

17 February 2020

Energy | Regional Oil & Gas

Regional Oil & Gas

Overweight (Maintained)

The Black Swan

Stocks Covered 21
 Ratings (Buy/Neutral/Sell): 13 / 7 / 1
 Last 12m Earnings Revision Trend: Negative

- Maintain OVERWEIGHT; Top Picks include SPRC, Keppel and Yinson.** COVID-19 has had a negative impact on oil demand, however, the extent of the impact remains uncertain, as the virus outbreak continues to spread. We revise our crude oil price to USD62.3/bbl for 2020F, to reflect this impact with the current available data. We now expect a subdued 1H20F while a rebound in oil demand/price is expected in 2H20F.
- COVID-19 is a black swan event** that is difficult to gauge with any certainty as to the extent of the global impact – be it social or economic. We tracked the impact of virus on crude oil price in our previous report *Fear Of The Unknown; Still OVERWEIGHT*. In this report, we revised our demand/supply and crude oil price to reflect the most likely impact of this event, with current available data.
- Weak demand for 1H20F.** COVID-19's impact on the global economy/oil demand remains quite uncertain. Major agencies have already revised down global oil demand growth for 1H20, putting demand growth at its weakest since 2011. With the latest demand and supply forecasts, we expect a weak 1H20F, with additional demand at 0.76mbpd and 0.80mbpd for 1Q-2Q20F. A rebound in demand growth in 2H20F is expected at 1mbpd and 1.3mbpd for 3Q-4Q20F.
- 2H20F to be stronger.** Assuming OPEC keeps its production at the January rate of 28.37mbpd, we expect a shortfall of 600kbpd and slight oversupply of 0.1mbpd for 1Q-2Q20F respectively. With much stronger demand in 2H20F, we expect to see a shortfall of 1.7mbpd and 1.5mbpd for 3Q-4Q20F. For 2020F, we should see a shortfall of 0.9mbpd.
- Our crude oil price is revised to USD59.5/bbl in 1H20 to reflect the subdued 1H20F,** rebounding to USD65/bbl in 2H20F. Crude oil price forecast is revised to average USD62.3/bbl (from USD64/bbl) for 2020F and maintained at USD64/bbl for 2021F-2022F. Our longer-term crude oil price forecast is maintained at USD60/bbl.
- Production cut. For January,** OPEC participating members' production cuts averaged 1.517mbpd, with production averaging at 24.708mbpd, or 130% compliant. Saudi Arabia production was at 9.73mbpd, cutting 900kbpd from the Oct 2018 baseline – it was 184% compliant. Russia's crude oil production data showed an increase in production at 11.28mbpd (+0.01mbpd MoM), however, this included both condensate and crude oil. No information has been released by Russia about the breakdown in crude oil vs condensate.
- OPEC+ actions:** We believe that OPEC and its alliance (OPEC+) will remain intact for the forecasted period. We expect OPEC+ to provide either a deeper cut and/or extension of the production cut at its next meeting. We expect crude oil price to remain in the +/-USD57 range, with such actions until COVID-19 fears dissipate. After which, we believe our normalised crude oil price will be attained ie in 2H20F.
- OVERWEIGHT.** At the moment, all stocks under our coverage should be under pressure, due to the uncertainty of the COVID-19 impact. We assume normalcy returns in 2H20F. With our downgrade of Thai Oil to NEUTRAL, the Thai oil & gas sector is now a NEUTRAL, while the sectors in Singapore and Malaysia remain OVERWEIGHT. Top Picks are PTT Global Chemical, Star Petroleum Refining, Keppel, Serba Dinamik, and Yinson.

Top Picks	Target Price
Star Petroleum Refining (SPRC TB) – BUY	THB10.30
Keppel Corp (KEP SP) – BUY	SGD7.80
Yinson (YNS MK) – BUY	MYR8.22

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The black swan event is difficult to predict



Source: pixabay

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Company	Rating	TP	% Upside (Downside)	P/E (x) Dec-20F	P/BV (x) Dec-20F	Yield (%) Dec-20F
PTTGC	BUY	THB59.00	12.92	5.87	0.79	8.13
SPRC	BUY	THB10.30	14.44	10.00	0.87	5.22
Yinson	BUY	MYR8.22	17.43	19.72	1.99	0.57
Serba Dinamik	BUY	MYR2.81	15.64	12.79	2.64	2.47
Keppel Corp	BUY	SGD7.80	16.07	11.79	1.04	4.17

Source: Bloomberg, RHB

Crude Oil Price Outlook

Crude oil price (Brent spot) averaged USD63.6/bbl for January (vs our original forecast of USD64/bbl for 1Q20) as US-Iran tensions drove up crude oil price. Towards the end of January up to now, world equities and oil markets have been gripped by COVID-19, which started in China and has since spread globally. Crude oil price has averaged USD54.56/bbl for the month of February.

Figure 1: Crude oil price YTD-2020 averaged USD60.9/bbl

(USD/bbl,spot)	4Q18		3Q19		4Q19		YTD20	
	End	Ave	End	Ave	End	Ave	End	Ave
WTI	45.4	59.0	54.1	56.4	61.1	56.9	51.4	55.5
Brent	53.2	67.7	59.9	61.9	66.4	62.5	56.4	60.9
Dubai	52.4	67.2	59.9	60.8	65.4	61.3	55.5	60.9
Tapis	57.1	70.6	65.7	66.6	73.9	68.1	62.9	68.8

Source RHB

At the time of writing, COVID-19 has infected 64,449 people in 28 countries and killed 1,383 people. China has put 20 cities on lockdown, and quarantined 56m people. It has closed factories and industries. Other countries have curbed travel to and from China. Global land, air and sea transportation are most likely to take a hit, as with the demand for crude oil. The fear of the unknown has impacted global trade and the financial markets.

