with the result of the parliamentary election in the UK suggesting a favourable environment for the ratification of the Brexit withdrawal agreement. Against the euro, on average m-o-m, the USD declined by 0.5%, with receding Brexit-related concerns and some firming in inflation readings in the Eurozone, while the US Fed added additional monetary easing in December, including a rate cut. Against the Swiss franc, the USD decreased by 0.7%. Against the Japanese yen, the USD advanced for the fourth consecutive month due to reduced safe haven demand. The USD rose against the yen by 0.3% m-o-m.

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



Sources: IMF and OPEC Secretariat.

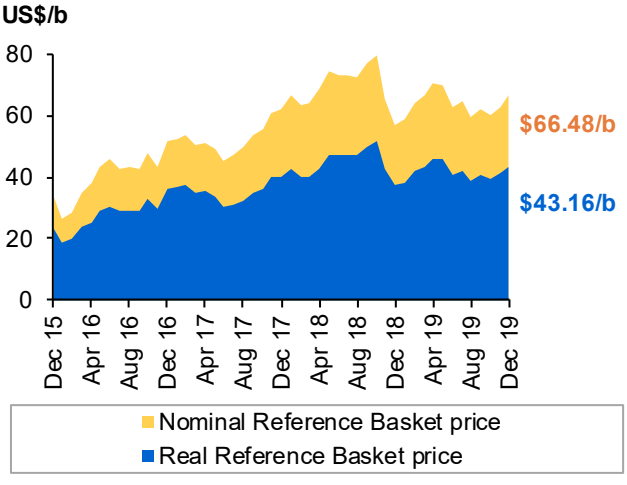
Against the currencies of the largest **emerging market economies**, the USD declined. On average, the USD decreased by 0.1% against the yuan m-o-m, with the Peoples Bank of China guiding the yuan higher, in view of the anticipation of the phase one deal in the trade dispute with the US. The trend of appreciation of the yuan has continued into January so far. Against the rupee, the USD declined by 0.4% amid positive emerging market sentiment and some signs of stabilization in the economy. The USD decreased by 1.1% against the Brazilian real amid improving domestic economic indicators and the above-mentioned improving EM sentiment in view of the Sino-US trade deal. Against the Russian ruble, the USD was down by 1.4% amid further strengthening in energy prices.

In **nominal terms**, the price of the ORB increased by $3.54, or 5.6%, from $62.94/b in November to $66.48/b in December.

In **real terms**, after accounting for inflation and currency fluctuations, the ORB increased to $43.16/b in December from a revised $41.08/b (base June 2001=100) in the previous month.

Over the same period, the **USD** declined by 0.5% against the import-weighted modified Geneva I + USD basket, while inflation was relatively flat 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 *were mixed. Crude oil advanced for the second consecutive month amid continuing positive financial market sentiment and expectations of a more balanced market after the extension of the OPEC-non-OPEC Declaration of Cooperation. However, mild winter temperatures in the northern hemisphere have limited heating demand, pressuring natural gas and coal prices. Indeed, natural gas inventories remain at comfortable levels both in the US and Europe, which will likely prevent large price spikes. Coal prices declined as in the previous month amid competitive prices for natural gas and the beginning of import restrictions in China.*

In the group of ***non-energy commodities****, base metal prices were supported by ongoing improvements in global manufacturing activity, and the optimism that stems from the expected signature of a phase one deal between China and the US. Among precious metals, gold prices increased slightly, mainly in view of rising geopolitical tensions at the end of the month.*

Trends in selected commodity markets

The **energy price index** increased by around 3.1% m-o-m in December. Y-t-d it was down on average by 12.7% compared with the same period last year.

The **non-energy index** was up by 1.9% m-o-m, as in the previous month, due to 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 4.1% compared with the same period last year.

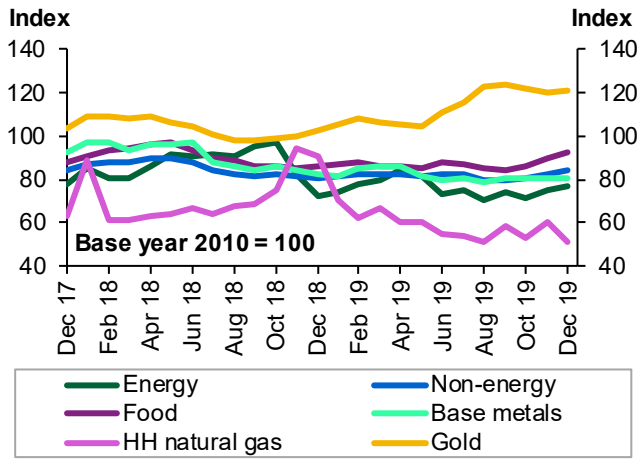
Table 2 - 1: Commodity prices

Commodity	Unit	Monthly averages			% Change	Annual average	
		Oct 19	Nov 19	Dec 19	Dec 19/Nov 19	2018	2019
Energy*		**70.9**	**74.6**	**76.9**	**3.1**	**87.0**	**76.0**
Coal, Australia	US$/mt	69.2	67.0	66.2	-1.2	107.0	77.9
Crude oil, average	US$/b	57.3	60.4	63.4	4.9	68.3	61.4
Natural gas, US	US$/mbtu	2.3	2.7	2.2	-15.4	3.2	2.6
Natural gas, Europe	US$/mbtu	5.1	5.2	4.6	-10.3	7.7	4.8
Non-energy*		**80.3**	**82.3**	**83.9**	**1.9**	**85.2**	**81.7**
Base metal*		**80.1**	**80.4**	**80.7**	**0.4**	**90.6**	**81.6**
Precious metals*		**113.4**	**111.4**	**111.9**	**0.5**	**97.2**	**105.4**

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

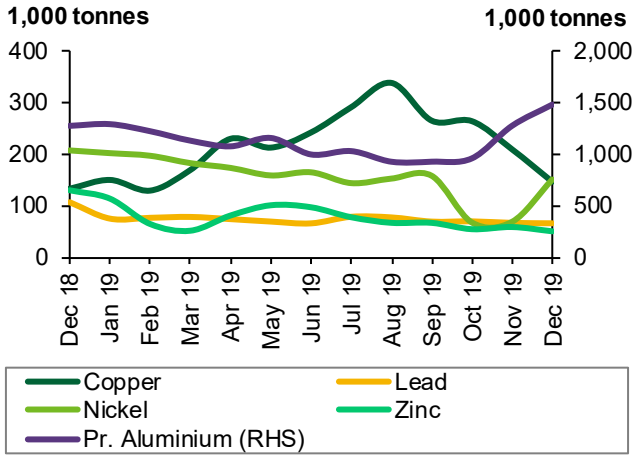
In December, the **Henry Hub natural gas index** decreased on average by 15.4% to $2.24/mmbtu. Prices weakened amid warmer-than-average temperatures that have extended into the middle of January. According to the US Energy Information Administration's (EIA's) last storage report for December, utilities withdrew 58 bcf from working gas in underground storage during the week ending 27 December. The withdrawal left total working gas in underground storage at 3,192 bcf, which was 1.2% below the five-year average. At the end of November, inventories were at 3,591 bcf or 0.3% above the then five-year average. As mentioned in the previous month, the combination of robust increases in natural gas production currently running at around 10% higher y-o-y and the very mild winter temperatures so far are likely to keep inventories at comfortable levels – despite the expectation of some short-lived cold outbreaks ahead — keeping 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 decreased with the **Title Transfer Facility price,** which was down by 10.3% to $4.62/mmbtu in December. Prices weakened significantly amid one of the warmest Decembers on record according to the European Union Earth Observation Program. In addition, the announcement of a deal between Russia and Ukraine on the transit of natural gas to Europe has removed a significant source of uncertainty in the market. The reduction in EU inventories has been tepid, with inventories in some countries still above 90% of working capacity. Indeed, EU member state inventories reported by Gas Infrastructure Europe were at 88.3% at the end of December. Last year, storage was around 70% full at the end of December.

Australian thermal coal prices declined in December by 1.2% m-o-m to average $66.2/mt. Prices weakened as Chinese imports were almost halted in view of government-mandated restrictions. The most recent customs data showed imports declining by around 78% y-o-y to 2.27 million tonnes in December. However, y-t-d coal imports have risen by around 6.3% this year. At the same time, Chinese coal production has risen by 4.5% y-t-d through November, according to data from the National Bureau of Statistics. Thermal power generation, meanwhile, has risen strongly over the last three months, increasing by 6.0% y-o-y in September, a further 5.9% y-o-y in October and by 4.4% in November y-o-y.

The **base metal price index** increased on average by 0.4% m-o-m in December, amid mixed movement across the various components. As in the previous two months, the de-escalation of the US-China trade dispute and pick-up in global manufacturing, especially in China, have been supportive of prices. The JP Morgan global manufacturing PMI declined slightly to 50.1, but still hovers in expansion territory. Moreover, industrial production data from China for the month of November showed a marked improvement from the previous month, rising by 6.2% y-o-y compared with the previous month's 4.7% y-o-y increase.

Average monthly copper prices rose in December by 3.7% to around 6077,0/Mt, led by the above-mentioned improvement in industrial activity in China and signs of tightening in the physical market. The International Copper Study estimates that in the first nine months of 2019, the world refined copper balance adjusted for unreported Chinese inventories, showing a deficit of 525,000 tonnes. Furthermore, inventories on the London Metal Exchange (LME) designated warehouses declined further in December to 145,700 — the lowest point since March 2019 — from 208,625 the previous month. Nickel prices declined on average by 8.8%, with uncertainties regarding Indonesia's policy towards the nickel industry adding significant volatility to prices. At the same time, nickel inventories more than doubled in LME designated warehouses to reach 150,690 tonnes, preventing or limiting upside potential.

Iron ore prices increased by 9.0% in December to around $92.7/metric tonne, supported by a pick-up in iron ore imports in China. Chinese iron ore imports increased by 11.8% m-o-m in December to 101.3 million tonnes, and by 16.8% y-o-y. This latest increase made imports for the whole year rise by 0.5%.Imports were subdued during the year, due to shortages that followed a major accident in one of Brazil's largest mines at the beginning of the year.

In the group of **precious metals**, the index rose by 0.5%, with gold and platinum up by 0.6% and 2.5%, while silver declined slightly by 0.1%. Gold prices were relatively stable during the month, but increased towards the end of the month and at the beginning of January amid rising geopolitical uncertainties and a minor decline in market expectations regarding US interest rates.

Investment flows into commodities

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

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

	Open interest		*Net length*			
	Nov 19	Dec 19	Nov 19	% OI	Dec 19	% OI
Crude oil	2,137	2,164	160	8	254	12
Natural gas	1,187	1,297	-126	-11	-240	-19
Precious metals	917	942	231	25	253	27
Copper	230	246	-29	-13	-7	-3
Total	**4,471**	**4,649**	**96**	**17**	**333**	**28**

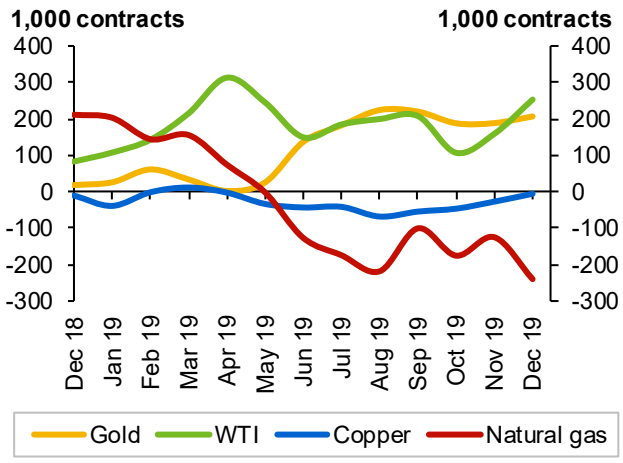
Note: Data on this table is based on monthly average.
Sources: CFTC and OPEC Secretariat.

Henry Hub's natural gas OI rose by 9.2% m-o-m in December, while money managers increased their net short position by around 91% to reach an average of 240,289 contracts from 125,362 contracts in November, underscoring expectations that comfortable inventory levels as a result of milder-than-average temperatures will limit upside moves in the months ahead.

Copper's OI increased by 7.1% in December. Money managers cut their net short position by around 74% to around 7,500 contracts from around 28,900 contracts the previous month. This follows tightening in the physical market and improving manufacturing prospects.

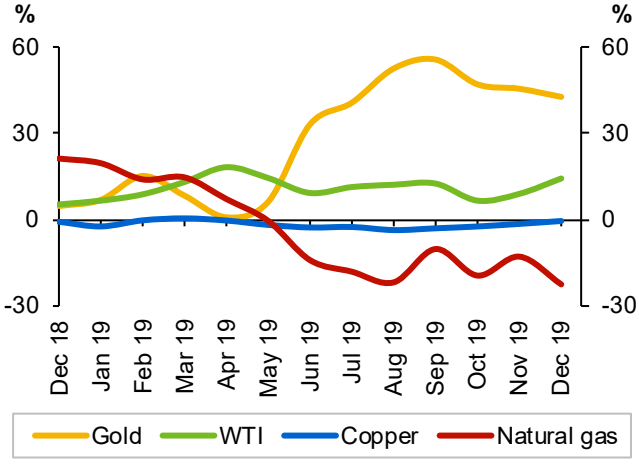
Precious metals' OI increased by 2.7%. Money managers' net long position increased by 9.7% to 253,108 contracts from 230,719 contracts the previous month. As mentioned in the previous report, they remain significantly bullish on gold, despite an improvement in financial market sentiment in 4Q19, in view of geopolitical uncertainties and still unresolved trade disputes.

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 overall economic growth trend over the last several weeks across various economies was mainly balanced, with selective economies seeing improvements and others slowing further. This keeps the ***2019 global economic growth estimate unchanged at 3.0%.***

With the services sector remaining solid in the US and other important OECD economies, improvements in global trade relations and monetary policies remaining accommodative the ***2020 GDP growth forecast was lifted slightly by 0.1 pp to 3.1%.*** *With further developments on the horizon in US-China trade and Brexit, ongoing high debt levels, fiscal imbalances in some key economies, trade-related uncertainties and heightened geopolitical risks still constitute some headwinds. Indeed, the decision taken in December by OPEC and non-OPEC participating countries in the Declaration of Cooperation to continue striving for a stable and balanced oil market will play a supportive role in maintaining healthy global economic growth.*

OECD growth *remains at 1.6% for 2019 and is revised up to 1.5% from 1.4% for 2020. The 2019 US economic growth estimate remains at 2.3%, while the ongoing developments have led to the expectation that 2020 US GDP growth will fare slightly better than initially expected at 1.9%, compared to an assessment of 1.8% in the previous month. Euro-zone growth remains at 1.2% for 2019, amid confirmation of slowing 2H19 growth carrying over into the coming year, leaving the 2020 forecast unchanged at 1.0%. The UK's 2019 estimate remains at 1.1% for 2019 and the forecast was revised up slightly to 1.1% for 2020, in anticipation of rising certainty about Brexit after the clear outcome in the December parliamentary elections. Japan's 2019 growth estimate was revised up to 1.1%, considering the latest upward revisions of growth for the first three quarters in 2019. Consequently, the 2020 economic growth forecast was revised up as well to 0.7% from 0.6% previously.*

In the ***emerging economies****, China's 2019 growth estimate remains at 6.2% and growth in 2020 remains forecast at 5.9%. India's 2019 GDP growth is unchanged at 5.5% and at 6.4% for 2020, but given the economic challenges, the developments will need close monitoring. Growth estimates for Brazil and Russia remain unchanged at 1.0% and 1.1% for 2019, but forecasts were revised up to 2.0% and 1.5% for 2020, compared with 1.7% and 1.3% in the previous month, 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**	**1.1**	**1.2**	**1.1**	**6.2**	**5.5**	**1.0**	**1.1**
Change from previous month	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2020	**3.1**	**1.5**	**1.9**	**0.7**	**1.0**	**1.1**	**5.9**	**6.4**	**2.0**	**1.5**
Change from previous month	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.3	0.2

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

OECD

OECD Americas

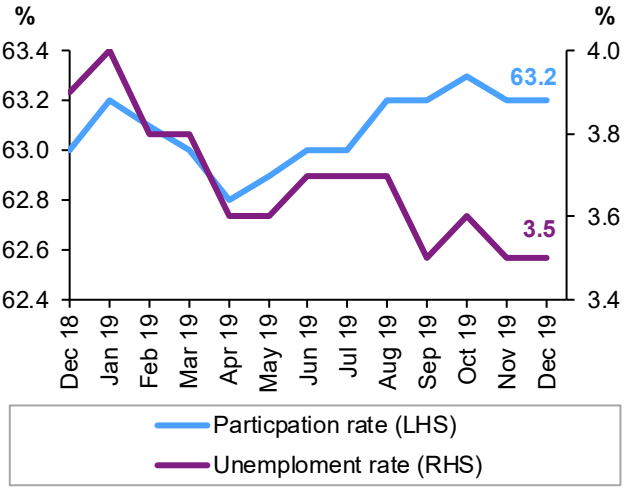
US

The third estimate of **3Q19 US GDP growth** confirmed the earlier forecast of 2.1% at a seasonally adjusted rate (SAAR), according to the Bureau of Economic Analysis. Growth remained well supported by consumption, which expanded by 3.1% q-o-q SAAR in 3Q19, after reaching 4.6% q-o-q SAAR in 2Q19. The positive trend in consumption was supported by the strong labour market. The services sector has also held up well, while the manufacturing side of the economy continues to weaken. Moreover, US Federal Reserve (Fed) monetary policies are expected to remain accommodative. The upcoming agreement on a partial trade deal between the US and China may at least take away some of the past month's rising uncertainties. However, it remains to be seen what details will be agreed upon and if this deal will provide a sound basis for future US-China trade relations. Other trade-related uncertainties remain, including to some extent with the EU. The ongoing slowdown is forecast to continue in 2020 and to stabilise at below the current 2H19 quarterly growth level of around 2.0%.

The **labour market** held up well in December, with the unemployment rate remaining at 3.5%. **Non-farm payrolls** in December increased by 143,000, after job additions of 260,000 in November. Importantly, average hourly earnings for the private sector fell below the important 3% in December, standing at 2.9% y-o-y, compared to 3.1% in November and October. This is the lowest level since April 2018. It remains to be seen if this is a temporary softening trend or if this is the onset of decelerating wages in the economy.

Positively, long-term unemployment declined again to stand at 20.5% in December, compared to 20.8% in November, 21.5% in October and 22.8% in September. The participation rate remained at 63.2% in December.

Graph 3 - 1: US monthly labour market

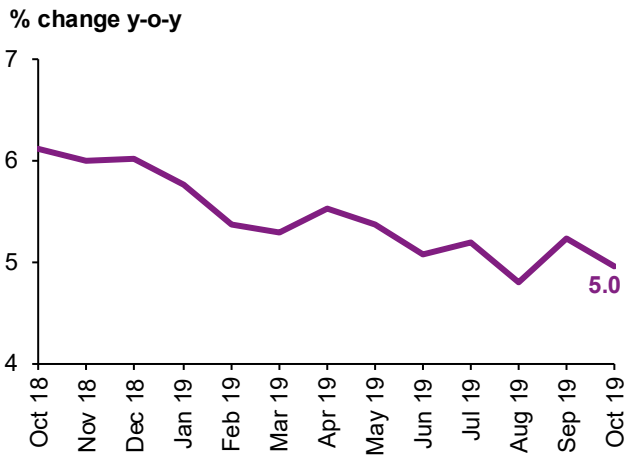


Sources: Bureau of Labor Statistics and Haver Analytics.

Total inflation rose strongly in November to stand at 2.0% y-o-y, compared to 1.8% y-o-y in October and 1.7% y-o-y in September. Core inflation – excluding volatile items such as food and energy – remained unchanged at 2.3% in November. The Fed's favoured inflation index, the personal consumption expenditure price index (PCE index), rose as well to stand at 1.5% y-o-y in November.

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) stood at 5% y-o-y in October compared to 5.2% y-o-y in September.

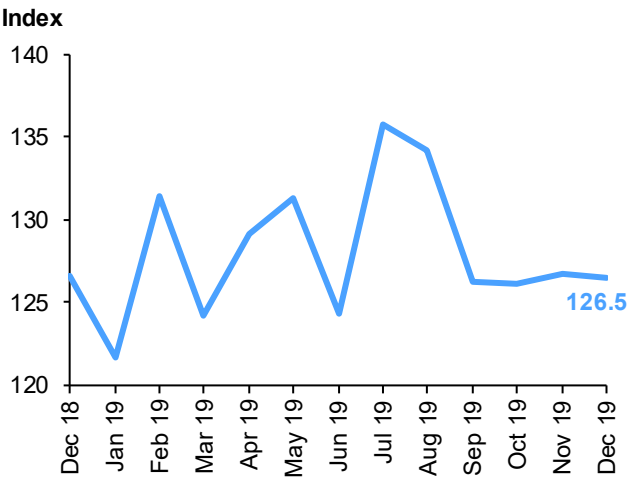
Graph 3 - 2: US house prices



Sources: Federal Housing Finance Agency and Haver Analytics.

Consumer sentiment remained almost unchanged for a fourth consecutive month in December. The lead indicator, published by the Conference Board, stood at 126.5 in December, compared to 126.8 in November and 126.1 in October. Given the ongoing supportive momentum in the labour market, in combination with robust housing and equity markets, this is forecast to continue to be well supported.

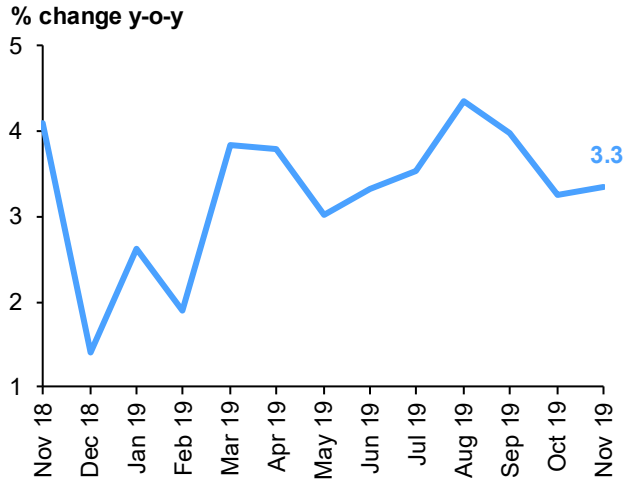
Graph 3 - 3: US consumer confidence index



Sources: The Conference Board and Haver Analytics.

The trend in consumer sentiment is to some extent reflected in **retail sales** growth, which retracted in November, but still remained at a good level, rising by 3.3% y-o-y in November, compared to 3.2% y-o-y in October and 4.0% y-o-y in September.

Graph 3 - 4: US retail sales

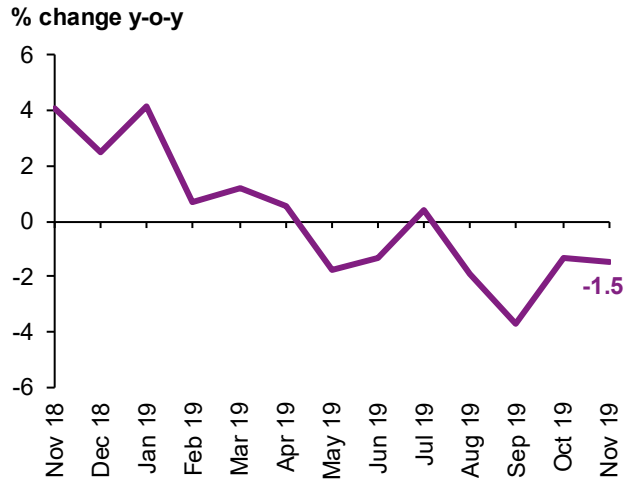


Sources: Census Bureau and Haver Analytics.

Manufacturing orders, a good lead indicator of future manufacturing activity, pointed to continued weakness in the industrial sector. After a considerable decline in September, down by 3.7% y-o-y, the October decline stood at 1.3% y-o-y and the November decline stood at 1.5% y-o-y.

Industrial production (IP) remained a weak spot in the US economy, decelerating further in November by 0.8% y-o-y, after a decline of 1.3% y-o-y in October.

Graph 3 - 5: US manufacturing orders

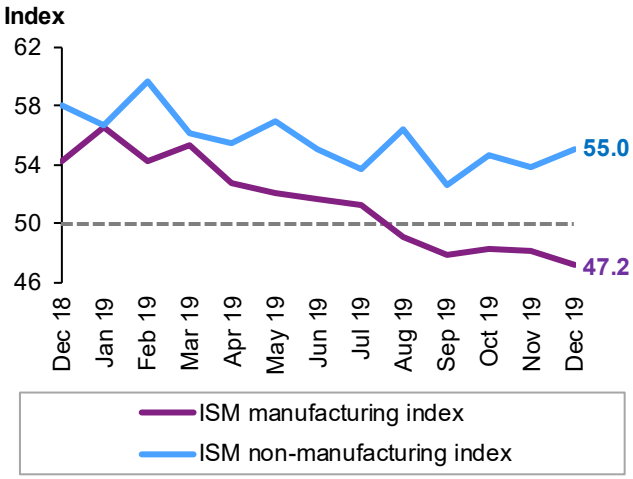


Sources: Census Bureau and Haver Analytics.

December's **Purchasing Managers' Index (PMI)**, as provided by the Institute for Supply Management (ISM), indicated a continued contraction in the manufacturing sector, while the services sector held up relatively better. The manufacturing PMI remained below the growth-indicating level of 50 to stand at 47.2 in December, compared to 48.1 in November. The services sector index rose to 55.0 in December, compared to 53.9 in November.

The **GDP growth** estimate for 2019 remains unchanged at 2.3%, but was revised up to 1.9% for 2020, compared to 1.8% in the previous month, taking into account ongoing strong domestic demand and lessening trade tensions with especially China. Monetary policies are expected to remain relatively accommodative as well. Moreover, industrial activity is forecast to recover and show a cyclical rebound, supported by the car sector and also a potential recovery in investments.

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. 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 total consumption held up well in the past two quarters, rising by 1.6% q-o-q SAAR in 2Q19 and by 1.5% q-o-q SAAR in 3Q19, considerably slowing investments were a significant drag to GDP, declining by 13.2% q-o-q SAAR in 2Q19 and by 8.4% q-o-q SAAR in 3Q19. This reflects some uncertainty in trade, domestic policy issues and weakness in the oil sector. **Industrial production** fell again in November, declining by 1.7% y-o-y, after a decline of 2.9% y-o-y in October. The **PMI** index for manufacturing points to a further weakening in the sector, retracting again in December, with the month's PMI falling to 47.1, compared to 48.0 in November.

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 estimate at only 0.1%, compared to 0.2% the previous month, while for 2020 it was revised down to 0.7%, compared to 0.8% the previous month.

OECD Asia Pacific

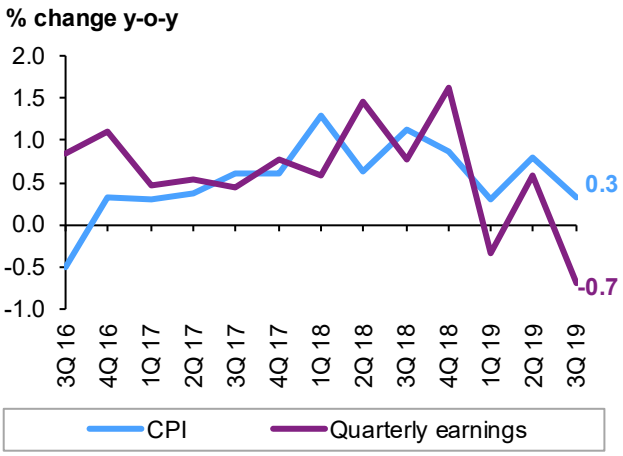
Japan

GDP numbers for the first three quarters have been revised up and it seems that the pre-sales tax increase spending spree and the anticipation of some further tariffs in 4Q19 lifted growth more than expected. 3Q19 GDP was reported to have grown at 1.8% q-o-q SAAR, compared to a previous estimate of 0.2% q-o-q SAAR. Consumption by both private households and the government increased significantly in 2Q19 and 3Q19, rising by 2.4% q-o-q SAAR in 2Q19 and by 2.2% q-o-q SAAR in 3Q19 for private households and by 6.4% q-o-q SAAR in 2Q19 and by 2.7% q-o-q SAAR in 3Q19. However, 4Q19 GPD growth numbers are likely to decline by more than 2% due to the slowdown in consumption, impacted by the sales tax increase. Another drag in 4Q19 came from Typhoon Hagibis, which disrupted production and supply in key sectors, including automotive manufacturing. A 13.2 trillion yen fiscal stimulus package, along with further private investment, were announced to support economic growth in 2020, while further details still need to be provided. However, it will be challenging to invest in an economy that has already seen a variety of fiscal stimulus measures. In the meantime, the Bank of Japan (BoJ) continued its monetary easing efforts, which, however, seem to have become less effective.

Total **inflation** improved slightly but remained relatively anaemic in November. November inflation again stood at 0.4% y-o-y, compared to 0.2% y-o-y in the preceding three months. Core inflation also increased, standing at 0.8% y-o-y in November, compared to 0.6% y-o-y in both October and September.

The **labour market** remains tight, with the unemployment rate falling to 2.2% in November, compared to 2.4% in October, signalling very limited upside to economic growth from this area. Despite this very positive development in employment, earnings declined by 0.4% in November and by 0.2% y-o-y in October. This compares to a rise in September earnings of 0.5% y-o-y.

Graph 3 - 7: Japan's CPI vs earnings

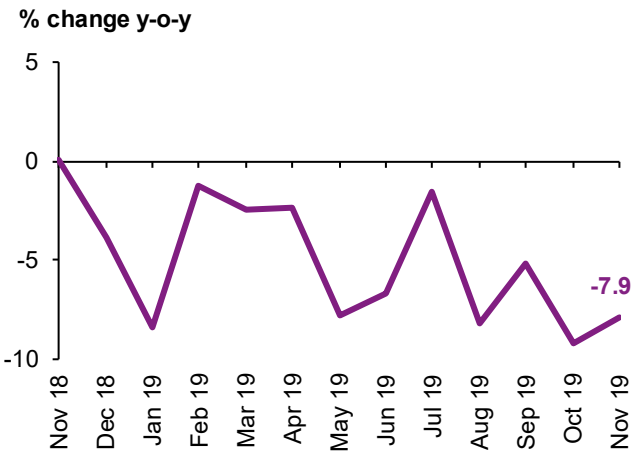


Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Haver Analytics.

Given ongoing trade disputes and the rising fragility of the global economy, **export** growth slowed again in November, declining by 7.9% y-o-y on a non-seasonally adjusted rate. This compares to a decline of 9.2% y-o-y in October and 5.2% y-o-y in September.

Correspondingly, **industrial production** was very much affected by the sales tax increase and declined significantly in both November and October, falling by 6.2% y-o-y in both months. This compares to 0% y-o-y in September and -2.0% y-o-y in August. Machinery orders fell by 14.3% y-o-y in October, compared to a decline of 8.1% y-o-y in September, pointing to a further slowdown in the manufacturing sector and in line with declining business sentiment.

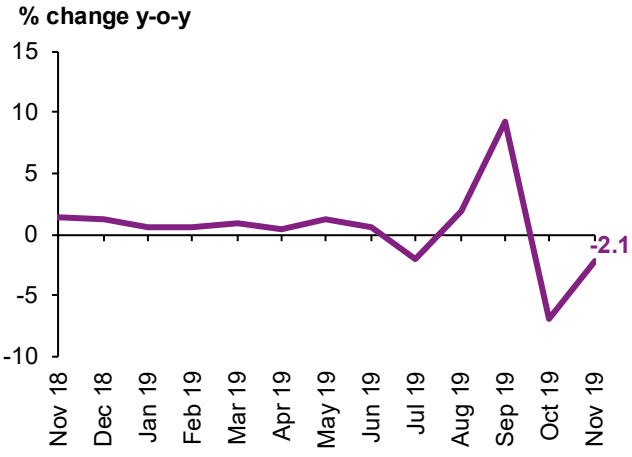
Graph 3 - 8: Japan's exports



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

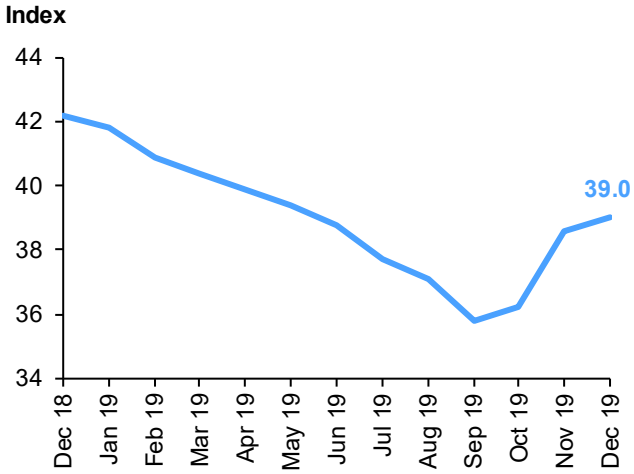
Domestic retail demand saw strong growth in both August and September, rising by 1.8% and 9.2% y-o-y, respectively, in anticipation of the sales tax increase. However, due to this, the trend naturally broke and retail demand growth declined by 2.1% y-o-y in November and by 7.0% y-o-y in October. Positively, consumer confidence continued to improve, independently of the sales tax increase.

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.

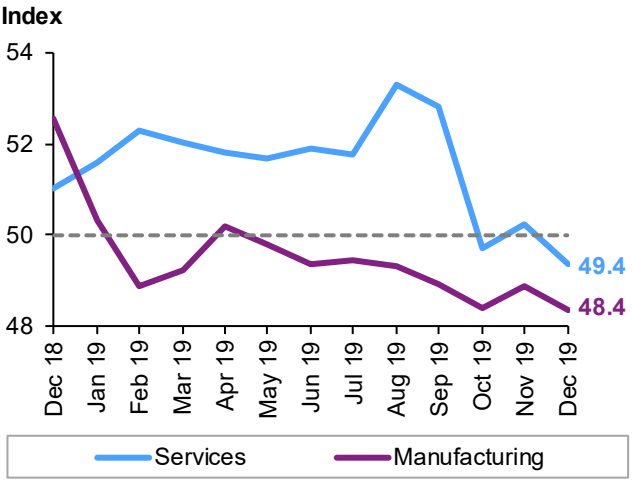
The **consumer confidence** index, published by the Cabinet Office, now stands at 39.0 in December, compared to 38.6 in November, 36.2 in October and 35.8 in September. This is therefore the third consecutive monthly increase, after the index fell for more than a year, and the highest since June.

The slowing trend of the Japanese economy was also reflected in the December PMI numbers. The **manufacturing PMI** was 48.5 in December, compared to 48.9 in November and 48.4 in October.

The **PMI for the services** sector – which constitutes around two-thirds of the Japanese economy – fell again below the growth indicating level of 50, standing at 49.4 in December, compared to 50.3 in November and 49.7 in October, obviously still impacted by the sales tax increase.

After the upwardly revised GPD growth numbers for the first three quarters in 2019, Japan's 2019 **GDP growth estimate** was revised up to 1.1%, compared to 0.9% in the past month's report. Consequently, GDP growth for 2020 was revised up to 0.7% from 0.6% in the previous month. While the underlying sluggish growth trend is expected to continue, it will be somewhat counterbalanced by the fiscal stimulus package.

Graph 3 - 11: Japan's PMIs



Sources: IHS Markit, Nikkei and Haver Analytics.

South Korea

The slightly improving trend in the **South Korean economy** seems to continue, after GDP for 3Q19 was confirmed at 2.0% y-o-y, only slightly below the 2.1% of 2Q19. Growth in industrial production improved to its highest level in more than a year, rising by 1.2% y-o-y, compared to a decline of 0.2% y-o-y in October. While exports continued to decline on a monthly basis, they fell much less in December when compared to previous months. December exports fell by 5.0% y-o-y, the lowest decline since April. The December **PMI number** for the manufacturing sector also reflects a rebound in the sector, standing at 50.1, compared to 49.4 in November, 48.4 in October and 48.0 in September.

It remains to be seen if these improvements are temporary or if they will continue. As some improvement has been already reflected in the current forecast levels, the 2019 **GDP growth** figure remains unchanged at 1.9%, while in 2020, GDP growth is forecast at 2.1%.

OECD Europe

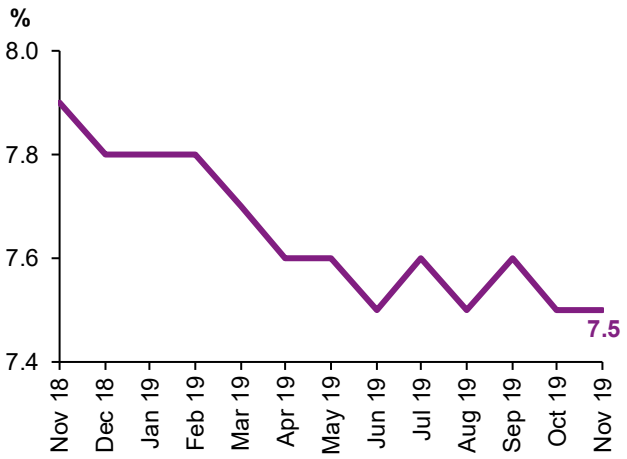
Euro-zone

The **Euro-zone's deceleration** of growth in 2H19 is likely to carry over into 2020. German exports and output continued their downward trend, the latest available numbers show. France has performed relatively better, but also is facing domestic headwinds. Positively, the services sector in the Euro-zone continues to perform well. Also, improving retail sales in combination with some rising inflation – the likely outcome of rising wages – may further support the current growth level, despite the ongoing challenges in investments and exports for the Euro-zone. While the Euro-zone economy is forecast to continue to decelerate in 2020, the ECB is maintaining its accommodative monetary policies, supporting growth at around the current level, support that is expected to continue in 2020. Moreover, some policy uncertainties remain, for example in Spain with its fragile new coalition government, ongoing political uncertainties in Italy and continued uncertainty about Brexit.

