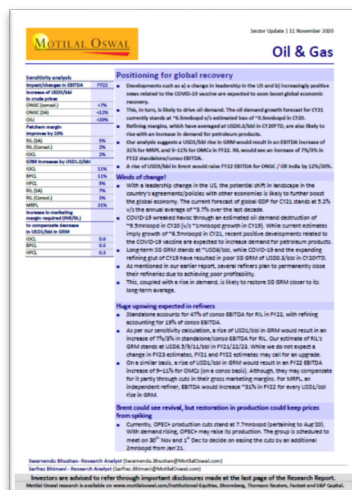
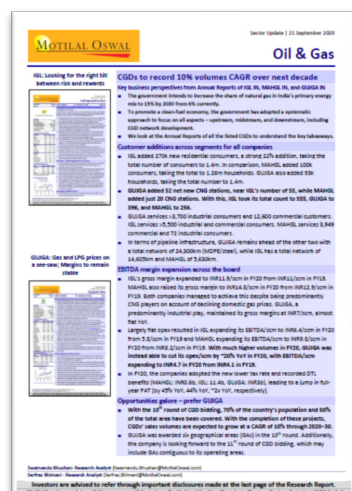


## Our latest research on Oil & Gas

### Positioning for global recovery



## CGDs to record 10% volumes CAGR over the next decade



## OPEC+ steps up patrolling as demand continues to defy

- At the last meeting of this historic year, OPEC+ decided to increase monitoring to balance the struggling global oil market.
- The group has decided on additional voluntary cuts of a mere 0.5mnbpd to 7.2mnbpd, starting Jan'21, against the scheduled cut of 2mnbpd to 5.7mnbpd.
- This is the second time when OPEC+ has agreed on lower cuts than schedule as further extensions and impositions of lockdowns in various countries has aggravated the demand-supply mismatch.
- The group has agreed to hold monthly meetings, starting Jan'21, to assess market conditions and decide on production adjustments for the following month, which would be no more than 0.5mnbpd.
- The recent move by OPEC+ would lead to more rigorous control over the global crude oil market until a better balance is struck between demand and supply. This system would also answer the huge inventory buildup that is yet to be consumed, as well as increase in production from US Shale (with breakeven ~USD48-54/bbl).
- The move would result in a more stable crude oil prices, with room for both extending as well as easing of cuts. In line with the same, we keep our crude oil prices unchanged at USD50/bbl for FY22-23E.
- We believe that increasingly positive news related to the COVID-19 vaccine is expected to soon boost global economic recovery. Our analysis suggests a rise of USD5/bbl in Brent would raise FY22E EBITDA for ONGC (SA)/OINL by 12%/20%.

## Forecasts continue to face downgrades...

- Crude oil demand fell as much as 17mnbpd in 2QCY20 (the highest ever in the history of oil markets), resulting in prices hitting historic lows (Brent touching a low of ~USD11/bbl, with WTI even trading in negative territory).
- Post the recent extension of production cuts, Brent prices crossed USD49/bbl – the highest since the imposition of lockdown in the first week of Mar'20.
- Having said that, the likelihood of continued mismatch in global crude oil demand-supply balance would keep prices in check for another year at least.
- As per OPEC, global oil demand is likely to contract ~9.8mnbpd in 2020 (to 89.9mnbpd) and grow ~6.2mnbpd in 2021 (to 96.3mnbpd). However, the forecasted growth in 2021 rules out demand normalizing around pre-COVID levels of 99.8mnbpd (in 2019).
- OPEC has lowered its current oil demand growth estimate by 0.8-0.9mnbpd in the last three months for both 2020-21, despite OPEC+ functioning at 100% (OPEC at 103%) production cut compliance - as driving season in the West and festive season in Southeast Asia failed to answer concerns over demand.
- As per IMF, the current estimates for global GDP growth is -4.4% in 2020, up from -4.9%; and +5.2% in 2021, but down from +5.4% in its previous forecast.

## ...howbeit, various near-term positives for demand are:

- Given the recent positive developments around COVID vaccines globally, we expect the contraction and downside in oil demand to be limited in 2021.
- Transportation and tourism sectors are anticipated to be the most affected by COVID-19 in 2020. With sentiment turning, given the optimism of a vaccine, it would grow end-consumer confidence and thus demand in these sectors.
- Growth in oil demand is likely to be further supported by normalization of production in the petrochemical industry and improving momentum in the other industrial sectors (already being reflected in the PMI of various countries).