Uncertainty ensues. COVID-19's impact on the global economy/oil demand remain quite uncertain. IEA and OPEC have already revised down 2020F global demand growth by 365kbpd and 250kbpd respectively. Global demand growth for 2020F is now expected at 825kbpd/990kbpd for IEA and OPEC respectively – the slowest growth since 2011.

Under current demand and supply forecasts, we expect a weak 1H20, with additional demand at 0.76mbpd and 0.80mbpd for 1Q-2Q20F. We expect a rebound in additional demand at 1mbpd and 1.3mbpd for 3Q-4Q20F.

A stronger 2H20F. Assuming OPEC keeps its production at the current rate of 28.37mbpd, we expect a shortfall of 600kbpd and slight oversupply of 0.1mbpd for 1Q-2Q20F respectively. With a much stronger demand in 2H20F, we expect to see a shortfall of 1.7mbpd and 1.5mbpd for 3Q-4Q20F. For 2020F, we should see a shortfall of 0.9mbpd.

Our crude oil price is revised to reflect the subdued 1H20F, with a rebound demand in 2H20F. Crude oil price forecast is revised to average USD62.3/bbl for 2020F and maintained at USD64/bbl for 2021F-2022F. Our longer-term crude oil price forecast is maintained at USD60/bbl.

Our assumption is that the oil markets will remain challenging for the forecasted period, while OPEC+ should stay intact – this is to monitor and provide support for the oil markets. OPEC+ is currently looking at further production cut of 600kbpd due to the impact of oil demand slowdown from COVID-19 and/or production cut extension.

Figure 2: Our crude oil price revision

Crude oil price (USD/bbl)	1Q20F	2Q20F	3Q20F	4Q20F	2020F	2021F-2022F	2023F onwards
Brent forecast - revised	59.0	60.0	64.0	66.0	62.3	64.0	60.0
Brent forecast - prior	64.0	62.0	64.0	66.0	64.0	64.0	60.0
USD/bbl change	(5.0)	(2.0)	-	-	(1.8)	-	-

Source RHB

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Figure 3: OPEC demand/supply and crude oil prices

(mbpd)	2016	2017	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020
Crude oil price (ave Brent)	44.1	54.4	71.2	63.1	68.5	61.9	62.5	64	59.0	60.0	64.0	66.0	62.3
<i>(Actual/RHB forecasts)</i>													
World demand													
OECD	47.1	47.6	48.0	47.7	47.2	48.5	48.5	48.0	47.7	47.1	48.5	48.6	48.0
Americas	24.9	25.1	25.6	25.1	25.3	26.1	26.1	25.7	25.3	25.5	26.2	26.3	25.8
Europe	14.0	14.4	14.3	14.1	14.3	14.8	14.3	14.3	14.0	14.2	14.7	14.2	14.3
Asia Pacific	8.1	8.2	8.1	8.5	7.6	7.7	8.1	8.0	8.3	7.4	7.6	8.1	7.9
DCs	31.6	32.1	32.6	33.0	32.8	33.4	33.2	33.1	33.5	33.4	34.1	33.9	33.7
FSU	4.6	4.6	4.8	4.7	4.7	5.0	5.0	4.8	4.8	4.8	5.1	5.2	5.0
Other Europe	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.8
China	11.8	12.3	12.7	12.6	13.2	13.0	13.5	13.1	12.8	13.4	13.2	13.8	13.3
(a) Total world demand	95.7	97.4	98.8	98.8	98.6	100.6	101.1	99.7	99.5	99.4	101.6	102.4	100.7
World demand growth (YoY)								0.9	0.8	0.8	1.1	1.3	1.0
Non-OPEC liquids production													
OECD	24.9	25.7	28.3	29.3	29.6	29.7	30.9	29.9	31.1	31.2	31.9	32.3	31.6
Americas	20.6	21.5	24.1	25.1	25.6	25.7	26.5	25.7	26.5	26.8	27.3	27.6	27.0
Europe	3.9	3.8	3.8	3.8	3.6	3.6	3.9	3.7	4.1	3.9	4.0	4.2	4.0
Asia Pacific	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.6	0.5	0.6	0.6	0.6
DCs	13.5	13.4	13.5	13.4	13.4	13.6	13.8	13.6	13.9	14.0	14.0	14.1	14.0
FSU	13.9	14.1	14.3	14.6	14.2	14.3	14.4	14.4	14.2	14.5	14.4	14.7	14.4
Other Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	4.1	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Processing gains	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Total non-OPEC	58.7	59.5	62.5	63.8	63.8	64.2	65.7	64.4	65.8	66.2	66.8	67.7	66.6
Non-OPEC growth (YoY)								1.9	2.0	2.5	2.6	2.0	2.2
OPEC NGLs +	4.6	4.6	4.8	4.8	4.8	4.7	4.9	4.8	4.8	4.8	4.8	4.8	4.8
(b) Total non-OPEC+OPEC NGLs	63.3	64.1	67.2	68.6	68.6	68.9	70.5	69.2	70.6	71.1	71.6	72.5	71.4
(c) OPEC crude oil production	32.2	32.0	31.9	30.5	30.0	29.4	29.6	29.9	28.4	28.4	28.4	28.4	28.4
Total supply	95.5	96.1	99.1	99.1	98.6	98.3	100.1	99.0					
Balance	(0.2)	(1.3)	0.3	0.3	(0.0)	(2.3)	(1.0)	(0.7)					
(d) Call on OPEC (a-b)	32.4	33.3	31.6	30.2	30.0	31.7	30.5	30.6	28.9	28.3	30.0	29.9	29.3
Oversupply/shortfall (c-d)	(0.2)	(1.3)	0.3	0.3	(0.0)	(2.3)	(1.0)	(0.7)	(0.6)	0.1	(1.7)	(1.5)	(0.9)
OECD closing stock levels, mb													
Commercial	3,007	2,860	2,873	2,877	2,939	2,945	2,918	2,918					
SPR	1,601	1,569	1,552	1,557	1,549	1,544	1,538	1,538					
Total	4,608	4,428	4,425	4,434	4,488	4,489	4,456	4,456					
Oil-on-water	1,102	1,025	1,058	1,013	995	1,012	1,007	1,007					