Within the **industrial sector**, motor vehicle output plunged 16.4% y-o-y in October, compared to a decline of 8.9% y-o-y in September. This coincides with a sharp output decline in the very important capital goods sector in October of 4.2% y-o-y, after a decline of 1.8% y-o-y in September.

In the **labour market**, the Euro-zone's unemployment rate remained at 7.5% in November, the same level as in October. Unemployment in Germany stood unchanged at 3.1% in November. France's unemployment rate improved to stand at 8.4%, compared to 8.5% in October. Spain's jobless rate also declined, standing at 14.1% in November. Unemployment in Italy remained at 9.7% for a second consecutive month, also showing a positive trend. Positively, wages in 2019 were rising by 2.6% y-o-y on average up to 3Q19. This reflects the improving labour market as it marks the highest growth rate since 2009.

Graph 3 - 12: Euro-zone unemployment rate

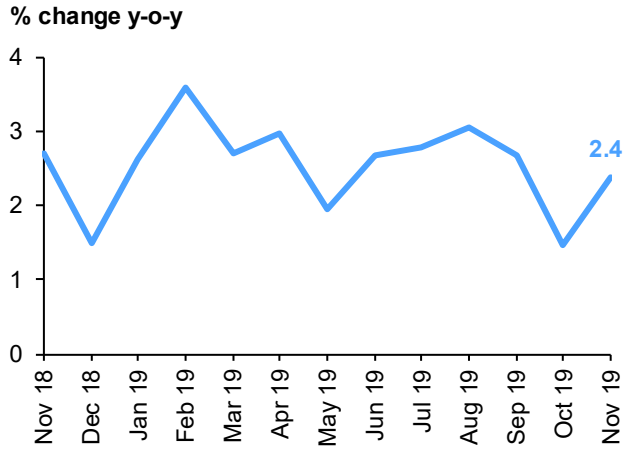


Sources: Statistical Office of the European Communities and Haver Analytics.

Retail trade picked up again in November. In value terms it rose by 2.4% y-o-y, compared to 1.5% y-o-y in October and 2.7% y-o-y in September. There is ongoing support coming from private household consumers, providing an important support factor for the Euro-zone's economy at the current level of relatively low growth.

In the latest available numbers for October, **industrial production** in the Euro-zone contracted, falling by 2.4% y-o-y, compared to a decline of 2.0% y-o-y in September. The trend has already improved on a country-by-country basis in November and while the aggregated November number for the Euro-zone has not been made available yet, it will likely reflect the improvement that has so far been registered in Germany, France, Italy and Spain, the four largest Euro-zone economies.

Graph 3 - 13: Euro-zone retail sales



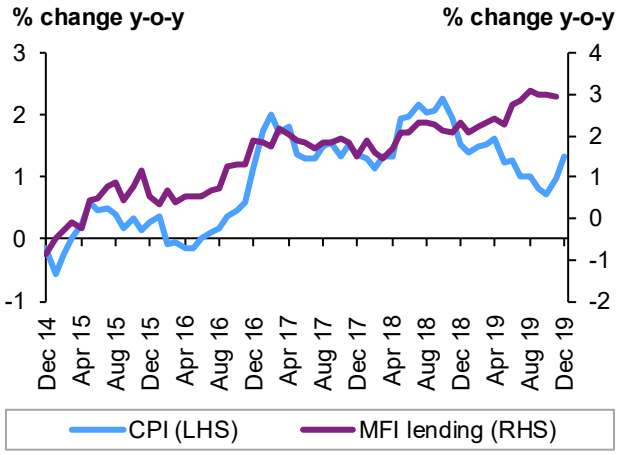
Sources: Statistical Office of the European Communities and Haver Analytics.

However, the most recent **manufacturing orders** for the Euro-zone point to a continuation of the downward trend. Manufacturing orders declined by 4.5% y-o-y in October, compared to a decline of 4.3% y-o-y in September.

Inflation recovered further in December to stand at 1.3%, compared to 1.0% y-o-y in November and 0.7% y-o-y in October. The important core inflation rate – the core CPI, excluding energy and food – remained stable. It stood at 1.4% y-o-y in December.

Developments in **lending activity** – a motor for investment – continued to grow at an almost unchanged level in November, when it increased by 2.9% y-o-y, compared to 3.0% y-o-y, in both October and September.

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

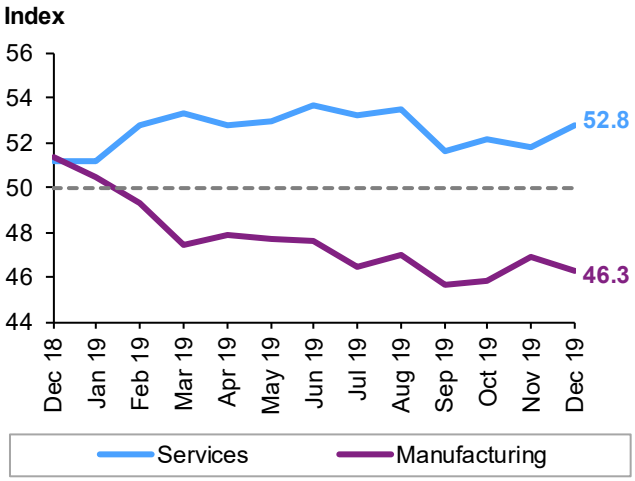


Sources: Statistical Office of the European Communities, European Central Bank and Haver Analytics.

The Euro-zone's latest December **PMI indicators** reflected mixed developments as the services sector recovered, while the manufacturing sector remained in contraction territory. The manufacturing PMI stood at 46.3, compared to 46.9 in November. The important PMI for services, the largest sector in the Euro-zone, recovered to 52.8 in December, compared to 51.9 in November.

The latest uptick in the services sector PMI and other services sector-related indicators point to continued support from the sector, while the industrial sector remained in decline, but may recover in 2020. For the time being ongoing challenges in the Euro-zone keep growth at a low level and the yearly comparison of most indicators point to a continued slowdown in 2020. For the time being, the 2019 **GDP growth** estimate 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



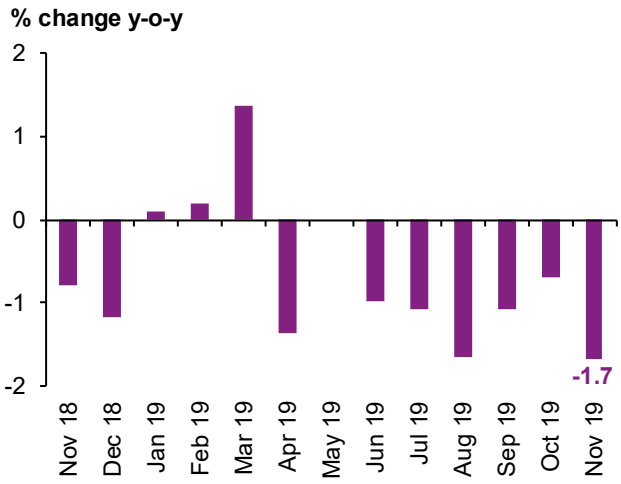
Sources: IHS Markit and Haver Analytics.

UK

After December's elections delivered a clear majority to the government, **Brexit procedures may accelerate**. While negotiations are ongoing, the exit date of 31 January has been confirmed by Parliament. However, negotiations on key issues will most likely continue as open questions remain, particularly on the subject of the UK's border with the Republic of Ireland. In the meantime the UK's economy remained impacted by Brexit. In a preliminary estimate, November's rolling three-month GDP growth slowed for the second month in a row, growing by only 0.1% when compared to the previous three-month period. Moreover, other indicators were confirming a mixed picture.

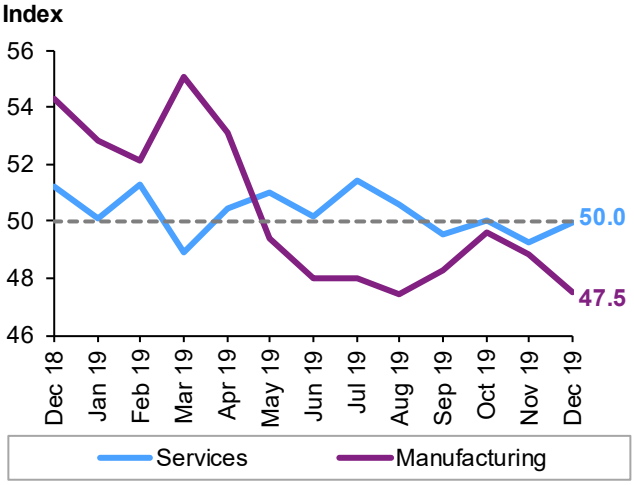
Retail sales in value terms retracted, growing by only 1.2% y-o-y in November, compared to a rise of 3.2% y-o-y in both October and September. **Exports** in goods and services increased considerably, rising by 6.3% y-o-y in November, after already strong growth of 4.3% y-o-y in October. However, **industrial production** fell again in November, declining by 1.7% y-o-y, after seeing a decline of 0.7% y-o-y in October.

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.

December **PMI lead indicators** showed another decline in manufacturing, remaining in contraction territory at 47.5, compared to 48.9 in November, indicating ongoing contraction in the sector. The very important services sector PMI, which constitutes the majority of the UK's economy, improved to stand at 50.0, the precise growth-indicating level, compared to 49.3 in October.

GDP growth for 2019 remains at 1.1%. Given the somewhat rising clarity about the timing of Brexit and an associated recovery in output in 2020, the 2020 growth forecast was lifted slightly to stand at 1.1% compared to 1.0% in the previous month.

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	2.0	3.6	3.2	-34.6	-43.6	-5.8	-4.7	79.1	80.0
Russia	1.1	1.5	4.5	4.6	106.2	113.4	2.3	1.5	9.5	9.3
India	5.5	6.4	3.4	4.2	-52.7	-57.0	-3.9	-3.6	44.3	44.1
China	6.2	5.9	2.7	3.3	209.5	149.7	-4.3	-4.5	18.4	21.6

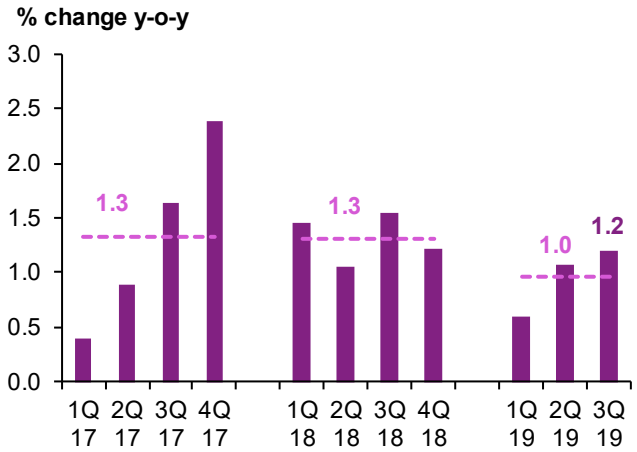
*Note: * 2019 = Estimate and 2020 = Forecast.*

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

Brazil

The country posted a trade surplus of $5.6 billion in December 2019, compared to $6.4 billion in December 2018. Exports dropped by 6.2% y-o-y in December to $1.8 billion. Exports of semi-manufactured products and manufactured products declined, while exports of primary products increased. Imports stood at $1.3 billion in December, lower by 2.8% y-o-y. Imports of primary, semi-manufactured and manufactured products all fell in December. **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 1.3% y-o-y in October 2019, from a 2.1% y-o-y rise in September. During 1H19, GDP posted growth of 0.7% y-o-y.

Graph 3 - 18: Brazil's GDP growth

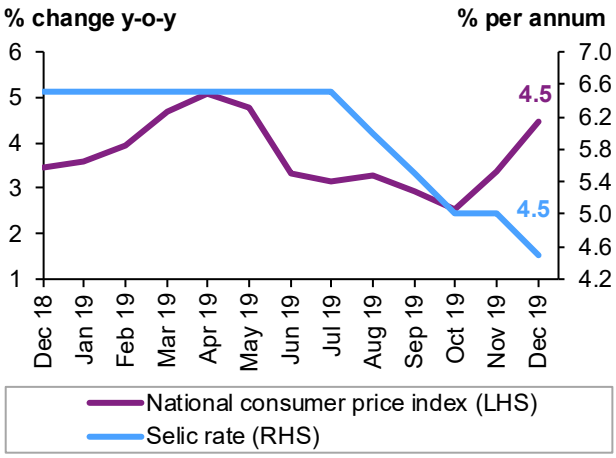


Sources: Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

In December, the **real** gained 1.1% m-o-m, after depreciating by 1.7% in November. Y-o-y, the real was lower by 5.8% vs the dollar in December 2019. The real depreciated by 18% overall in 2018. **Inflation** increased from 3.4% in November to 4.5% in December. In September 2019, inflation rose by less than 3% for the first time since May 2018. The mean inflation rate was 2.9% in 2018. The central bank lowered its benchmark **interest rate** in December 2019 to 4.5%, from 5.0%, after cutting it from 5.5% in October. The current rate is the lowest on record. The rate cuts were a response to sluggish GDP growth.

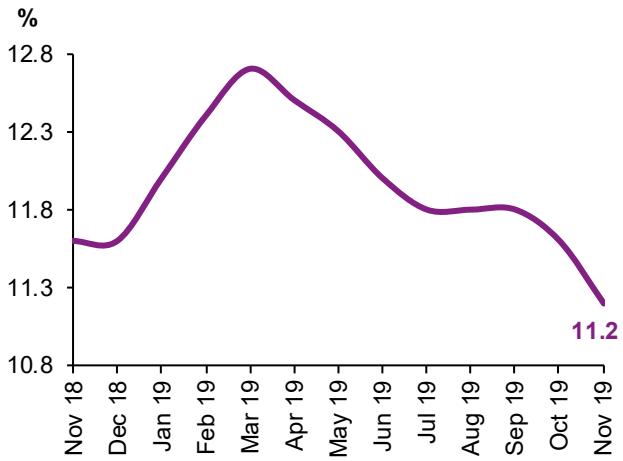
The **unemployment rate** was lower in November 2019 at 11.2%, compared to October's 11.6%. The **consumer confidence** index rose in December 2019 to 93.5, from 91.2 in November.

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



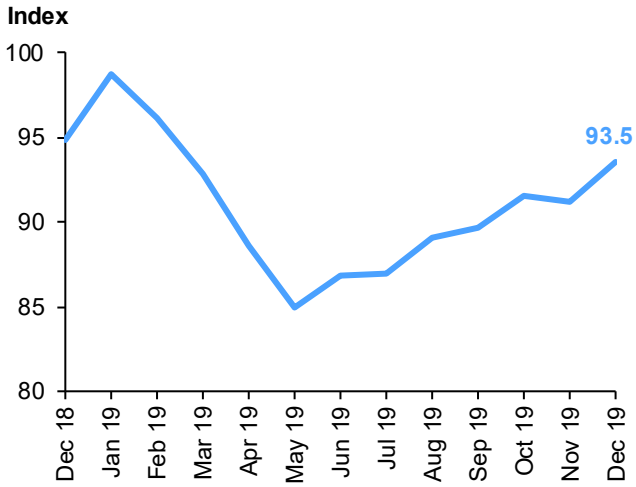
Sources: Banco Central do Brasil, Instituto Brasileiro de Geografia e Estatística and Haver Analytics.

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

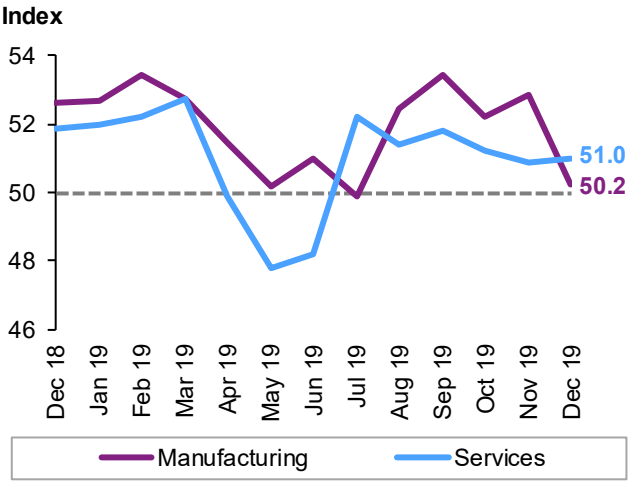


Sources: Fundação Getúlio Vargas and Haver Analytics.

Operating conditions in the **manufacturing sector** dropped in December 2019, according to the IHS Markit Brazil manufacturing PMI. The index was at 50.2 in December, from 52.9 in November, highlighting the lowest reading of the index in five months. The index survey showed that "although Brazil's manufacturing industry remained in expansion mode at the end of 2019, rates of increase in new orders and output eased noticeably. December also saw a return to job shedding and the steepest fall in exports in over a decade. Input cost inflation ticked higher, due to real depreciation, but firms were reluctant to pass this on to clients amid subdued demand conditions. On the positive side, business confidence strengthened to an 11-month high.''

GDP growth is expected to post growth of 1.0% y-o-y and 2.0% in 2019 and 2020, respectively.

Graph 3 - 22: Brazil's PMIs



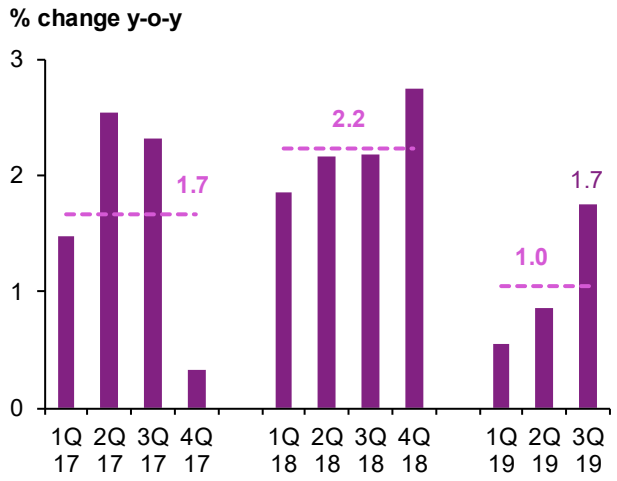
Sources: IHS Markit and Haver Analytics.

Russia

The **balance of trade** in goods posted a surplus of $12.4 billion in October 2019, compared to $19.8 billion in October 2018. Exports registered a drop of 12.6% y-o-y in October, to $36.1 billion, whereas imports of goods went up by 10.2% y-o-y, reaching $23.7 billion.

GDP expanded by 1.8 % y-o-y in 3Q19, up from 0.9% in the previous quarter, according to the Federal State Statistics Service. This faster pace of economic growth was supported by household consumption, government consumption, gross capital formation and exports. **Household consumption** increased by 3.1% y-o-y in 3Q19, from 2.8% in the previous quarter. **Government consumption** rose by 0.2% y-o-y in 3Q19, from 0.2% in 2Q19. **Gross capital formation** grew by 4.2% in 3Q19, from 3.2% in the previous quarter. **Exports** dropped by a smaller rate of 1.1% y-o-y in 3Q19, compared to a 4.9% decline in 2Q19. **Imports** growth increased from 0.1% y-o-y in 2Q19 to 4.0% in 3Q19. GDP growth registered 0.9% y-o-y in 2Q19, up from 0.5% in 1Q19.

Graph 3 - 23: Russia's GDP growth



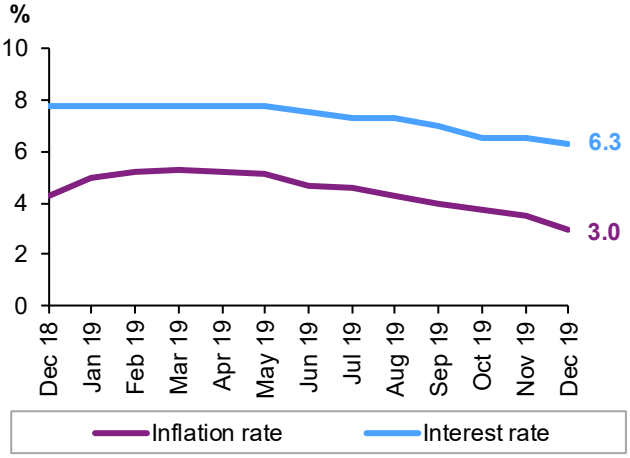
Sources: Federal State Statistics Service and Haver Analytics.

The **ruble** rose by 1.4% m-o-m in December, from a 0.8% depreciation in November. On a year-on-year comparison, the ruble was 6.4% higher in December 2019 compared to its level a year earlier.

Consumer price **inflation** rose by 3.0% y-o-y in December, down from 3.5% in November. At the beginning of 2019, inflation stood at 5.0% y-o-y because of an increase in the VAT and it reached 5.3% y-o-y in March, its highest rate since end of 2016.

The central bank reduced its benchmark **one-week repo rate** to 6.25% in December, from 6.50% in November.

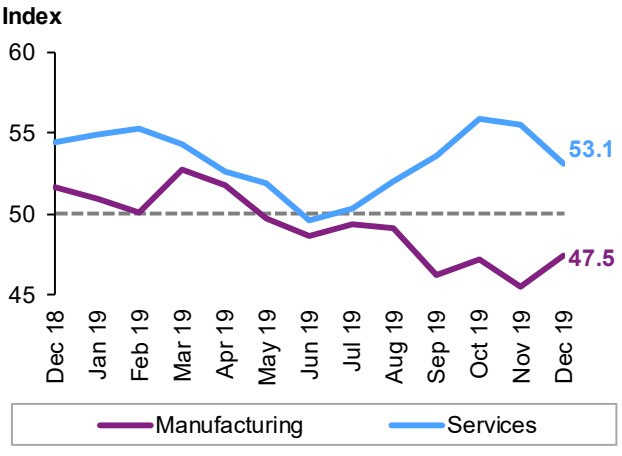
Graph 3 - 24: Russia's inflation vs. interest rate



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

December data continued to signal a deterioration in operating conditions across the **manufacturing sector**. The IHS Markit Russia manufacturing PMI stood at 47.5 in December, from 45.6 in November. According to the survey report, "Production and client demand fell at a softer pace while firms reduced further their workforce numbers and backlogs of work dropped sharply. At the same time, output prices rose only slightly and at the joint-slowest pace since April 2017, as firms struggled to pass on higher cost burdens amid challenging demand conditions. Meantime, input price inflation reportedly stemmed from higher raw material prices."

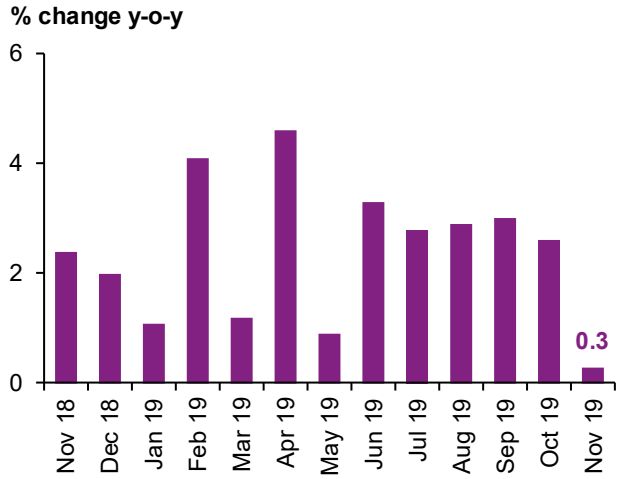
Graph 3 - 25: Russia's PMIs



Sources: IHS Markit and Haver Analytics.

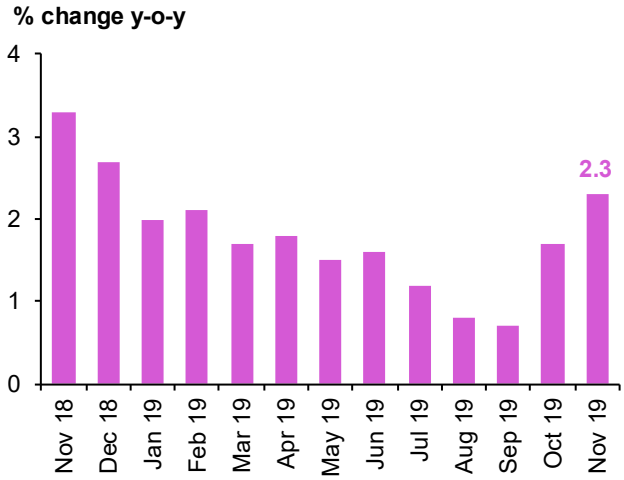
Industrial production increased by 0.3% y-o-y in November, compared to 2.6% y-o-y in October and 3.0% in September. Industrial production has stood in expansion territory since January 2018. **Retail trade** posted an expansion of 2.3% y-o-y in November, from 1.6% y-o-y in October and 0.7% in September. Retail trade has been in the expansion territory since February 2017.

Graph 3 - 26: Russia's industrial production



Sources: Federal State Statistics Service and Haver Analytics.

Graph 3 - 27: Russia's retail sales



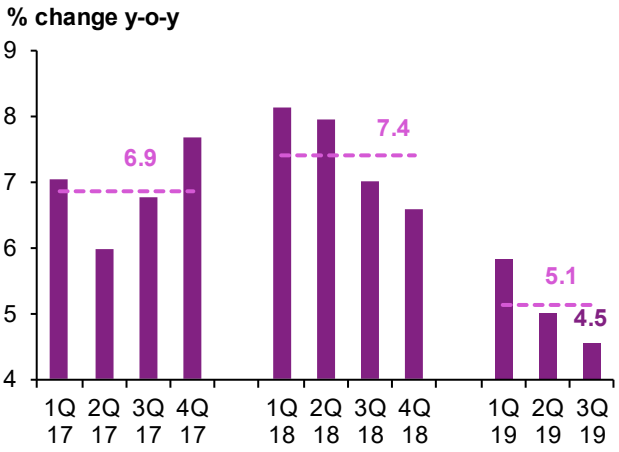
Sources: Federal State Statistics Service and Haver Analytics.

Russia's GDP growth is estimated at 1.0% y-o-y in 2019 and forecast at 1.5% in 2020.

India

As reported in last month's report, **India's real GDP growth** decelerated to 4.5% y-o-y in the 3Q19, despite the rebound in consumption growth. The slowdown is primarily due to disappointing private investment growth and manufacturing performance. The Indian government is expected to continue its fiscal stimulus in 2020 to support a recovery. The government, in its February budget, may consider cutting the corporate tax rate and the income tax along with its rationalization of the equity tax structure. Moreover, the unexpected pause of the Rope rate cut that the Reserve Bank of India (RBI) put in December 2019 is likely to be extended to 2Q20, following higher inflation.

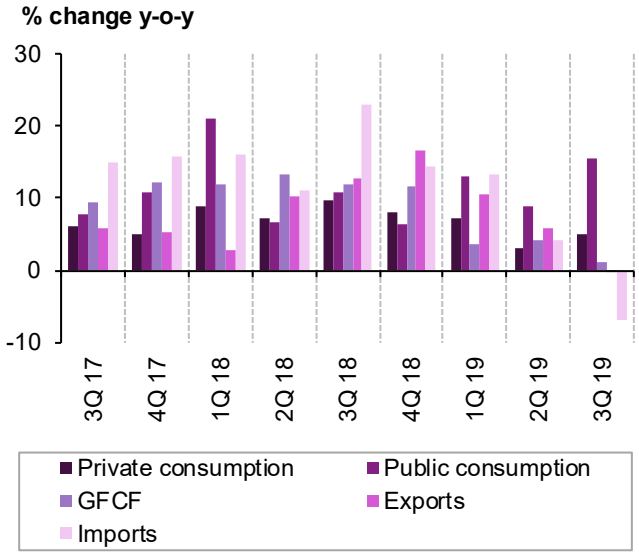
Graph 3 - 28: India's GDP growth



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

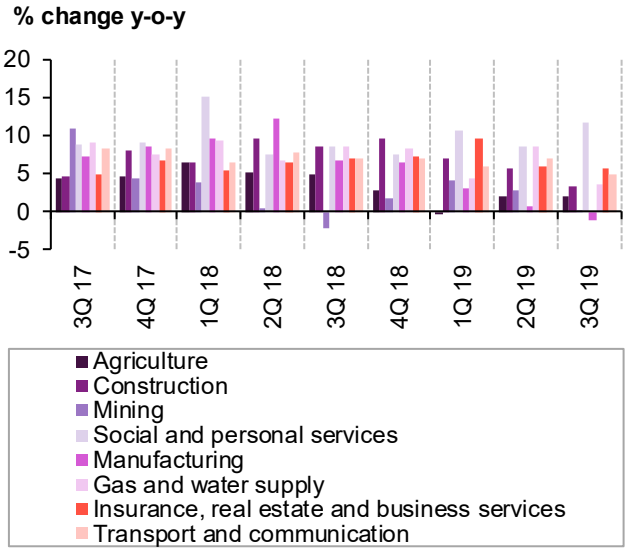
The 3Q19 slowdown of the real GDP by expenditure was most pronounced in gross **fixed capital formation**, which declined sharply to 1.05% compared to 4.03% in 2Q19. Despite increased sales of electronic goods, **exports** from India declined by 0.59% y-o-y, after a 5.6% rise in 2Q19, while **imports** declined by 6.6% (+4.2% in 2Q19). Yet both private and public consumption increased sharply in 3Q19. Private consumption increased by 5.064%, about 2% higher than 2Q19 and accounted for 56.3% of GDP, compared to 55.1% in 2Q19. Public consumption jumped to 15.9% after an 8.8% rise in 2Q19 and accounted for 13.1% of GDP (11.8% in 2Q19), driven by the government's stimulus measures to boost the GDP growth.

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



Sources: Central Statistics Office and Haver Analytics.

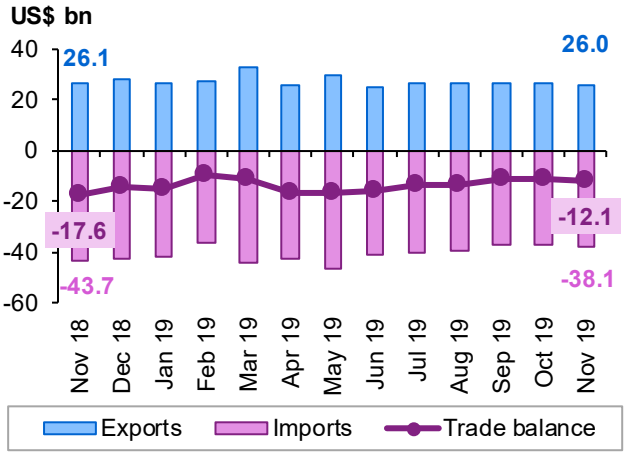
Graph 3 - 30: India's GDP growth by supply side



Sources: Central Statistics Office and Haver Analytics.

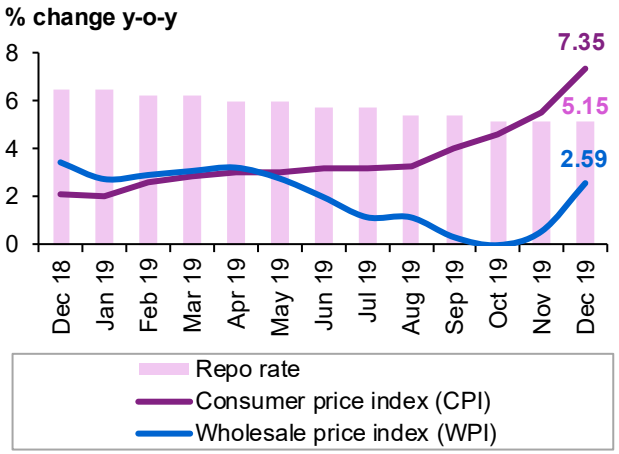
The disappointing manufacturing performance dragged down the **real gross value added to the economy** in 3Q19, leading GDP on the supply side to slow to 4.33% compared to 6.32% in 3Q18. **Manufacturing** fell 1.05% after rising to 0.58 increase in 2Q19 (+6.4% in 3Q18). Yet **trade, hotel, transport, communication and services related to broadcasting** declined at a faster rate (4.8% vs 7.1%); **construction** (3.3% vs 5.7%); **utilities** (3.6% vs 8.6%); and **mining** (0.1% vs 2.7%). **Financial, real estate and professional services** declined slightly (5.8% compared to 5.9% in 2Q19). Meanwhile, **public administration and defence** rose to 11.6% compared to 8.5% in 2Q18, and **agriculture, forestry and fishing** (2.1% vs 2.0%).

Graph 3 - 31: India's trade balance



Sources: Ministry of Commerce and Industry and Haver Analytics.

Graph 3 - 32: Repo rate and inflation in India

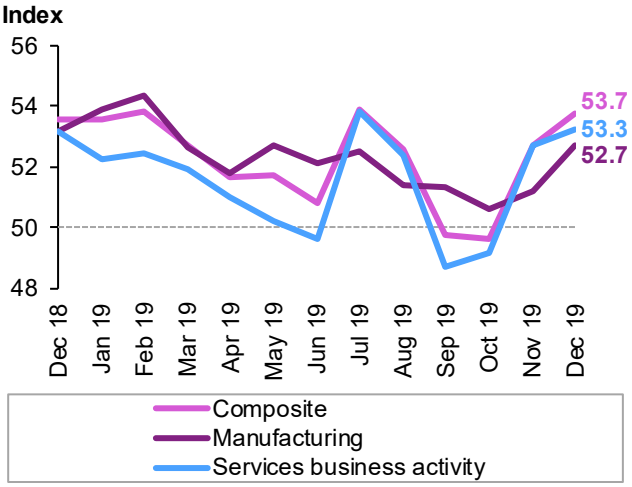


Sources: Ministry of Commerce and Industry, Reserve Bank of India and Haver Analytics.

Pushed by increased food prices, India's **CPI inflation** reaching 7.35% y-o-y in December 2019 compared to 5.54% in the previous month. This is a 3.35% above the RBI's medium-term target of 4%. Meanwhile, India's **WPI** rose to reach 2.59% y-o-y in December 2019, following an increase of 0.58% in the previous month.

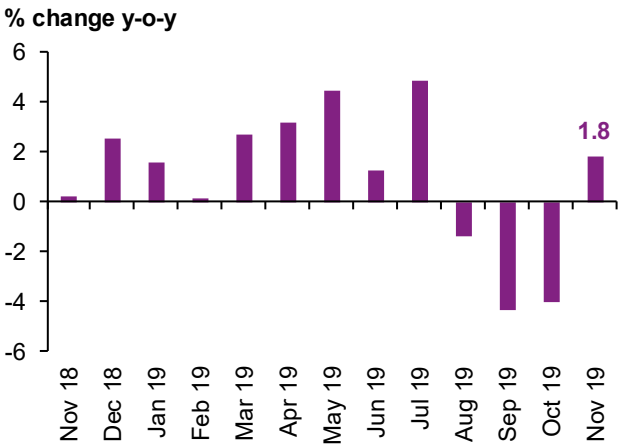
As reported in our previous monthly report, the **IHS Markit India Manufacturing PMI** increased to 52.7 in December 2019 from 51.2 in November 2019, mirroring the upbeat outlook in the manufacturing sector and supported by the increased demand for consumer and intermediate goods. However, the higher PMI indictor still raises concerns about market conditions because of its weakness compared to the three-year average.

Graph 3 - 33: India's PMIs



Sources: Nikkei, IHS Markit and Haver Analytics.

Graph 3 - 34: India's industrial production



Sources: Ministry of Statistics and Program Implementation of India and Haver Analytics.

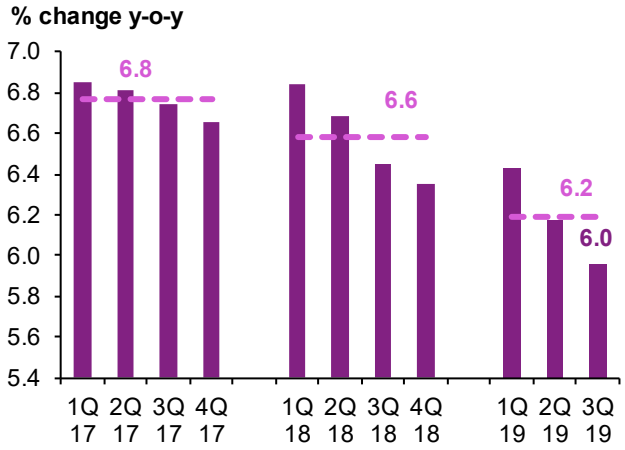
India's **industrial production** increased to 1.8% y-o-y in November 2019, supported by the rebounded manufacturing (2.7% vs -2.3%) and mining (1.7% vs -8.0%) while electricity production fell 5%, following a 12% drop in October.

China

Despite the slowdown in **China's GDP growth** in 3Q19, the improvement in the industrial sector and the investment performance in November 2019 are promising a higher economic growth towards the end of the year.

Moreover, the phase one trade deal between China and the US, expected to be singed on 15 January, reduced the trade tensions between the two countries, lifting GDP growth expectations for 2020. Nevertheless, it is important to mention that the tariffs will still cover approximately two-thirds of Chinese exports to the US. Additionally, the deal would reduce the tariffs from an average of 21% to 19.3%, which is still much higher than the average of 3% before the trade dispute.