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**Investors are advised to refer through important disclosures made at the last page of the Research Report.**

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**Valuation and recommendation****■ ONGC – developments on new fields remain key**

- Despite the delay, ONGC is expected to grow its gas production in FY22, with efforts to arrest the decline in oil production from age-old fields (accounting for 60–70% of total oil production).
- In FY20, ONGC made 12 discoveries (seven onshore, five offshore); of which seven are prospects (three onshore, four offshore) and five are pools (four onshore, one offshore). The management has notified seven new discoveries (four pools and three prospects) in FY21 so far.
- We model in flattish oil production for the next two years, while building in gas production growth of ~10mmscmd over the next two years (FY22-23E).
- The company is likely to generate FCF of INR380b (translating to a FCF yield of ~33%), with a dividend yield of ~3-5% in FY21-23E.
- ONGC trades at 3.0x FY23E EV/EBITDA and 4.0x FY23E EPS. We value the company at 10x Sep'22E adjusted EPS of INR7.9 and add value of investments to arrive at a target price of INR105 (up from INR90, post rationalizing various cost structures). Reiterate Buy.

**■ OINL – concerns over production declines continue**

- We expect no incremental change in near term production volumes for oil and gas. The company intends to add gas production of ~5mmscmd from 2024-25 (to the current 7.5mmscmd), while arresting the decline in oil production.
- Our model has built in an oil production decline of 3% YoY (~3mmt) and flat gas production (~2.7bcm) in FY21E, with ~2% per year increase in oil (3.1mmt) and gas (2.9bcm) production in FY23E.
- Dividend yield is attractive at 7-8% for FY22-23E. The stock trades at 5.7x FY23E EPS of INR18.7. We use SoTP-based fair value of 8x Sep'22E adjusted EPS of INR14.6 and add investments to arrive at our target price of INR125 (up from INR105, post rationalizing various cost structures). Maintain Buy.

**Exhibit 1: Oil and gas coverage valuation snapshot**

Company	TP (INR)	Upside (%)	EPS (INR)			P/E (x)			P/BV (x)			EV/EBITDA (x)			RoE (%)			Div. yield
			FY20	FY21E	FY22E	FY20	FY21E	FY22E	FY20	FY21E	FY22E	FY20	FY21E	FY22E	FY20	FY21E	FY22E	
AGIS	251	0	3.0	6.8	12.1	84.5	37.0	20.8	5.1	4.6	3.9	30.2	19.4	12.0	6.5	13.1	20.4	0.7
BPCL	414	6	25.3	37.9	34.8	15.5	10.3	11.3	2.1	1.9	1.7	13.2	8.4	8.8	13.2	19.3	15.9	4.2
GAIL	153	28	16.5	8.3	15.3	7.3	14.4	7.8	1.1	1.1	1.0	7.3	11.8	6.4	15.0	8.3	14.2	5.3
GUJGA	440	27	17.3	15.9	17.6	20.1	21.8	19.8	7.3	5.8	4.7	15.2	13.1	11.7	43.6	29.4	26.1	0.4
GUJS	300	36	19.7	16.8	17.8	11.2	13.1	12.4	1.9	1.7	1.5	5.5	5.2	4.5	17.8	13.3	12.6	0.9
HPCL	308	42	23.9	44.5	38.2	9.1	4.9	5.7	1.1	1.0	0.9	10.3	5.0	6.7	11.9	21.1	17.1	4.5
IOCL	148	64	10.3	15.2	17.4	8.8	6.0	5.2	0.9	0.8	0.8	10.1	5.7	4.7	9.1	14.1	15.1	4.7
IGL	485	1	16.2	12.9	17.0	29.5	37.2	28.1	6.6	5.8	5.0	20.9	24.5	18.5	28.3	16.6	19.0	0.6
MAHGL	1,100	6	80.3	52.9	68.3	12.9	19.6	15.2	3.5	3.2	2.9	8.5	11.6	8.8	29.7	17.0	20.1	3.4
MRPL	30	-9	-15.4	-2.2	4.6	NM	NM	7.2	0.7	0.8	0.7	NM	25.3	5.1	-29.2	-5.2	10.4	0.0
OINL	125	17	22.9	6.3	15.5	4.7	16.9	6.9	0.5	0.5	0.5	3.9	10.2	6.5	9.9	2.0	7.0	9.9
ONGC	105	17	13.1	9.7	17.8	6.9	9.3	5.0	0.6	0.5	0.5	3.5	5.3	3.7	7.9	5.9	10.2	5.6
PLNG	335	28	18.5	18.5	21.3	14.2	14.2	12.3	3.6	3.3	3.1	8.4	7.2	6.1	26.4	24.4	26.0	4.8
RIL	2,240	15	66.8	64.8	105.1	29.1	30.0	18.5	2.8	2.5	2.2	17.1	15.7	9.9	10.2	8.7	12.6	0.3

Please find the link to our recent report, titled: '[Positioning for global recovery](#)', where we highlight sensitivity analysis for our coverage