Source OPEC, Bloomberg, RHB

COVID-19 scenario:

COVID-19 could have more impact on the global economy, compared to any other virus outbreak, as China tries to contain it with almost 60m people quarantined and 20 cities in lockdown. Our analysis suggest that crude oil prices could decline to USD38-57 per bbl, depending on the severity of the outbreak.

- i. **Low case, USD57/bbl:** We assume 10% decline in crude oil price, assuming that the situation does not result in a global recession, can be contained, and is not prolonged. We expect crude oil price could average USD57/bbl for 2020F;
- ii. **Worse case:** We assume a 40% decline, which is of a similar magnitude to that of the Asian/global financial crisis. We can expect crude oil price to decline much further than where we are now – at USD38.4/bbl.

For more details: *Fear Of The Unknown; Still OVERWEIGHT*

Figure 4: Possible crude oil price impact

	Crude oil price forecast (USD/bbl)	Impact % decline	Crude oil price (high and low case, USD/bbl)	Crude oil demand (mbpd)
Low case	64	-10%	57.6	c. -0.5
Worst case	64	-40%	38.4	c. -1.0

Source RHB

January Production Cuts

For January, OPEC participating members' production cuts averaged 1.517mbpd, with production averaging at 24.708mbpd, or 130% compliant:

- i. Saudi Arabia's production cut was 900kbpd, with production averaging 9.733mbpd, it was 184% compliant;
- ii. Four other countries complied or exceeded their production cut agreements: Algeria, Angola, Congo and Kuwait;
- iii. Equatorial Guinea and UAE were 60% and 86% compliant respectively to the production cut agreement;
- iv. Iraq has started to lower its crude oil production, now at 4.501mbpd, it cut 152kbpd from Oct 2018 production baseline. It was 80% compliant;
- v. Two countries increased their production levels: Gabon's production was 196kbpd (+9kbpd from Oct-18 baseline) and Nigeria's production was 1.776mbpd, +38kbpd from Oct-18 baseline).

OPEC non-participating members' production declined by 1.922mbpd in total from the Oct 2018's baseline. The declines mainly came from Iran (-1.21mbpd) and Venezuela (-331kbpd), as a result of US sanctions. As a result of further unrest, Libya's crude oil production plunged to 733kbpd (from 1.139mbpd in Dec), a cut of 381kbpd from the aforementioned baseline. Non-participating members are exempt from the production cut agreement.

Russia's crude oil production data showed an increase in production at 11.28mbpd (+0.01mbpd MoM), however, this included both condensate and crude oil. No information has been released by Russia about the breakdown in crude oil vs condensate.

We exclude non-participating members in this analysis due to limited data.

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Figure 5: January 's production cuts compliance was a high of 126% for OPEC's participating members