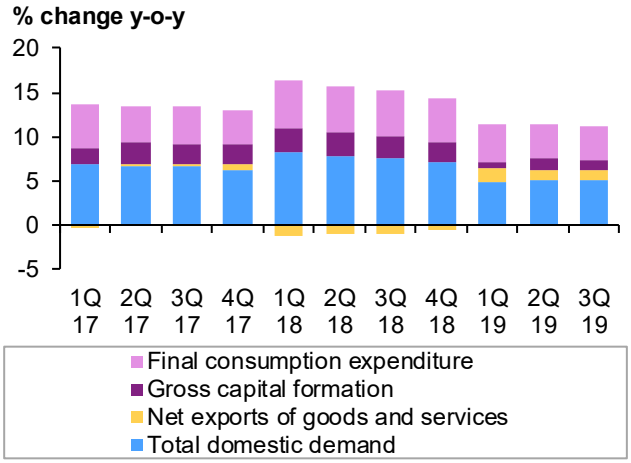
Graph 3 - 35: China's GDP growth



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

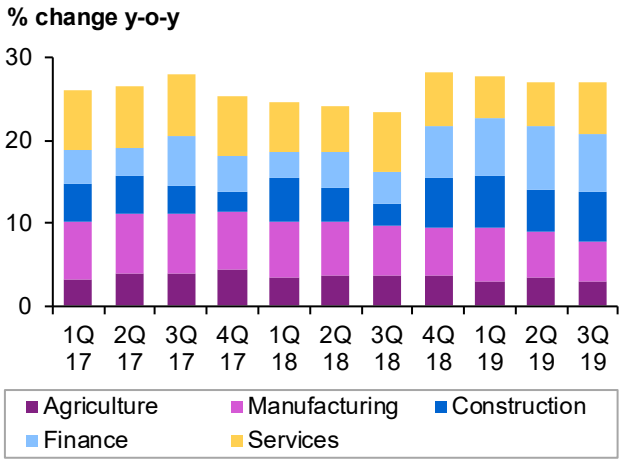
Domestically, the Central Economic Work Conference may drift towards more policy stimulus, yet the macro easing would not be significant considering the stable performance of the labour market and improved external sentiment. The 2019 and 2020 GDP growth forecast will be maintained considering the uncertainty regarding the new US-China trade deal as well as the extend of the upbeat in the industrial sector improvement.

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



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

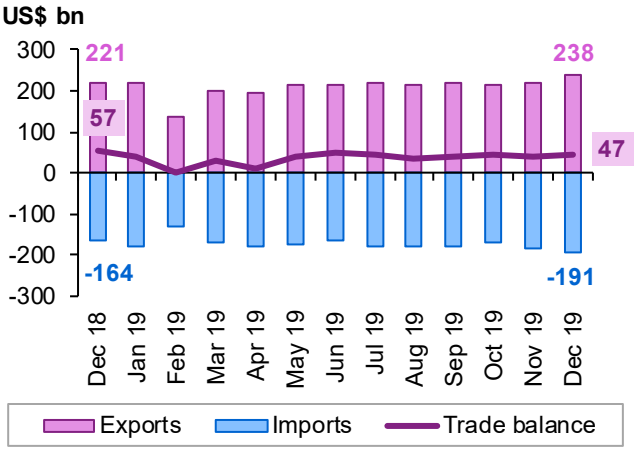
Graph 3 - 37: Contribution to China's GDP growth on the supply side



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

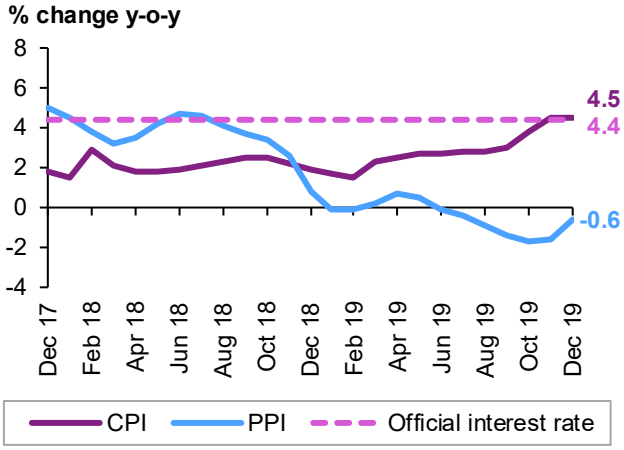
China's **CPI inflation** remained unchanged from the previous month at 4.5% in December 2019. This was the highest inflation rate since January 2012, driven by increased pork prices due to a prolonged African swine fever outbreak. The **producer price index (PPI)** increased to -0.6% in December 2019 from -1.6% y-o-y in the previous month.

Graph 3 - 38: China's trade balance



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

Graph 3 - 39: China's CPI and PPI

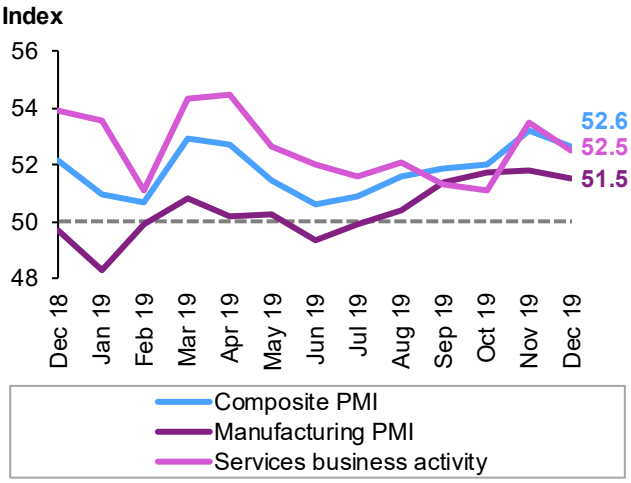


Sources: China Index Academy, China National Bureau of Statistics, Soufan and Haver Analytics.

The **official NBS Manufacturing PMI** marginally declined to 51.5 in December 2019 compared to 51.8 in November 2019, the lowest since September 2019 mainly due to the modest growth of new orders. Yet the positive signal of the anticipated phase one trade deal with the US would allow space for further improvement in China's business and manufacturing economy.

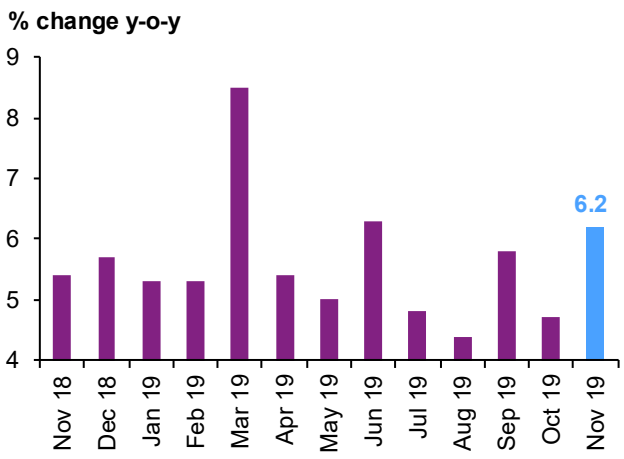
The **Caixin China General Services PMI** fell to 52.5 in December from 53.4 in November, indicating that the services sector has kept its expansion trend but the growth rate might slow down.

Graph 3 - 40: China's PMI



Sources: Caixin, IHS Markit and Haver Analytics.

Graph 3 - 41: China's industrial production



Sources: China National Bureau of Statistics and Haver Analytics.

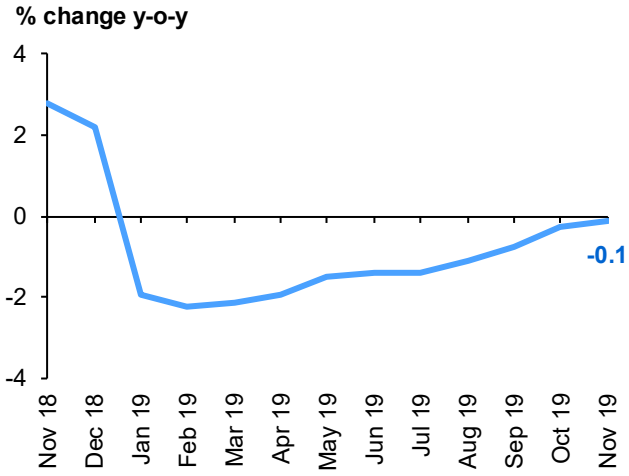
China's **industrial production** increased to 6.2% y-o-y in November 2019, its highest growth since June 2019, following an increase of 4.7% the previous month, implying the demand recovery due to government stimulus measures and optimistic business environment due to an overall positive external atmosphere.

OPEC Member Countries

Saudi Arabia

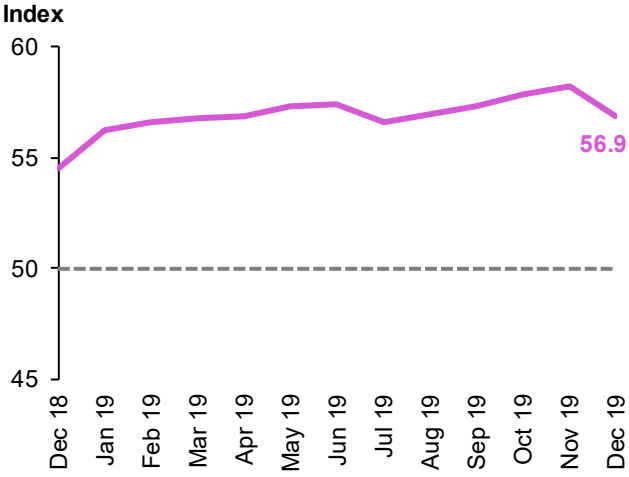
Saudi Arabia's GDP contracted by 0.5% y-o-y in 3Q19, mainly due to a 6.4% decline in mining and quarrying. Manufacturing also registered a 2.4% y-o-y drop, while construction, transportation and wholesale and retail trade all posted good rates of growth. The non-oil-and-gas sector registered a healthy 4.3% y-o-y growth rate in 3Q19, up from 2.9% in the previous quarter. Inflation dropped by 0.1% y-o-y in November, compared to a 0.3% decline in consumer prices during October 2019.

Graph 3 - 42: Saudi Arabia's inflation



Sources: General Authority for Statistics and Haver Analytics.

Graph 3 - 43: Saudi Arabia's composite PMI



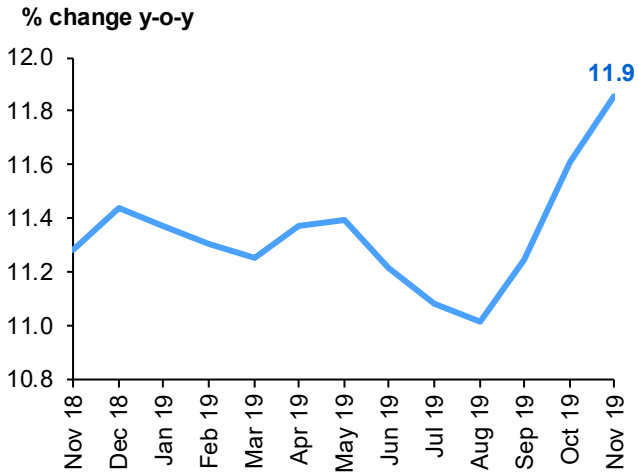
Sources: Emirates NBD, IHS Markit and Haver Analytics.

The non-oil private sector continued to grow in December, albeit at a slower pace compared to the previous month, according to the IHS Markit Saudi Arabia PMI. The index registered 56.9 in December, down from 58.3 in November. The survey report highlighted that "Saudi Arabia's non-oil private sector remained on a growth footing in December. Business activity, new orders and employment all expanded since the previous month. However, in each case the rate of growth lost momentum in comparison to the previous survey period."

Nigeria

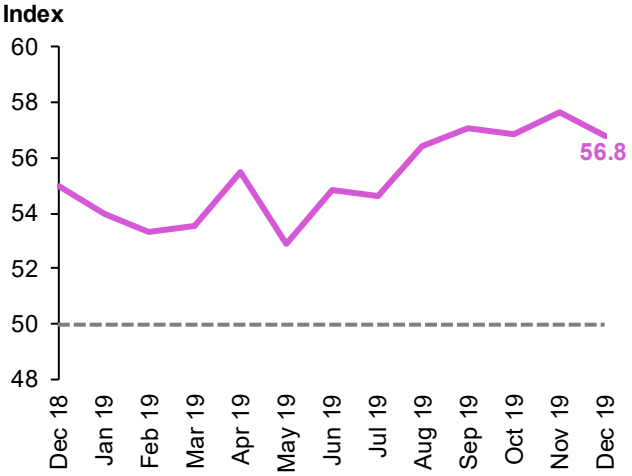
In **Nigeria**, inflation reached 11.9% y-o-y in November, compared to 11.6% a month earlier. The country's liquid foreign reserves stood at $37.8 billion in December 2019, compared to $42.1 at the beginning of the year. The Nigerian stock exchange index decreased by an average of 0.1% m-o-m in December 2019, following a 0.3% rise a month earlier.

Graph 3 - 44: Nigeria's inflation



Sources: National Bureau of Statistics and Haver Analytics.

Graph 3 - 45: Nigeria's composite PMI



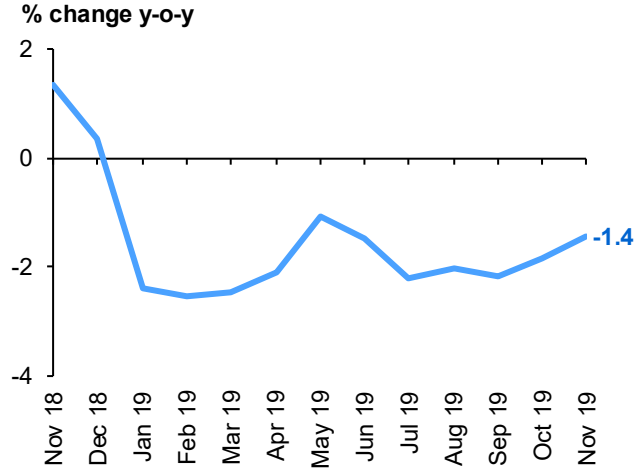
Sources: IHS Markit, Stanbic IBTC Bank and Haver Analytics.

Private sector performance remained in expansion territory during December, according to the Stanbic IBTC Bank Nigeria PMI. The index posted 56.8 in December 2019, down from 57.7 in November. The survey report indicated that "the Nigerian private sector remained comfortably inside growth territory at the end of 2019, with further marked increases in output and new orders recorded. Efforts to keep on top of workloads led companies to accelerate their expansions of both staffing levels and purchasing activity. Meanwhile, further solid rises in both purchase prices and staff costs were noted." GDP grew by 2.1% y-o-y in 3Q19, similar to the previous quarter, bringing GDP growth in the first three quarters of 2019 to 2.1% y-o-y.

The United Arab Emirates (UAE)

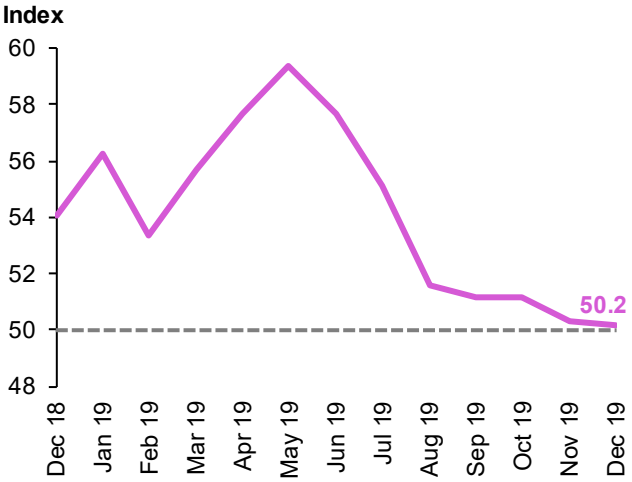
In the **UAE**, inflation decreased by 1.4% y-o-y in November 2019, compared to a 1.9% drop during October. This marks the 11th consecutive month of decline in consumer prices. Net international reserves increased by 14.1% y-o-y in November 2019, to 392.6 billion dirham, higher than October's level of 370 billion dirham. Dubai's financial market general index hit 2742.1, up by 1.9% m-o-m in December 2019.

Graph 3 - 46: UAE's inflation



Sources: National Bureau of Statistics and Haver Analytics.

Graph 3 - 47: UAE's composite PMI



Sources: Emirates NBD, IHS Markit and Haver Analytics.

The non-oil private sector continued to grow in December, albeit at a weak pace, according to the IHS Markit UAE PMI. The index went from 50.3 in November to 50.2 in December. The survey report stated that "the UAE non-oil economy ended the year on a very different note to where it started. While the first half of 2019 saw demand levels soar in response to price discounting, the second half was much more subdued, with sales struggling to rise despite further price cuts. December data continued this theme, with the PMI falling to the lowest since August 2009 (the first month of data collection). Output rose at the softest rate in over eight years, while new orders increased only marginally after a slight downturn in sales during November."

Other Asia

Malaysia

In **Malaysia**, GDP grew by 4.4% y-o-y in 3Q19, from 4.9% and 4.5% in 2Q19 and 1Q19, respectively. Private consumption expenditure growth went from 7.8% y-o-y in 2Q19 to 7.0% in the following quarter, whereas public consumption growth increased from 0.3% y-o-y in 2Q19 to 0.9% in 3Q19. GFCF declined by 3.7% y-o-y in 3Q19, deeper than a 0.6% drop registered in 2Q19. Exports fell by 1.4% y-o-y in 3Q19, following a fractional increase of 0.1% in the previous quarter. Imports of goods and services declined for the third quarter in a row during 3Q19, at a rate of 3.3% y-o-y, compared to 2Q19's 2.1% drop. The manufacturing sector grew in December at its fastest pace since September 2018, according to the IHS Markit Malaysia manufacturing PMI. The index went from 49.5 in November to 50.0 in December. The survey report highlighted that "Malaysia's manufacturers move into 2020 reporting increasingly brighter business conditions, having ended 2019 with their best performance for over a year. Survey indicators of output and order book inflows moved higher as recent headwinds to demand showed further signs of easing, in turn helping boost optimism about the year ahead to one of the highest seen over the past six years."

Africa

Egypt

In **Egypt**, GDP grew by 5.6% y-o-y in 3Q19 compared to 5.7% and 5.6% in 2Q19 and 1Q19, respectively. Private sector growth stood at 1.4% y-o-y in 2Q19, up from 1.1% in the previous quarter, while public sector growth went from 2.2% y-o-y in 1Q19 to 1.0% in 2Q19. Gross capital formation expanded by 15.3% y-o-y in 2Q19, up from 12.6% in 1Q19. In 2Q19, exports declined by 11.7% y-o-y, after decelerating by 3.5% in 1Q19. Imports went from a 8.7% contraction in 1Q19 to a drop of 12.9% in 2Q19. The Egyptian pound appreciated by 0.3% m-o-m on average in December 2019 compared to 10.3% in December 2019. The central bank kept its policy rate unchanged at 12.25% in December, after lowering it in November from 13.25%. Inflation stood at 6.9% y-o-y in December 2019, up from 2.7% in November. The IHS Markit Egypt PMI showed that business conditions in the private sector improved in December 2019 due to softer deceleration in production and new orders alongside low input price inflation. The survey report indicated that the index "showed some signs of a turnaround in December, with the headline reading increasing for the first time in three months. Despite contracting further, both output and new orders fell at softer rates than in November. This indicates that the downturn in the non-oil sector is beginning to ease."

Latin America

Argentina

In **Argentina**, GDP shrank by 1.7% y-o-y in 3Q19 after registering zero growth in 2Q19. In 3Q19, private consumption and government consumption both fell by 4.9% y-o-y and 0.9%, respectively. GFCF dropped by 10.2% y-o-y in 3Q19 alongside imports which fell by 13.4%. Exports rose by 14.2% y-o-y in 3Q19 compared to 15.4% in the previous quarter. The central bank lowered its monetary policy target rate from 63% to 55% in December. The peso depreciated by 3.8% m-o-m in November. On a year-on-year comparison, the peso was 63.8% lower vs the dollar in November 2019. Inflation stood at 52.1% y-o-y in November, compared to 50.5% a month earlier. Total supermarket sales were in contraction for 16 consecutive months and fell by 1.3% y-o-y during October 2019. The unemployment rate registered 12.8% in 3Q19, compared to 13.1% in 2Q19. Industrial production went down by 0.5% y-o-y in November 2019, extending the negative streak to 19 consecutive months. The country's foreign reserves fell from $66.8 billion in January 2019 to $44.8 billion in December 2019. The gross external debt as a percentage of annualized GDP stood at 71.4% in 3Q19, up from 58.0% in 2Q19.

Transition region

Czech Republic

In the **Czech Republic**, GDP expanded by 3.4% y-o-y in 3Q19, up from 2.4% in the previous quarter, on the back of faster growth in household consumption, exports and gross capital formation. In 3Q19, household consumption went up by 3.0% y-o-y, up from 2.7% in 2Q19. Gross capital formation went from a 0.1% y-o-y decline in 2Q19 to a 1.2% increase in 3Q19. Exports grew by 3.8% y-o-y in 3Q19, up from 1.8% in 2Q19. Government consumption, on the other hand, showed stable growth at 3.4% y-o-y in 2Q19 and 3Q19, while imports of goods and services rose from 1.2% in 2Q19 to 2.7% in 3Q19. The koruny appreciated by an average 0.7% m-o-m during December 2019. Inflation was 3.1% y-o-y in November 2019, up from 2.7% a month earlier. The manufacturing sector witnessed another deceleration in December, according to the IHS Markit Czech Republic manufacturing PMI. The index stood at 43.6 in December, from 43.5 in November.

World Oil Demand

Global oil demand growth in 2019 *is revised lower by around 0.05 mb/d to 0.93 mb/d. As a result, total demand currently stands at 99.77 mb/d. This was despite an upwardly revised 4Q19 amid strong demand growth in the Middle East, which slightly offset a sizeable downward revision to oil demand data in 1H19 due to lower-than-expected oil requirements in OECD America and Asia Pacific. In the* ***OECD****, oil demand growth is revised down in 2019, due to data showing slower growth in OECD Americas, mainly in 1H19, because of lower-than-expected middle distillate demand, in line with slower manufacturing and trucking activities compared with a year ago. In OECD Asia Pacific, oil requirements for industrial fuels and petrochemical stocks were weaker than expected. In the* ***non-OECD****, oil demand growth is also revised slightly lower in 2019, with significant downward revisions during 2Q19 and 3Q19, counterbalanced by positive revisions in 4Q19. The downward revisions mainly reflect slower momentum in Other Asia, particularly in India, during 2Q19 and 3Q19, while higher-than-expected demand from the Middle East during 2H19 supported upward revisions.*

World oil demand in 2020 *is foreseen to increase by 1.22 mb/d, up by 0.14 mb/d from last month's report, to average 100.98 mb/d for the year. Improved trade sentiment between the US and China, as well as an improved economic outlook in various economies — coupled with a low baseline — propelled the upward revision. In the* ***OECD****, oil demand is estimated to increase by 0.09 mb/d, higher than last month's projections. OECD Americas is projected to lead oil demand growth in the region, supported by steady NGL and middle distillate demand. In the* ***non-OECD****, oil demand is foreseen rising by 1.13 mb/d despite Chinese oil demand growth projected to be less than a year earlier. However, this will be more than offset by improved oil requirements in Other Asia, Latin America and the Middle East compared with 2019.*

World oil demand in 2019 and 2020

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

							Change 2019/18	
	2018	1Q19	2Q19	3Q19	4Q19	2019	Growth	%
Americas	25.60	25.19	25.32	26.07	26.16	25.69	0.09	0.33
of which US	*20.82*	*20.65*	*20.66*	*21.25*	*21.17*	*20.94*	*0.11*	*0.54*
Europe	14.33	14.08	14.22	14.71	14.29	14.33	0.00	-0.03
Asia Pacific	8.08	8.50	7.61	7.68	8.12	7.97	-0.10	-1.27
Total OECD	**48.01**	**47.76**	**47.15**	**48.45**	**48.57**	**47.99**	**-0.02**	**-0.04**
Other Asia	13.64	13.91	13.96	13.56	14.21	13.91	0.27	1.99
of which India	*4.73*	*5.03*	*4.75*	*4.49*	*5.14*	*4.85*	*0.12*	*2.57*
Latin America	6.53	6.35	6.58	6.87	6.49	6.57	0.05	0.71
Middle East	8.12	8.25	7.87	8.67	8.00	8.20	0.08	0.93
Africa	4.33	4.45	4.42	4.36	4.50	4.43	0.10	2.31
Total DCs	**32.62**	**32.96**	**32.84**	**33.46**	**33.19**	**33.11**	**0.49**	**1.52**
FSU	4.76	4.70	4.68	4.96	5.04	4.84	0.09	1.84
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"	**18.21**	**18.08**	**18.58**	**18.69**	**19.31**	**18.66**	**0.45**	**2.50**
Total world	**98.84**	**98.79**	**98.56**	**100.60**	**101.07**	**99.77**	**0.93**	**0.94**
Previous estimate	98.82	98.76	98.76	100.69	100.95	99.80	0.98	0.99
Revision	0.01	0.04	-0.20	-0.09	0.12	-0.03	-0.05	-0.05

*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	Change 2020/19 %
Americas	25.69	25.42	25.52	26.25	26.35	25.89	0.20	0.77
of which US	*20.94*	*20.85*	*20.82*	*21.39*	*21.34*	*21.10*	*0.17*	*0.80*
Europe	14.33	14.03	14.19	14.69	14.27	14.30	-0.03	-0.21
Asia Pacific	7.97	8.41	7.52	7.60	8.05	7.90	-0.08	-0.99
Total OECD	**47.99**	**47.86**	**47.23**	**48.54**	**48.67**	**48.08**	**0.09**	**0.18**
Other Asia	13.91	14.27	14.32	13.94	14.60	14.28	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	6.46	6.70	6.99	6.60	6.69	0.11	1.75
Middle East	8.20	8.34	7.96	8.78	8.12	8.30	0.11	1.28
Africa	4.43	4.53	4.52	4.46	4.59	4.52	0.09	2.00
Total DCs	**33.11**	**33.60**	**33.49**	**34.17**	**33.92**	**33.79**	**0.68**	**2.05**
FSU	4.84	4.80	4.78	5.07	5.15	4.95	0.11	2.19
Other Europe	0.76	0.76	0.72	0.76	0.85	0.77	0.01	1.54
China	13.06	12.93	13.52	13.30	13.79	13.39	0.33	2.53
Total "Other regions"	**18.66**	**18.50**	**19.02**	**19.12**	**19.80**	**19.11**	**0.45**	**2.40**
Total world	**99.77**	**99.95**	**99.73**	**101.83**	**102.38**	**100.98**	**1.22**	**1.22**
Previous estimate	99.80	99.78	99.79	101.78	102.12	100.88	1.08	1.08
Revision	-0.03	0.18	-0.06	0.05	0.26	0.11	0.14	0.14

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

OECD

OECD Americas

US

The most recently released data for October implies a small increase of around 0.04 mb/d y-o-y in **US oil demand**, substantially lower than anticipated based on previously available weekly data and the earlier months of 2019. As during the whole of 2019, the bulk of growth originated in requirements for lighter petroleum products, especially those utilized as feedstock for the petrochemical industry. In line with a robustly growing economy and coupled with healthy travelling activities, jet kerosene demand grew by roughly 3% y-o-y, while demand for road transportation fuels, notably gasoline, also remained in positive territory compared with the same month in 2018.

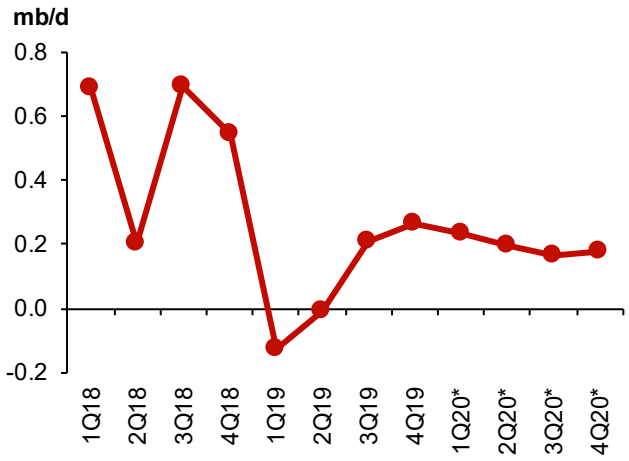
Table 4 - 3: US oil demand, tb/d

	Oct 19	Oct 18	Change 2019/18 tb/d	Change 2019/18 %
LPG	2,992	2,773	219	7.9
Naphtha	139	267	-128	-47.9
Gasoline	9,337	9,294	43	0.5
Jet/kerosene	1,728	1,676	52	3.1
Diesel oil	4,222	4,348	-126	-2.9
Fuel oil	320	273	47	17.2
Other products	2,325	2,394	-69	-2.9
Total	**21,063**	**21,025**	**38**	**0.2**

Sources: US EIA and OPEC Secretariat.

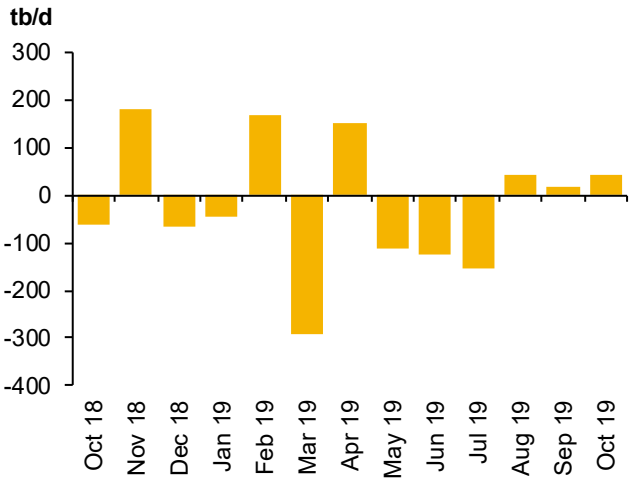
Demand for naphtha shrunk compared with the historical normal and the same month in 2018, as did that for heating oil, as a result of warmer weather. This partially offset the overall oil demand increase. With monthly data for 10 months of 2019 and preliminary weekly data for November and December, 2019 US oil demand is estimated to have grown by approximately 0.2 mb/d or 0.8% y-o-y, in line with overall economic momentum in the country. The bulk of additionally required volumes came from the petrochemical sector, which enjoys a particularly well-supported environment as a result of growing domestic oil and natural gas production providing feedstock. Growth in jet kerosene demand was particularly favoured by a healthy economy, while sluggish gasoline demand related to increasing efficiencies, fuel substitution and changing driving patterns in large parts of the country.

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



*Note: * 1Q20-4Q20 = Forecast.*
Source: OPEC Secretariat.

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



Sources: US EIA and OPEC Secretariat.

The outlook for 2020 US oil demand depends largely on developments in the US economy, the degree of substitution and the oil price level, with risks being assessed as balanced.

Canada

The latest available **Canadian** data for October implied slightly growing oil demand compared with the same month in 2018. Demand for LPG, jet kerosene, diesel and residual fuel oil rose y-o-y, while gasoline and naphtha requirements fell. Projections for Canadian oil demand in 2020 foresee slight growth y-o-y, with risks being balanced.

Mexico

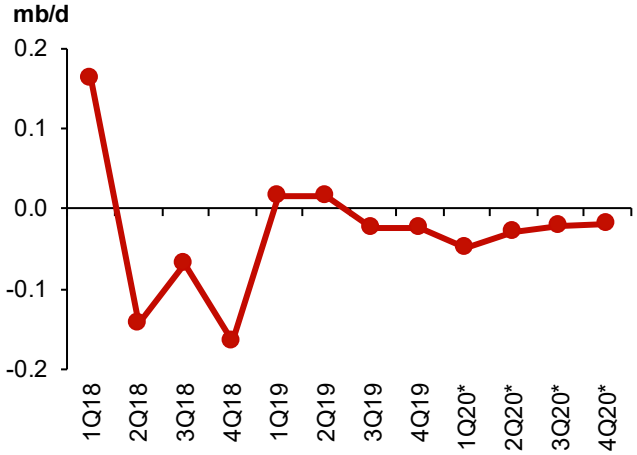
In **Mexico**, November oil demand decreased sharply, y-o-y. Losses in demand for gasoline and diesel have been only partly dampened by growing demand for naphtha. According to data for 11 months of 2019, Mexican oil demand seemed to slightly decline, compared with the same period in 2018. Naphtha and diesel usage implied gains, which have been more than offset by falling requirements in all other petroleum product categories, notably LPG and gasoline. Mexican oil demand is forecast to grow only slightly in 2020, with risks being skewed to the downside, primarily depending on the country's economy and the degree of fuel substitution with other energy commodities.

In 2019, **OECD Americas oil demand** is estimated to have grown by 0.09 mb/d compared with 2018. In 2020, OECD Americas oil demand is projected to gain an additional 0.20 mb/d compared with 2019.

OECD Europe

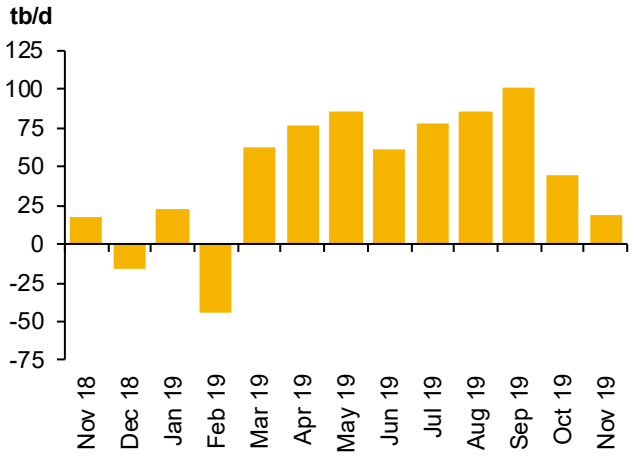
Following gains in September, **European oil demand** fell in October y-o-y, as a result of weak naphtha and residual fuel oil requirements. Falling naphtha demand originated in the region's major petrochemical hubs, Germany and the Netherlands, while weaker residual fuel oil demand reflects fuel substitution. Colder weather during October, compared with the same month in 2018 and the historical normal, moderated declines in heating oil demand.

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



*Note: * 1Q20-4Q20 = 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.

Demand for transportation fuels, notably LPG, gasoline, jet kerosene and diesel rose in October. Within the region, oil demand grew in the UK, Italy, Poland, Turkey and Sweden, while it fell in Germany, France the Netherlands, Belgium and the majority of other countries. The region's road transportation fleet is a key oil demand indicator, which has been particularly supported by the low oil price environment, calling for rising diesel and gasoline requirements during the most recent years. However, 2019 is estimated to have been a declining year for all major auto markets in the region, also implying less road transportation oil usage. Early indications for November oil demand imply slight losses of approximately 0.01 mb/d y-o-y in Germany, France, Italy and the UK – the European Big 4 oil consumers. Oil demand in Germany and Italy is estimated to have declined, while oil requirements in France and the UK grew, y-o-y. The outlook for the region's oil demand in 2020 continues to decline, with risks pointing towards the downside and relating to the structure of oil demand in the region and the associated uncertainties, mainly efficiencies, fuel substitution and the oil price environment. Due to high taxation on oil usage in the region, the latter largely impacts European oil demand indirectly by influencing the overall economy.

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

			Change 2019/18	
	Nov 19	Nov 18	tb/d	%
LPG	402	410	-8	-2.0
Naphtha	519	596	-77	-12.9
Gasoline	1,184	1,178	6	0.5
Jet/kerosene	780	788	-8	-1.0
Diesel oil	3,404	3,335	69	2.1
Fuel oil	193	214	-21	-10.0
Other products	623	627	-4	-0.6
Total	**7,105**	**7,148**	**-43**	**-0.6**

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

OECD Europe oil demand for 2019 is estimated to have remained stagnant compared with 2018, while 2020 oil demand is projected to fall by 0.03 mb/d.

OECD Asia Pacific

Japan

As per preliminary data from the Japanese Ministry of Economy Trade, and Industry (METI), **Japanese oil demand** is estimated to have decreased by 0.08 mb/d in November y-o-y, with smaller losses in volume than seen in previous months.

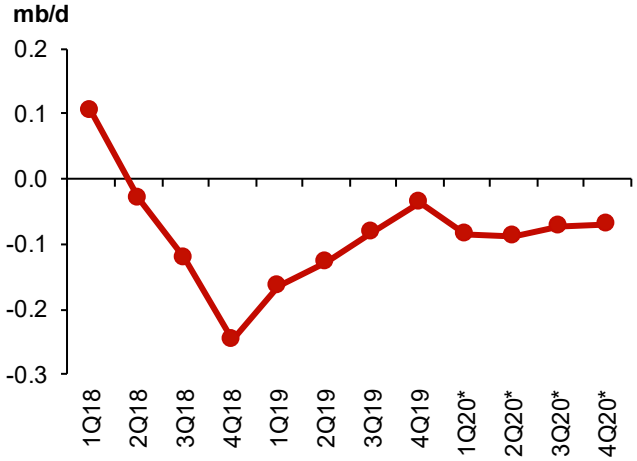
Table 4 - 5: Japan's domestic sales, tb/d

	Nov 19	Nov 18	Change 2019/18 tb/d	Change 2019/18 %
LPG	343	372	-29	-7.8
Naphtha	780	840	-60	-7.1
Gasoline	842	847	-5	-0.6
Jet/kerosene	597	555	42	7.6
Diesel oil	785	804	-19	-2.4
Fuel oil	244	248	-4	-1.6
Other products	354	360	-6	-1.6
Total	**3,945**	**4,026**	**-81**	**-2.0**

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

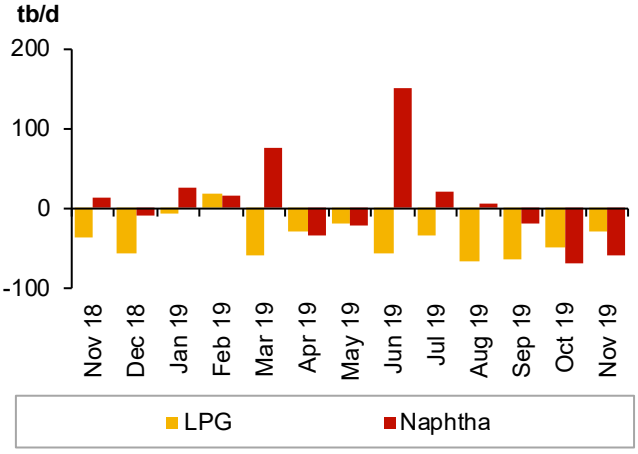
Demand fell for most of the main petroleum product categories, particularly for naphtha and LPG, while jet kerosene and diesel requirements rose y-o-y and partly offset overall losses. Fossil fuel use for electricity generation contracted less in November y-o-y, as the month was substantially colder than the same month in 2018. With data available for 11 months, Japanese oil demand for 2019 is estimated to have sharply declined by almost 0.14 mb/d, compared with the same period in 2018, with only demand for naphtha and diesel showing slight growth.