Source: MOFSL

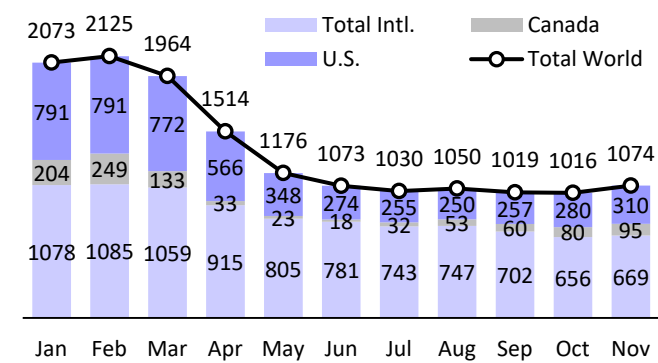
**Exhibit 2: OPEC+ production cut quotas – 2H2020 v/s Jan'21 (data in mnbopd)****Jan'21 cuts allow Saudi Arabia and Russia to increase production by 126kbpd each, with others taking a total cut of 230kbpd**

OPEC	Ref level	Aug-Dec cuts	Aug-Dec quota	Oct compliance	Jan cut	Jan quota	Change in quota
Algeria	1.06	0.19	0.86	102%	0.18	0.88	0.01
Angola	1.53	0.28	1.25	110%	0.26	1.27	0.02
Rep. of Congo	0.33	0.06	0.27	93%	0.06	0.27	0.00
Equatorial Guinea	0.13	0.02	0.10	74%	0.02	0.11	0.00
Gabon	0.19	0.03	0.15	-9%	0.03	0.16	0.00
Iraq	4.65	0.85	3.80	102%	0.80	3.86	0.05
Kuwait	2.81	0.51	2.30	101%	0.48	2.33	0.03
Nigeria	1.83	0.33	1.50	90%	0.31	1.52	0.02
Saudi Arabia	11.00	2.01	8.99	100%	1.88	9.12	0.13
UAE	3.17	0.59	2.59	129%	0.54	2.63	0.04
<b>Total OPEC</b>	<b>26.68</b>	<b>4.88</b>	<b>21.82</b>	<b>103%</b>	<b>4.56</b>	<b>22.12</b>	<b>0.30</b>
<b>Non-OPEC</b>							
Azerbaijan	0.72	0.13	0.59	98%	0.12	0.60	0.01
Bahrain	0.21	0.04	0.17	95%	0.04	0.17	0.00
Brunei	0.10	0.02	0.08	116%	0.02	0.09	0.00
Kazakhstan	1.71	0.31	1.40	99%	0.29	1.42	0.02
Malaysia	0.60	0.11	0.49	133%	0.10	0.49	0.01
Oman	0.88	0.16	0.72	95%	0.15	0.73	0.01
Russia	11.00	2.01	8.99	94%	1.88	9.12	0.13
Sudan	0.08	0.01	0.06	107%	0.01	0.06	0.00
South Sudan	0.13	0.02	0.11	-47%	0.02	0.11	0.00
<b>Total non-OPEC</b>	<b>15.42</b>	<b>2.81</b>	<b>12.60</b>	<b>96%</b>	<b>2.64</b>	<b>12.78</b>	<b>0.18</b>
<b>Total OPEC+</b>	<b>42.10</b>	<b>7.69</b>	<b>34.42</b>	<b>100%</b>	<b>7.20</b>	<b>34.90</b>	<b>0.48</b>

*Iran, Libya and Venezuela are exempt from OPEC cuts | Source: OPEC, S&P Platts, MOFSL***Exhibit 3: OPEC's estimate for growth in global oil demand in 2020-21**

World oil demand	2019	1Q2020	2Q2020	3Q2020	4Q2020	2020	Growth	%	2021	Growth	%
Americas	25.7	24.3	20.0	23.5	24.3	23.0	-2.7	-10%	24.69	1.7	7%
of which US	20.9	19.7	16.4	19.3	20.0	18.8	-2.0	-10%	20.18	1.3	7%
Europe	14.3	13.4	11.0	12.9	12.2	12.4	-1.9	-13%	13.25	0.9	7%
Asia Pacific	7.8	7.8	6.5	6.5	7.3	7.0	-0.8	-10%	7.44	0.4	6%
<b>Total OECD</b>	<b>47.7</b>	<b>45.4</b>	<b>37.6</b>	<b>42.9</b>	<b>43.9</b>	<b>42.4</b>	<b>-5.3</b>	<b>-11%</b>	<b>45.38</b>	<b>2.9</b>	<b>7%</b>
China	13.3	10.7	12.9	13.0	13.6	12.5	-0.8	-6%	13.81	1.3	10%
India	4.8	4.8	3.5	3.6	4.3	4.0	-0.8	-16%	4.61	0.6	14%
Other Asia	9.0	8.2	7.8	8.3	8.7	8.3	-0.7	-8%	8.73	0.5	6%
Latin America	6.6	6.1	5.6	6.2	6.1	6.0	-0.6	-9%	6.29	0.3	5%
Middle East	8.2	7.9	6.9	7.9	7.5	7.6	-0.6	-8%	7.91	0.4	5%
Africa	4.5	4.4	3.8	4.0	4.2	4.1	-0.3	-7%	4.24	0.1	3%
Eurasia	5.6	5.2	4.6	4.9	5.1	4.9	-0.7	-12%	5.28	0.3	7%
of which Russia	3.6	3.4	3.0	3.2	3.2	3.2	-0.4	-11%	3.42	0.2	6%
of which other Eurasia	2.0	1.8	1.5	1.7	1.9	1.7	-0.3	-15%	1.85	0.1	8%
<b>Total non-OECD</b>	<b>52.0</b>	<b>47.3</b>	<b>45.0</b>	<b>47.7</b>	<b>49.7</b>	<b>47.5</b>	<b>-4.5</b>	<b>-9%</b>	<b>50.9</b>	<b>3.4</b>	<b>7%</b>
<b>Total World</b>	<b>99.8</b>	<b>92.7</b>	<b>82.6</b>	<b>90.6</b>	<b>93.6</b>	<b>89.9</b>	<b>-9.8</b>	<b>-10%</b>	<b>96.3</b>	<b>6.2</b>	<b>7%</b>