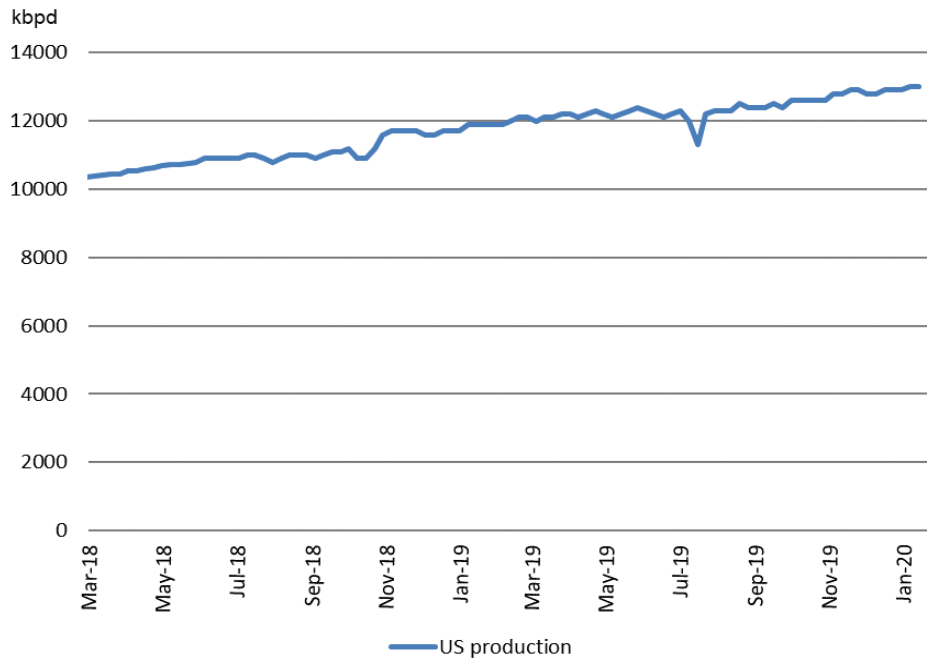
(kbpd)	Oct 2018 baseline Production (revised)	OPEC+ Declaration of Cooperation			Jan-20 Production	Production cut from baseline	Jan-20 Compliance
		Voluntary adjustment	% of adjustment	Voluntary production			
OPEC 11, participating members							
Algeria	1,057	-44	-4.2%	1,013	1,012	-45	102%
Angola	1,528	-47	-3.1%	1,481	1,374	-154	328%
Congo	325	-14	-4.3%	311	293	-32	229%
Eq. Guinea	127	-5	-3.9%	122	124	-3	60%
Gabon	187	-8	-4.3%	179	196	9	-113%
Iraq	4,653	-191	-4.1%	4,462	4,501	-152	80%
Kuwait	2,809	-140	-5.0%	2,669	2,665	-144	103%
Nigeria	1,738	-74	-4.3%	1,664	1,776	38	-51%
Saudi Arabia	10,633	-489	-4.6%	10,144	9,733	-900	184%
UAE	3,168	-156	-4.9%	3,012	3,034	-134	86%
OPEC 10	26,225	(1,168)	-4.5%	25,057	24,708	-1517	130%
Non-participating OPEC members							
Iran	3,296			3,296	2,086	-1,210	
Venezuela	1,171			1,171	840	-331	
Libya	1,114			1,114	733	-381	
Non-part. OPEC members	5,581			5,581	3,659	-1,922	
Total OPEC 13	31,806	-1168	-3.7%	30,638	28,367	-3,439	294%

Source: Bloomberg, RHB

Global Crude Oil Production Data

The charts below depict the latest preliminary production data from Bloomberg, unless otherwise stated. Official production numbers will be provided by OPEC in the middle of every month.

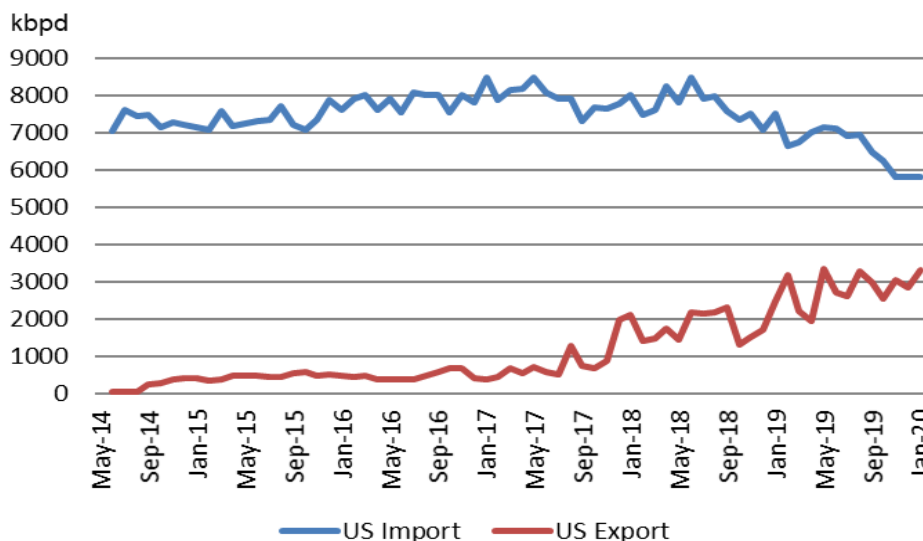
Figure 6: US crude oil production increased by 125kbpd MoM at 12.9mbpd



◆ For Jan 2020, US crude oil production average production stood 12.9mbpd (+125kbpd MoM), with shale oil production averaging 9.3mbpd (+44kbpd MoM, +1mbpd YoY).