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



*Note: * 1Q20-4Q20 = 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.

For 2020, Japanese oil demand is forecast to decline further, with risks skewed to the downside.

South Korea

In **South Korea**, October oil demand increased y-o-y; almost all main petroleum product category requirements rose, particularly those related to petrochemical activities, such as LPG and naphtha, as well as gasoline and diesel. Jet fuel and residual fuel oil demand fell slightly y-o-y, slightly offsetting overall gains. The outlook for South Korean oil demand during 2020 remains positive, mainly as a result of positive expectations for the country's economy and the growing petrochemical industry.

OECD Asia Pacific oil demand for 2019 is estimated to have contracted by 0.10 mb/d. This downward trend is forecast to continue in 2020 by 0.08 mb/d.

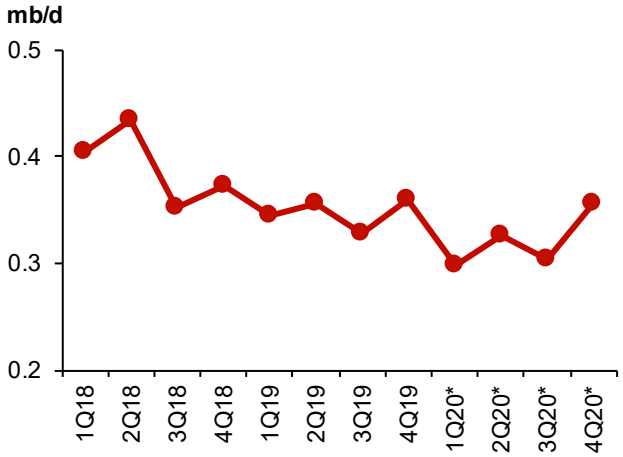
Non-OECD

China

In **China**, November 2019 oil demand increased by around 0.35 mb/d, driven by healthy increases in light distillates.

Oil demand was characterized by a better-than-anticipated performance by LPG, naphtha and jet/kerosene, largely as a result of expansion in the petrochemical sector and healthy air travel activity. LPG demand surged amid new expansions in the petrochemical sector and healthy petrochemical margins. LPG recorded gains of around 0.20 mb/d compared with November 2018. Jet/kerosene, particularly jet fuel, also saw strong growth in November, adding a healthy 0.10 mb/d y-o-y amid improvement in the aviation sector. According to the Chinese National Bureau of Statistics and Haver Analytics, the country's passenger travel increased by nearly 6% compared with November 2018 and in cumulative terms, with data from January until November 2019, the indicator added around 8% in 2019, supporting increases in jet fuel requirements.

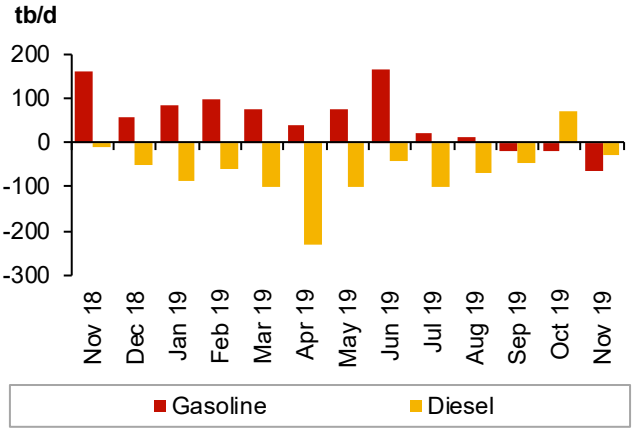
Graph 4 - 7: Changes in China's apparent oil demand, y-o-y change



*Note: * 1Q20-4Q20 = Forecast.*
Source: OPEC Secretariat.

On the other hand, gasoline posted some decline for the third consecutive month, dipping by around 0.06 mb/d y-o-y, reflecting slower momentum in car sales data. According to statistics and analysis from the China Passenger Car Association, sales of passenger cars reached 20.8 million units, 5% lower y-o-y. However, within car segments, sport utility vehicles (SUVs) recorded positive gains, adding around 5% y-o-y, which was heavily outweighed by hefty declines in the multi-purpose vehicles (MPVs) segment, which decreased by nearly 17% y-o-y. Year-to-date, data suggested that passenger car sales in China dropped by nearly 20% compared with the same period in 2018. Similarly, fuel oil and diesel consumption weakened by 0.11 mb/d and 0.03 mb/d y-o-y, respectively, in light of slightly slower momentum in the manufacturing and construction sectors.

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.

Going forward, 2020 oil demand growth is foreseen to be marginally lower than in 2019, as economic activities are assumed to slightly ease. Most oil demand growth is projected to stem from petrochemical feedstock and transportation fuels. A continuation of fuel quality programmes targeting fewer emissions and fuel displacement with natural gas are also assumed in 2020 projections.

For 2019, Chinese oil demand is projected to increase by 0.35 mb/d, while oil demand in 2020 is projected to increase again by 0.33 mb/d.

Other Asia

India

Oil demand in India increased strongly in November by 0.51 mb/d y-o-y, marking the strongest level of growth since March 2016, according to latest data from India's Petroleum Planning and Analysis Cell (PPAC). This positive development came despite cooling macroeconomic indicators and following sluggish performance up to October 2019.

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

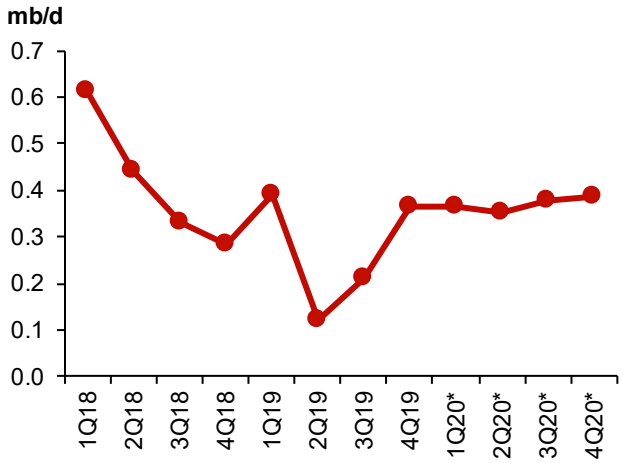
	Nov 19	Nov 18	Change 2019/18 tb/d	Change 2019/18 %
LPG	981	795	187	23.5
Naphtha	328	320	8	2.5
Gasoline	645	590	54	9.2
Jet/kerosene	273	288	-16	-5.5
Diesel oil	2,050	1,885	166	8.8
Fuel oil	269	275	-6	-2.0
Other products	834	715	118	16.5
Total	**5,380**	**4,869**	**512**	**10.5**

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

Total oil consumption reached 5.38 mb/d in November, the highest level of total demand ever recorded. Demand was strong across all petroleum products, with the exception of jet/kerosene and residual fuel oil. LPG and diesel noted healthy growth of 0.19 mb/d and 0.17 mb/d y-o-y, respectively. LPG was supported by positive developments in the residential sector and increasing LPG connections in many parts of the country. Diesel, a product largely influenced by economic development, recorded significant gains after three months of declines, due to slower manufacturing activity and a heavy monsoon season in 3Q19.

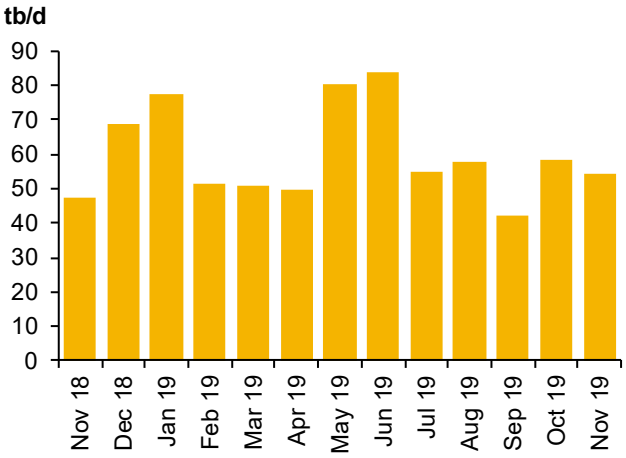
In fact, diesel had the largest share of total oil demand with 2.1 mb/d in November, exceeding the 2 mb/d mark for the first time, supported by strong requirements for infrastructure filling rather than end-user demand. Previously, 3Q19 y-o-y diesel demand growth was flat, compared with y-o-y growth of around 0.05 mb/d in 1H19. Additionally, the baseline of comparison in November 2018 was low, in light of slower construction activities and a general decrease in overall economic development.

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



*Note: * 1Q20-4Q20 = 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.

Diesel demand growth over the last five years averaged 0.06 mb/d, while year-to-date in 2019 growth stands at around 0.03 mb/d. Gasoline was also higher y-o-y in November, adding around 0.05 mb/d compared with the same period in 2018, despite lower vehicle sales. Passenger vehicle sales, however, only eased by around 1%, while SUV sales increased by more than 30% y-o-y.

Indonesia

The latest available data for October in **Indonesia** suggests increasing requirements for most products, with gasoline and diesel increasing the most by 0.02 mb/d and 0.01 mb/d y-o-y, respectively. Total consumption reached 1.60 mb/d with an increase of around 0.01 mb/d compared with the same month in 2018.

Thailand

In **Thailand**, the latest available data for the month of October highlights increasing oil demand by 0.02 mb/d. Most of the increases appeared in diesel, followed by gasoline, on the back of higher consumption in the industrial and transportation sectors.

Philippines

In the **Philippines**, oil demand rose in October by around 0.02 mb/d y-o-y, as transportation fuels – including gasoline, diesel fuel and jet fuel – recorded steady gains, while LPG and naphtha declined.

Looking forward, 2020 **oil demand in Other Asia** is anticipated to be affected by economic development activities in India, as a major consuming nation in the region. For other countries within Other Asia, major assumptions are linked to the continuation of healthy economic growth, in addition to steady retail prices. Indonesia, Thailand, Singapore and Malaysia are anticipated to contribute positively to oil demand growth in 2020. Light and middle distillates are expected to be the leading products for oil demand growth in 2020.

Other Asia's oil demand is estimated to have grown by 0.27 mb/d in 2019. As for 2020, oil demand is forecast to grow by 0.37 mb/d compared with 2019.

Latin America

Brazil

In **Brazil**, November oil demand growth recorded positive increases for the third consecutive month. Oil demand increased by 0.07 mb/d y-o-y in November amid better-than-expected industrial activity in the country.

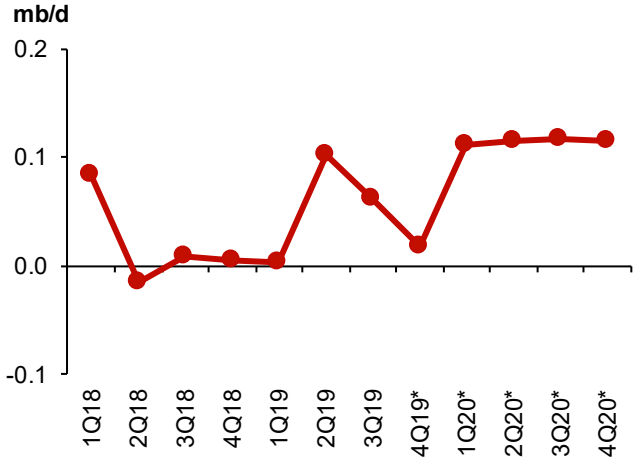
Table 4 - 7: Brazil's oil demand*, tb/d

			Change 2019/18	
	Nov 19	Nov 18	tb/d	%
LPG	224	230	-6	-2.4
Naphtha	148	147	1	0.7
Gasoline	689	634	56	8.8
Jet/kerosene	120	124	-4	-3.4
Diesel oil	1,008	993	14	1.5
Fuel oil	74	76	-2	-2.9
Other products	495	487	8	1.6
Total	**2,758**	**2,691**	**67**	**2.5**

*Note: * = Inland deliveries.*
Sources: JODI, Agencia Nacional do Petroleo, Gas Natural e Biocombustiveis and OPEC Secretariat.

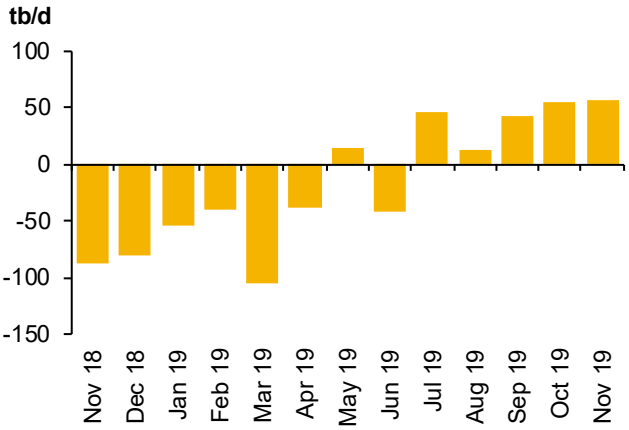
Road transportation fuels gasoline and ethanol recorded gains, with gasoline increasing by a healthy 0.06 mb/d, largely the result of a low baseline in 2018. Gasoline remained priced higher than ethanol, providing flexibility for drivers to switch between the two fuels. Additionally, ethanol recorded soft gains during the month, adding 0.01 mb/d. Gasoline was priced at 4.41 reais per liter, while ethanol was priced at 2.97 reais per liter.

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.

Diesel demand remained in positive territory for the fifth consecutive month on the back of improvements in the manufacturing PMI of the country, which registered 52.8 in November, clearly above the 50-point threshold, and remaining in expansion territory. Fuel oil demand was flat y-o-y with some support stemming from the power generation sector.

Argentina

Oil consumption in **Argentina** was positive during the month of October, gaining around 0.01 mb/d compared with the same month in 2018. All products recorded gains with the exception of jet/kerosene. Light distillates – LPG and naphtha – increased most in October, adding more than 8% y-o-y each. In the transportation sector, gasoline also registered steady gains, adding around 3% y-o-y. Lastly, fuel oil has posted notable increases of 3% y-o-y. Total consumption reached 0.67 mb/d in October.

Ecuador

The latest **Ecuadorian** data for November shows flat oil requirements, compared with the same month last year. Gasoline and fuel oil requirements declined y-o-y, while residual fuel oil and the other products category saw positive growth.

Looking forward, **Latin American oil demand** for 2020 is forecast unchanged from the previous month – carefully optimistic. Projected oil demand growth is strongly dependent on economic development throughout the year, primarily in Brazil and Argentina. Oil demand growth is foreseen improving from current expectations in 2019. Brazil is anticipated to be the main contributor to growth, with diesel, followed by gasoline and LPG, projected to lead demand growth in 2020, fuelling the industrial and transportation sectors.

Latin American oil demand is estimated to have firmly increased by 0.05 mb/d in 2019. For 2020, oil demand growth is forecast at 0.11 mb/d.

Middle East

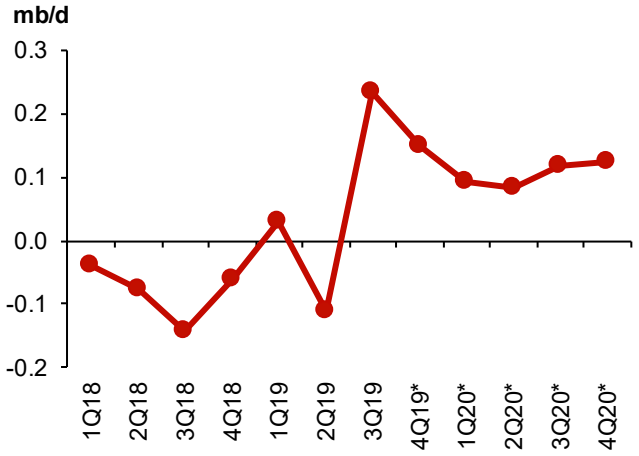
Saudi Arabia

After four months of significant growth in **Saudi Arabian** oil requirements, oil demand was broadly flat in November, as positive development in middle distillates – jet/kerosene and diesel, as well as crude oil for power generation demand – were almost entirely offset by declines in light distillates and residual fuel oil demand. Middle distillates posted steady gains over the past four months. A similar trend has been observed during the month of November, with jet/kerosene and diesel each adding around 0.02 mb/d y-o-y. Improvements in air passenger traffic data, positive developments in the construction sector y-o-y and the

rather low baseline of comparison have all contributed positively to those increases. Cement deliveries increased by around 18% y-o-y during the month of November.

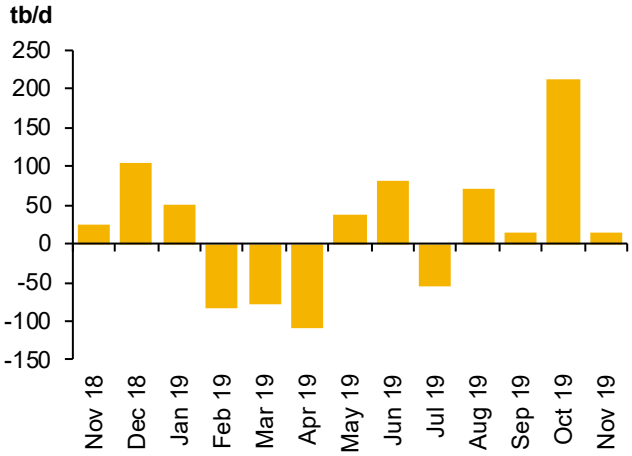
Additionally, crude oil for burning in the power generation sector also increased slightly in November by around 0.01 mb/d y-o-y, traditionally easing towards the end of the year. On the other hand, petrochemical feedstock LPG, registered a decline of around 0.01 mb/d y-o-y, while residual fuel oil dipped by around 0.03 mb/d as a result of lower requirements from the power generation sector.

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



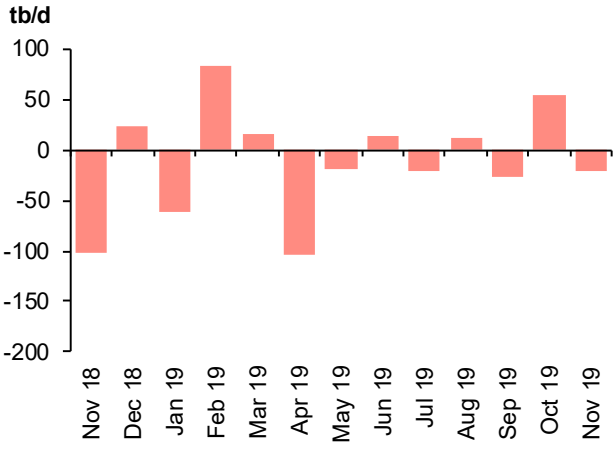
Sources: Joint Organisations Data Initiative, direct communication and OPEC Secretariat.

Total oil demand in Saudi Arabia registered around 2.1 mb/d in November. Oil demand has declined in Saudi Arabia over the past three years and overall 2019 oil demand performance will be dependent on developments during the month of December. Year-to-date, with data up to November, oil demand is estimated to have risen by around 0.04 mb/d, compared with the same period in 2018.

Iraq

In November, **Iraq's** oil demand flipped into negative territory after increasing in October. It contracted by as much as 0.08 mb/d y-o-y with total demand, in absolute terms, now at around 0.67 mb/d after peaking at 0.76 mb/d in October. This decline marks the sixth monthly decline in 2019, leading to a marginal year-to-date drop in petroleum product requirements of around 0.01 mb/d compared with the same period a year earlier. All product categories registered declines in November, with residual fuel oil and crude oil, mainly for power generation requirements, dropping the most by 0.04 mb/d and 0.02 mb/d y-o-y, respectively, in line with trends in the recent past. Those declines are mainly attributed to substitution programmes in the power generation sector. Diesel was flat in November, in line with slower-than-expected industrial activity.

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



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

Looking forward, 2020 **oil demand growth in the Middle East** is projected to be at the same level as indicated in the previous month's report. Economic activities are assumed to gain momentum over 2019 levels, contributing positively to improvements in regional oil demand requirements. Demand is foreseen to be increasing in Saudi Arabia, the largest consumer in the region, with transportation fuels as well as petrochemical feedstock projected to contribute to product growth. On the other hand, geopolitical concerns are anticipated to have a negative impact on oil consumption in certain regions.

For 2019, Middle East oil demand is estimated to have increased by 0.08 mb/d, while oil demand in 2020 is projected to grow by 0.11 mb/d.

World Oil Supply

*The **non-OPEC oil supply** growth estimate for **2019** is revised up by 0.04 mb/d from the previous MOMR and is now estimated at 1.86 mb/d, to average 64.34 mb/d. The upward revisions to production data from the US, Norway, Australia, Indonesia, Thailand, Argentina and Brazil are partially offset by minor downward production adjustments in the UK, Denmark, India, Qatar, and Ghana. US liquids output y-o-y growth is revised up to average 1.66 mb/d. The US, Brazil, China, Canada, Russia, Australia and the UK are estimated to have been the key drivers of growth in 2019, while Mexico and Norway have seen the largest declines.*

*The **non-OPEC oil supply growth** forecast for **2020** is also revised up by 0.18 mb/d from last month's assessment and is projected to grow by 2.35 mb/d to average 66.68 mb/d. Large upward revisions in Norway, Mexico and Guyana's oil supply forecast are partially offset by downward revisions in the supply forecast of the US, other OECD Europe, and the Sudans. US oil supply growth forecast for the current year is revised down by 76 tb/d, to represent y-o-y growth of 1.43 mb/d. The US, Norway, Brazil, Canada, Guyana, and Australia are expected to be the main growth drivers in 2020, while Indonesia, Thailand, Egypt and Colombia are forecast to see the largest declines.*

***OPEC NGLs and non-conventional liquids** production in 2019 is estimated to have grown 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 December, **OPEC crude oil production** fell by 161 tb/d m-o-m to average 29.44 mb/d, according to secondary sources. As a result, preliminary data indicates that **global oil supply** decreased in December by 0.06 mb/d m-o-m to average 100.28 mb/d, and down by 0.61 mb/d y-o-y. Global oil supply in 2019 declined by 0.10 mb/d compared to 2018. OPEC crude oil production in 2019 declined by 2.0 mb compared to a year earlier. With non-OPEC supply growth at 1.86 mb/d, if there had not been an agreement between OPEC and 10 non-OPEC countries, the market would be considerably oversupplied in 2019.*

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

Region	2019	Change 2019/18	2020	Change 2020/19
OECD Americas	25.69	1.61	27.18	1.49
OECD Europe	3.72	-0.12	4.00	0.27
OECD Asia Pacific	0.49	0.08	0.56	0.07
Total OECD	**29.91**	**1.58**	**31.74**	**1.83**
Other Asia	3.43	-0.13	3.38	-0.04
Latin America	5.41	0.22	5.78	0.37
Middle East	3.21	0.00	3.26	0.04
Africa	1.51	0.00	1.53	0.02
Total DCs	**13.56**	**0.09**	**13.95**	**0.39**
FSU	14.37	0.07	14.42	0.06
Other Europe	0.12	0.00	0.12	-0.01
China	4.10	0.09	4.12	0.02
Non-OPEC production	62.06	1.83	64.35	2.29
Processing gains	2.28	0.03	2.33	0.05
Non-OPEC supply	**64.34**	**1.86**	**66.68**	**2.35**

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

Main monthly revisions to the non-OPEC supply growth forecast

Non-OPEC supply in 2019 was revised up by 40 tb/d and is now estimated to have grown by 1.86 mb/d and average 64.34 mb/d for the year.

Non-OPEC supply growth in 2020, was also revised up by 180 tb/d, mainly due to upward revisions in the supply forecasts of Mexico and Norway, along with new supply volumes from Guyana. These upward revisions were partially offset by downward revisions in the US, other OECD Europe, the Sudans and Russia.

The **US** supply growth estimate for 2019 was revised up by 46 tb/d to show annual growth of 1.66 mb/d compared with last month's assessment, due to higher-than-expected output in October and a reassessment of the previous forecasts for November and December. Therefore, the supply forecast for 4Q19 was revised up by 195 tb/d to average 19.07 mb/d. However, the US oil supply growth forecast for 2020 was revised down by 76 tb/d.

Mexico's oil supply forecast for 2020 was revised up by 86 tb/d to show a lesser contraction of 0.04 mb/d.

Norway's oil production in 4Q19 was also larger than expected, due to the quick ramp-up of the Johan Sverdrup field. Hence, an upward revision to 4Q19 by 85 tb/d led to an upward revision of annual supply growth by 21 tb/d. Furthermore, the field's projected higher production level in 1Q20 led to a production change in all quarters, which necessitated a greater upward revision in Norway's y-o-y oil supply growth by 79 tb/d.

The **UK's** oil supply growth for 2019 was revised down by 21 tb/d, following downward revisions in official data for 2Q19 and 3Q19 by 39 tb/d and 41 tb/d, respectively. However, the oil supply growth forecast for 2020 was revised up by 21 tb/d due to a lower base.

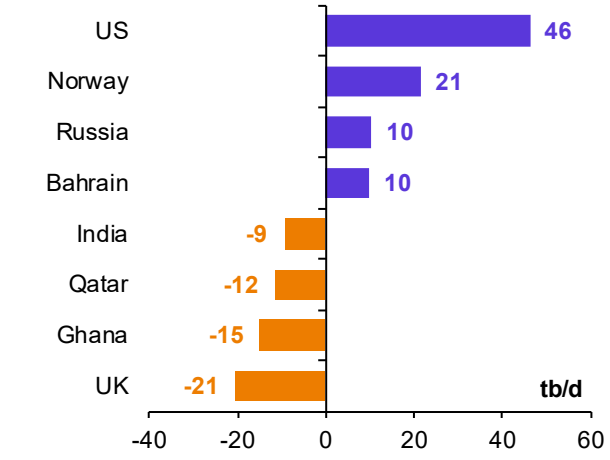
Australia's annual oil supply estimate for 2019 was also revised up by 8 tb/d due to an upward revision in 4Q19 oil supply of 33 tb/d.

More-than-expected supply in 4Q19 in **Argentina** led to an upward revision not only in the supply growth estimate for 2019 by 9 tb/d, but also to the forecast for 2020 by 20 tb/d.

Through the start-up of oil production in **Guyana**, the non-OPEC oil supply forecast for 2020 rose by 94 tb/d.

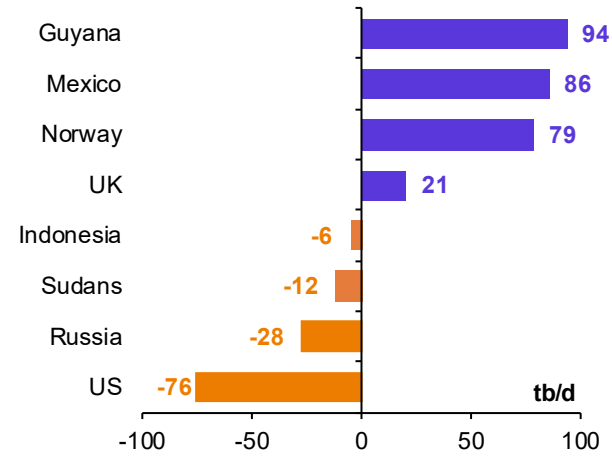
Finally, **Russia's** oil supply in 4Q19 led to an upward revision of 41 tb/d in the same quarter, which revised Russia's 2019 supply growth y-o-y higher by 10 tb/d. However, due to downward adjustments in 1Q20 production by 71 tb/d to meet Declaration of Cooperation commitments, Russia's supply growth forecast in 2020 was revised down by 28 tb/d (***Graph 5 – 1 and Graph 5 - 2***).

Graph 5 - 1: Monthly oil market report Jan 20/Dec 19 revisions in 2019* annual supply changes



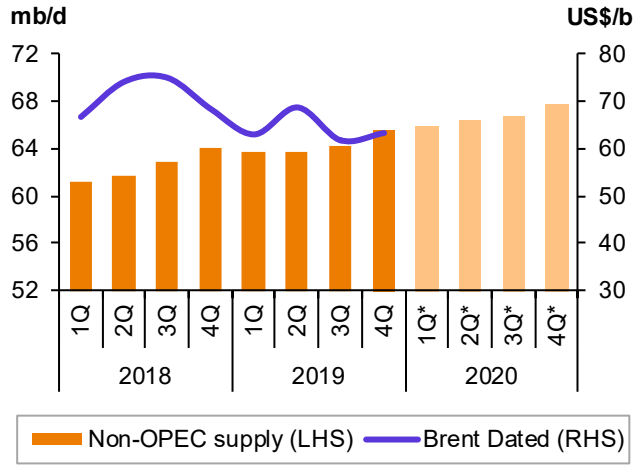
*Note: * 2019 = Estimate.*
Source: OPEC Secretariat.

Graph 5 - 2: Monthly oil market report Jan 20/Dec 19 revisions in 2020* annual supply changes



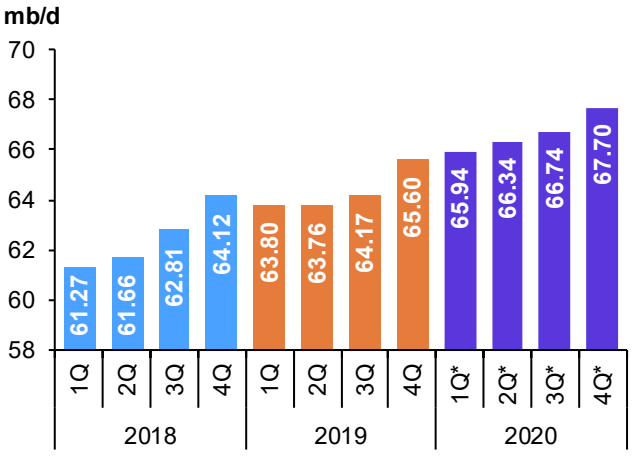
*Note: * 2020 = Forecast.*
Source: OPEC Secretariat.

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



*Note: * 1Q20-4Q20 = Forecast.*
Source: OPEC Secretariat.

Graph 5 - 4: Non-OPEC quarterly oil supply



*Note: * 1Q20-4Q20 = Forecast.*
Source: OPEC Secretariat.

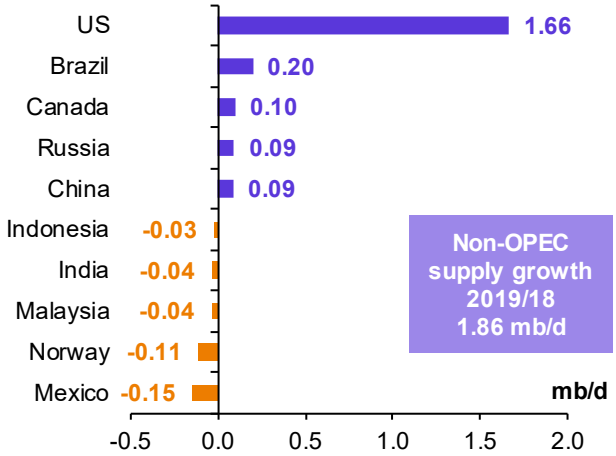
Non-OPEC oil supply in 2019 and 2020

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	25.68	26.43	25.69	1.61	6.70
of which US	*16.71*	*17.78*	*18.29*	*18.36*	*19.07*	*18.38*	*1.66*	*9.96*
Europe	3.84	3.84	3.57	3.55	3.93	3.72	-0.12	-3.00
Asia Pacific	0.41	0.43	0.48	0.51	0.55	0.49	0.08	20.52
Total OECD	**28.33**	**29.34**	**29.64**	**29.74**	**30.90**	**29.91**	**1.58**	**5.59**
Other Asia	3.56	3.51	3.46	3.34	3.41	3.43	-0.13	-3.57
Latin America	5.19	5.17	5.25	5.53	5.68	5.41	0.22	4.17
Middle East	3.21	3.22	3.21	3.21	3.21	3.21	0.00	0.04
Africa	1.50	1.51	1.51	1.51	1.49	1.51	0.00	0.18
Total DCs	**13.46**	**13.41**	**13.43**	**13.59**	**13.79**	**13.56**	**0.09**	**0.70**
FSU	14.29	14.55	14.16	14.34	14.41	14.37	0.07	0.51
of which Russia	*11.35*	*11.53*	*11.36*	*11.42*	*11.45*	*11.44*	*0.09*	*0.82*
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**	**18.63**	**18.59**	**0.16**	**0.86**
Total non-OPEC production	**60.22**	**61.52**	**61.48**	**61.90**	**63.32**	**62.06**	**1.83**	**3.05**
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**	**63.76**	**64.17**	**65.60**	**64.34**	**1.86**	**2.98**
Previous estimate	62.47	63.80	63.81	64.25	65.31	64.30	1.82	2.92
Revision	0.00	0.00	-0.05	-0.08	0.29	0.04	0.04	0.06

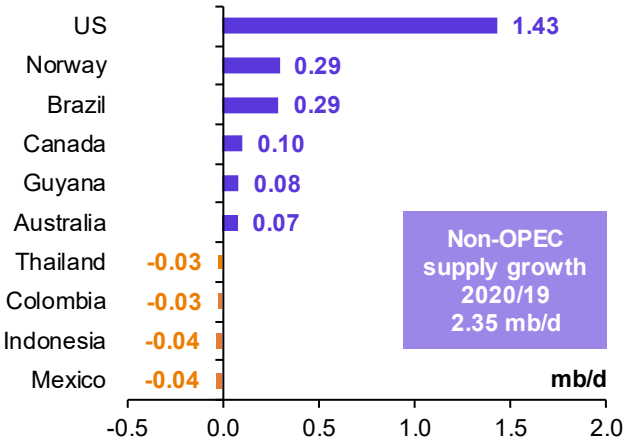
*Note: * 2019 = Estimate.*
Totals may not add up due to independent rounding.
Source: OPEC Secretariat.

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

							Change 2020/19	
	2019	1Q20	2Q20	3Q20	4Q20	2020	Growth	%
Americas	25.69	26.71	26.96	27.39	27.68	27.18	1.49	5.80
of which US	*18.38*	*19.23*	*19.78*	*19.99*	*20.21*	*19.81*	*1.43*	*7.77*
Europe	3.72	4.03	3.88	3.93	4.15	4.00	0.27	7.35
Asia Pacific	0.49	0.55	0.54	0.58	0.58	0.56	0.07	14.22
Total OECD	**29.91**	**31.29**	**31.38**	**31.89**	**32.41**	**31.74**	**1.83**	**6.13**
Other Asia	3.43	3.38	3.39	3.39	3.38	3.38	-0.04	-1.31
Latin America	5.41	5.74	5.75	5.74	5.88	5.78	0.37	6.78
Middle East	3.21	3.24	3.25	3.26	3.28	3.26	0.04	1.35
Africa	1.51	1.50	1.55	1.54	1.54	1.53	0.02	1.60
Total DCs	**13.56**	**13.85**	**13.93**	**13.93**	**14.07**	**13.95**	**0.39**	**2.87**
FSU	14.37	14.23	14.45	14.37	14.65	14.42	0.06	0.40
of which Russia	*11.44*	*11.27*	*11.50*	*11.51*	*11.64*	*11.48*	*0.04*	*0.37*
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"	**18.59**	**18.47**	**18.70**	**18.59**	**18.89**	**18.66**	**0.07**	**0.38**
Total non-OPEC production	**62.06**	**63.61**	**64.01**	**64.41**	**65.37**	**64.35**	**2.29**	**3.70**
Processing gains	2.28	2.33	2.33	2.33	2.33	2.33	0.05	2.37
Total non-OPEC supply	**64.34**	**65.94**	**66.34**	**66.74**	**67.70**	**66.68**	**2.35**	**3.65**
Previous estimate	64.30	65.82	66.09	66.46	67.49	66.46	2.17	3.37
Revision	0.04	0.12	0.26	0.29	0.21	0.22	0.18	0.28

*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 have grown by 1.58 mb/d y-o-y and average 29.91 mb/d, revised up by 0.04 mb/d from last month's assessment. OECD Americas and Asia Pacific are revised up by 43 tb/d and 10 tb/d, respectively, and are now estimated to have grown by 1.61 mb/d and 0.08 mb/d, respectively, while OECD Europe was revised down by 10 tb/d and is now estimated to have declined by 0.12 mb/d.

For **2020**, forecast growth was revised up by 0.09 mb/d to 1.83 mb/d, averaging 31.74 mb/d, mainly due to a re-assessment of the production forecasts in the US and Mexico, and in Norway after a rapid production ramp-up at the Johan Sverdrup. OECD Americas, Europe and Asia Pacific are now forecast to grow by 1.49 mb/d, 0.27 mb/d and 0.07 mb/d, respectively.

OECD Americas

US

US liquids output in October (excluding processing gains) showed an increase of 0.18 mb/d m-o-m to average 18.98 mb/d, up by 1.43 mb/d y-o-y, while crude oil output increased by 0.17 mb/d m-o-m to average 12.66 mb/d, higher by 1.02 mb/d y-o-y. Production of NGLs in October has already passed the 5 mb/d level, up by 33 tb/d m-o-m, to average 5.02 mb/d, higher by 0.43 mb/d y-o-y. Preliminary indications show that the output of other non-conventional liquids, mainly ethanol, was down in October by 24 tb/d m-o-m to average 1.30 mb/d, also lower by 28 tb/d compared with a year ago. The actual production data of other non-conventional liquids has been officially reported by the US Energy Information Administration (EIA) at 1.327 mb/d for September.

The EIA's latest US monthly production information for October showed a mild increase of 171 tb/d m-o-m for crude oil production, higher by 1,024 tb/d y-o-y (including lease condensate) to average 12.66 mb/d, compared with the previous month's increase of 99 tb/d (revised up by 21 tb/d by the EIA). Onshore Lower 48 production in October grew by 140 tb/d m-o-m to average 10.26 mb/d, primarily due to increasing production from Texas and North Dakota totalling 123 tb/d.