Source: OPEC, MOFSL

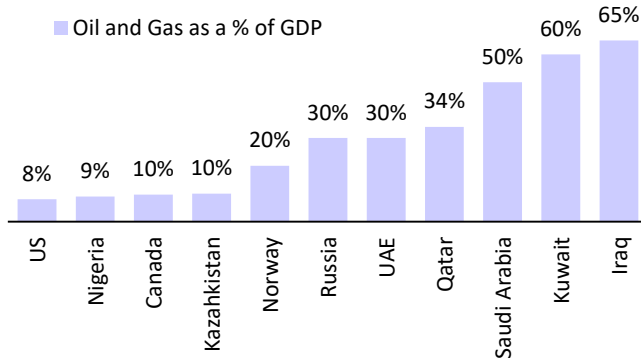
**Exhibit 4: Global rig count still at ~50% of Jan'20 levels...**

Source: Baker Hughes, MOFSL

**Exhibit 5: ...with US rig count jumping ~10% in both Oct'20 and Nov'20. The table below is US breakeven oil prices:**

US play – breakeven prices (USD/bbl)	Average
Permian Basin – Midland	48
Other US (Shale)	49
Permian Basin – Delaware	49
Other US (non-Shale)	49
Eagle Ford	51
Oklahoma – SCOOP/STACK	53
Permian Basin – Other	54

Source: Dallas Fed Energy Survey, EIA, MOFSL

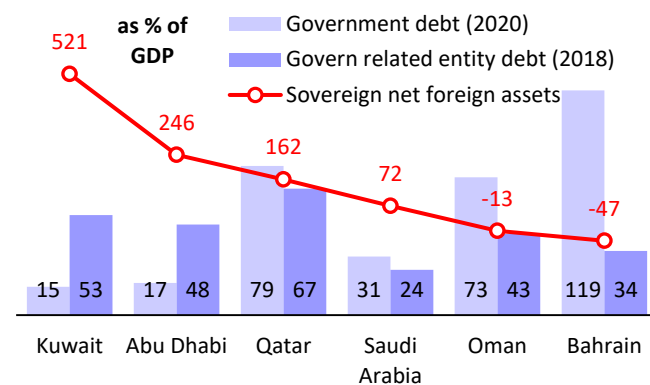
**Exhibit 6: O&G constitutes a higher share (%) in the GDP of GCC countries...**

Source: Saudi Arabia MoF, MOFSL

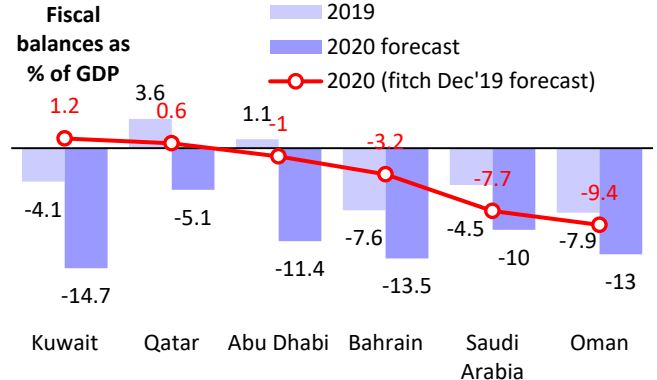
**Exhibit 7: ...thus, the budget breakeven crude oil prices for GCC nations is higher**

Country	Breakeven oil price
Nigeria	144
Bahrain	96
Saudi Arabia	91
Oman	82
Kuwait	68
Abu Dhabi	65
Qatar	55