Source: US Energy Information Administration, RHB

Figure 7: US crude oil exports was up at 3.3mbpd, imports declined to 5.8mbpd

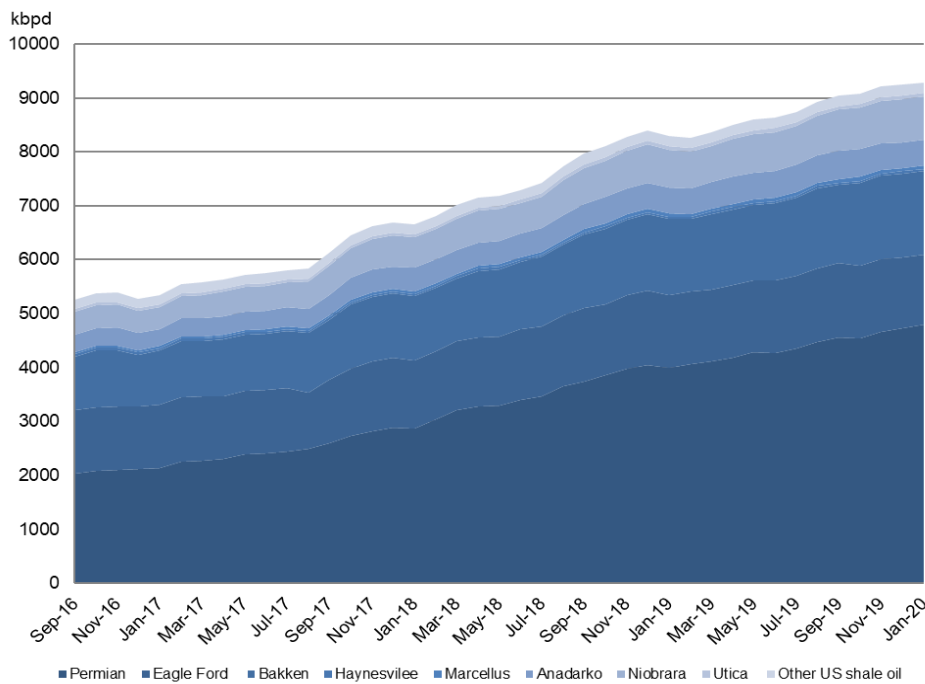


◆ January crude oil export ave. 3.3mbpd (+842kbpd YoY, +460kbpd MoM).

◆ January US crude oil imports averaged 5.8mbpd (-1.7mbpd YoY, 0mbpd MoM).

Source: Bloomberg, RHB

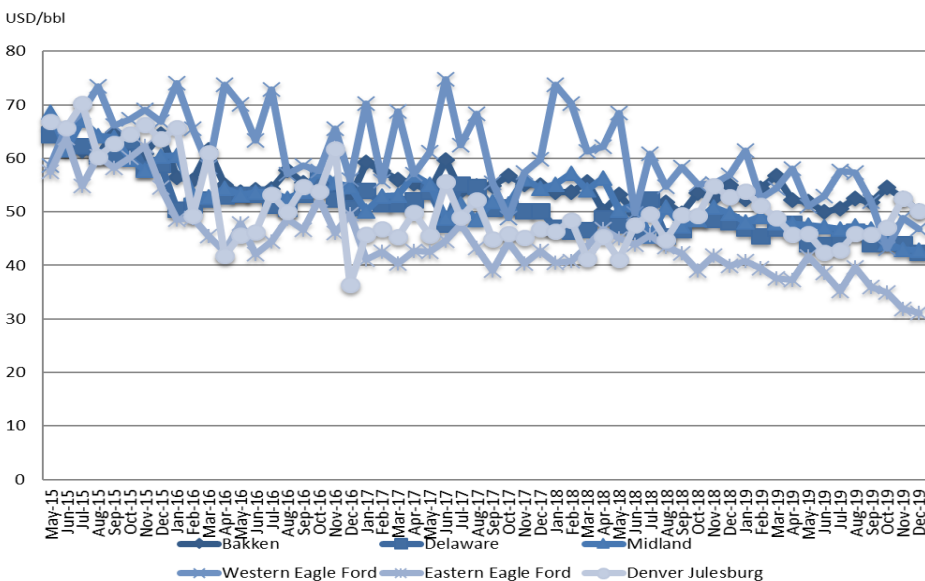
Figure 8: US shale production relatively stable MoM



- ◆ January shale oil production averaged 9.3mbpd (+44kbpd MoM, +1mbpd YoY).
- ◆ US shale production growth is toning down, as producers may be reaching a limit on accelerating output and minimising costs. Shale oil producers remain focused on cash flows and capital discipline

Source: Bloomberg, RHB

Figure 9: US shale oil producers costs averaged USD43.93 per bbl for Dec 2019



- ◆ For Dec 2019, US average shale breakeven point averaged at USD43.93 per bbl (-USD1.50 per bbl MoM, -USD6.48 per bbl YoY)
- ◆ The Bakken Formation and Denver Julesburg Basin's breakeven points are among the highest at more than USD50.00 per bbl, while the Eastern Eagle Ford Basin has one of the lowest: c.USD32.00 per bbl

Source: Bloomberg, RHB

Figure 10: Russia's crude oil and condensate increased in January



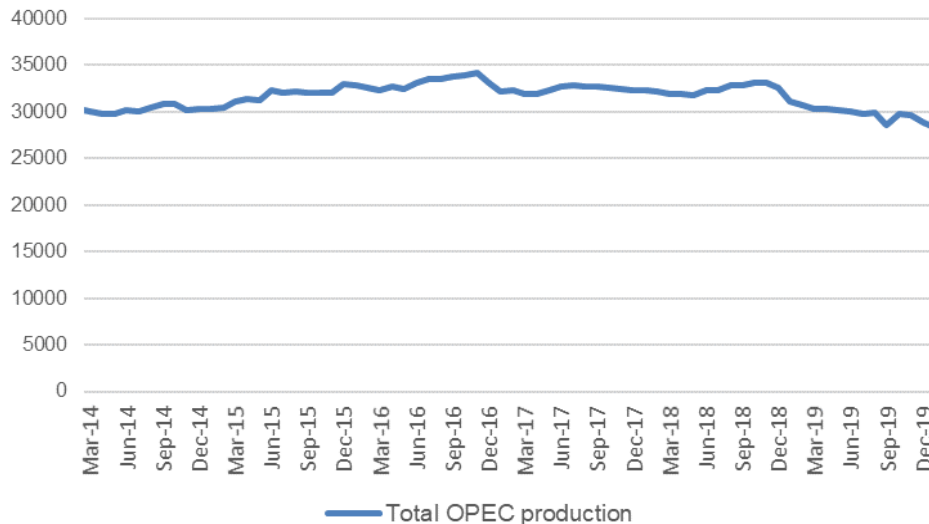
Source: Bloomberg, Reuters, Russia Energy Ministry, RHB