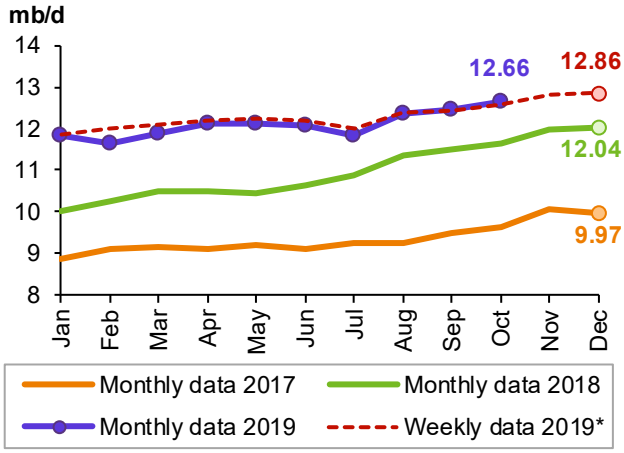
Crude oil output increased on the West Coast (PADD 5), mainly in Alaska (+26 tb/d); in the Rocky Mountains (PADD 4), mainly in Colorado (+39 tb/d); in the Midwest (PADD 2), primarily in North Dakota (+70 tb/d); and on the East Coast (PADD 1), primarily in West Virginia (+2 tb/d). On the Gulf Coast (PADD 3), total production rose by 61 tb/d m-o-m to average 8.35 mb/d particularly in Texas which showed an increase of 53 tb/d, and also in New Mexico and Gulf of Mexico (GoM).

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

State	Sep 19	Oct 19	Change Oct 19/Sep 19
Alaska	449	475	*26*
Colorado	515	554	*39*
Oklahoma	604	592	*-12*
New Mexico	979	982	*3*
North Dakota	1,404	1,474	*70*
Federal Offshore - Gulf of Mexico (GoM)	1,898	1,904	*6*
Texas	5,220	5,273	*53*
Total US crude oil production	**12,484**	**12,655**	***171***

Sources: US EIA and OPEC Secretariat.

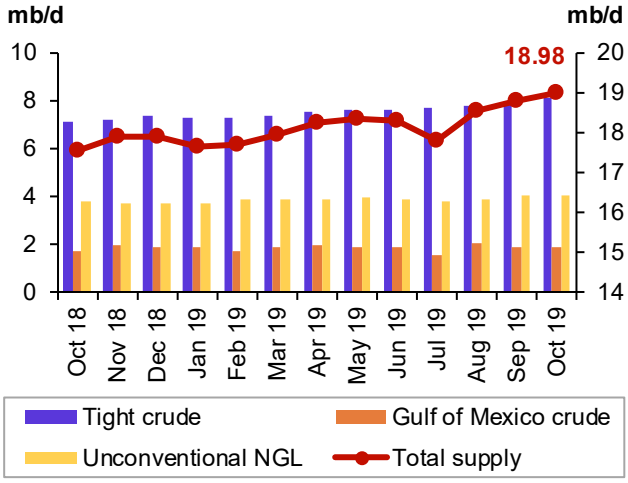
Graph 5 - 7: US monthly crude oil production in 2017-2019 vs. weekly forecast in 2019



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

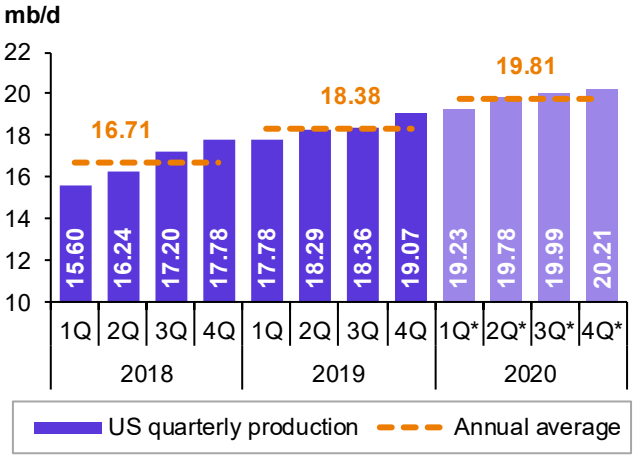
US crude oil production in 2019 is likely to have grown by 1.21 mb/d y-o-y to average 12.20 mb/d. The share of tight crude in the forecast growth of 1.21 mb/d in 2019 is estimated at 1.14 mb/d, to average 7.65 mb/d, and for the GoM is 0.13 mb/d, averaging 1.89 mb/d. Conventional crude (non-shale), including Alaska's production, is estimated to have declined by 0.07 mb/d, to average 2.66 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

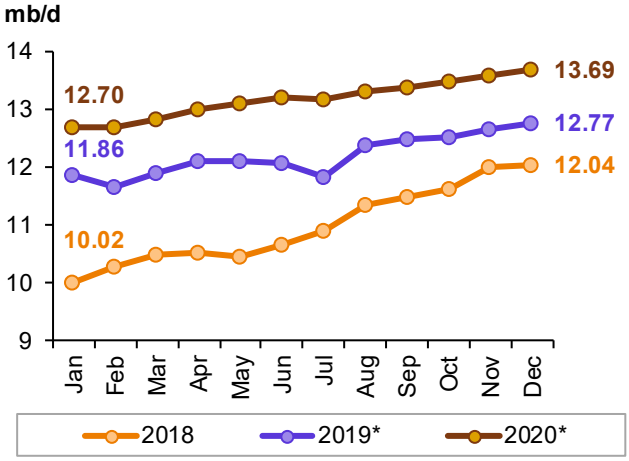


*Note: * 1Q20-4Q20 = Forecast.*
Sources: US EIA and OPEC Secretariat.

US crude oil production in 2020 is forecast to grow by 0.98 mb/d y-o-y to average 13.18 mb/d. Of this, tight crude output is forecast to increase y-o-y by 0.96 mb/d to average 8.61 mb/d, mainly in the Permian Basin. Production is continuing to increase, despite the pullback in drilling, as companies are running through their inventories of drilled but uncompleted (DUC) wells. Investment in the GoM peaked in 2014 at more than $30 billion, then declined to about half of that in 2019. However, due to lower development and operating costs, operators may move into new frontiers. Giant projects such as Shell's Appomattox — the company's largest floating platform in the GoM — which started up in May 2019 with planned production of 175 tboe/d, are key drivers for growth in 2020. Oil production from offshore fields in the GoM is expected to grow by 0.10 mb/d to average 1.99 mb/d, while Lower 48 onshore non-tight crude oil production, including from Alaska, is forecast to decline by around 0.09 mb/d to average 2.58 mb/d.

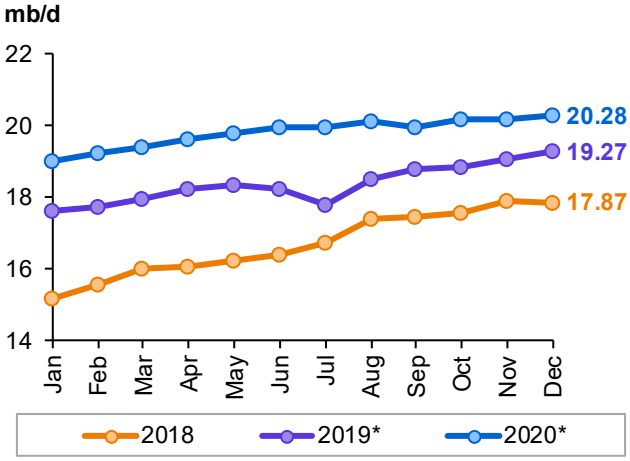
US liquids supply in 2019 is estimated to average 18.38 mb/d, representing y-o-y growth of 1.66 mb/d, revised up by 0.04 mb/d from the previous month's assessment, due to an upward revision of 195 tb/d in 4Q19. Crude oil is estimated to have grown by 1.21 mb/d, NGLs production — mainly from unconventional sources of rich gas — is estimated to have grown by 0.47 mb/d to average 4.84 mb/d, revised up by 0.04 mb/d, while other liquids output, mainly biofuels, are estimated to have declined by 0.01 mb/d y-o-y to 1.34 mb/d, revised down by 0.01 mb/d m-o-m.

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.

US liquids supply in 2020 is forecast to average 19.81 mb/d, representing y-o-y growth of 1.43 mb/d, revised down by 0.08 mb/d from the previous month's assessment. Crude oil production is forecast to grow by 0.98 mb/d to average 13.18 mb/d, while NGLs and other unconventional liquids, mainly ethanol, are projected to grow by 0.42 mb/d and 0.03 mb/d to average 5.26 mb/d and 1.37 mb/d, respectively.

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

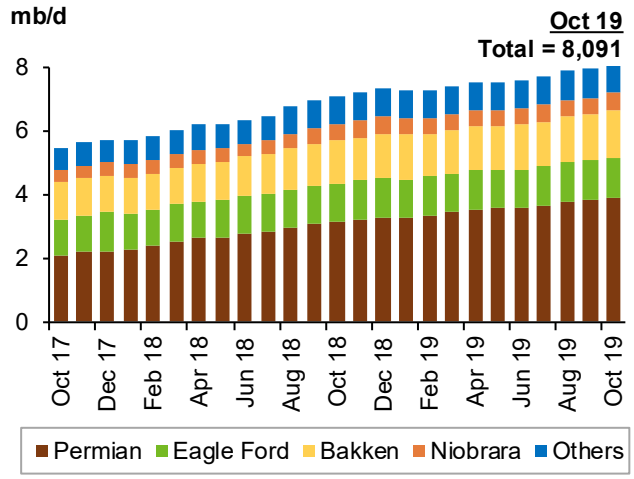
	2017	2018	Change 2018/17	2019*	Change 2019/18	2020*	Change 2020/19
Tight crude	4.96	6.51	*1.55*	7.65	*1.14*	8.61	*0.96*
Gulf of Mexico crude	1.68	1.76	*0.08*	1.89	*0.13*	1.99	*0.10*
Conventional crude oil	2.71	2.72	*0.01*	2.66	*-0.07*	2.58	*-0.09*
Unconventional NGLs	3.02	3.60	*0.57*	4.03	*0.45*	4.43	*0.40*
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*	1.34	*-0.01*	1.37	*0.03*
US total supply	**14.40**	**16.71**	***2.31***	**18.38**	***1.66***	**19.81**	***1.43***

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

US tight crude output in October increased by an estimated 136 tb/d m-o-m to average 8.09 mb/d, an increase of 1.01 mb/d y-o-y.

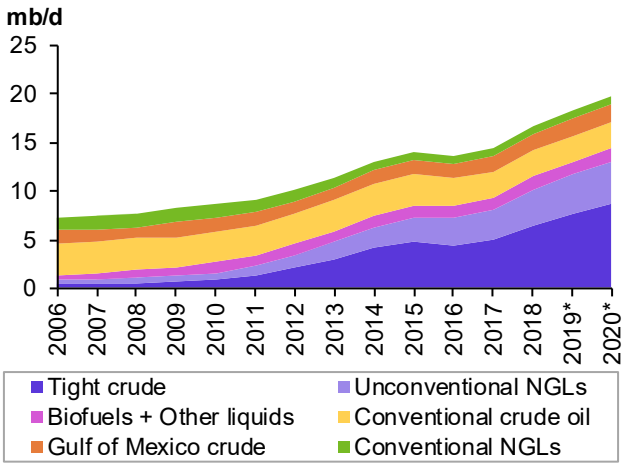
The main m-o-m growth in US tight crude output from shale and tight formations through horizontal wells came from the Permian Midland, as well as the Delaware Basin in Texas, adding a total of 43 tb/d to average 3.91 mb/d. Tight crude output in Eagle Ford was flat at 1.22 mb/d in October, while that from Bakken in North Dakota rose robustly by 70 tb/d m-o-m compared with a 40 tb/d decline in September, to average 1.48 mb/d. While production from the Niobrara shale formation in Colorado rose by 39 tb/d to average 0.57 mb/d, production from other tight plays declined by 26 tb/d in October m-o-m to average 0.91 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.

US tight crude production in 2020 is forecast to grow by 0.96 mb/d to average 8.61 mb/d, 179 tb/d less than seen a year ago. With the current drilling and completion trend, tight crude production from the Permian Midland and Permian Delaware is projected to grow by 0.62 mb/d to average 4.28 mb/d, while production is likely to increase by 0.16 mb/d y-o-y in the Bakken shale area, which is located in the Williston Basin mainly in North Dakota, to average 1.56 mb/d. Tight crude output from Eagle Ford in New Mexico, as well as Niobrara in Colorado and part of Wyoming, is expected to grow by 0.04 mb/d and 0.05 mb/d, respectively. Shale oil output from other US plays is forecast to increase by 0.08 mb/d to average 0.93 mb/d.

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*	4.28	*0.62*
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*	0.85	*0.05*	0.93	*0.08*
Total	**6.51**	***1.55***	**7.65**	***1.14***	**8.61**	***0.96***

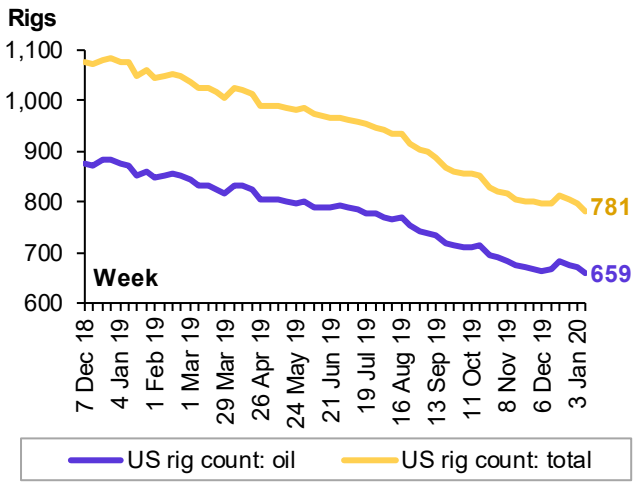
*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

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

The overall **US rig count** declined by 294 units, or 27.3%, y-o-y to 781 rigs in the week ending 10 January. Out of 781 active rigs, 759 were onshore and 21 were offshore. US oil rigs dropped by 214 units, or 24.5%, y-o-y to average 659 (***Graph 5 - 14***).

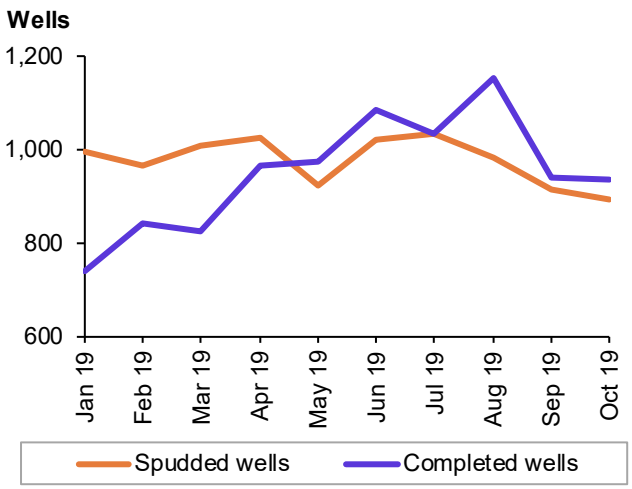
US gas rigs dropped by 83 units, or 41%, y-o-y to 119. Total horizontal rigs (oil and gas) decreased by 250 units, or 26.4%, y-o-y, to stand at 698.

Graph 5 - 14: US weekly rig count



Sources: Baker Hughes and OPEC Secretariat.

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



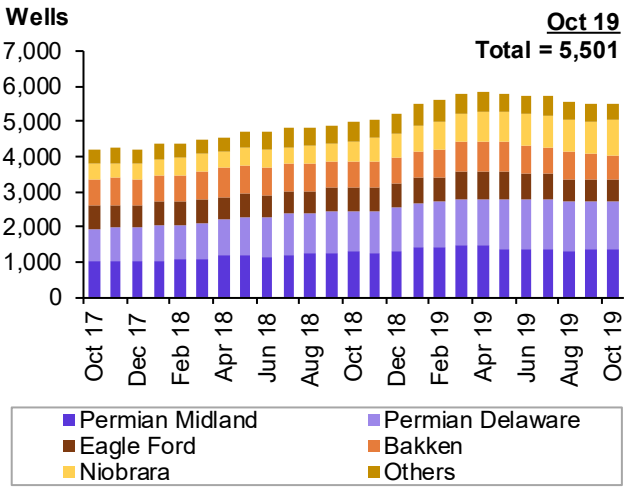
Sources: Rystad Energy and OPEC Secretariat.

With regard to drilling and completion (D&C) in all US shale plays, 894 wells were spudded in October, down by 20 wells m-o-m, while 935 wells were completed in the same month, only 4 wells less than completed in September (***Graph 5 - 15***).

Graph 5 - 16 shows that the DUC count has been decreasing in recent months since April 2019.

The number of DUC oil wells in October fell for the sixth consecutive month in all US shale plays by 23 to 5,501 (excluding abandoned wells). The number of DUC wells dropped in most regions in October, excluding the Permian Midland, Eagle Ford and Niobrara, according to DUC inventory data analysis provided by Rystad Energy. Since April 2019, the number of DUCs declined by 346 wells as of October 2019.

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

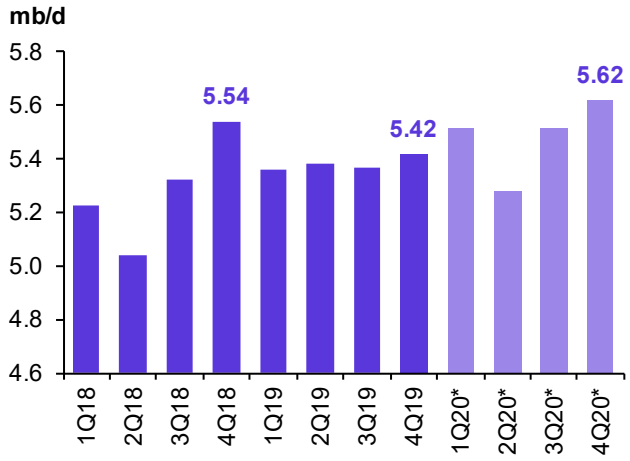


Sources: Rystad Energy and OPEC Secretariat.

Canada

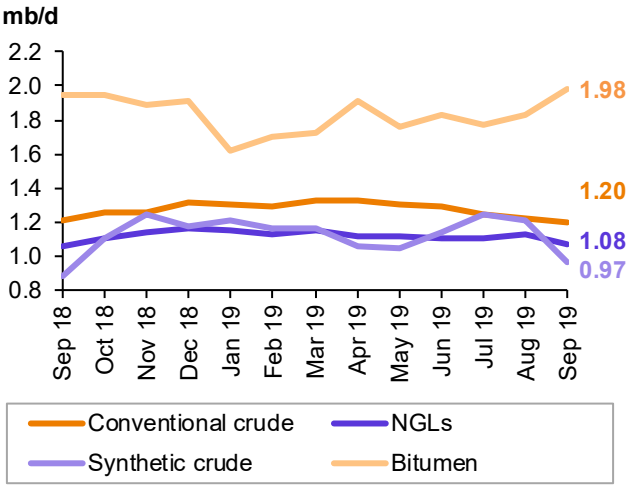
Canada's liquids supply in September fell by 0.17 mb/d m-o-m to average 5.26 mb/d, according to official data, which is 0.12 mb/d higher than a year earlier. Non-conventional oil production fell by 0.1 mb/d m-o-m to average 2.94 mb/d in September, but was higher by 0.11 mb/d y-o-y, while conventional oil output declined by 22 tb/d m-o-m to average 1.20 mb/d. NGLs output also declined by 55 tb/d to average 1.08 mb/d, higher by 0.02 mb/d, y-o-y. As a result, considering 3Q19 production at 5.37 mb/d, Canada's liquids supply growth averaged 5.38 mb/d in the first three quarters of 2019, showing an increase of 0.1 mb/d compared with annual production of 5.28 mb/d in 2018.

Graph 5 - 17: Canada quarterly oil production



Note: 1Q20-4Q20 = Forecast.
Sources OPEC Secretariat.

Graph 5 - 18: Canada monthly production development by type



Sources: National Energy Board and OPEC Secretariat.

Conventional crude production increased by 0.12 mb/d in October, mainly from offshore fields located in the East coast — Hibernia and Hebron — thus total crude oil output reached 1.32 mb/d. NGLs production also showed a m-o-m increase of 0.09 mb/d to average 1.17 mb/d. Regarding oil sands production; while production of synthetic crude in Alberta showed a m-o-m decline of 0.07 mb/d in November, production of bitumen rose by 0.01 mb/d to average 1.99 mb/d in the same month, following more production coming on stream from the Cold Lake project. Moreover, some 0.15 mb/d of oil transferred by rail to the US was affected for 9 days due to a labour strike during 19-27 November.

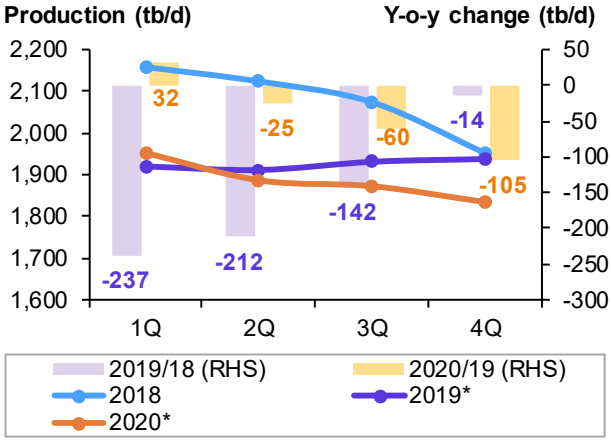
Canada's oil supply growth estimate for **2019** and forecast for **2020** remain unchanged at 0.10 mb/d for each year to average 5.38 mb/d and 5.48 mb/d, respectively.

Mexico

Mexico's liquids output in November was up by 0.03 mb/d m-o-m to average 1.94 mb/d, a rise of 0.01 mb/d y-o-y. Crude oil production increased by 41 tb/d m-o-m, due to a production recovery at Ku-Maloob-Zaap (KMZ), to average 1.70 mb/d, the same level as November 2018. NGLs output was down by 5 tb/d m-o-m to average 240 tb/d.

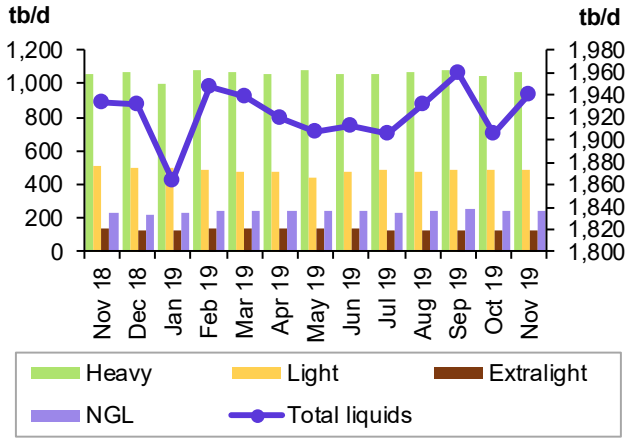
According to preliminary production data for December, output has increased m-o-m by 0.03 mb/d, possibly due to the production start-up of the first project of 17 Pemex priority fields — the 70 tb/d Xikin field — which should help limit the estimated heavy annual decline. Pemex expects new production from the Xikin, Esah, Kinbe, Koban, Mulach and Manik offshore fields to add up to 210 tb/d of crude and 350 mcf/d of natural gas by the second half of 2020. The Esah field should follow in 1Q20.

Graph 5 - 19: Mexico's quarterly liquids supply



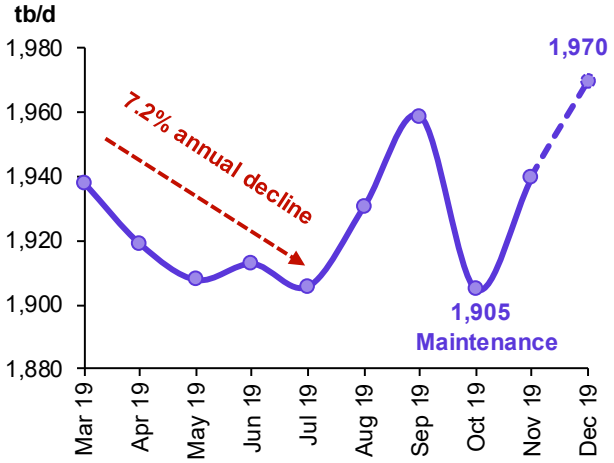
*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

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



Sources: PEMEX and OPEC Secretariat.

Graph 5 - 21: Mexico's monthly total liquids production



Sources: PEMEX and OPEC Secretariat.

Oil output has increased since August, mainly in Ku-Maloob-Zaap, along with other regions. **Mexico's supply growth in 2019** is estimated to have contracted by 0.15 mb/d, y-o-y, despite a mild increase in production in 2H19 compared with 1H19.

Mexico's oil supply in 2020 is forecast to decline further by 0.04 mb/d to average 1.89 mb/d y-o-y. In fact, some of the decline from the Cantarell, Abkatún-Pol-Chuc and Tsimin-Xux projects will be offset by new incremental production capacity that is coming online next year. However, this forecast is subject to change due to uncertainty regarding the timely implementation of new projects as well as unexpected maintenance, which has had a deep impact on Mexico's oil production performance in the past.

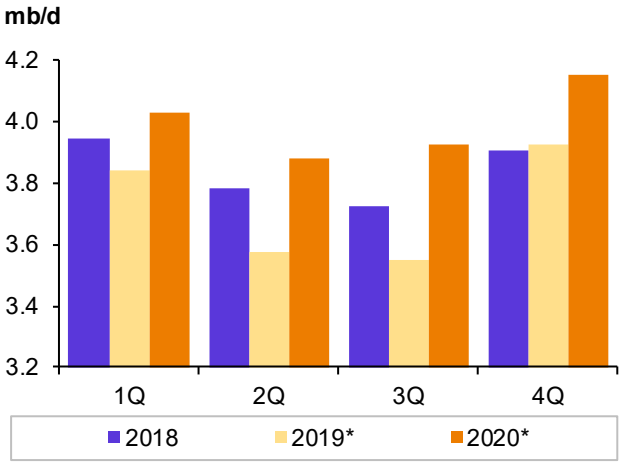
OECD Europe

OECD Europe's oil supply in November rose by 0.31 mb/d m-o-m, due to higher output in Norway, to average 3.99 mb/d, up by 0.08 mb/d y-o-y.

For **2019**, OECD Europe's oil supply is estimated to have seen a contraction of 0.12 mb/d to average 3.72 mb/d, revised down by 0.01 mb/d following a lower UK supply estimate for 2Q19 and 3Q19, as well as a downward revision in 4Q19 for Denmark and other OECD Europe. A large part of these downward revisions were offset by drastic upward revisions in 4Q19 for production in Norway, up by 85 tb/d, due to the faster-than-expected ramp-up of Johan Sverdrup field.

Projected annual growth of 0.04 mb/d for the UK is expected to be offset by production declines in other countries, particularly Norway.

Graph 5 - 22: OECD Europe quarterly liquids supply



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

The previous forecast for growth of 0.19 mb/d y-o-y in 2020 has now been revised up by 81 tb/d, representing 0.27 mb/d y-o-y growth, because of expected higher growth in Norway, to average 4 mb/d.

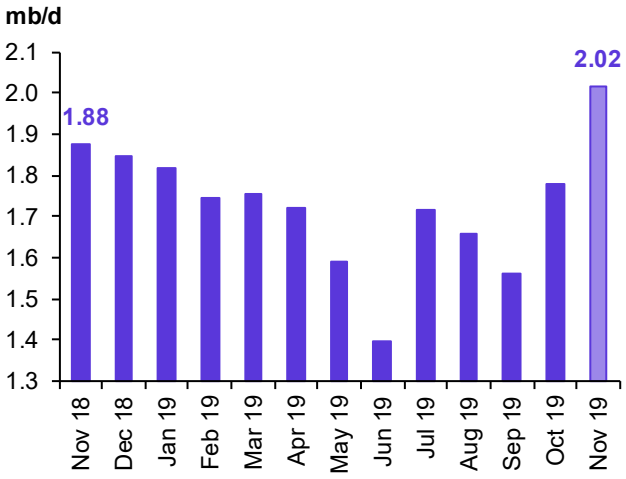
While 2020 production in Norway and the UK is forecast to grow by 0.29 mb/d and 0.01 mb/d to average 2.03 mb/d and 1.17 mb/d, respectively, oil output in Denmark and other OECD Europe is projected decline by 0.01 mb/d each to average 0.09 mb/d and 0.71 mb/d, respectively.

Norway

Norway's liquids supply in November rose by 0.24 mb/d m-o-m to average 2.02 mb/d, following m-o-m growth in October of 0.22 mb/d. Average daily liquids production in November included 1.71 mb/d of crude oil and 0.35 mb/d of NGLs (including 30 tb/d of condensate).

According to the Norwegian Petroleum Directorate (NPD), oil production in November was 13.2% higher than forecast. The main reason for higher output in November was a rapid ramp up of production in Johan Sverdrup that reached an unexpected level of 350 tb/d within a short time of around two months in early December. Moreover, production in December is expected to show another remarkable jump, supported by higher NGLs output during the winter season.

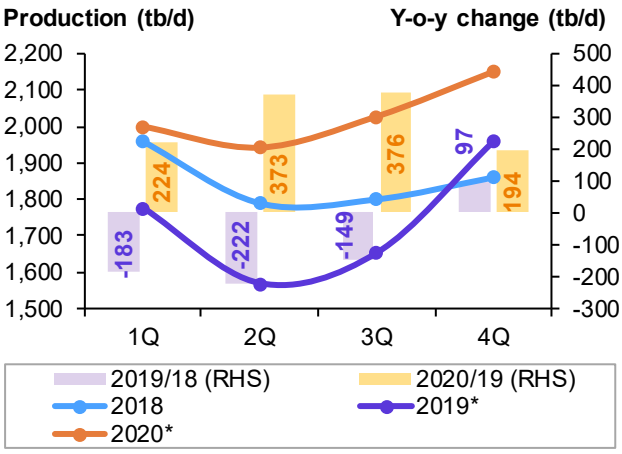
Graph 5 - 23: Norway monthly liquids output



Sources: Norwegian Petroleum DirectorateOPEC Secretariat.

Following a deep y-o-y contraction in Norway's oil supply in 2019 by 0.11 mb/d y-o-y, which was revised up this month by 21 tb/d following an upward revision in 4Q19 by 85 tb/d, Norway's liquids supply in 2020 is expected to grow by 0.29 mb/d to average 2.03 mb/d, revised up by 79 tb/d compared with the previous month. Additional Norwegian North Sea output is expected from the Martin Linge field in the third quarter of 2020.

Graph 5 - 24: Norway's quarterly liquids supply

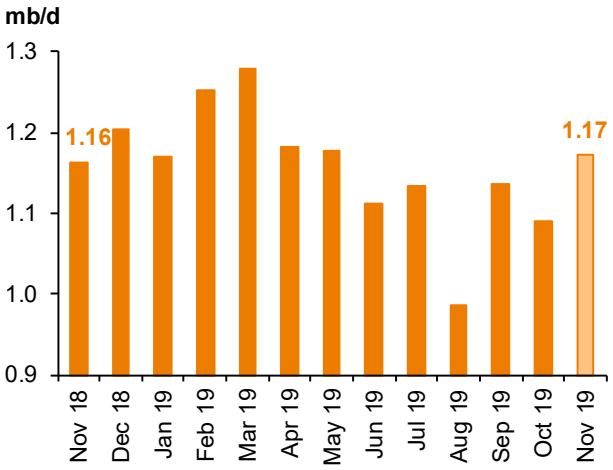


*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

UK

UK crude oil output in November was up m-o-m by 0.08 mb/d to average 1.17 mb/d, mainly due to the return of Buzzard output in the last week of October, though still down by 0.01 mb/d, y-o-y. The Buzzard field in the North Sea stopped producing twice in October as Chinese operator CNOOC carried out pipeline maintenance. Crude oil and NGLs output declined by 74 tb/d and 8 tb/d in November to average 1.03 mb/d and 93 tb/d, respectively. Due to a production shut-in in the Thistle field and a continuation of inspections on sub-sea equipment, the disruption may continue into early 2020. However, oil output in December is expected to be higher than seen in November.

Graph 5 - 25: UK monthly liquids output

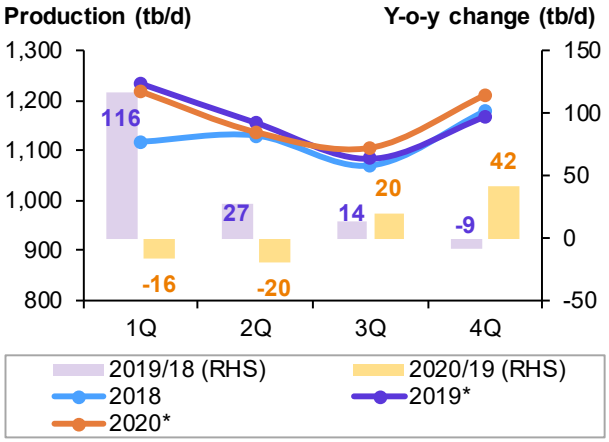


Sources: Oil and Gas Authority and OPEC Secretariat.

For **2019**, the UK liquids supply growth estimation was revised down by 21 tb/d due to official downward revisions in 2Q19 and 3Q19 by 39 tb/d and 41 tb/d, respectively. As a result, annual growth is estimated at a slower pace compared with a year ago, at 0.04 mb/d y-o-y, to average 1.16 mb/d.

For **2020**, despite expected growth from new projects, the UK oil supply is forecast to see minor growth of 0.01 mb/d to average 1.17 mb/d. It is expected that part of the annual decline from main projects, including Buzzard, Elgin/Franklin, Golden Eagle Area, Western Isles, Greater Catcher and ETAP will be offset by new production coming from Mariner, Clair, Lancaster and the Liberator.

Graph 5 - 26: UK quarterly liquids supply



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

Developing Countries (DCs)

Total developing countries' (DCs) oil supply for 2019 was revised down by 15 tb/d from last month's assessment to average 13.56 mb/d, representing y-o-y growth of 0.09 mb/d. Latin America is forecast to see y-o-y growth of 0.22 mb/d, revised up by 0.02 mb/d m-o-m, driven by new production ramp-ups in Brazil. Meanwhile, oil supply is estimated to remain unchanged y-o-y in Africa and the Middle East; and decline by 0.13 mb/d y-o-y in Other Asia.

For **2020**, DCs' oil supply is expected to increase by 0.39 mb/d to average 13.95 mb/d, revised up by 116 tb/d due to an upward revision in the supply forecast for Latin America by 118 tb/d, on the back of new production coming on stream in Guyana, compared with the last monthly assessment. The key driver remains Latin America, with y-o-y forecast growth of 0.37 mb/d due to projects being ramped up in Brazil and Guyana. While production is forecast to increase in the Middle East and Africa by 0.04 mb/d and 0.02 mb/d, respectively, to average 3.26 mb/d and 1.53 mb/d, production in Other Asia, despite projected growth in India and Malaysia, is forecast to decline by 0.04 mb/d to average 3.38 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	13.43	13.59	13.79	13.56	*0.09*
2020*	13.85	13.93	13.93	14.07	13.95	*0.39*

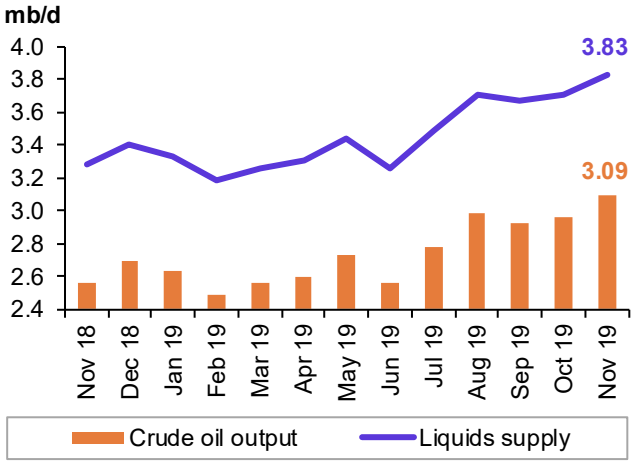
*Note: * 2019 = Estimate and 2020 = Forecast.*
Source: OPEC Secretariat.

Latin America

Brazil

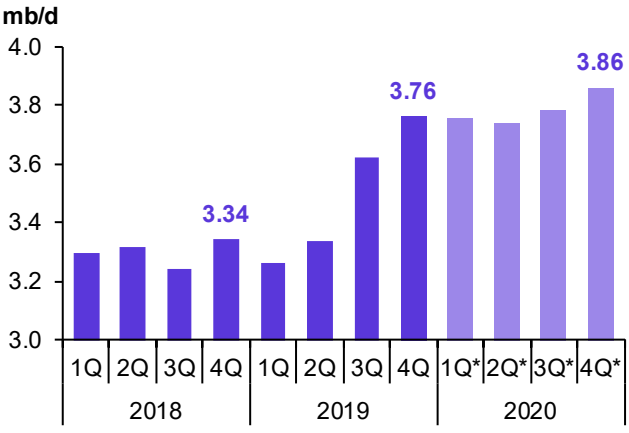
Brazil's crude oil output in November rose by 126 tb/d m-o-m to average 3.09 mb/d — a new historical record of more than 3 mb/d — showing robust y-o-y growth of 523 tb/d according to the Agência Nacional do Petróleo, mainly due to higher output coming online from three FPSOs — P-74, P-75 & P-76 — (operating with more than 80% of installed capacity in November). Oil production from the Lula field also grew by 42 tb/d to average 1.06 mb/d. As a result, total production from the pre-salt horizon in the deepwater Santos Basin reached 2.06 mb/d. Moreover, a startup in production at the Berbigao field in November added volumes this month. Production of NGLs and biofuels was steady in November at 0.11 mb/d and 0.63 mb/d, respectively.

Graph 5 - 27: Brazil's crude oil and liquids supply



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

Graph 5 - 28: Brazil's quarterly liquids supply



*Note: * 1Q20-4Q20 = Forecast.*
Sources: National Agency of Petroleum, Natural Gas and Biofuels; and OPEC Secretariat.