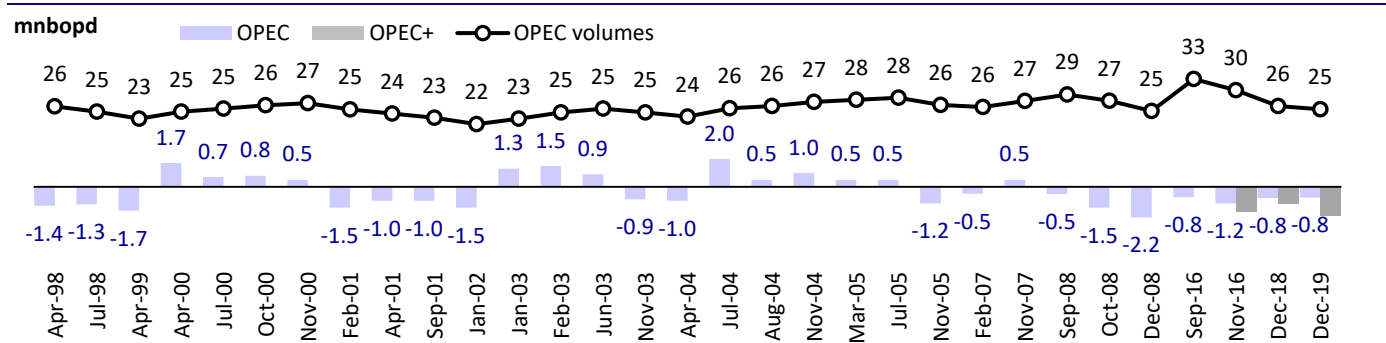
Source: Fitch Ratings, MOFSL

**Exhibit 8: GCC countries – public sector balance sheet**

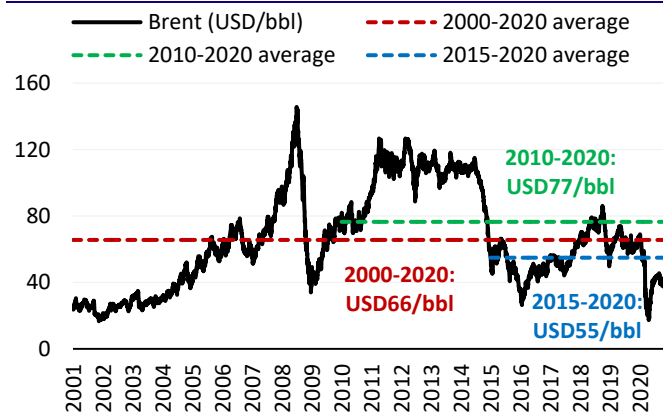
Source: Fitch Ratings, MOFSL

**Exhibit 9: GCC countries – fiscal balances**

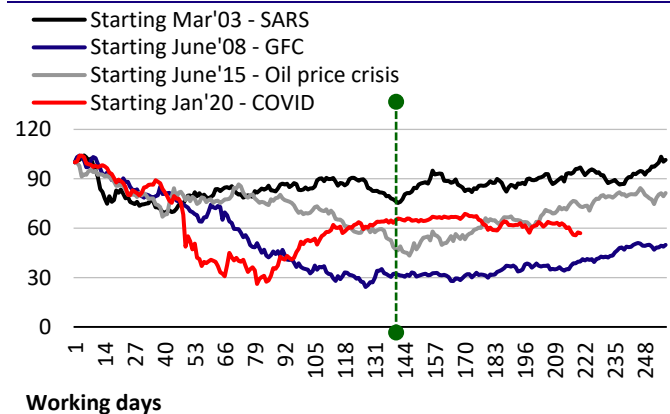
Source: Fitch Ratings, MOFSL

**Exhibit 10: OPEC adjustments to production changes, excluding the unprecedented cuts announced recently**

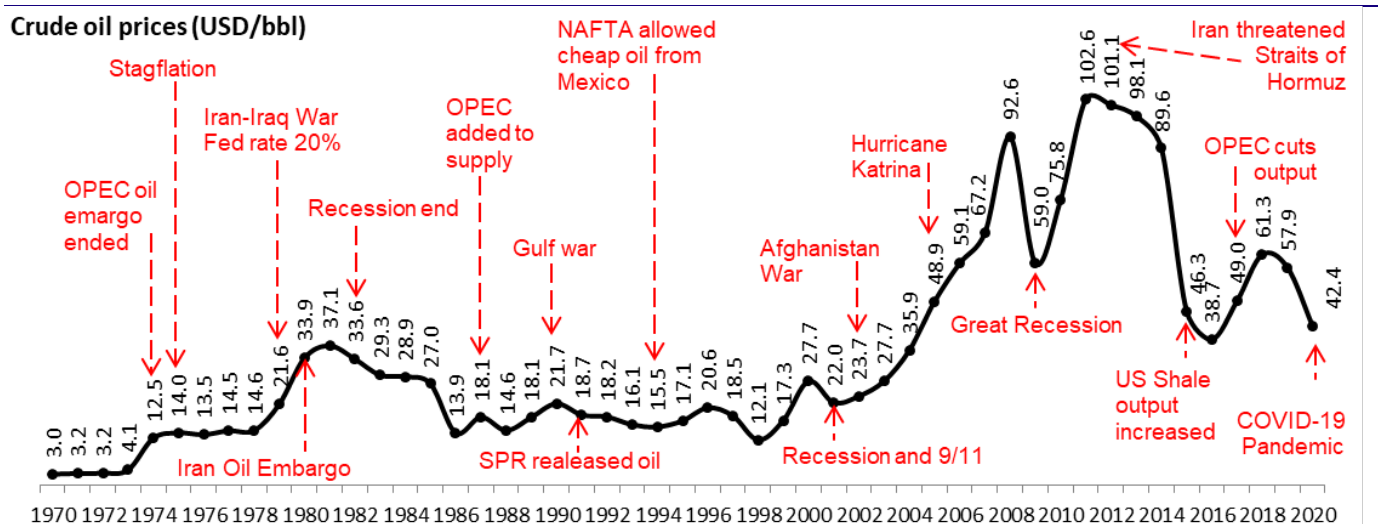
Source: Reuters, OPEC, MOFSL

**Exhibit 11: Long-term price average stands ~USD55/bbl**

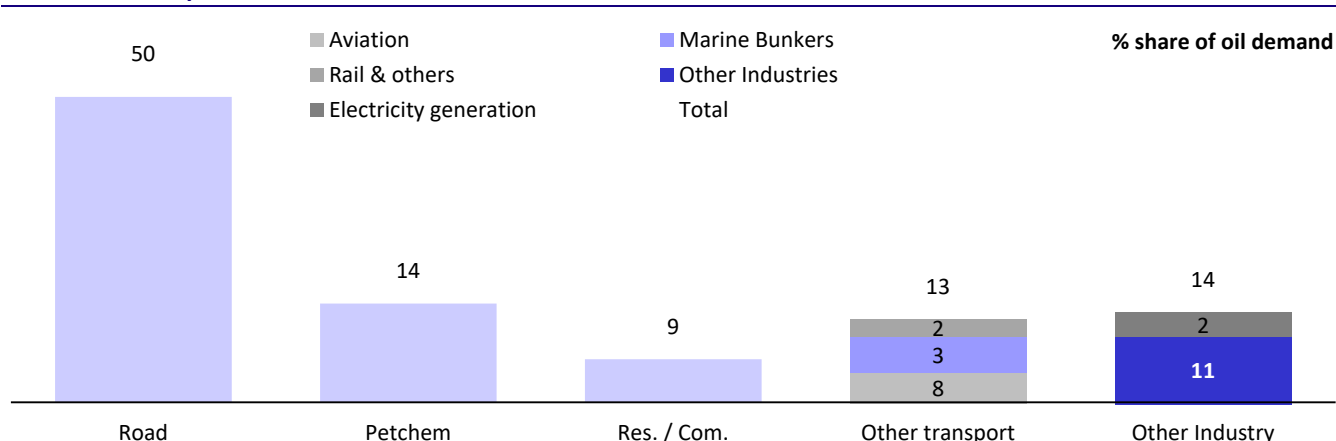
Source: Bloomberg, MOFSL

**Exhibit 12: Indexation price chart – past crude oil crises**

Source: Bloomberg, MOFSL

**Exhibit 13: Oil price chart – annotation highlighting major events**

Source: Reuters, MOFSL

**Exhibit 14: Transportation constitutes over 60% of oil demand**

Source: Statista (Note: OECD in 2017), MOFSL

## ONGC – financial summary and assumptions (TP: INR105)

### Exhibit 15: Key assumptions

Year-end: March 31 (INR m)	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Exchange rate (INR/USD)	65.5	67.1	64.5	70.0	70.9	74.6	75.3	75.3