- ◆ Russia's crude oil and condensate increased to 11.28mbpd (+0.01mbpd MoM). However, no information has been released by Russia about the breakdown in crude oil production vs. condensate.
- ◆ With Russia launching new gas fields in the Arctic, East Siberia and new gas pipeline to China, gas condensate production will be on the rise in 2020.
- ◆ 2020 oil and condensate production is expected to be in the range of 555-565m tonnes, or c.11.12-11.32mbpd (using the conversion rate of 7.33bbl per tonne of oil). 2019 oil and condensate output stood at 560.2m tonnes (Reuters).

Russia's Minister of Energy Alexander Novak was quoted that there are risk to the country's crude oil production with rising production costs and dwindling crude oil reserves. Russia's crude oil production could peak by as early as 2021 due to high tax and costs unless benefits to exploration and tax incentives are introduced.

At current production rate, and there are no incentives to stimulate exploration and production activities, Russia's production could drop by 44% to 310mt pa by 2035. However, including condensate, production could increase to over 12mbpd by 2035.

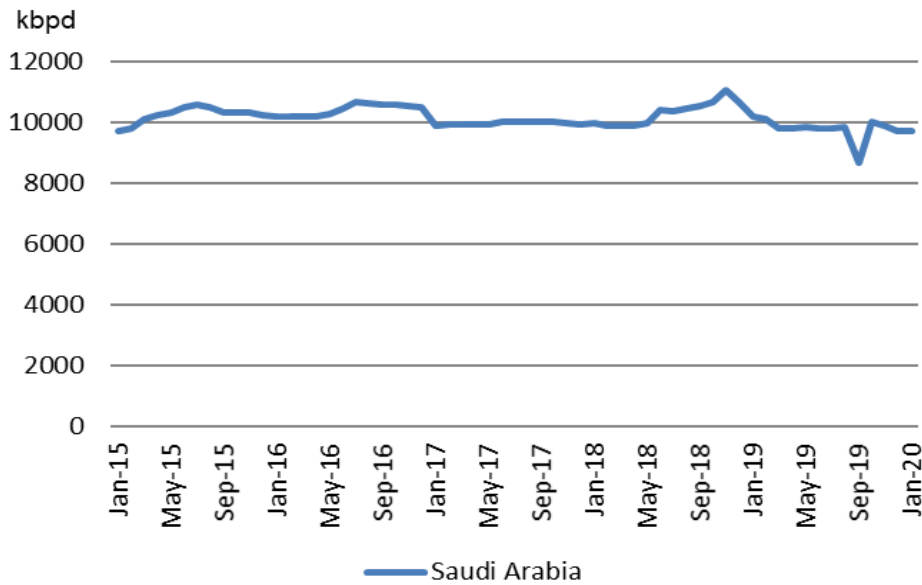
Figure 11: OPEC production saw further declines to stand at 28.37mbpd



Source: Bloomberg, RHB

- ◆ OPEC's total production averaged 28.37mbpd (-500kbpd MoM, -2.69mbpd YoY). OPEC-10 production stood at 24.7mbpd, or 1.475mbpd lower than Oct 2018's baseline – this was 126% compliant

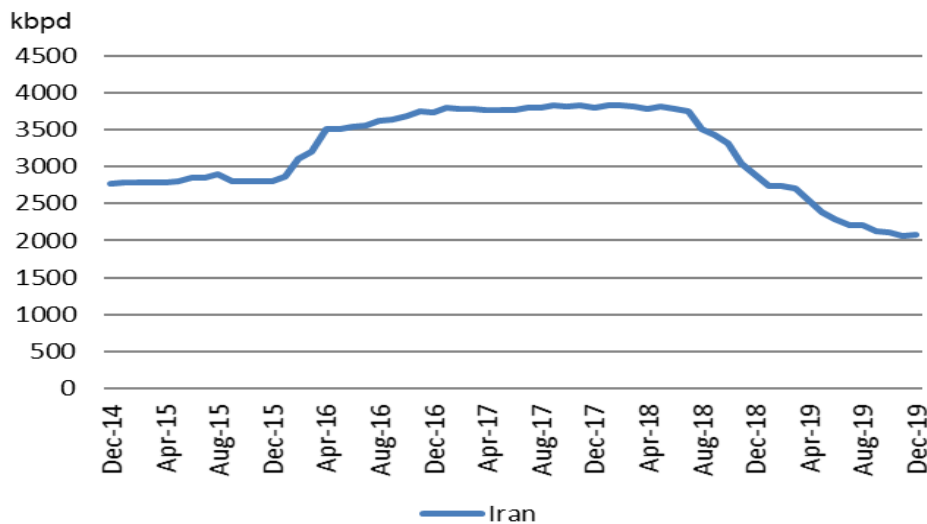
Figure 12: Saudi Arabia's production dipped further to average 9.7mbpd



- ◆ Saudi Arabia's production fell further to 9.7mbpd (-30kbpd MoM, -500kbpd YoY). It was 191% compliant, with production cut at 933kbpd from Oct-18 baseline
- ◆ There was a dip in production in Sep 2019 due to the drone attacks on the kingdom's critical oil facilities, where its crude oil production fell to 8.65mbpd.