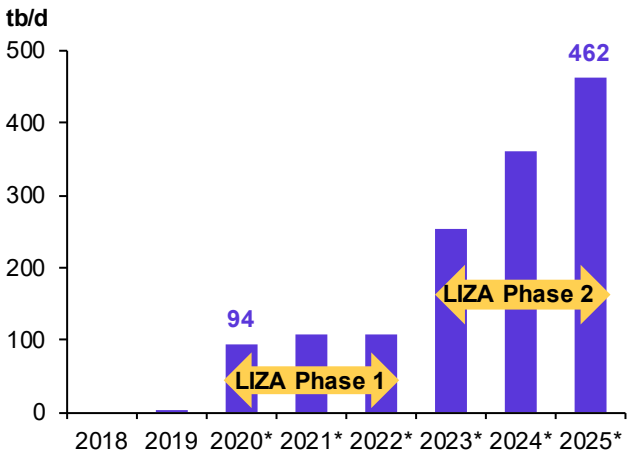
Brazil's total liquids supply in November rose by 0.13 mb/d to average 3.83 mb/d, higher by 0.55 mb/d y-o-y. With new project ramp-ups, particularly in the Lula and Búzios fields, Brazil's **liquids supply** in **2019** is estimated to have averaged 3.50 mb/d (including biofuels), revised up by 0.01 mb/d, representing y-o-y growth of 0.20 mb/d.

The supply forecast for **2020** shows y-o-y growth of 0.29 mb/d for an average of 3.79 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 3Q20.

Guyana

Exxon initially planned first production in **Guyana** from an explored offshore field — Liza — to come on-stream in 1H20 but now the plan is to already ship two 1 mb cargoes of Liza crude in January, to be followed by similarly sized shipments from Hess and Guyana's government in February. Liza phase 1 is the first phase of the Greater Liza project, which is located in the North Atlantic shelf area in offshore Guyana at a depth of more than 1,700 m. It will be the first Guyanese crude grade produced and offered to the oil market. Liza crude has an API of 32 and sulphur content of 0.5%, according to Exxon's assay. Production started up ahead of schedule on 20 December and is projected to produce up to 120 tb/d of oil in 2020-2022 and reach 750 tb/d through phase-2 by 2025.

Graph 5 - 29: Guyana's oil supply forecast



*Note: * 2020-2025 = Forecast.*
Sources: Rystad Energy and OPEC Secretariat.

"A consortium including Exxon Mobil Corp, Hess Corp and a unit of China's CNOOC Ltd have so far discovered more than 6 billion barrels of recoverable oil and gas resources off Guyana's coast, which could eventually produce 750 tb/d for a country that has no history of crude output", Reuters reported.

FSU

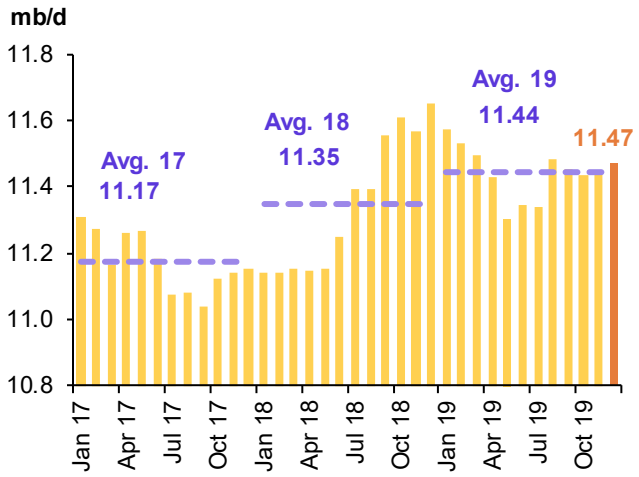
FSU's oil supply in 2019 is estimated to have increased by 0.07 mb/d y-o-y to average 14.37 mb/d, revised up by 11 tb/d from last month's assessment due to an upward revision of 41 tb/d in Russia's supply forecast for 4Q19. In Russia, oil supply is estimated to have increased by 0.09 mb/d to average 11.44 mb/d, while oil output in Azerbaijan is estimated to have declined by 0.01 mb/d y-o-y to average 0.79 mb/d. Oil output remained unchanged in Kazakhstan and FSU Others, averaging 1.81 mb/d and 0.32 mb/d, respectively.

For **2020**, the FSU oil supply forecast is revised down by 0.03 mb/d and is now expected to grow by 0.06 mb/d y-o-y to average 14.42 mb/d, mainly due to a downward adjustment in Russia's and Kazakhstan's crude oil production in 1Q20 to meet levels agreed upon in the Declaration of Cooperation. However, oil supply in Russia and Kazakhstan is projected to grow by 0.04 mb/d and 0.02 mb/d, respectively, while Azerbaijan's supply will remain unchanged y-o-y.

Russia

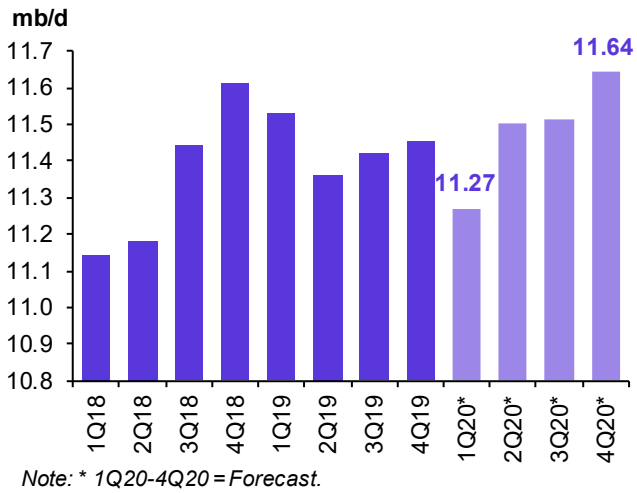
Preliminary data for **Russia's liquids supply in December** shows an increase of 0.02 mb/d m-o-m to average 11.47 mb/d, down by 0.18 mb/d y-o-y. The annual liquids production across 2019 is estimated to have risen by 0.09 mb/d to average 11.44 mb/d, the highest level since 1987.

Graph 5 - 30: Russia's monthly liquids supply



Sources: Nefte Compass and OPEC Secretariat.

Graph 5 - 31: Russia's quarterly liquids output



*Note: * 1Q20-4Q20 = Forecast.*
Sources: Nefte Compass and OPEC Secretariat.

Part of the reason behind higher production in recent months is the rising condensate output from gas condensate fields in the Yamal LNG, Rospan plant, North Russkoye, one of several fields in the Nadym-Pur-Taz area of West Siberia and the Chayandinskoye gas field.

Russia's annual oil supply growth in **2019** was revised up by 10 tb/d, following 4Q19 output that was 41 tb/d higher than expected. Production is now estimated to have grown by 0.09 mb/d y-o-y to average 11.44 mb/d, including condensate and other NGLs. The largest reduction came from mature West Siberian fields, as Russian producers are unlikely to have cut output from Greenfield projects.

For **2020**, Russia liquids supply is expected to grow by 0.04 mb/d y-o-y to average 11.48 mb/d, despite downward adjustments for crude oil production by 300 tb/d from the October 2018 benchmark for 1Q20 to average 11.27 mb/d. The average over the other three quarters is forecast at 11.55 mb/d.

Caspian

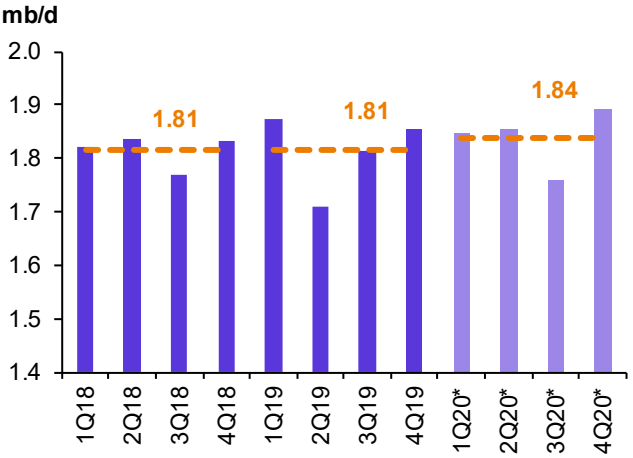
Kazakhstan

Kazakhstan's liquids output in November recovered by 0.04 mb/d m-o-m to average 1.88 mb/d, lower y-o-y by 0.03 mb/d. Crude oil production in November increased by 45 tb/d to average 1.61 mb/d, however it was 24 tb/d lower compared with a year ago. Nevertheless, according to the Kazakh Energy Minister, oil production from the giant Kashagan field offshore Kazakhstan will have averaged 390-400 tb/d in 2019 and plateau at around 500 tb/d by 2027. NGLs output was flat at 0.27 mb/d, the same as a year ago.

Kazakhstan's oil supply in **2019** is not estimated to have grown y-o-y due to heavy maintenance in the Kashagan, Tengiz and Karachaganak fields throughout 2019, and is estimated to have remained unchanged at an average of 1.81 mb/d.

For **2020**, Kazakhstan's oil supply forecast for 1Q20 was adjusted down to average 1.85 mb/d, in line with voluntary commitments in the Declaration of Cooperation. However, total liquids supply for 2020 is forecast to grow by 0.02 mb/d to average 1.84 mb/d.

Graph 5 - 32: Kazakhstan's quarterly liquids output



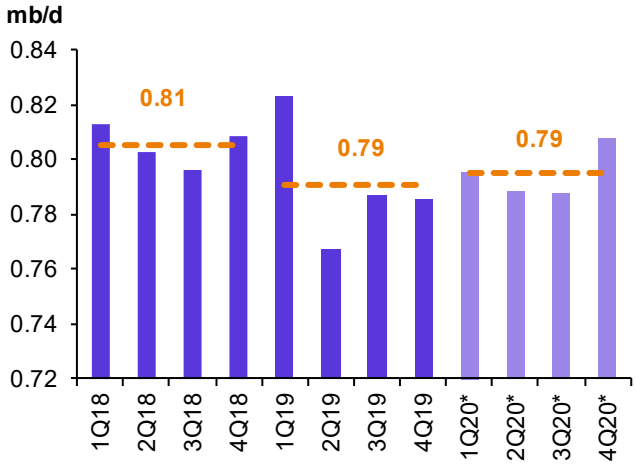
*Note: * 1Q20-4Q20 = Forecast.*
Sources: Nefte Compass and OPEC Secretariat.

Azerbaijan

Azerbaijan's liquids output in November was up by 0.07 tb/d m-o-m to average 0.81 mb/d, with an increase in crude oil production by 51 tb/d to average 687 tb/d and by 15 tb/d for NGLs to average 123 tb/d. However, crude oil output in November was lower by 37 tb/d than a year ago. Nonetheless, NGLs output increased by 30 tb/d y-o-y to a new record of 123 tb/d, mainly coming from the Shah Deniz gas-condensate field in the Caspian Sea.

For **2019**, Azerbaijan's oil supply is estimated to have declined by 0.01 mb/d to average 0.79 mb/d, and is forecast to remain unchanged in **2020**. The forecast was adjusted to 796 tb/d in 1Q20, in line with the Declaration of Cooperation.

Graph 5 - 33: Azerbaijan's quarterly liquids supply



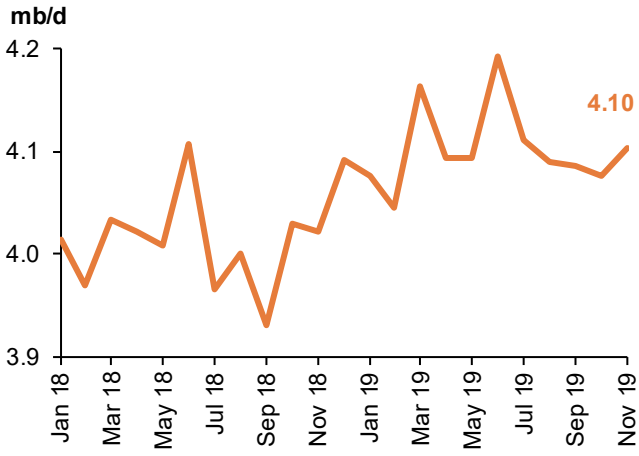
*Note: * 1Q20-4Q20 = Forecast.*
Sources: JODI and OPEC Secretariat.

China

China's liquids production in November was up by 28 tb/d m-o-m to average 4.10 mb/d, and up by 82 tb/d y-o-y, according to official data.

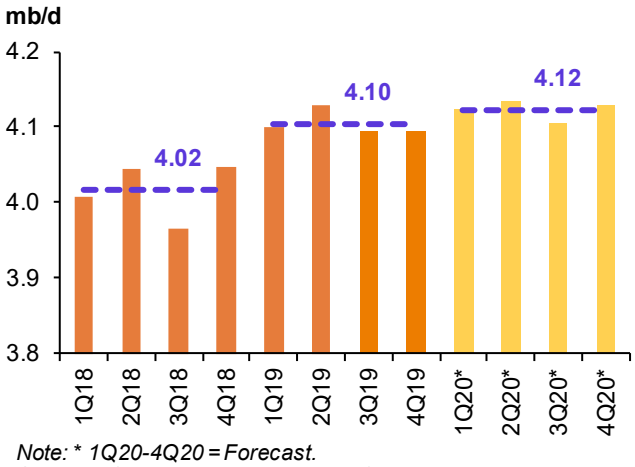
Crude oil output in November increased by 26 tb/d to average 3.82 mb/d, which was 41 tb/d higher y-o-y. Domestic crude oil production is estimated to have edged up to 3.83 mb/d in 2019 from 3.79 mb/d in 2018. Three major companies, China National Petroleum Corp., Sinopec and China National Offshore Oil Corp., have increased investment in domestic oil and gas E&P in 2019 by 22%, or around $48 billion, compared with a year ago, according to estimates by the National Energy Agency (NEA). Following a successful year in China, in which there was an increase of proven oil reserves by 25% and natural gas reserves by around 68% y-o-y, state-run majors are looking to increase investment in the coming years. Chinese offshore oil and gas major CNOOC plans to lift capital spending to the highest level since 2014, the company said on 13 January, as it sharpens its focus on domestic drilling, Reuters reported. CNOOC plans to bring 10 new projects onstream in 2020.

Graph 5 - 34: China's monthly liquids output



Sources: China National Petroleum Corporation and OPEC Secretariat.

Graph 5 - 35: China's quarterly liquids output



*Note: * 1Q20-4Q20 = Forecast.*
Sources: China National Petroleum Corporation and OPEC Secretariat.

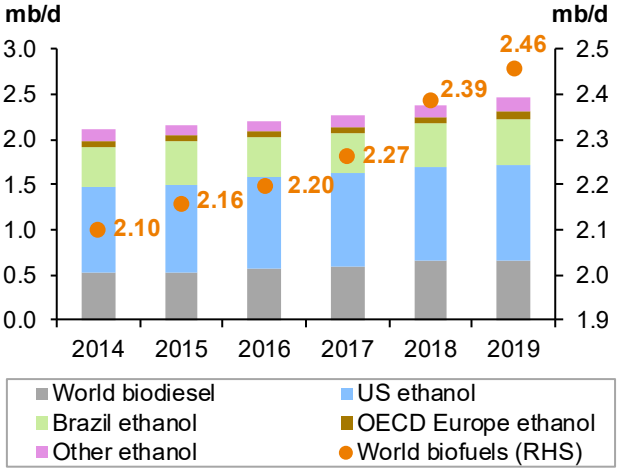
China's liquids production in **2019** is expected to have grown by 0.09 mb/d to average 4.10 mb/d, unchanged from last month. For **2020**, oil production growth is forecast to slow to 0.02 mb/d, for an average of 4.12 mb/d.

World biofuels production

World biofuels production is expected to have increased by 0.07 mb/d y-o-y to average 2.46 mb/d in 2019, according to preliminary estimates by secondary sources. The bulk of growth is estimated to have come from ethanol, with y-o-y growth of 0.06 mb/d to average 1.79 mb/d. The production of biodiesel is also estimated to have grown by 0.01 mb/d in 2019 to average 0.67 mb/d.

According to historical data (*see **Graph 5 - 36***), the US has had the main share of total biofuels (ethanol and biodiesel) in the world. Its production of 1.18 mb/d equalled 48% of total world biofuels in 2019, followed by Brazil with a total of 0.60 mb/d.

Graph 5 - 36: World Biofuels with disaggregated ethanol production



Sources: FOL, MOG, EIA, JODI and OPEC Secretariat.

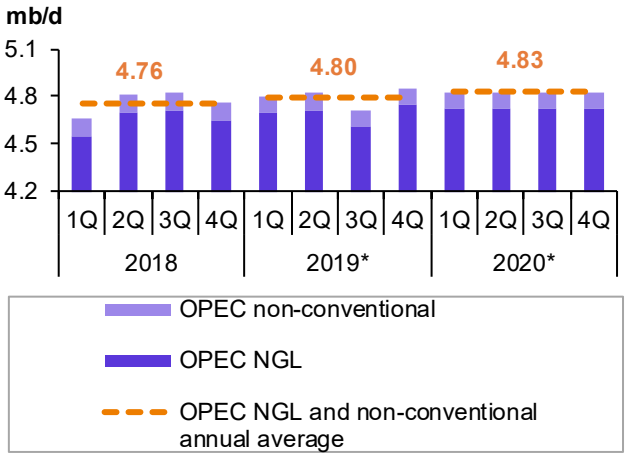
OPEC NGLs and non-conventional oils

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

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

The preliminary **2020** forecast indicates growth of 0.03 mb/d to average 4.83 mb/d.

Graph 5 - 37: 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 29.44 mb/d in December, lower by 161 tb/d m-o-m. Crude oil output increased mainly in Angola, while production decreased in Saudi Arabia, Iraq and the UAE.

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

	2018	2019	2Q19	3Q19	4Q19	Oct 19	Nov 19	Dec 19	*Dec/Nov*
Algeria	1,042	1,022	1,019	1,021	1,021	1,019	1,028	1,017	*-11*
Angola	1,505	1,401	1,420	1,390	1,351	1,358	1,283	1,408	*125*
Congo	317	327	332	325	324	329	317	326	*8*
Ecuador	519	527	530	545	508	459	528	538	*9*
Equatorial Guinea	125	118	114	119	125	126	128	122	*-6*
Gabon	187	208	212	204	209	207	197	222	*26*
Iran, I.R.	3,553	2,357	2,404	2,189	2,115	2,147	2,107	2,092	*-15*
Iraq	4,550	4,680	4,699	4,752	4,633	4,693	4,641	4,565	*-76*
Kuwait	2,745	2,687	2,693	2,655	2,685	2,648	2,701	2,708	*7*
Libya	951	1,097	1,154	1,103	1,163	1,166	1,183	1,139	*-44*
Nigeria	1,718	1,789	1,786	1,844	1,791	1,809	1,794	1,770	*-24*
Saudi Arabia	10,311	9,778	9,769	9,452	9,879	10,001	9,873	9,762	*-111*
UAE	2,986	3,077	3,067	3,082	3,092	3,105	3,108	3,062	*-46*
Venezuela	1,354	792	776	714	706	687	717	714	*-3*
Total OPEC	**31,864**	**29,860**	**29,974**	**29,394**	**29,601**	**29,753**	**29,606**	**29,444**	***-161***

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

	2018	2019	2Q19	3Q19	4Q19	Oct 19	Nov 19	Dec 19	*Dec/Nov*
Algeria	1,040	1,023	1,017	1,025	1,023	1,023	1,026	1,021	*-5*
Angola	1,473	1,377	1,424	1,318	1,345	1,391	1,273	1,369	*96*
Congo	323	340	340	334	340	316	314	389	*76*
Ecuador	517	531	531	546	518	467	546	542	*-4*
Equatorial Guinea	120	110	114	109	110	119	90	121	*31*
Gabon	193	..	225	220	..	212	..	..	*..*
Iran, I.R.	..	..	..	..	..	..	..	..	*..*
Iraq	4,410	4,576	4,565	4,630	4,568	4,576	4,595	4,535	*-60*
Kuwait	2,737	2,678	2,681	2,636	2,683	2,633	2,706	2,711	*5*
Libya	..	..	..	..	..	..	..	..	*..*
Nigeria	1,602	1,719	1,721	1,794	1,671	1,780	1,664	1,570	*-95*
Saudi Arabia	10,317	9,808	9,752	9,503	9,929	10,303	9,890	9,594	*-296*
UAE	3,008	3,058	3,050	3,068	3,058	3,070	3,065	3,040	*-25*
Venezuela	1,510	1,013	1,045	864	859	761	912	907	*-5*
Total OPEC	..	..	..	..	..	..	..	..	*..*

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

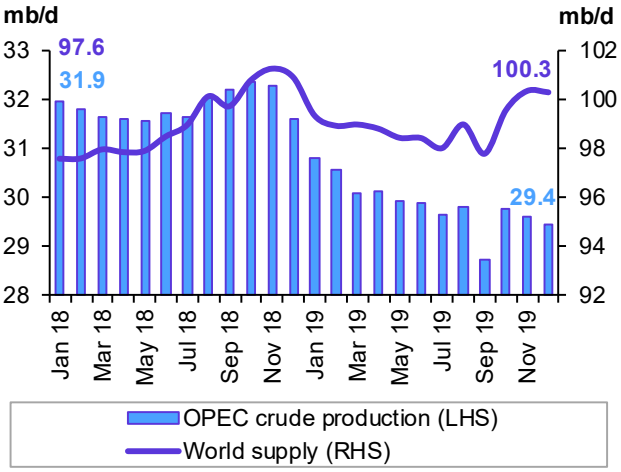
World oil supply

Preliminary data indicates that the **global oil supply** in December decreased by 0.06 mb/d to average 100.28 mb/d, compared with the previous month.

Non-OPEC supply (including OPEC NGLs) increased by 0.11 mb/d compared with the previous month to average 70.84 mb/d in December, higher by 1.55 mb/d y-o-y. Preliminary incremental production in December was mainly driven by the UK, Norway, Canada, Mexico and the US.

The **share of OPEC crude oil in total global production** decreased by 0.1 pp to 29.4% in December compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC crude production are based on secondary sources.

Graph 5 - 38: OPEC and world oil supply



Source: OPEC Secretariat.

Product Markets and Refinery Operations

Product markets *in December weakened as feedstock prices firmed along with a considerable rise in product inventory levels due to higher refinery intakes, while winter-related support was lower than expected, evidenced by weaker gasoil market performance y-o-y in the Atlantic Basin. In Asia, the release in late December of the first batch of the 2020 export quotas in China, added to the weakness in Asian product markets and contributed to losses.*

In December, one month before the new IMO 2020 regulations come into effect, the high sulphur fuel oil (HSFO) market showed slight gains in the US and Singapore trading hubs backed by declining availability, while very low sulphur fuel oil (VLSFO) prices reached record high levels.

Refinery margins

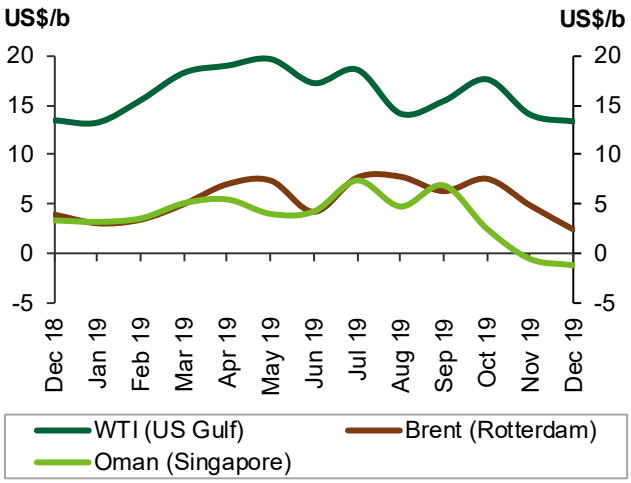
US refinery margins continued the downward trend as hefty losses at the top of the barrel outstripped gains registered in other sections of the barrel. US refining economics in December reached the lowest recorded level since January 2019, but managed to stay above the lowest level seen in 2018.

The negative impact of the weaker domestic fuel market was partly offset by a rise in total product exports from the US, which provided support to prices and helped cap losses.

Moreover, during the month, refinery intakes rose, in line with historical trends, as most refineries returned to operation and ramped up throughputs to replenish stocks.

US refinery margins for WTI averaged $13.41/b in December, down by 69¢ m-o-m and 11¢ y-o-y.

Graph 6 - 1: Refining margins



Sources: Argus Media and OPEC Secretariat.

European refining economics trended downwards as well, losing the most ground relative to the other main trading hubs, affected by a weakening in all product markets, the most pronounced being gasoline and middle distillates. Higher product availability in the region exerted pressure on fuel prices amid a decline in product consumption as the global economy and European manufacturing activities continued to experience a slowdown.

The poor performance in the European product market came despite concerns over refinery strikes and unplanned outages due to a fire in France. Moreover, expectations of a boost in diesel returns from the IMO 2020 regulations failed to materialize in December. Furthermore, higher diesel stock levels in Europe impacted negatively. Refinery margins for Brent in Europe averaged $2.41/b in December, down by $2.44 compared to a month earlier and by $1.49 y-o-y.

Asian refining margins fell slightly and submersed further into negative territory for the second consecutive month. They were affected mainly by gasoline weakness, and to a smaller extent by jet/kerosene markets. This drove Asian refining margins down to a new multi-year low in December. In addition, the allocation of the first batch of 2020 product export quotas, with a 30% rise y-o-y, to five state-owned oil companies, led to further concerns over higher product supplies and exacerbated pressure on the region's product markets. Refinery margins for Oman in Asia lost 64 ¢ m-o-m to average minus $1.23/b in December, which is lower by $4.52 y-o-y.

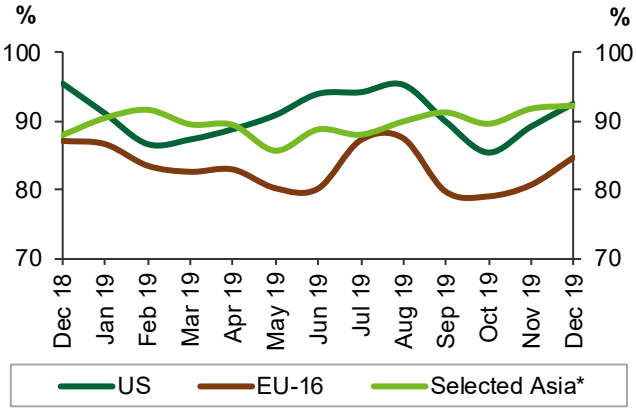
Refinery operations

In the **US**, refinery utilization rates increased, averaging 92.50%, which corresponds to a throughput of 17.40 mb/d. This represented a rise of 3.3 pp, or 560 tb/d, compared to the previous month. Y-o-y, the December refinery utilization rate was down by 2.90 pp, with throughputs marginally down by 1.1 tb/d.

European refinery utilization averaged 84.64% in December, corresponding to a throughput of 10.49 mb/d. This is a m-o-m rise of 4.0 pp, or 490 tb/d. Y-o-y, utilization rates fell by 2.42 pp and throughputs were down by 300 tb/d.

In **Selected Asia** — comprising Japan, China, India, Singapore and South Korea — refinery utilization rates rose slightly, averaging 92.37% in December, corresponding to a throughput of 26.17 mb/d. Compared to the previous month, throughputs were up by 0.5 pp and 133 tb/d. Meanwhile, y-o-y they were up by 4.4 pp and 1.9 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

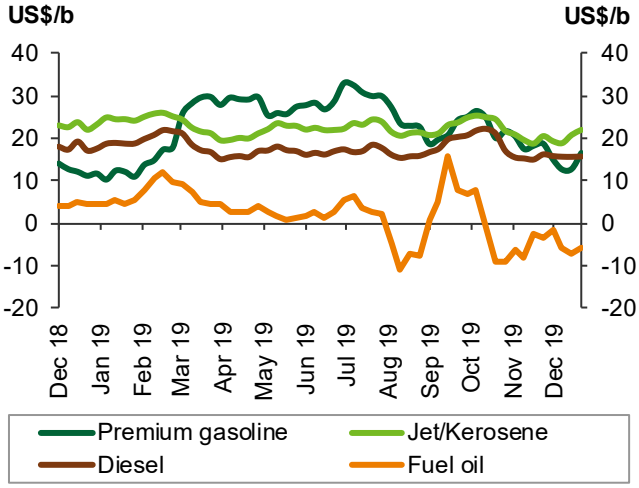
US gasoline cracks suffered solid losses, which was reflective of the rally in US gasoline inventory levels for the second consecutive month driven by stronger refinery intakes that were up by 560 tb/d m-o-m.

Seasonally weaker demand also played a role and contributed to declines in US gasoline prices for the fifth consecutive month, having lost $1.77/b m-o-m to reach $74.38/b.

In December, the gasoline crack spreads lost $4.33 m-o-m to average $14.57/b, albeit this level was up by $1.80 y-o-y.

The USGC **jet/kerosene crack spread** strengthened slightly**,** supported by firm jet fuel requirements from the aviation sector over the holiday season despite higher refinery outputs.

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



Sources: Argus Media and OPEC Secretariat.

The US jet-kerosene balance surplus in December remained tight despite being 26 tb higher when compared with the November. This helped cap gains. The US jet/kerosene crack spread against WTI averaged $20.08/b, up by 42 ¢ m-o-m, but down by $2.78 y-o-y.

US **gasoil crack spreads** saw a slight uptick, supported by winter-related bullishness as the market continued to hope for a pick-up in heating oil demand, despite warmer than average temperatures, particularly during the first half of December. However, a considerable rise in inventory levels during the month – reflective of higher US refinery run rates – partially countered the positive impact and kept gains limited. The US gasoil crack spread averaged $15.54/b, up by 32¢ m-o-m, but down by $2.46 y-o-y.

US **fuel oil crack spreads** reversed trend in December and showed a slight recovery, although it remained in negative territory. This positive performance is attributed to firm demand from US refiners for crude blending, despite the ongoing hike in freight rates that had a negative impact on global fuel oil demand. In December, the US fuel oil crack spread averaged minus $5.32/b, up slightly by 31¢ m-o-m, but lower by $9.74 y-o-y.

European market

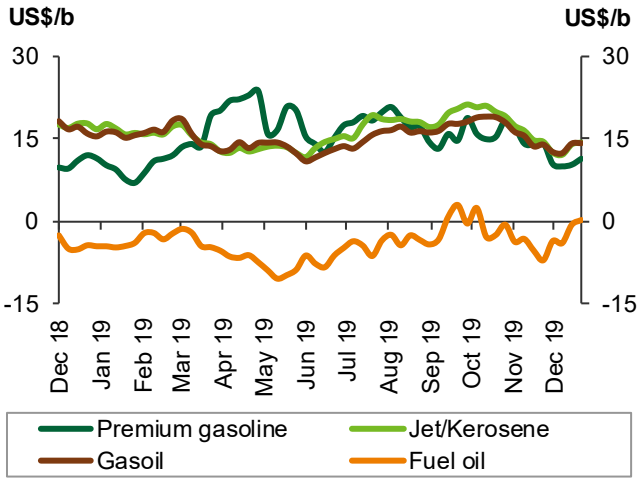
Gasoline crack spreads witnessed losses as exports declined and lower gasoline prices in the US pressured Northwest Europe-US volume flows.

In December, the gasoline balance in Northwest Europe was up by 74 mb relative to the previous month.

The gasoline crack spread averaged $10.45/b in December, down by $4.66 m-o-m and by 17¢ 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. This led to a considerably longer balance over the month with the region's jet fuel balance up by 200 tb/d m-o-m, which weighed on jet fuel prices.

Graph 6 - 4: Rotterdam crack spreads vs. Brent



Sources: Argus Media and OPEC Secretariat.

The Rotterdam jet/kerosene crack spread averaged $13.35/b, down by $2.58 m-o-m and by $4.49 y-o-y.

European **gasoil** crack spreads lost further ground in December, affected by weaker manufacturing activity within the region, higher volume arrivals from Russia and the FSU and rising inventory levels amid relatively flat total exports m-o-m out of Northwest Europe. Moreover, the relatively warmer winter weather in early December failed to provide any significant lift to heating oil demand, while expectations of a pick-up in diesel demand to support IMO 2020 compliant marine fuel demand did not materialize. The gasoil crack spread averaged $13.47/b, which was lower by $1.56 m-o-m and by $4.16 y-o-y.

At the bottom of the barrel, **fuel oil 3.5% crack spreads** in Rotterdam continued to trend downwards pressured by high freight rates, and improved HSFO availability, which led to a 53% growth in the surplus m-o-m. On the other hand, firm HSFO demand in the region supported prices that showed a $2.83/b gain compared with November. This follows two consecutive months of loss HSFO prices that dropped by 96¢ and drove the HSFO oil crack deeper into negative territory. In Europe, fuel oil cracks averaged minus $34.75/b in December, a drop of 96 ¢ m-o-m and $26.67 y-o-y.

Asian market

The **Asian gasoline 92** crack spread against Dubai weakened, impacted by stronger supplies and rising inventory levels in the region.

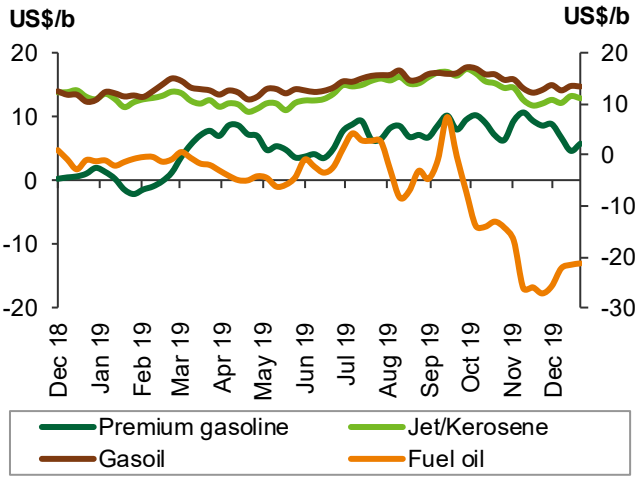
Furthermore, gasoline markets in Asia came under added pressure in response to the release of crude import quotas to China's state-owned oil companies, which triggered bearish sentiment over higher product supplies in the regional market.

The Singapore gasoline crack spread against Oman averaged $6.48/b in December, down by $3.00 m-o-m, but up by $5.79 y-o-y.

Singapore light distillate **naphtha crack spreads** continued to perform positively as lower arrivals from the Middle East contributed to a tighter regional naphtha balance, which supported prices for the product. The Singapore naphtha crack spread against Oman averaged minus $1.24/b, having increased by 91¢ m-o-m, and by $3.92 y-o-y.

In the middle of the barrel, **jet/kerosene** crack spreads in Asia edged slightly lower in December as strong jet fuel supplies led to a lengthening balance and weighed on the cash premium for jet fuel in the region. At the same time, the onset of the winter season has also spurred mild kerosene consumption for space heating and provided support to kerosene markets. Although the upside was limited and failed to provide a lift in jet/kerosene cracks, markets for the same product remained relatively healthy when compared to most other products. The Singapore jet/kerosene crack spread against Oman averaged $12.89/b, down by 9 ¢ m-o-m and by 99 ¢ y-o-y.

Graph 6 - 5: Singapore crack spreads vs. Dubai



Sources: Argus Media and OPEC Secretariat.

The Singapore **gasoil crack spread** trended slightly upwards, supported by stronger spot requirements from India on the back of IMO 2020 related support. Furthermore, robust demand data from South Korea, as well as rising bunker marine gasoil sales in Singapore, were also supportive. The Singapore gasoil crack spread against Oman averaged $14.02/b, up by 53¢ m-o-m and by $1.45 y-o-y.

The Singapore **fuel oil crack spread** recovered in December after a deterioration in the previous month, as 3.5% sulphur fuel oil prices almost returned to levels recorded in October. The major factor was essentially firmer feedstock prices following the OPEC and non-OPEC oil supply adjustment decision on 5/6 December, which supported the fuel oil market in Singapore. Singapore fuel oil cracks against Oman averaged minus $22.64, up by 86¢ m-o-m, but down by $21.79 y-o-y.

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

Event	Time frame	Asia	Europe	US	Observations
High refinery runs	Jan 2020	↓ 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.
High speed rail launch and network expansions	Jan 2020	↓ Some negative impact on product markets	↓ Some negative impact on product markets	↓ Some negative impact on product markets	Could further dent domestic air and road transport fuel markets. However, long-distance, overseas air travel, should continue to support product markets.
1st Batch of Chinese product export quotas	Jan 2020	↓ 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. Product side pressure could be partially offset by the expected heavy maintenance season in the Middle East during 1Q20.
IMO 2020	1Q20	↑ Some positive impact on product markets	↑ Some positive impact on product markets	↑ Some positive impact on product markets	High sulphur fuel oil (HSFO) market will support product markets as slight gains in the US and Singapore trading hubs were backed by declining availability, while very low sulphur fuel oil (VLSFO) prices reached record high levels.

Source: OPEC Secretariat.