APM gas price (USD/mmbtu)	4.7	3.1	3.0	3.5	3.8	2.3	2.4	3.0
Brent crude price (USD/bbl)	47.6	48.6	57.6	70.1	61.2	40.6	50.0	50.0
<b>Production details (mmtoe)</b>								
Domestic oil production (mmt)	25.9	25.5	26.2	24.2	23.4	23.3	24.0	24.0
Domestic gas production (bcm)	22.5	23.3	25.6	25.8	24.9	24.8	30.8	34.8
<b>Domestic production (mmtoe)</b>	<b>48.5</b>	<b>48.8</b>	<b>51.8</b>	<b>50.0</b>	<b>48.3</b>	<b>48.2</b>	<b>54.8</b>	<b>58.8</b>
<b>OVL production (mmtoe)</b>	<b>8.9</b>	<b>12.8</b>	<b>14.2</b>	<b>14.8</b>	<b>14.7</b>	<b>13.6</b>	<b>14.5</b>	<b>14.5</b>
<b>Group production (mmtoe)</b>	<b>57.4</b>	<b>61.6</b>	<b>66.0</b>	<b>64.9</b>	<b>62.9</b>	<b>61.7</b>	<b>69.3</b>	<b>73.3</b>
<b>Subsidy sharing (INR b)</b>								
ONGC subsidy	17	0	0	0	0	0	0	0
<b>Oil price realization (USD/bbl)</b>								
Gross	48.6	50.2	57.4	68.9	58.8	40.0	50.0	50.0
Upstream discount	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net</b>	<b>46.8</b>	<b>50.2</b>	<b>57.4</b>	<b>68.9</b>	<b>58.8</b>	<b>40.0</b>	<b>50.0</b>	<b>50.0</b>