Source: Bloomberg, RHB

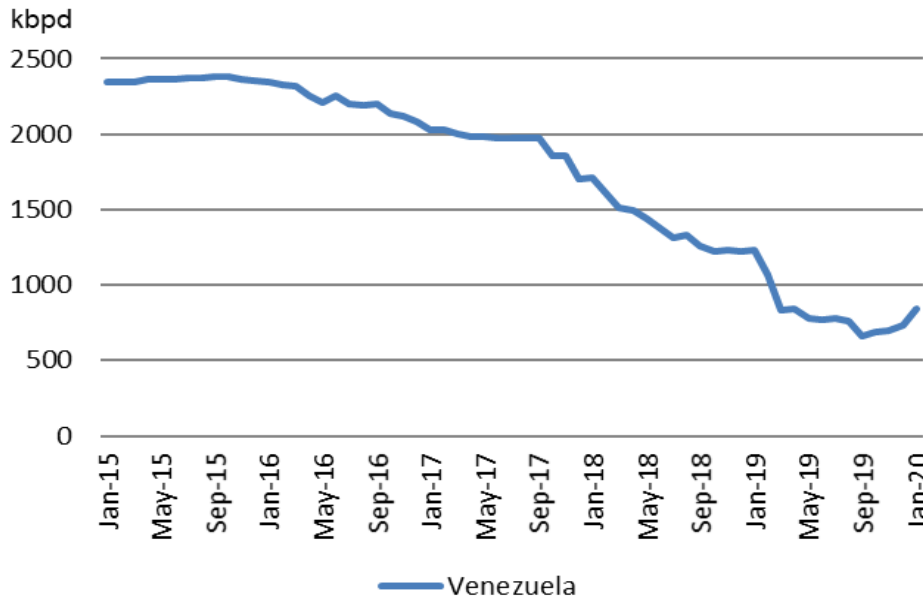
Figure 13: Iran's crude oil production fell further to 1.99mbpd



- ◆ Iran's average crude oil production stood at 1.99mbpd (-90kbpd MoM, 750kbpd YoY) – the decline in production was the result of US sanctions. Its production was 1.3mbpd lower than Oct 2018's baseline. Iran was exempted from the voluntary production cuts
- ◆ Iran's exports averaged 20kbpd as at Jan 2020, with no exports to China, India, and the EU. For 2019, exports averaged at 598kbpd (-1.2mbpd YoY)

Source: Bloomberg, RHB

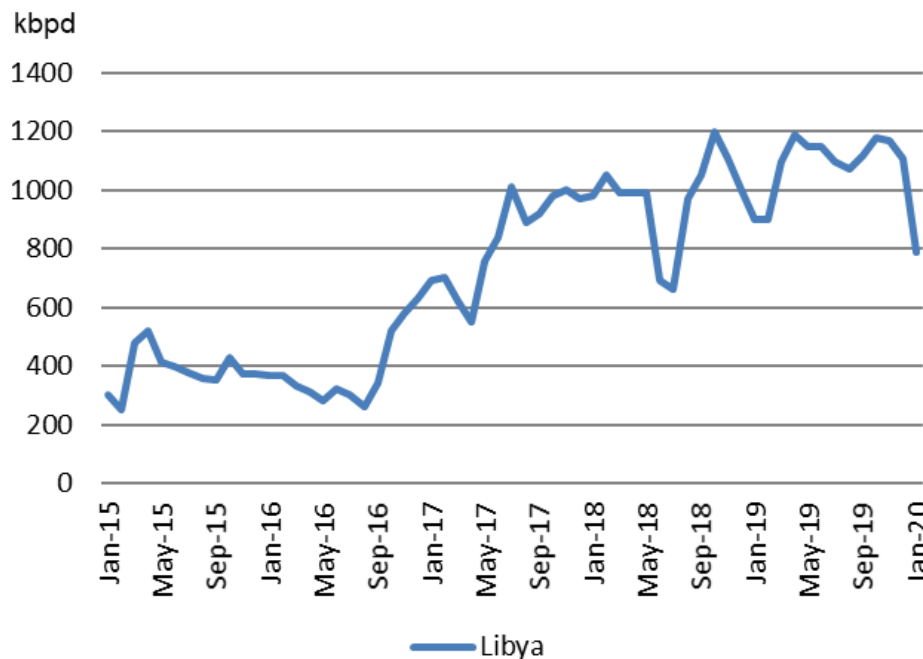
Figure 14: Venezuela's oil production is on an uptrend now at 840kbpd



- ◆ Venezuela's production was at 840kbpd (+110kbpd MoM, -390kbpd YoY). This was as the US imposed sanctions on President Nicolas Maduro's government. It was 331kbpd lower than the Oct 2018 baseline. Venezuela is exempted from the voluntary production cuts agreement
- ◆ PDVSA expects crude oil production to rebound above 1.2mbpd in 2020. This will come from Orinoco belt in eastern Venezuela (661kbpd, where Chevron, Rosneft and CNPC have their major operations); Western division (298kbpd) and 273kbpd from eastern fields north of Orinoco belt. (Reuters)