Table 6 - 2: Refinery operations in selected OECD countries

	Refinery throughput, mb/d				*Refinery utilization, %*			
	Oct 19	Nov 19	Dec 19	*Change* Dec/Nov	Oct 19	Nov 19	Dec 19	*Change* Dec/Nov
US	**16.14**	**16.84**	**17.40**	**0.56**	**85.51**	**89.20**	**92.50**	**3.3 pp**
Euro-16	**9.80**	**10.00**	**10.49**	**0.49**	**79.03**	**80.67**	**84.64**	**4.0 pp**
France	0.83	0.79	0.90	0.11	66.22	63.18	71.62	8.4 pp
Germany	1.85	1.80	1.84	0.04	84.41	82.31	84.26	1.9 pp
Italy	1.35	1.36	1.40	0.04	65.84	66.62	68.66	2.0 pp
UK	1.12	1.02	1.10	0.08	85.53	77.84	83.88	6.0 pp
Selected Asia*	**25.40**	**26.03**	**26.17**	**0.13**	**89.68**	**91.90**	**92.37**	**0.5 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	**37.64**	**38.33**	**38.21**	**38.12**	**37.45**	**37.34**	**38.52**	**38.27**
OECD Americas	**18.78**	**19.10**	**19.31**	**19.15**	**18.36**	**19.07**	**19.54**	**19.23**
of which US	16.51	16.88	17.32	17.33	16.46	17.14	17.43	16.79
OECD Europe	**12.08**	**12.41**	**12.15**	**12.10**	**12.22**	**11.82**	**12.44**	**12.47**
of which:								
France	1.14	1.17	1.10	1.15	1.12	0.98	1.06	0.84
Germany	1.93	1.91	1.80	1.65	1.76	1.70	1.83	1.83
Italy	1.30	1.40	1.35	1.35	1.24	1.33	1.48	1.37
UK	1.09	1.10	1.06	1.14	1.08	1.03	1.07	1.08
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	2.98
Total Non-OECD	**41.30**	**42.13**	**43.38**	**43.77**	**43.78**	**43.29**	**43.77**	**44.53**
of which:								
China	10.77	11.35	12.03	12.25	12.62	12.66	12.95	13.59
Middle East	6.93	7.04	7.26	7.47	7.23	7.12	6.95	6.91
Russia	5.58	5.59	5.72	5.73	5.71	5.38	5.89	5.86
Latin America	4.66	4.49	4.18	4.06	4.01	4.01	3.96	3.86
India	4.74	4.79	4.89	4.89	5.11	4.97	4.96	5.24
Africa	2.21	2.24	2.25	2.21	2.16	2.24	2.23	2.18
Total world	**78.94**	**80.45**	**81.58**	**81.89**	**81.24**	**80.63**	**82.30**	**82.80**

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

		Nov 19	Dec 19	Change Dec/Nov	Annual average 2018	2019
US Gulf (Cargoes FOB):						
Naphtha*		56.79	59.36	2.57	68.51	56.86
Premium gasoline	*(unleaded 93)*	76.15	74.38	-1.77	85.78	79.66
Regular gasoline	*(unleaded 87)*	68.95	68.93	-0.02	80.17	72.70
Jet/Kerosene		76.91	79.89	2.98	85.35	79.32
Gasoil	*(0.2% S)*	72.47	75.35	2.88	80.99	74.61
Fuel oil	*(3.0% S)*	35.84	39.09	3.25	60.17	52.55
Rotterdam (Barges FoB):						
Naphtha		58.59	59.70	1.11	66.47	55.71
Premium gasoline	*(unleaded 98)*	78.22	77.35	-0.87	87.34	79.52
Jet/Kerosene		79.04	80.25	1.21	86.93	80.22
Gasoil/Diesel	*(10 ppm)*	78.14	80.37	2.23	85.94	79.50
Fuel oil	*(1.0% S)*	58.57	65.03	6.46	62.33	60.15
Fuel oil	*(3.5% S)*	29.32	32.15	2.83	59.04	48.90
Mediterranean (Cargoes FOB):						
Naphtha		56.62	56.98	0.36	65.79	54.48
Premium gasoline**		71.75	70.32	-1.43	79.08	71.36
Jet/Kerosene		75.46	76.42	0.96	85.10	77.77
Diesel		77.28	79.16	1.88	85.66	79.03
Fuel oil	*(1.0% S)*	62.64	69.69	7.05	63.53	63.42
Fuel oil	*(3.5% S)*	29.53	32.85	3.32	60.36	50.55
Singapore (Cargoes FOB):						
Naphtha		59.76	63.62	3.86	67.24	57.10
Premium gasoline	*(unleaded 95)*	76.11	74.82	-1.29	79.93	72.45
Regular gasoline	*(unleaded 92)*	71.39	71.34	-0.05	77.66	69.45
Jet/Kerosene		74.89	77.75	2.86	84.81	77.26
Gasoil/Diesel	*(50 ppm)*	75.40	78.88	3.48	84.67	77.78
Fuel oil	*(180 cst)*	38.41	42.22	3.81	65.24	57.29
Fuel oil	*(380 cst 3.5% S)*	38.19	41.20	3.01	64.74	56.70

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

Tanker Market

The tanker market experienced a general strengthening trend in December as freight rates in both the dirty and clean segments of the market increased. On average, ***dirty tanker spot freight rates*** *rose by 29% from the previous month on the back of increased tonnage requirements, tonnage tightening and high bunker prices. Enhanced market activities were seen to drive rates higher in all areas, affecting all tanker sectors in the market. Moreover, dirty freight rates are expected to continue climbing into the first quarter of 2020, reflecting the cost of new low-sulphur bunker fuel required to meet regulations effective 1 January 2020.*

In the ***clean market****, an increase in activity prevailed in the different classes, leading to an increase in average clean tanker spot freight rates by 18% in December from the month before.*

Spot fixtures

Global spot fixtures fell in December from the previous month's levels, declining by 1.72 mb/d, or 8.6% m-o-m, with all areas contributing to losses. Fixtures also came in below the robust levels seen last year, down 2.3 mb/d, or 11.2%, from the same month a year ago.

Table 7 - 1: Spot fixtures, mb/d

	Oct 19	Nov 19	Dec 19	*Change* Dec 19/Nov 19
All areas	**19.91**	**19.97**	**18.25**	**-1.72**
OPEC	13.44	14.11	12.41	-1.70
Middle East/East	8.03	8.09	6.71	-1.38
Middle East/West	1.34	1.60	1.46	-0.15
Outside Middle East	4.07	4.42	4.24	-0.17

Sources: Oil Movements and OPEC Secretariat.

OPEC spot fixtures averaged 12.41 mb/d in December, some 12%, or 1.7 mb/d, lower than in the previous month, and 13%, or 1.80 mb/d, lower y-o-y.

Middle East-to-East fixtures were also lower, edging down 17% to 6.7 mb/d. Compared with the same month last year, rates on the route fell by 16.6% or 1.33 tb/d.

Fixtures from the **Middle East-to-West** fell by more than 9%, or 150 tb/d, to average 1.46 mb/d in December, down by 3.5% y-o-y.

Outside of the Middle East, fixtures averaged 4.24 mb/d in December, a decrease of 170 tb/d, or 3.9%, from the previous month, and fell 420 tb/d, or 9%, compared with the same month last year.

Sailings and arrivals

OPEC sailings declined by 1.6%, or 410 tb/d, m-o-m in December to average 25.10 mb/d. **Sailings from the Middle East** were 3.6%, or 680 tb/d, lower to average 18.02 mb/d in December.

Crude arrivals were mixed in December. Arrivals in North America and West Asia declined by 150 tb/d m-o-m each, or 1.6% and 3.4%, respectively, in percentage terms. Arrivals in North America were 4% lower y-o-y, while those in West Asia were 1.8% higher over the same period.

Elsewhere, arrivals in Europe and the Far East rose by 3.1% and 2.8%, or or 360 tb/d and 230 tb/d, m-o-m, respectively. At 12.01 mb/d, arrivals in Europe were 5.0%, or 570 tb/d, higher than the same month last year, while arrivals in the Far East were 1.6%, or 140 tb/d, lower than the same level a year ago.

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

	Oct 19	Nov 19	Dec 19	*Change* Dec 19/Nov 19
Sailings				
OPEC	25.21	25.51	25.10	-0.41
Middle East	18.50	18.70	18.02	-0.68
Arrivals				
North America	9.50	9.37	9.22	-0.15
Europe	11.72	11.65	12.01	0.36
Far East	8.24	8.22	8.45	0.23
West Asia	4.39	4.48	4.32	-0.15

Sources: Oil Movements and OPEC Secretariat.

Dirty tanker freight rates

Very large crude carriers (VLCCs)

VLCC spot freight rates in December moved back toward the high levels seen two months ago, erasing some of the losses seen in November to end the year on a stronger note than in the previous year.

Gains were seen across the selected routes. At WS113 points, the **Middle East-to-East** was up 23% in December compared with the previous month. Y-o-y, rates on the route were also 29% higher those seen in December 2018.

Freight rates registered for tankers operating on the **Middle East-to-West** routes in December were up 12% m-o-m. At WS63 points, rates on the route were also 64% higher than the same month last year.

West Africa-to-East routes in December also showed a similar pattern, up 15% m-o-m to stand at WS108 points, representing a gain of 25% compared with December 2018.

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

	Size *1,000 DWT*	Oct 19	Nov 19	Dec 19	*Change* Dec 19/Nov 19
Middle East/East	230-280	135	92	113	21
Middle East/West	270-285	83	56	63	7
West Africa/East	260	130	95	108	14

Sources: Argus Media and OPEC Secretariat.

Suezmax

Suezmax average spot freight rates in December recovered roughly half the losses seen in the prior month, which followed a spike in rates in October. Y-o-y, Suezmax rates were 20% higher than the same momth last year.

Rates for tankers operating on the West Africa-to-US Gulf Coast (USGC) route averaged WS142 points, representing a m-o-m increase of 33% in December, and 28% higher than the levels seen in December 2018.

The Northwest Europe (NWE)-to-USGC route rose by 16% m-o-m to average WS104 points, which was some 10% higher y-o-y.

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

	Size 1,000 DWT	Oct 19	Nov 19	Dec 19	Change Dec 19/Nov 19
West Africa/US Gulf Coast	130-135	166	106	142	36
Northwest Europe/US Gulf Coast	130-135	151	90	104	14

Sources: Argus Media and OPEC Secretariat.

Aframax

The **Aframax** sector enjoyed the biggest monthly gains in December. The Indonesia-to-East route was 35% higher to average WS185 points, representing a gain of 34% y-o-y. The intra-Mediterranean route was up 28% to average WS199 points, still 2% higher than in December 2018. The Mediterranean-to-NWE route was also 20% higher m-o-m to average WS181 points, but remained 1.0% lower y-o-y.

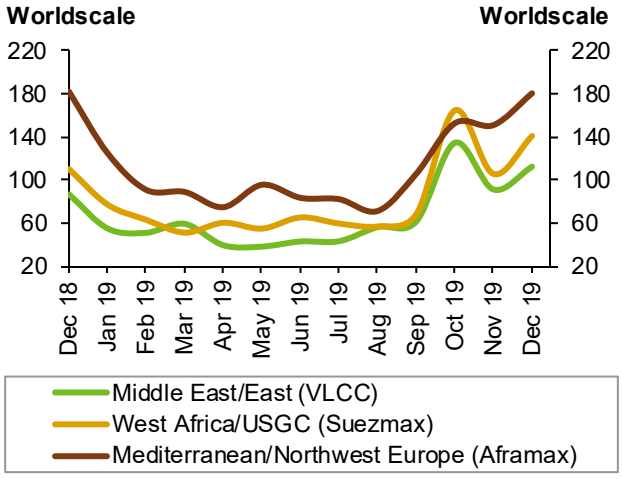
Table 7 - 5: Dirty Aframax spot tanker freight rates, WS

	Size 1,000 DWT	Oct 19	Nov 19	Dec 19	Change Dec 19/Nov 19
Indonesia/East	80-85	174	137	185	48
Caribbean/US East Coast	80-85	188	155	249	94
Mediterranean/Mediterranean	80-85	176	156	199	43
Mediterranean/Northwest Europe	80-85	153	151	181	30

Sources: Argus Media and OPEC Secretariat.

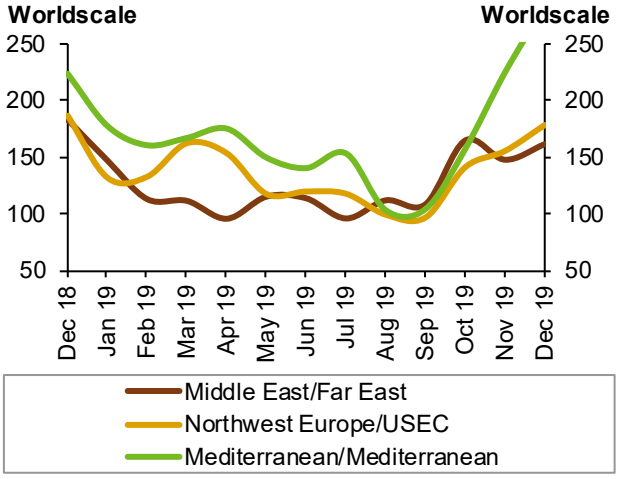
The Caribbean-to-US East Coast (USEC) route experienced a sharp gain in December compared with the previous month. Rates averaged WS249 points, which was around 61% higher m-o-m and up 33% y-o-y.

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 gain for the fourth-consecutive month in December, with all routes showing further increases compared with the previous month.

Clean tanker spot freight rates **West of Suez** averaged WS251 points, representing an overall gain of 23% over the previous month. The **Mediterranean-to-Mediterranean** and **Mediterranean-to-NWE** routes saw increases of around 25% to average WS283 points and WS292 points, respectively. Meanwhile, rates on the **NWE-to-USEC** route rose 15% m-o-m to WS179 points.

On the **East of Suez** route, clean tanker spot freight rates edged up 7% higher m-o-m in December to average WS170 points, with the **Singapore-to-East** route increasing 6% m-o-m to average WS177 points. The **Middle East-to-East** route also increased by 9% m-o-m to average WS162 points, which was still 12% lower than the same month last year.

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

	Size				Change
	1,000 DWT	Oct 19	Nov 19	Dec 19	Dec 19/Nov 19
East of Suez					
Middle East/East	30-35	165	148	162	14
Singapore/East	30-35	163	168	177	10
West of Suez					
Northwest Europe/US East Coast	33-37	141	156	179	23
Mediterranean/Mediterranean	30-35	157	225	283	59
Mediterranean/Northwest Europe	30-35	167	235	292	58

Sources: Argus Media and OPEC Secretariat.

Oil Trade

*Preliminary data indicates that **US crude oil imports** rose by 10.8% or 650 tb/d m-o-m in December to average 6.7 mb/d. However, y-o-y, imports were 6.2% or 438 tb/d lower than the same period last year. For the whole year 2019, US crude imports have averaged 6.8 mb/d, a decline of around 1.0 mb/d, or 12.5%, compared with the 2018 level. US **crude exports** averaged 3.6 mb/d in December, remaining above 3 mb/d for the fourth straight month and around 0.6 mb/d, or 19%, above the previous month. Y-o-y, crude exports were 1.3 mb/d, or 52%, higher. For the whole year 2019, US crude exports averaged 3.0 mb/d, representing a gain of 0.9 mb/d, or 45.6%, from a year ago.*

***China's crude oil imports** jumped in November for the second consecutive month to average 11.16 mb/d, a new record high following a m-o-m gain of 0.4 mb/d or 3.9%. Compared with the same month last year, they were 0.7 mb/d, or 6.7%, higher. As a result, so far, the 2019 yearly average was 10.1 mb/d, representing a gain of almost 1.0 mb/d over the same period a year ago. **Product exports** from the country rose sharply, averaging 1.9 mb/d. This represented an increase of 45%, or 600 tb/d m-o-m, and an increase of 63% or 740 tb/d y-o-y.*

***India's crude imports** averaged 4.7 mb/d in November, representing an increase of 2.6% or 120 tb/d m-o-m. Compared with the same month last year, they were nearly 13%, or 0.53 mb/d, higher. Year-to-date to November, India's crude oil imports have averaged 4.5 mb/d, slightly lower than the same period in 2018. Meanwhile, India's **product imports** declined for the second consecutive month, averaging 976 tb/d in November.* So far this year, the country's net product exports have averaged *368 tb/d, or some 40% lower than in the same period last year.*

***Japan's crude oil imports** in November rose from the previous month, averaging 2.9 mb/d, which is around 1.9%, or 178 tb/d, higher y-o-y. So far in 2019, Japan's crude imports have averaged 3.0 mb/d, representing a decline of 1.5%, or 57 tb/d, compared with the first 11 months of 2018. **Product imports** to Japan averaged 887 tb/d in November, representing an increase of 42 tb/d, or 5%, compared with the previous month. Gains were seen in LPG, while fuel oil and naphtha showed declines. So far this year, total product imports have averaged 877 tb/d, representing a decline of 91 tb/d, or 9.4%, compared with the same period last year.*

*The latest available data shows **OECD Europe crude imports** averaged 11.1 mb/d in September, reflecting a decline of 966 tb/d m-o-m and a gain of 33 tb/d y-o-y. In the first nine months of this year, they averaged 11.5 mb/d, representing a gain of 1% compared with the same period last year.* Product imports declined by 78 tb/d, or 1%, to average 7.7 mb/d in September. So far this year, product imports into OECD Europe have averaged 7.95 mb/d, representing a decline of 208 tb/d, or 3%, compared with the same period in 2018.

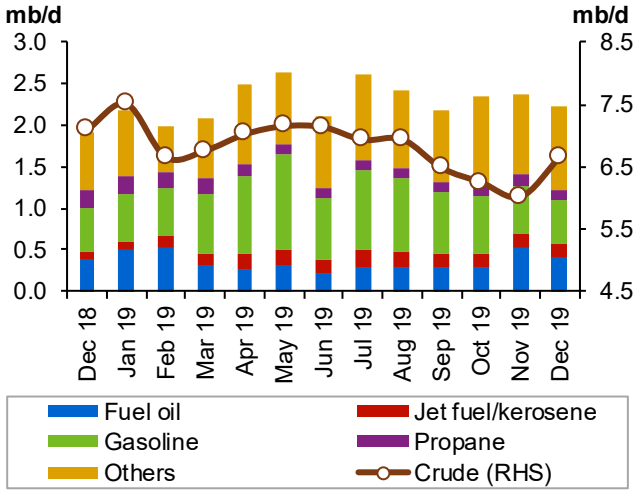
US

Preliminary data indicates that **US crude oil imports** rose by 10.8%, or 650 tb/d, m-o-m in December to average 6.7 mb/d. However, y-o-y, imports were 6.2%, or 438 tb/d, lower than the same period last year. For the whole year 2019, US crude imports have averaged 6.8 mb/d, a decline of around 1.0 mb/d, or 12.5%, compared with the 2018 level.

US **crude exports** averaged 3.6 mb/d in December, according to preliminary data, remaining above 3 mb/d for the fourth straight month and around 0.6 mb/d, or 19%, above the previous month. Y-o-y, crude exports were 1.3 mb/d, or 52%, higher. For the whole year 2019, US crude exports have averaged 3.0 mb/d, representing a gain of 0.9 mb/d, or 45.6%, from a year ago.

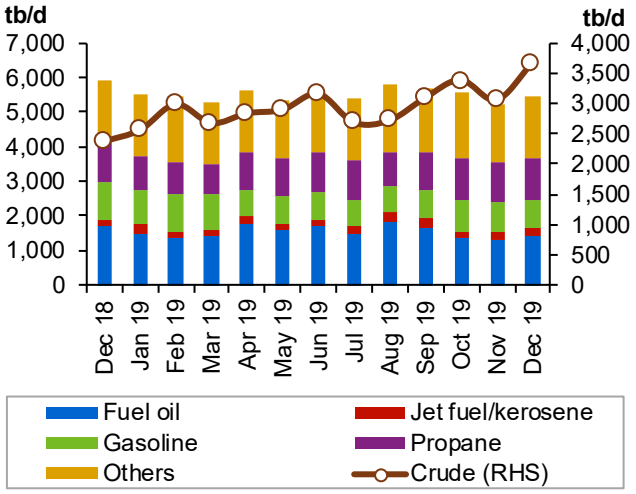
As a result, US **net crude imports** averaged 3.0 mb/d in December. Y-o-y, US net crude exports were down almost 1.7 mb/d, or 36%, compared with the same period last year.

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** fell by 150 tb/d, or 6.3%, in December to average 2.2 mb/d. Compared with the same month last year, they were around 300 tb/d, or 15.6%, higher. For the whole year 2019, product imports into the US have averaged 2.3 mb/d, representing a gain of almost 6%, or 128 tb/d, compared with the 2018 level.

US **product exports** averaged 5.4 mb/d in December, representing an increase of 3.9%, or 205 tb/d m-o-m, but a decline of 8.0% or 475 tb/d y-o-y. In 2019, product exports from the US averaged 5.5 mb/d, around 1%, or 50 tb/d, lower than in the same period in 2018.

As a result, US **net product exports** averaged 3.2 mb/d in December, almost 20%, or 0.8 mb/d, lower than in the same month of 2018.

Combined, **net crude and product imports** averaged 201 tb/d in December, according to preliminary data, compared with 921 tb/d in December 2018.

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

				Change
	Oct 19	Nov 19	Dec 19	Dec 19/Nov 19
Crude oil	2,860	2,953	3,010	58
Total products	-3,249	-2,858	-3,212	-354
Total crude and products	**-389**	**95**	**-201**	**-296**

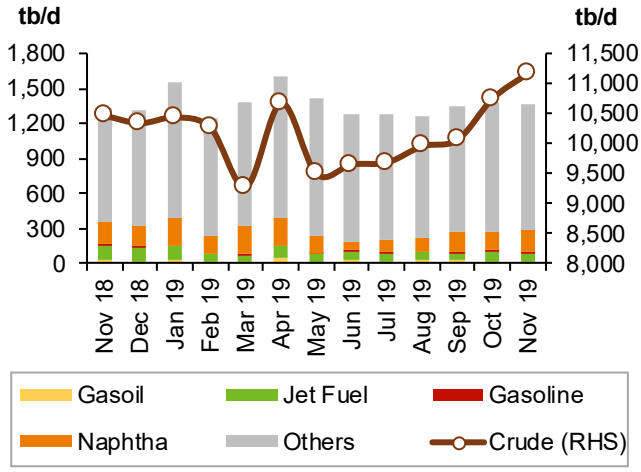
Sources: US EIA and OPEC Secretariat.

China

China's crude oil imports jumped in November for the second-consecutive month to average 11.16 mb/d, a new record high, following a m-o-m gain of 0.4 mb/d or 3.9%. Compared with the same month last year, they were 0.7 mb/d, or 6.7%, higher. As a result, the 2019 yearly average was 10.1 mb/d, representing a gain of almost 1.0 mb/d over the same period last year.

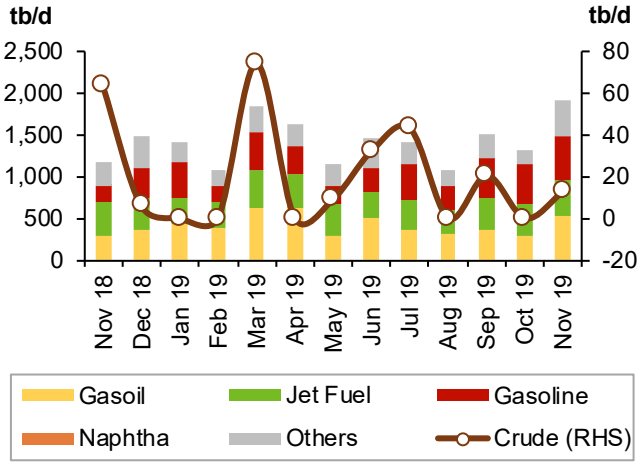
Saudi Arabia remained the top **crude supplier** to China in November, with a share of 17.9%, or 2.0 mb/d, in imports, an increase of 0.8% over the previous month. Russia came in second with a 16.7% share, followed by Iraq with 12.7%, Brazil with 9.0% and Angola with 8.4%.

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 November, almost flat when compared to the previous month. Within products, the picture was mixed. Gains were led by naphtha and fuel oil, which were both at 32 mb/d m-o-m, offsetting losses by jet fuel and asphalt. Y-t-d, China's product imports have declined by 2.2% compared with the same period last year.

Product exports from the country rose sharply, averaging 1.9 mb/d, representing an increase of 45%, or 600 tb/d m-o-m, and an increase of 63%, or 740 tb/d, y-o-y. In terms of major products, gains were led by gasoil and fuel oil. Y-t-d, China's product exports have increased by more than 14% compared with the same period last year.

As a result, China was a **net product exporter** in November, with net exports of 543 tb/d, compared with net imports of 54 tb/d in the previous month.

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

	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
Crude oil	10,042	10,746	11,147	401
Total products	-172	54	-543	-597
Total crude and products	**9,870**	**10,801**	**10,605**	**-196**

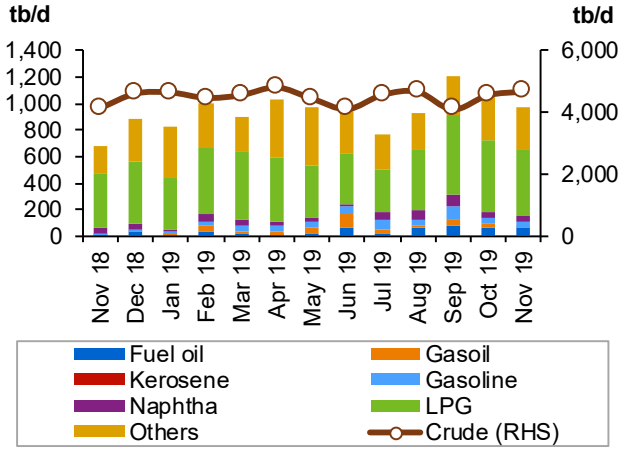
Sources: Argus China Petroleum and China, Oil and Gas Petrochemicals and OPEC Secretariat.

India

India's crude imports averaged 4.7 mb/d in November, representing an increase of 2.6% or 120 tb/d m-o-m. Compared with the same month last year, they were nearly 13%, or 0.53 mb/d, higher. Y-t-d to November, India's crude oil imports have averaged 4.5 mb/d, slightly lower than the same period in 2018.

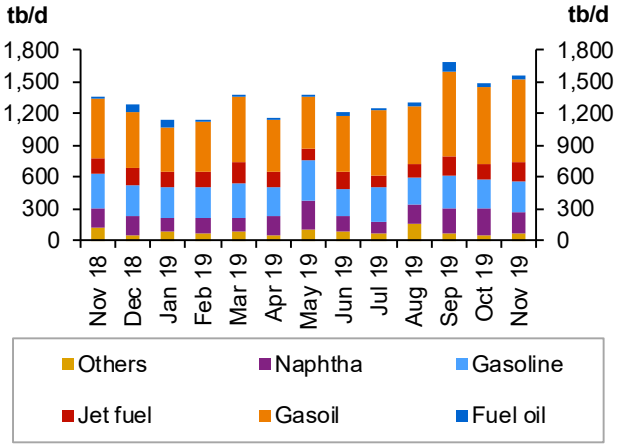
Meanwhile, India's **product imports** declined for the second consecutive month, averaging 976 tb/d in November, representing a decline of 7.7%, or 81 tb/d m-o-m, but still a notable gain of 44% y-o-y. All major products saw declines m-o-m, led by LPG, gasoil and gasoline. Y-t-d, total product imports averaged 967 tb/d in the year to November, some 26% 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 higher in November, up by 5.1%, or 75 tb/d, compared with the level seen the previous month to average 1.6 mb/d. In terms of major products, gasoil, gasoline and jet fuel contributed to the gains, while naphtha declined by 43%. So far this year, India's product exports up to November have averaged 1.3 mb/d, representing a decline of around 1%.

As a result, India's **net product exports** have averaged 368 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

	Sep 19	Oct 19	Nov 19	Change Nov 19/Oct 19
Crude oil	4,104	4,558	4,678	120
Total products	-471	-430	-587	-157
Total crude and products	**3,634**	**4,128**	**4,091**	**-37**

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.

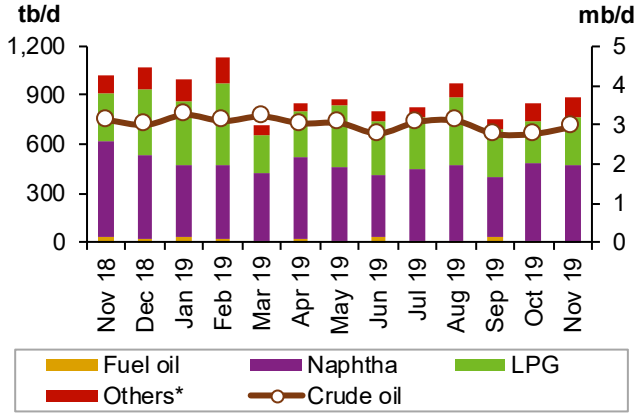
Japan

Japan's crude oil imports in November rose from the previous month, averaging 2.9 mb/d, which is around 1.9%, or 178 tb/d, higher y-o-y. So far in 2019, Japan's crude imports have averaged 3.0 mb/d, representing a decline of 1.5%, or 57 tb/d, compared with the first eleven months of 2018.

Saudi Arabia was the **top supplier of crude** to Japan in November, averaging 1.1 mb/d, representing a share of more than 38%. The United Arab Emirates held the second position with 31%, followed by Kuwait with nearly 9%.

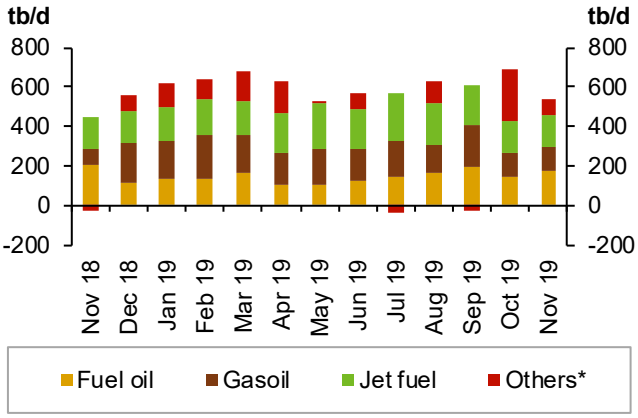
Product imports to Japan, including LPG, averaged 887 tb/d in November, representing an increase of 42 tb/d, or 5%, compared with the previous month. Gains were seen in LPG, while fuel oil and naphtha showed declines. So far this year, total product imports have averaged 877 tb/d, representing a decline of 91 tb/d, or 9.4%, 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 600 tb/d in November, representing a gain of 60 tb/d, or 11%, 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 600 tb/d, an increase of around11% compared with the same period last year.

As a consequence, Japan's **net product imports** averaged 287 tb/d over the first eleven months of 2019, representing a decline of 149 tb/d, or 35%, compared with the same period last year.

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

	Sep 19	Oct 19	Nov 19	*Change* Nov 19/Oct 19
Crude oil	2,764	2,764	2,942	178
Total products	175	153	348	195
Total crude and products	**2,939**	**2,917**	**3,289**	**373**

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

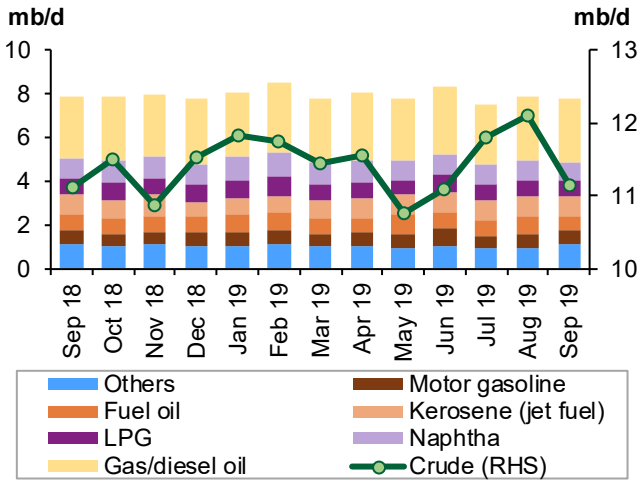
OECD Europe

The latest available data shows **OECD Europe crude imports** averaged 11.1 mb/d in September, reflecting a decline of 966 tb/d m-o-m and a gain of 33 tb/d y-o-y. In the first nine months of this year, they averaged 11.5 mb/d, representing a gain of 1% compared with the same period last year.

Crude exports averaged 2.2 mb/d in September, representing an increase of 269 tb/d, or 13% m-o-m, and a gain of 41 tb/d or 1.9% y-o-y. So far this year, OECD Europe crude exports have averaged 2.1 mb/d in the first nine months of the year, down 55 tb/d from the same period in 2018.

As a result, **OECD Europe net crude imports** averaged 9.4 mb/d y-t-d through to September, which represents an increase of 1.8% over the same period last year.

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



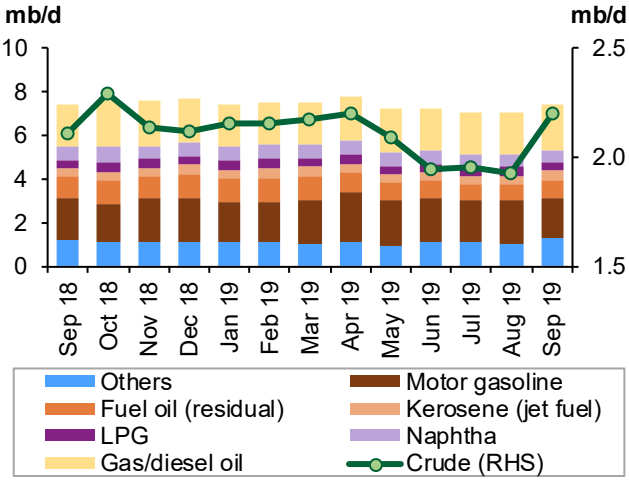
Sources: IEA and OPEC Secretariat.

Product imports declined by 78 tb/d, or 1%, to average 7.7 mb/d in September. Losses were led by fuel oil and LPG, while kerosene and petroleum coke saw increases. So far this year, product imports into OECD Europe have averaged 7.95 mb/d, representing a decline of 208 tb/d, or 3%, compared with the same period in 2018.

OECD Europe **product exports** averaged 7.4 mb/d in September, which was 341 tb/d, or 4.8%, higher m-o-m than the previous month, but some 1% lower compared with the same month last year. Increases in gas/diesel oil and kerosene outpaced the losses in motor gasoline and LPG. In the first nine months of the year, OECD Europe product exports averaged 7.4 mb/d, representing a decline of 344 tb/d, or around 4%, compared with the second half of 2018.

Consequently, **OECD Europe net product imports** in September averaged 349 tb/d, while y-t-d to September, they stood at 588 tb/d, representing an increase of 30% 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

	Jul 19	Aug 19	Sep 19	Change Sep 19/Aug 19
Crude oil	9,855	10,182	8,947	-1,235
Total products	445	769	349	-420
Total crude and products	**10,299**	**10,950**	**9,296**	**-1,654**

Sources: IEA and OPEC Secretariat.

FSU

Total crude oil exports from the Former Soviet Union (FSU) fell by 10.1% in November to average 6.8 mb/d, representing a decline of 768 t/bd. Crude exports through the **Transneft system** declined by 700 tb/d, or 15%, compared with the previous month to average 3.9 mb/d.

Total shipments from the Black Sea declined by 108 tb/d m-o-m, or more than 17%, to average 518 tb/d in November. Total Baltic Sea exports decreased by 437 tb/d, or around 30% m-o-m, with shipments from Ust-Luga falling to 360 tb/d, while Primorsk exports declined by 114 tb/d or 13%. Meanwhile, shipments via the Druzhba pipeline edged up 47 tb/d to average 1.1 mb/d. Kozmino shipments fell by 123 tb/d m-o-m, or 16.4%, to average 627 tb/d. Exports to China via the ESPO pipeline averaged 603 tb/d, a decline of 34 tb/d, or 5.3%, m-o-m.

In the **Lukoil system**, exports via the Barents Sea edged down by 7 tb/d to 156 tb/d in November, while those from the Baltic Sea remained unchanged at 6 tb/d.

Russia's Far East total exports fell by 40 tb/d from the previous month to average 356 tb/d.

Central Asia's total exports averaged 195 tb/d, a 35 tb/d, or 15%, decrease from the previous month.

Black Sea total exports rose by 42 tb/d m-o-m to average 1.52 mb/d, with the Novorossiyk port terminal (CPC) driving the increase, while the Supsa port terminal saw a marginal increase.

In the **Mediterranean**, BTC supplies fell compared with the previous month, down 33 tb/d m-o-m, or 5.1%, to average 613 tb/d.

FSU total product exports increased by 336 mb/d, or more than 11%, in November to average 3.4 mb/d for the month. Movements were mixed, with fuel oil, gasoline, gasoil and naphtha seeing gains, while VGO and jet fuel experienced losses.

Stock Movements

*Preliminary data for November showed that **total OECD commercial oil stocks** fell by 8.8 mb m-o-m to stand at 2,920 mb, which was 62.7 mb higher than the same time one year ago and 17.5 mb above the latest five-year average. Within the components, crude and product stocks fell by 0.7 mb and 8.1 mb, m-o-m respectively. OECD crude stocks stood at 22.9 mb above the latest five-year average, while product stocks indicated a deficit of 5.4 mb. In terms of days of forward cover, OECD commercial stocks fell by 0.4 days m-o-m in November to stand at 60.6 days, which was 0.9 days above the same period in 2018, but 0.6 days below the latest five-year average.*

*Preliminary data for December showed that **US total commercial oil stocks** rose by 18.0 mb m-o-m to stand at 1,281.8 mb, which was 17.7 mb, above the same period a year ago, and 31.5 mb higher than the latest five-year average. Within the components, crude stocks fell by 16 mb, while product stocks rose by 34.0 mb, m-o-m.*

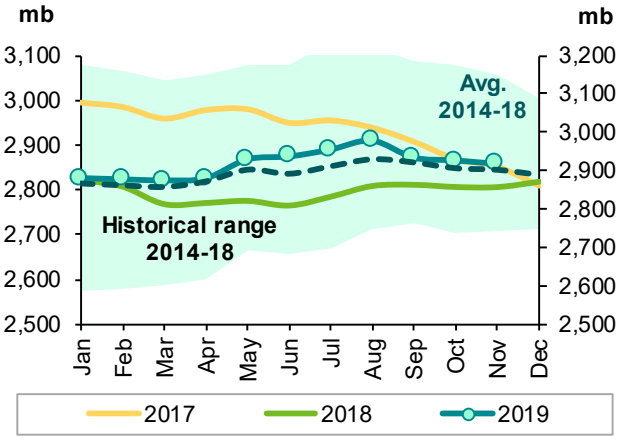
OECD

Preliminary data for November showed that **total OECD commercial oil stocks** fell by 8.8 mb m-o-m to stand at 2,920 mb, which was 62.7 mb higher than the same time one year ago and 17.5 mb above the latest five-year average.