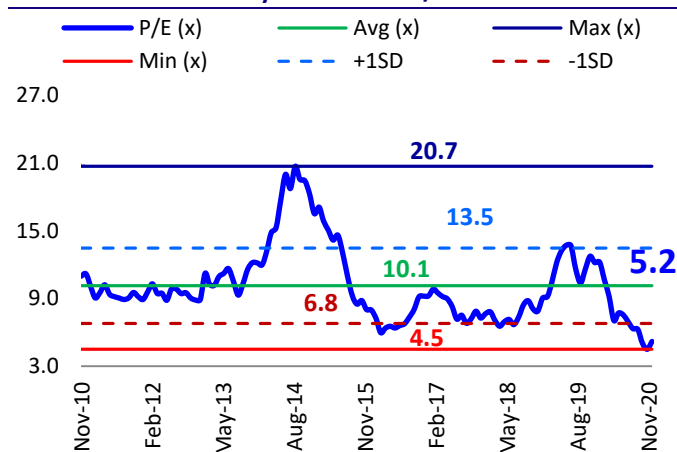
Source: Company, MOFSL

### Exhibit 16: Key assumptions

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Sales	1,357	3,257	3,622	4,537	4,250	3,016	3,911	4,017
EBITDA	452	580	644	840	612	437	593	632
Adj. PAT	174	288	259	349	168	128	246	288
Adj. EPS (INR)	13.6	22.4	20.2	27.2	13.1	9.9	19.2	22.5
EPS Gr. (%)	-5.0	64.9	-9.9	34.6	-51.8	-24.1	92.7	17.2
BV/Sh. (INR)	154.1	151.5	158.0	169.0	161.3	168.0	182.2	198.9
<b>Ratios</b>								
Net D:E	0.1	0.3	0.5	0.4	0.5	0.5	0.4	0.3
RoE (%)	9.2	14.7	13.0	16.6	7.9	6.0	11.0	11.8
RoCE (%)	8.3	11.1	9.2	11.3	6.3	4.9	8.1	8.9
Payout (%)	66.8	36.0	38.0	31.3	66.9	28.0	25.6	25.9
<b>Valuations</b>								
P/E (x)	6.6	4.0	4.5	3.3	6.9	9.0	4.7	4.0
P/BV (x)	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5
EV/EBITDA (x)	2.9	3.0	3.3	2.5	3.5	5.3	3.5	3.0
Div. yield (%)	6.3	7.7	7.3	7.6	5.6	2.5	4.7	5.5
FCF yield (%)	40.6	14.8	-16.7	15.7	3.3	-11.9	23.6	21.3