Source: Bloomberg, RHB

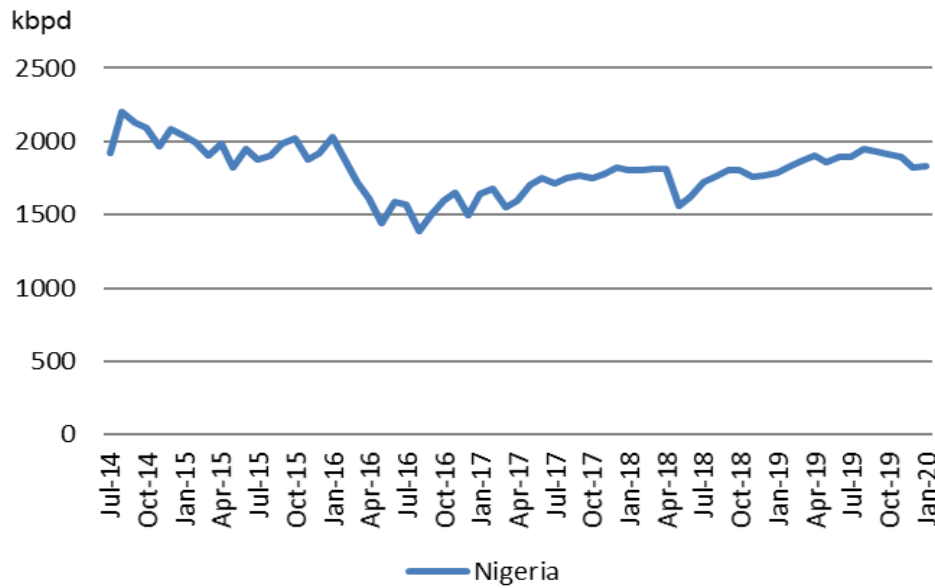
Figure 15: Libya's oil production dives on unrest to 790kbpd



- ◆ Libya's production plunged to 790kbpd (-320kbpd MoM, -110kbpd YoY) – this was 324kbpd lower than Oct 2018's production numbers. The country is exempt from production cuts.
- ◆ **The unrest in Libya:** General Khalifa Haftar in April 2019 launched an offensive to take control of Tripoli, killing 2000 people in the process. The crisis escalated in Jan 2020, after blockades of ports and oil fields, it has declared force majeure on oil supplies. The country has no crude oil storage facilities, thus export market has been halted. The national oil company has since been told that it will not receive budget to expand oil production.
- ◆ Crude oil production reached a peak of 1.2mbpd – highest level in six years – before the current decline.

Source: Bloomberg, RHB

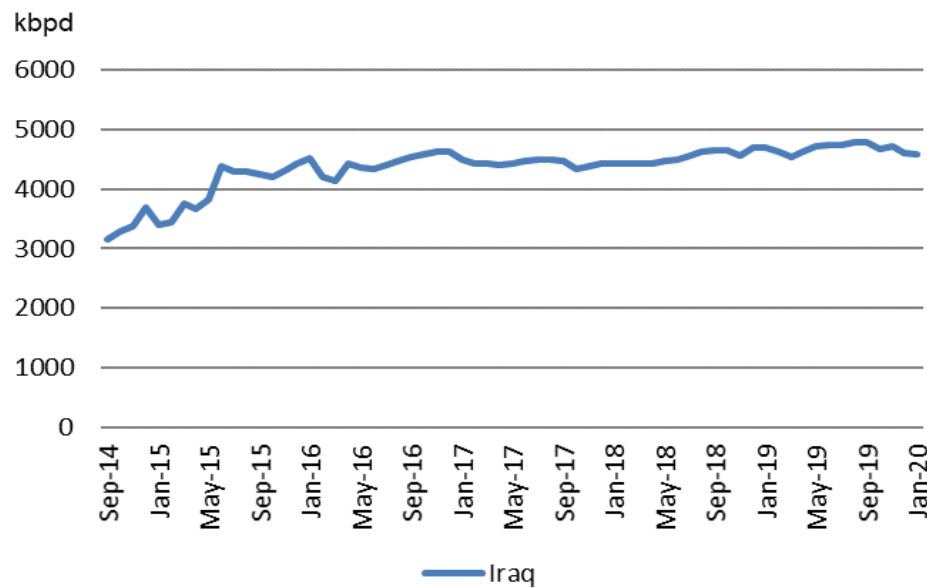
Figure 16: Nigeria's oil production averaged 1.8mbpd (+10kbpd MoM)



◆ For Jan 2020, Nigeria's crude oil production averaged 1,830kbpd (+10kbpd MoM, +40kbpd YoY). It increased production by 92kbpd from the Oct 2018 baseline.

Source: Bloomberg, RHB

Figure 17: Iraq's oil production fell slightly to 4.58mbpd



◆ Jan 2020's crude oil production averaged 4,580kbpd (-30kbpd MoM, -110kbpd YoY). Iraq cut production by 73kbpd from the Oct 2018 baseline – it was 38% compliant

Source: Bloomberg, RHB

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