Within the components, crude and product stocks fell by 0.7 mb and 8.1 mb, m-o-m respectively. It should be noted that the overhang of total OECD commercial oil stocks has been reduced by around 282 mb since the 'Declaration of Cooperation' began at the beginning of 2017.

Within the regions, all OECD regions witnessed stock draws from the previous month.

Graph 9 - 1: OECD commercial oil stocks



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

OECD **commercial crude stocks** fell by 0.7 mb m-o-m in November, ending the month at 1,468 mb, which was 14.7 mb higher than the same time a year ago and 22.9 mb higher than the latest five-year average. Compared to the previous month, OECD Americas rose by 2.9 mb, while crude stocks in OECD Europe and OECD Asia Pacific fell by 1.4 mb and 2.2 mb, respectively.

OECD **total product inventories also** fell by 8.1 mb m-o-m in November to stand at 1,451 mb, which was 48.1 mb above the same time a year ago, but 5.4 mb lower than the latest five-year average. Within the OECD regions, product stocks in OECD Asia Pacific rose by 0.9 mb, while OECD Americas and OECD Europe stocks fell by 6.6 mb and 2.5 mb, m-o-m, respectively.

In terms of **days of forward cover**, OECD commercial stocks fell by 0.4 days m-o-m in November to stand at 60.6 days, which was 0.9 days above the same period in 2018, but 0.6 days below the latest five-year average. Within the regions, OECD Americas was 0.2 days below the latest five-year average to stand at 61.3 days in November. OECD Europe's stocks were 0.5 days lower than the latest five-year average, to finish the month at 68.4 days. OECD Asia Pacific stocks were 2.6 days below the latest five-year average to stand at 45.7 days.

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

	Sep 19	Oct 19	Nov 19	Change Nov 19/Oct 19	Nov 18
Crude oil	1,438	1,469	1,468	-0.7	1,454
Products	1,498	1,460	1,451	-8.1	1,403
Total	**2,936**	**2,929**	**2,920**	**-8.8**	**2,857**
Days of forward cover	**60.4**	**61.0**	**60.6**	**-0.4**	**59.6**

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 3.7 mb m-o-m in November to settle at 1,567 mb, which was 39.1 mb above a year ago and 40.0 mb above the latest five-year average. Within the components, crude stocks rose by 2.9 mb, while product stocks fell by 6.6 mb, m-o-m.

Commercial crude oil stocks in OECD Americas rose by 2.9 mb m-o-m in November to stand at 823 mb, which was 13.7 mb higher than the same time a year ago and 35.9 mb higher than the latest five-year average. The build could have been driven by higher supply, as refinery throughput showed an increase.

In contrast, **total product stocks** in OECD Americas fell by 6.6 mb m-o-m in November to stand at 744 mb, which was 25.5 mb higher than the same time one year ago and 4.2 mb above 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 3.9 mb m-o-m in November, ending the month at 960 mb, which was 47.4 mb higher than the same time a year ago and 9.8 mb higher than the latest five-year average. Crude and product stocks fell by 1.4 mb and 2.5 mb, m-o-m, respectively.

OECD Europe's **commercial crude stocks** fell by 1.4 mb m-o-m in November, ending the month at 438 mb, which was 22.2 mb above a year earlier and 27.5 mb higher than the latest five-year average. The drop was driven by higher refinery throughput in the EU-16 countries, which rose by 460 tb/d to stand at 10.37 mb/d.

OECD Europe's **commercial product stocks** also fell by 2.5 mb m-o-m to end November at 522 mb, which was 25.1 mb higher than the same time a year ago, but 17.7 mb lower than 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 fell by 1.3 mb m-o-m in November to stand at 392 mb, which was 23.8 mb lower than a year ago, and 32.3 mb below the latest five-year average. Within the components, crude stocks fell by 2.2 mb, while product stock rose by 0.9 mb, m-o-m.

OECD Asia Pacific's **crude inventories** fell by 2.2 mb m-o-m to end November at 207 mb, which was 21.2 mb lower than one year ago and 40.4 mb below the latest five-year average.

In contrast, OECD Asia Pacific's **total product inventories** rose by 0.9 mb m-o-m to end November at 185 mb, which was 2.5 mb lower than the same time a year ago yet 8.1 mb above the latest five-year average.

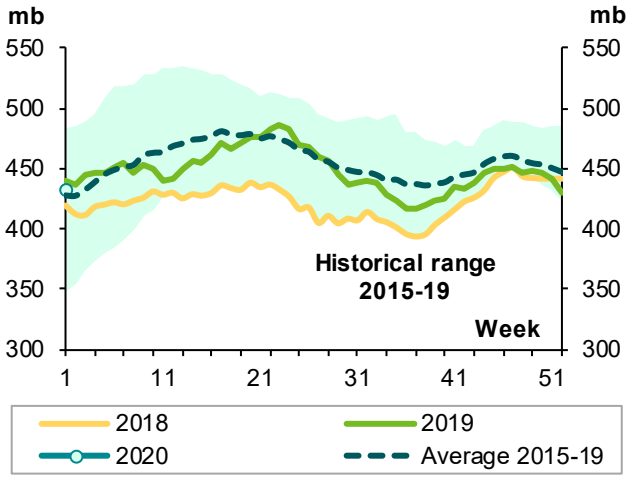
US

Preliminary data for December showed that **US total commercial oil stocks** rose by 18.0 mb m-o-m to stand at 1,281.8 mb, which was 17.7 mb, or 1.4%, above the same period a year ago, and 31.5 mb, or 2.5%, higher than the latest five-year average. Within the components, crude stocks fell by 16 mb, while product stocks rose by 34 mb, m-o-m.

US **commercial crude stocks** fell in December to stand at 431.1 mb, which was 11.4 mb, or 2.6%, below the same time last year, and 0.7 mb, or 0.2%, below the latest five-year average. The drop could have been driven by higher refinery throughput, which increased by around 560 tb/d to a level of 17.40 mb/d. Inventories in Cushing, Oklahoma, fell by more than 8.0 mb to end December at 35.5 mb.

In contrast**, total product stocks** in December rose by 34.0 mb m-o-m to stand at 850.8 mb, which was 29.2 mb, or 3.6%, above the level seen at the same time in 2018, and 32.2 mb, or 3.9%, above the latest five-year average. Within the components, gasoline, jet fuel and distillate saw stock builds, while, residual fuel oil, propylene and other unfinished oil registered stock draws.

Graph 9 - 2: US weekly commercial crude oil inventories



Sources: US EIA and OPEC Secretariat.

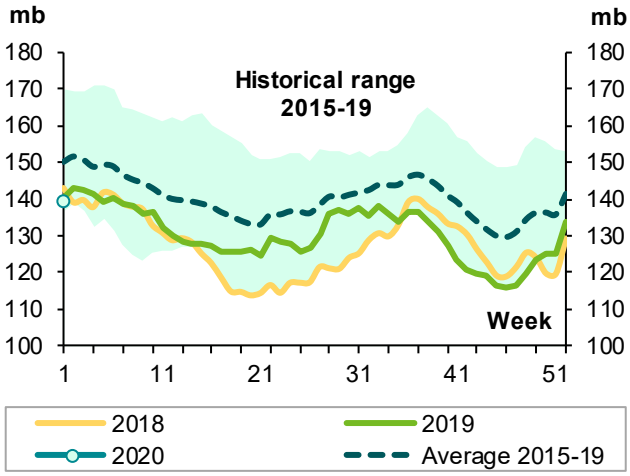
Gasoline stocks rose in December by 22.2 mb m-o-m to settle at 251.6 mb, which was 5.1 mb, or 2.1%, higher than levels seen at the same time last year, and 12.1 mb, or 5.0%, higher than the latest five-year average. This monthly increase came mainly on the back of lower demand, which fell by nearly 250 tb/d to average 8.95 mb/d.

Distillate stocks also rose by 19.6 mb m-o-m in December to end the month at 139.1 mb, which was 1.1 mb, or 0.8%, lower than the same period a year ago, and 10.9 mb, or 7.2%, below the latest five-year average. The stock build could be mainly attributed to lower demand, which decreased by around 500 tb/d to average 3.96 mb/d.

In contrast, **residual fuel stocks** fell by 1.2 mb m-o-m to end December at 28.3 mb, which was at the same level as the same time a year ago yet 6.7 mb, or 19.0%, lower than the latest five-year average.

Jet fuel stocks also rose by 1.7 mb m-o-m to stand at 40.0 mb in December, which was 1.6 mb, or 3.8%, less than the same time a year ago and 0.9 mb, or 2.3%, 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

	Oct 19	Nov 19	Dec 19	Change Dec 19/Nov 19	Dec 18
Crude oil	**444.2**	**447.1**	**431.1**	**-16.0**	**442.5**
Gasoline	224.7	229.4	251.6	22.2	246.5
Distillate fuel	120.1	119.5	139.1	19.6	140.2
Residual fuel oil	29.6	29.5	28.3	-1.2	28.3
Jet fuel	39.8	38.3	40.0	1.7	41.6
Total products	**848.3**	**816.7**	**850.8**	**34.0**	**821.6**
Total	**1,292.5**	**1,263.8**	**1,281.8**	**18.0**	**1,264.1**
SPR	**641.2**	**635.2**	**635.0**	**-0.2**	**649.1**

Sources: US EIA and OPEC Secretariat.

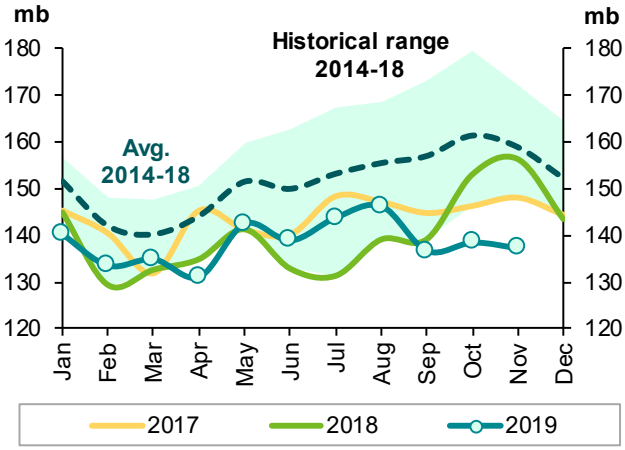
Japan

In **Japan**, **total commercial oil stocks** fell by 1.3 mb m-o-m in November to settle at 137.2 mb, which was 19.0 mb, or 12.2%, lower than one year ago and 21.5 mb, or 13.5%, below the latest five-year average. Within the components, crude stocks fell by 2.2 mb, while products stocks rose by 0.9 mb, m-o-m.

Japanese **commercial crude oil stocks** fell by 2.2 mb m-o-m in November to stand at 71.9 mb, which was 14.7 mb, or 17.0%, below the same period a year ago, and 18.7 mb, or 20.6%, below the latest five-year average. The drop was driven mainly by higher refinery throughput, which increased by around 210 tb/d, or 7.5%, to average 3.02 mb/d. However, higher crude oil import limited a further drop in crude oil stocks.

In contrast, Japan's **total product inventories** rose by 0.9 mb m-o-m to end November at 65.3 mb, which was 4.4 mb or 6.3% lower than the same month last year, and 2.8 mb, or 4.1%, below the latest five-year average. Within products, naphtha saw stock draw, while all other main 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 0.3 mb m-o-m to stand at 10.5 mb in November, which was 0.5 mb, or 4.8%, lower than a year ago, yet 0.1 mb, or 0.3%, higher than the latest five-year average. The build was mainly driven by higher gasoline output, which rose by 6.5% from the previous month. Higher gasoline sales, which increased by 2.1%, limited a further build in gasoline stocks.

Distillate stocks also rose by 1.1 mb m-o-m ending November at 32.5 mb. This was 1.5 mb, or 4.4%, lower than the same time a year ago, and 0.5 mb, or 1.7%, lower than the latest five-year average. Within the distillate components, jet fuel and gasoil stocks rose by 7.1% and 10.8% m-o-m, respectively. The builds in both products were driven by higher output combined with lower domestic sales. In contrast, kerosene stocks fell by 1.3% m-o-m in November on the back of higher kerosene sales.

Total residual fuel oil stocks rose by 0.2 mb m-o-m in November to stand at 13.5 mb, which was 0.4 mb, or 2.8%, lower than the same time last year, and 0.9 mb, or 6.4%, lower than the latest five-year average. Within the components, fuel oil A stocks fell by 3.7% m-o-m on the back of higher domestic sales. In contrast, fuel oil B.C rose by 4.1% m-o-m driven by higher production.

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

	Sep 19	Oct 19	Nov 19	Change Nov 19/Oct 19	Nov 18
Crude oil	**75.1**	**74.1**	**71.9**	**-2.2**	**86.6**
Gasoline	9.6	10.2	10.5	0.3	11.1
Naphtha	9.0	9.5	8.8	-0.7	10.8
Middle distillates	30.1	31.4	32.5	1.1	34.0
Residual fuel oil	12.8	13.3	13.5	0.2	13.9
Total products	**61.5**	**64.4**	**65.3**	**0.9**	**69.7**
Total**	**136.7**	**138.5**	**137.2**	**-1.3**	**156.3**

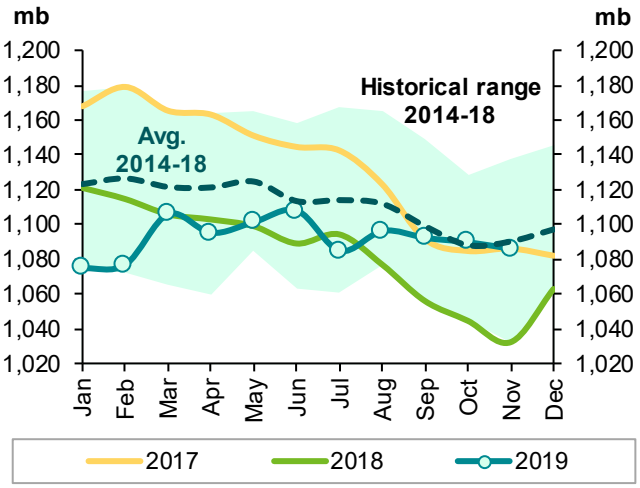
*Note: * At the end of the month.*
*** Includes crude oil and main products only.*
Sources: Ministry of Economy, Trade and Industry of Japan and OPEC Secretariat.

EU plus Norway

Preliminary data for November showed that **total European commercial oil stocks** fell by 3.9 mb m-o-m to stand at 1,085.8 mb, which was 53.8 mb, or 5.2%, above the same time a year ago, yet 4.5 mb, or 0.4%, lower than the latest five-year average. Within the components, crude and product stocks fell by 1.4 mb and 2.5 mb, m-o-m, respectively.

European **crude inventories** fell in November to stand at 479.8 mb, which was 13.6 mb, or 2.9%, higher than the same period a year ago, and 4.1 mb, or 0.9%, higher than the latest five-year average. The drop was driven by higher refinery throughput in the EU-16 countries, which rose by 200 tb/d to stand at 10.0 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 2.5 mb m-o-m, ending November at 606.0 mb, which was 40.3 mb, or 7.1%, higher than the same time a year ago, but 8.6 mb, or 1.4%, lower 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 and naphtha witnessed stock draws in November versus the previous month. Gasoline stocks remained unchanged m-o-m in November.

Distillate stocks fell by 2.8 mb m-o-m in November for the third consecutive month to stand at 409.5 mb, which was 38.4 mb, or 10.3%, higher than the same time last year, and 2.0 mb, or 0.5%, above the latest five-year average.

Naphtha stocks also fell by 0.9 mb in November, ending the month at 25.1 mb, which was 2.5 mb, or 9.2%, below last year's November level, and 0.3 mb, or 1.1%, lower than the latest five-year average.

In contrast**, residual fuel stocks** rose in November by 1.2 mb m-o-m to stand at 63.6 mb, which was 4.2 mb, or 7.1%, higher than the same time one year ago, but 6.5 mb, or 9.2%, below the latest five-year average.

Gasoline stocks remained unchanged m-o-m in November to stand at 107.9 mb, which was 0.2 mb, higher than the same time a year ago, yet 3.8 mb, or 3.4%, lower than the latest five-year average.

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

	Sep 19	Oct 19	Nov 19	Change Nov 19/Oct 19	Nov 18
Crude oil	**477.9**	**481.1**	**479.8**	**-1.4**	**466.2**
Gasoline	109.7	107.9	107.9	0.0	107.7
Naphtha	28.2	26.0	25.1	-0.9	27.6
Middle distillates	415.4	412.3	409.5	-2.8	371.2
Fuel oils	61.1	62.4	63.6	1.2	59.4
Total products	**614.3**	**608.5**	**606.0**	**-2.5**	**565.8**
Total	**1,092.1**	**1,089.7**	**1,085.8**	**-3.9**	**1,032.0**

Sources: Argus, Euroilstock and OPEC Secretariat.

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

Singapore

At the end of November, **total product stocks in Singapore** fell by 0.6 mb m-o-m, reversing the build of last month, to stand at 44.0 mb, which was 0.1 mb, or 0.2%, lower than the same period a year ago. Within products, light and middle distillates experienced stock draws, while fuel oil registered a stock build, compared with the previous month.

Light and middle oil stocks fell in November by 0.5 mb and 0.3 mb, m-o-m, respectively. At 11.2 mb, light distillates stood at 3.0 mb, or 21.1%, lower than the same time one year ago. Middle distillate stocks ended November at 10.9 mb, which was 0.2 mb, or 1.9%, higher than last year's November level.

In contrast, **fuel oil stocks** rose by 0.2 mb m-o-m to end November at 21.9 mb, which was 2.7 mb, or 14.1%, higher than the same period a year ago. This build may have been driven by higher imports to the hub.

ARA

Total product stocks in ARA fell by 3.4 mb m-o-m in November for the fourth consecutive month to settle at 37.2 mb, which was 0.3 mb, or 0.8%, higher than the same time a year ago. Within products, all products registered stock draws compared with the previous month.

Gasoline and gasoil stocks fell by 0.4 mb and 1.8 mb m-o-m in November to stand at 6.4 mb and 17.5 mb, respectively. Gasoline stocks were 2.0 mb, or 23.8%, lower than last year's level at the same time. Gasoil stocks were 2.4 mb, or 15.9%, higher than last year's level.

Naphtha and jet fuel stocks fell by 0.3 mb and 0.1 mb m-o-m in November to stand at 1.9 mb and 5.6 mb, respectively. Naphtha stocks were 0.4 mb, or 17%, below the same period a year ago. Jet fuel stocks were 0.5 mb, or 9.8%, higher than last year's level.

Fuel oil stocks fell by 0.8 mb in November m-o-m to stand at 5.8 mb, which was 0.2 mb, or 3.3%, lower than the same time a year ago.

Fujairah

During the week ending 6 January 2020, **total oil product stocks in Fujairah** rose by 2.17 mb w-o-w to stand at 20.74 mb, according to data from FEDCom and S&P Global Platts. At this level, total oil stocks were 0.16 mb higher than the same time a year ago. Within products, light and heavy distillates witnessed stock builds, while middle distillates registered a stock draw compared with the previous week's data.

Light distillate stocks rose by 1.12 mb w-o-w to stand at 5.89 mb, which was 4.84 mb lower than a year ago at the same time.

Heavy distillate stocks also rose by 1.13 mb to stand at 11.21 mb, which was 2.96 mb higher than the same level one year ago.

In contrast, **middle distillates** fell by 0.08 mb w-o-w to stand at 3.64 mb, which was 2.04 mb higher than the same week in 2019.

Balance of Supply and Demand

Demand for OPEC crude in 2019 *was revised down by 0.1 mb/d from the previous report to stand at 30.6 mb/d, which is 1.0 mb/d lower than the 2018 level.*

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, in line with 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. In 4Q19, OPEC crude oil production stood at 29.6 mb/d, around 1.0 mb/d below the demand for OPEC crude. For 2019, OPEC crude oil production therefore averaged at 29.9 mb/d, around 0.8 mb/d below the demand for OPEC crude.*

Demand for OPEC crude in 2020 *was also revised down by 0.1 mb/d from the previous report to 29.5 mb/d. This is around 1.2 mb/d lower than the 2019 level.*

Balance of supply and demand in 2019

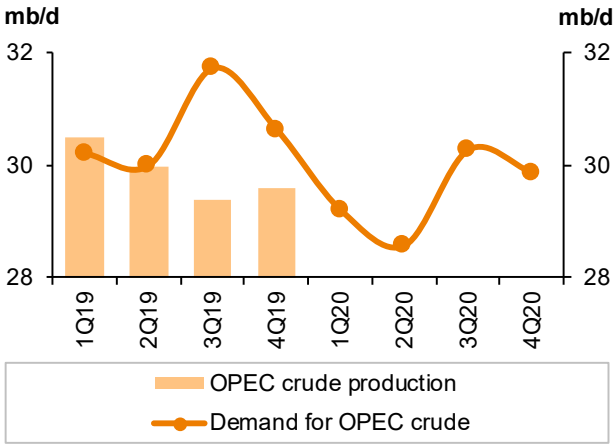
Demand for OPEC crude in 2019 was revised down by 0.1 mb/d from the previous report to stand at 30.6 mb/d, which is 1.0 mb/d lower than the 2018 level.

Compared to the previous monthly report, both 1Q19 and 3Q19 were unchanged, while 2Q19 was revised down by 0.1 mb/d. Demand for OPEC crude in 4Q19 was revised down by 0.2 mb/d.

When compared to the same quarters in 2018, demand for OPEC crude in 1Q19 and 2Q19 were 2.0 mb/d and 1.6 mb/d lower, respectively. 3Q19 and 4Q19 show a drop of 0.1 mb/d and 0.3 mb/d, respectively.

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, in line with 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. In 4Q19, OPEC crude oil production stood at 29.6 mb/d, around 1.0 mb/d below the demand for OPEC crude. For 2019, OPEC crude oil production therefore averaged at 29.9 mb/d, around 0.8 mb/d below 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	**98.84**	**98.79**	**98.56**	**100.60**	**101.07**	**99.77**	**0.93**
Non-OPEC supply	62.47	63.80	63.76	64.17	65.60	64.34	1.86
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**	**68.58**	**68.89**	**70.46**	**69.13**	**1.90**
Difference (a-b)	**31.60**	**30.20**	**29.99**	**31.72**	**30.61**	**30.63**	**-0.97**
OPEC crude oil production	**31.86**	**30.48**	**29.97**	**29.39**	**29.60**	**29.86**	**-2.00**
Balance	**0.26**	**0.29**	**-0.01**	**-2.32**	**-1.01**	**-0.77**	**-1.03**

*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 was revised down by 0.1 mb/d from the previous report to 29.5 mb/d. This is around 1.2 mb/d lower than the 2019 level.

Compared to the previous monthly report, 1Q20 was revised up by 0.1 mb/d, while 2Q20 and 3Q20 were revised down by 0.3 mb/d and 0.2 mb/d, respectively. Demand for OPEC crude in 4Q20 remained unchanged, when compared to the previous assessment.

When compared to the same quarters in 2019, demand for OPEC crude in 1Q20 and 2Q20 were 1.0 mb/d and 1.4 mb/d lower, respectively. 3Q20 and 4Q20 show a drop of 1.5 mb/d and 0.8 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	**99.77**	**99.95**	**99.73**	**101.83**	**102.38**	**100.98**	**1.22**
Non-OPEC supply	64.34	65.94	66.34	66.74	67.70	66.68	2.35
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	**69.13**	**70.77**	**71.17**	**71.57**	**72.53**	**71.51**	**2.38**
Difference (a-b)	**30.63**	**29.19**	**28.56**	**30.26**	**29.85**	**29.47**	**-1.16**

*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	47.07	47.61	48.01	47.76	47.15	48.45	48.57	47.99	47.86	47.23	48.54	48.67	48.08
Americas	24.89	25.07	25.60	25.19	25.32	26.07	26.16	25.69	25.42	25.52	26.25	26.35	25.89
Europe	14.04	14.38	14.33	14.08	14.22	14.71	14.29	14.33	14.03	14.19	14.69	14.27	14.30
Asia Pacific	8.14	8.15	8.08	8.50	7.61	7.68	8.12	7.97	8.41	7.52	7.60	8.05	7.90
DCs	31.56	32.13	32.62	32.96	32.84	33.46	33.19	33.11	33.60	33.49	34.17	33.92	33.79
FSU	4.57	4.64	4.76	4.70	4.68	4.96	5.04	4.84	4.80	4.78	5.07	5.15	4.95
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	12.93	13.52	13.30	13.79	13.39
(a) Total world demand	**95.70**	**97.42**	**98.84**	**98.79**	**98.56**	**100.60**	**101.07**	**99.77**	**99.95**	**99.73**	**101.83**	**102.38**	**100.98**
Non-OPEC supply													
OECD	24.86	25.71	28.33	29.34	29.64	29.74	30.90	29.91	31.29	31.38	31.89	32.41	31.74
Americas	20.59	21.49	24.08	25.07	25.59	25.68	26.43	25.69	26.71	26.96	27.39	27.68	27.18
Europe	3.85	3.82	3.84	3.84	3.57	3.55	3.93	3.72	4.03	3.88	3.93	4.15	4.00
Asia Pacific	0.43	0.39	0.41	0.43	0.48	0.51	0.55	0.49	0.55	0.54	0.58	0.58	0.56
DCs	13.54	13.40	13.46	13.41	13.43	13.59	13.79	13.56	13.85	13.93	13.93	14.07	13.95
FSU	13.85	14.05	14.29	14.55	14.16	14.34	14.41	14.37	14.23	14.45	14.37	14.65	14.42
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**	**63.76**	**64.17**	**65.60**	**64.34**	**65.94**	**66.34**	**66.74**	**67.70**	**66.68**
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**	**68.58**	**68.89**	**70.46**	**69.13**	**70.77**	**71.17**	**71.57**	**72.53**	**71.51**
OPEC crude oil production (secondary sources)	32.21	32.01	31.86	30.48	29.97	29.39	29.60	29.86					
Total supply	95.47	96.13	99.10	99.08	98.55	98.28	100.06	98.99					
Balance (stock change and miscellaneous)	-0.23	-1.29	0.26	0.29	-0.01	-2.32	-1.01	-0.77					
OECD closing stock levels, *mb*													
Commercial	3,007	2,860	2,870	2,877	2,939	2,936							
SPR	1,601	1,569	1,552	1,557	1,549	1,544							
Total	**4,608**	**4,428**	**4,422**	**4,434**	**4,488**	**4,480**							
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	61	60							
SPR	34	33	32	33	32	32							
Total	**97**	**92**	**92**	**94**	**93**	**92**							
Memo items													
(a) - (b)	**32.44**	**33.31**	**31.60**	**30.20**	**29.99**	**31.72**	**30.61**	**30.63**	**29.19**	**28.56**	**30.26**	**29.85**	**29.47**

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	0.06	0.07	0.08	0.11	-0.11	0.01	0.13	0.04	0.13	-0.09	0.03	0.15	0.06
Americas	-	-	0.05	-0.03	-0.06	0.04	0.15	0.02	-0.01	-0.04	0.06	0.16	0.04
Europe	0.06	0.06	0.02	0.09	-0.01	0.03	-0.01	0.02	0.09	-0.01	0.03	-0.01	0.02
Asia Pacific	-	-	-	0.04	-0.04	-0.05	-	-0.01	0.04	-0.04	-0.05	-	-0.01
DCs	-	-	-	-0.02	-0.03	-0.03	0.05	-0.01	0.06	0.04	0.05	0.13	0.07
FSU	-0.06	-0.06	-0.06	-0.05	-0.06	-0.07	-0.07	-0.06	-0.03	-0.04	-0.04	-0.04	-0.04
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	0.02	0.02	0.02	0.02	0.02
(a) Total world demand	**0.01**	**0.01**	**0.01**	**0.04**	**-0.20**	**-0.09**	**0.12**	**-0.03**	**0.18**	**-0.06**	**0.05**	**0.26**	**0.11**
Non-OPEC supply													
OECD	-	-	-	-	-0.04	-0.07	0.28	0.04	0.15	0.12	0.16	0.11	0.14
Americas	-	-	-	-	-	-0.04	0.21	0.04	0.07	0.04	0.05	0.06	0.06
Europe	-	-	-	-	-0.04	-0.04	0.04	-0.01	0.08	0.07	0.10	0.04	0.07
Asia Pacific	-	-	-	-	-	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01
DCs	-	-	-	-	-0.01	-0.01	-0.04	-0.01	0.07	0.13	0.12	0.09	0.10
FSU	-	-	-	-	-	-	0.04	0.01	-0.10	0.01	0.01	0.01	-0.02
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-0.05	-0.08	0.29	0.04	0.12	0.26	0.29	0.21	0.22
OPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Total non-OPEC supply and OPEC NGLs	**-**	**-**	**-**	**-**	**-0.05**	**-0.08**	**0.29**	**0.04**	**0.12**	**0.26**	**0.29**	**0.21**	**0.22**
OPEC crude oil production (secondary sources)	**-**	**-**	**-**	**-**	**-**	**-**							
Total supply	-	-	-	-	-0.05	-0.08							
Balance (stock change and miscellaneous)	-0.01	-0.01	-0.01	-0.04	0.15	0.01							
OECD closing stock levels (mb)													
Commercial	6	5	5	6	9	-2							
SPR	1	1	1	1	1	-							
Total	7	6	7	7	10	-2							
Oil-on-water	-	-	-	-	-	-							
Days of forward consumption in OECD													
Commercial onland stocks	-	-	-	-	-	-							
SPR	-	-	-	-	-	-							
Total	**-**	**-**	**-**	**-**	**-**	**-**							
Memo items													
(a) - (b)	**0.01**	**0.01**	**0.01**	**0.04**	**-0.15**	**-0.01**	**-0.17**	**-0.07**	**0.05**	**-0.32**	**-0.24**	**0.04**	**-0.11**

*Note: * This compares Table 11 - 1 in this issue of the MOMR with Table 11 - 1 in the December 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**	**2,939**	**2,936**
Americas	1,598	1,498	1,542	1,571	1,498	1,468	1,471	1,541	1,542	1,508	1,565	1,558
Europe	989	943	922	965	943	959	944	925	922	980	985	979
Asia Pacific	415	412	399	433	412	378	388	390	399	380	389	399
OECD SPR	**1,600**	**1,568**	**1,550**	**1,578**	**1,568**	**1,576**	**1,573**	**1,569**	**1,550**	**1,556**	**1,549**	**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	485	482
Asia Pacific	421	423	420	423	423	422	422	422	420	417	417	416
OECD total	**4,602**	**4,421**	**4,413**	**4,547**	**4,421**	**4,381**	**4,376**	**4,424**	**4,413**	**4,424**	**4,488**	**4,480**
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**	**61**	**60**
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	69
Asia Pacific	51	51	50	52	48	49	50	48	47	50	51	49
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**	**93**	**92**

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	19.1	18.4	1.7	19.2	19.8	20.0	20.2	19.8	1.4
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	2.0	1.9	1.9	1.8	1.9	0.0
OECD Americas	**20.6**	**21.5**	**24.1**	**25.7**	**26.4**	**25.7**	**1.6**	**26.7**	**27.0**	**27.4**	**27.7**	**27.2**	**1.5**
Norway	2.0	2.0	1.9	1.7	2.0	1.7	-0.1	2.0	1.9	2.0	2.2	2.0	0.3
UK	1.0	1.0	1.1	1.1	1.2	1.2	0.0	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**	**3.9**	**3.9**	**4.2**	**4.0**	**0.3**
Australia	0.3	0.3	0.3	0.4	0.5	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**	**0.6**	**0.5**	**0.6**	**0.6**	**0.6**	**0.1**
Total OECD	**24.9**	**25.7**	**28.3**	**29.7**	**30.9**	**29.9**	**1.6**	**31.3**	**31.4**	**31.9**	**32.4**	**31.7**	**1.8**
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	0.8	0.8	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	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.0
Brazil	3.1	3.3	3.3	3.6	3.8	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	0.3	0.4	0.4	0.4	0.3	0.1
Latin America	**5.1**	**5.2**	**5.2**	**5.5**	**5.7**	**5.4**	**0.2**	**5.7**	**5.7**	**5.7**	**5.9**	**5.8**	**0.4**
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	1.9	1.9	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	0.6	0.7	0.0	0.6	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	0.2	0.2	0.0	0.2	0.3	0.3	0.3	0.2	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**	**1.5**	**1.5**	**0.0**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**0.0**
Total DCs	**13.5**	**13.4**	**13.5**	**13.6**	**13.8**	**13.6**	**0.1**	**13.9**	**13.9**	**13.9**	**14.1**	**13.9**	**0.4**
FSU	**13.9**	**14.1**	**14.3**	**14.3**	**14.4**	**14.4**	**0.1**	**14.2**	**14.5**	**14.4**	**14.6**	**14.4**	**0.1**
Russia	11.1	11.2	11.3	11.4	11.5	11.4	0.1	11.3	11.5	11.5	11.6	11.5	0.0
Kazakhstan	1.6	1.7	1.8	1.8	1.9	1.8	0.0	1.8	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**	**61.9**	**63.3**	**62.1**	**1.8**	**63.6**	**64.0**	**64.4**	**65.4**	**64.4**	**2.3**
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**	**64.2**	**65.6**	**64.3**	**1.9**	**65.9**	**66.3**	**66.7**	**67.7**	**66.7**	**2.3**
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**	**68.9**	**70.5**	**69.1**	**1.9**	**70.8**	**71.2**	**71.6**	**72.5**	**71.5**	**2.4**

Note: OECD Americas includes Chile.

Totals may not add up due to independent rounding.

Source: OPEC Secretariat.

Table 11 - 5: World rig count, units

	2017	2018	2019	Change 2019/18	1Q19	2Q19	3Q19	4Q19	Nov 19	Dec 19	Change Dec/Nov
US	875	1,031	944	*-88*	1,045	990	920	819	811	805	*-6*
Canada	207	191	134	*-57*	185	83	131	138	136	135	*-1*
Mexico	17	27	37	*10*	26	34	38	48	50	49	*-1*
OECD Americas	1,099	1,249	1,115	*-135*	1,257	1,106	1,089	1,006	997	989	*-8*
Norway	15	15	17	*2*	15	17	18	18	18	17	*-1*
UK	9	7	15	*7*	13	16	16	13	14	11	*-3*
OECD Europe	92	85	149	*63*	92	159	190	154	147	139	*-8*
OECD Asia Pacific	15	21	29	*8*	24	29	31	30	29	29	*0*
Total OECD	**1,206**	**1,355**	**1,292**	***-63***	**1,372**	**1,295**	**1,310**	**1,189**	**1,173**	**1,157**	***-16***
Other Asia*	208	222	221	*-1*	232	225	217	212	209	212	*3*
Latin America	112	123	121	*-2*	128	122	123	113	114	112	*-2*
Middle East	68	65	68	*3*	66	69	67	69	69	70	*1*
Africa	38	45	54	*10*	54	52	50	62	60	63	*3*
Total DCs	**426**	**454**	**465**	***11***	**481**	**468**	**457**	**455**	**452**	**457**	***5***
Non-OPEC rig count	**1,632**	**1,809**	**1,757**	***-53***	**1,853**	**1,763**	**1,767**	**1,645**	**1,625**	**1,614**	***-11***
Algeria	54	50	45	*-5*	47	49	42	41	39	42	*3*
Angola	3	4	4	*1*	5	5	4	3	3	5	*2*
Congo	2	3	3	*0*	4	4	3	2	2	2	*0*
Ecuador	6	8	8	*0*	9	8	9	6	7	5	*-2*
Equatorial Guinea**	1	1	1	*0*	1	1	1	1	1	1	*0*
Gabon	1	3	7	*4*	7	6	7	9	9	9	*0*
Iran**	156	157	157	*0*	157	157	157	157	157	157	*0*
Iraq	49	59	74	*14*	65	75	77	77	77	77	*0*
Kuwait	54	51	46	*-5*	44	44	46	48	48	50	*2*
Libya	1	5	14	*10*	11	15	16	16	16	16	*0*
Nigeria	9	13	16	*2*	14	14	16	18	20	17	*-3*
Saudi Arabia	118	117	115	*-2*	118	115	118	109	107	115	*8*
UAE	52	55	62	*7*	58	59	64	67	64	66	*2*
Venezuela	49	32	25	*-8*	25	23	25	25	25	25	*0*
OPEC rig count	**553**	**558**	**576**	***18***	**565**	**576**	**585**	**580**	**575**	**587**	***12***
World rig count* **	**2,185**	**2,368**	**2,333**	***-35***	**2,418**	**2,338**	**2,352**	**2,225**	**2,200**	**2,201**	***1***
of which:											
Oil	1,678	1,886	1,838	*-48*	1,936	1,827	1,833	1,757	1,746	1,738	*-8*
Gas	466	448	463	*15*	455	482	486	430	418	421	*3*
Others	42	33	31	*-2*	26	29	32	38	36	42	*6*

*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 3.54 in December

December 2019	66.48
November 2019	62.94
Annual average	**64.04**

December OPEC crude production

mb/d, according to secondary sources

down 0.16 in December

December 2019	29.44
November 2019	29.61

Economic growth rate

per cent

	World	OECD	US	Japan	Euro-zone	China	India
2019	3.0	1.6	2.3	1.1	1.2	6.2	5.5
2020	3.1	1.5	1.9	0.7	1.0	5.9	6.4

Supply and demand

mb/d

2019		**19/18**	**2020**		**20/19**
World demand	99.8	0.9	World demand	101.0	1.2
Non-OPEC supply	64.3	1.9	Non-OPEC supply	66.7	2.3
OPEC NGLs	4.8	0.0	OPEC NGLs	4.8	0.0
Difference	**30.6**	**–1.0**	**Difference**	**29.5**	**–1.2**

OECD commercial stocks

mb

	Sep 19	Oct 19	Nov 19	Nov 19/Oct 19	Nov 18
Crude oil	1,438	1,469	1,468	–0.7	1,454
Products	1,498	1,460	1,451	–8.1	1,403
Total	**2,936**	**2,929**	**2,920**	**–8.8**	**2,857**
Days of forward cover	60.4	61.0	60.6	–0.4	59.6

Next report to be issued on 12 February 2020.