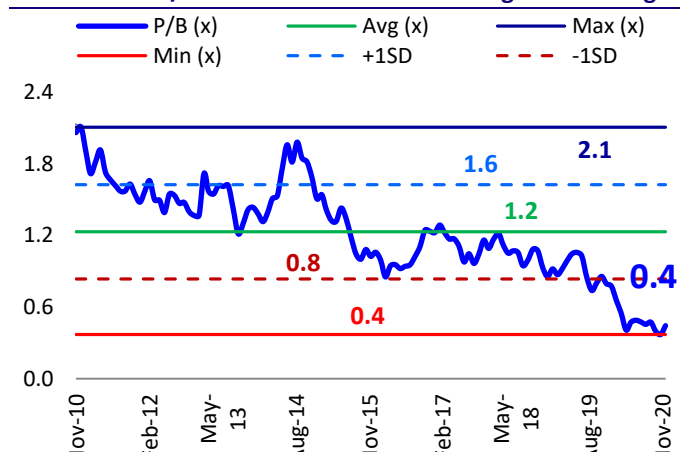
Source: Company, MOFSL

### Exhibit 17: ONGC one-year forward P/E trades ~50% and...



Source: Company, MOFSL

### Exhibit 18: ...P/B at a 65% discount to its long-term average



Source: Company, MOFSL



## Oil India – financial summary and assumptions (TP: INR125)

Exhibit 19: Key assumptions

Year-end: March 31 (INR m)	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Exchange rate (INR/USD)	65.4	67.1	64.5	64.5	64.5	74.6	75.3	75.3
APM gas price (USD/mmbtu)	4.7	3.0	3.0	3.5	3.8	2.3	2.4	3.0
Brent crude price (USD/bbl)	47.5	49.0	57.6	70.1	61.2	40.6	50.0	50.0
<b>Production details</b>								
Oil (mmt)	3.25	3.28	3.39	3.32	3.11	3.02	3.08	3.14
Gas (bcm)	2.84	2.94	2.89	2.72	2.69	2.69	2.75	2.86
<b>Total (mmtoe)</b>	<b>6.09</b>	<b>6.22</b>	<b>6.29</b>	<b>6.05</b>	<b>5.80</b>	<b>5.71</b>	<b>5.83</b>	<b>6.00</b>
<b>Subsidy sharing (INR b)</b>	<b>2</b>	-	-	-	-	-	-	-
<b>Oil price realization (USD/bbl)</b>								
Gross	46.4	47.4	55.7	68.5	60.8	40.6	50.0	50.0
Upstream discount	1.0	-	-	-	-	-	-	-
<b>Net</b>	<b>45.3</b>	<b>47.4</b>	<b>55.7</b>	<b>68.5</b>	<b>60.8</b>	<b>40.6</b>	<b>50.0</b>	<b>50.0</b>
<b>EPS (INR/sh.)</b>	<b>22.3</b>	<b>23.9</b>	<b>23.6</b>	<b>32.0</b>	<b>22.9</b>	<b>7.4</b>	<b>17.1</b>	<b>18.7</b>

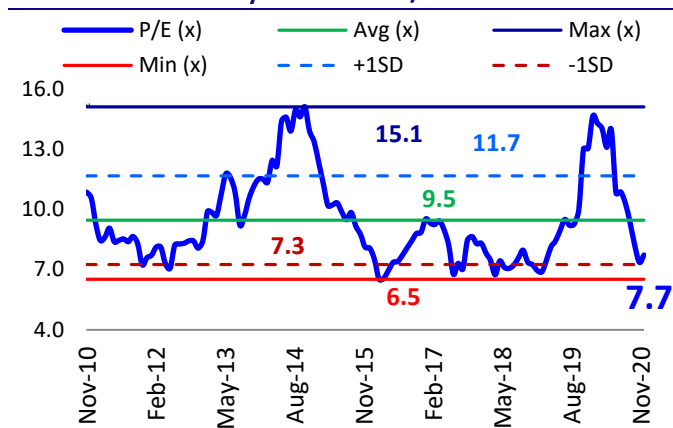
Source: Company, MOFSL

Exhibit 20: Key assumptions

Y/E March 31 (INR b)	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Sales	92.7	93.6	106.6	137.3	121.3	82.4	101.2	105.0
EBITDA	30.7	29.6	39.1	54.8	43.7	18.8	30.5	32.5
Adj. PAT	25.2	27.0	26.7	36.2	25.8	8.4	19.4	21.1
Adj. EPS (INR)	22.3	23.9	23.6	32.0	22.9	7.4	17.1	18.7
EPS Gr. (%)	14.9	7.2	-1.2	35.6	-28.6	-76.4	218.1	9.0
BV/Sh. (INR)	220.5	257.4	246.9	245.5	215.7	218.7	228.1	238.4
<b>Ratios</b>								
Net D:E	0.0	0.1	0.2	0.0	0.2	0.2	0.2	0.2
RoE (%)	9.4	5.7	9.4	9.3	9.9	2.5	7.7	8.0
RoCE (%)	4.1	3.5	4.8	6.8	3.6	0.0	3.0	3.2
Payout (%)	56.5	96.5	52.7	53.8	55.8	54.2	54.2	54.2
<b>Valuations</b>								
P/E (x)	4.8	4.5	4.5	3.3	4.7	14.5	6.2	5.7
P/BV (x)	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4
EV/EBITDA (x)	3.7	4.9	4.2	2.4	4.0	9.5	6.0	5.7
Div. yield (%)	8.9	10.3	9.7	9.6	9.9	2.3	7.2	7.9
FCF yield (%)	15.4	14.0	23.3	42.3	-15.3	-1.5	3.2	6.1

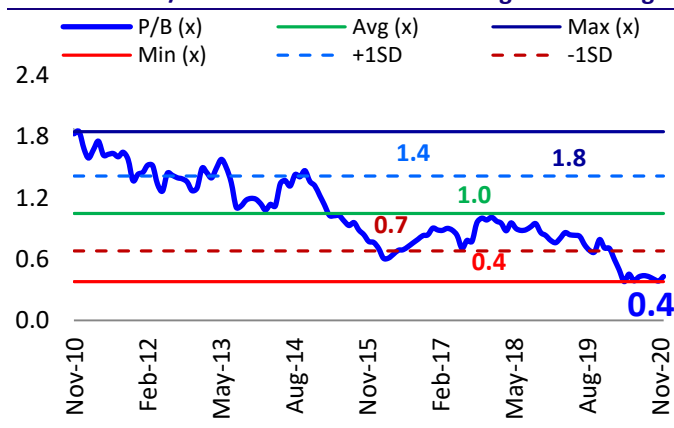
Source: Company, MOFSL

Exhibit 21: ONIL one-year forward P/E trades ~20% and...



Source: Company, MOFSL

Exhibit 22: ...P/B at a 60% discount to its long-term average



Source: Company, MOFSL

## NOTES



Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

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