CGSCIMB InCred Equities

Sector Note

India

Overweight *(no change)*

Highlighted Companies

Oil & Natural Gas

ADD, TP Rs190, Rs160 close

We reiterate our Add rating and raise our SOP-based TP to Rs190 from Rs150 on the back of a sharp increase in estimates for Brent crude and domestic gas prices.

Oil India

ADD, TP Rs265, Rs230 close

We reiterate our Add rating and raise our SOP-based TP to Rs265 from Rs200 on the back of a sharp increase in estimates for Brent crude and domestic gas prices.

Summary Valuation Metrics

P/E (x)	Mar21-F	Mar22-F	Mar23-F
Oil & Natural Gas	12.39	7.67	6.19
Oil India	7.06	5.07	4.35

P/BV (x)	Mar21-F	Mar22-F	Mar23-F
Oil & Natural Gas	0.91	0.85	0.78
Oil India	1.05	0.95	0.83

Dividend Yield	Mar21-F	Mar22-F	Mar23-F
Oil & Natural Gas	2.25%	5.63%	6.25%
Oil India	2.18%	4.35%	6.09%

Oil & Gas Exp & Prodn

Brent/gas forecasts higher for longer

- We raise our Brent crude forecasts by US$10/bbl over FY22F-24F and domestic gas price by US$1/mmbtu over FY23F/24F.
- We maintain a cautious view on oil/gas production forecasts. We have raised opex estimates and kept capex at the higher end of management guidance.
- Maintain sector Overweight. We keep our Add ratings but raise our target prices for ONGC (to Rs190 from Rs150) and OIL (to Rs265 from Rs200).

Brent forecasts raised by US$10/bbl, long-term forecast at US$60/bbl

We raise our Brent oil forecasts by US$10/bbl to US$70/65/60 over FY22F/23F24F and beyond. We believe oil prices (and even gas prices) will settle at higher levels in the long term mainly due to lower supply. Following clear guidance from investors, global oil companies (especially in US shale) have opted to use the free cash flow from higher oil/gas prices to return cash to shareholders rather than invest to raise production. Consequently, the normal supply response to higher prices has not materialised and control over prices has largely moved to OPEC+ group, in our view. In the Indian context, with higher global prices being fully passed on to consumers, we see limited risks of any subsidy/tax for ONGC/OIL.

Domestic gas price raised by US$1/mmbtu

The domestic gas price has increased by 60% to US$3.2/mmbtu for 2HFY22F compared to US$2/mmbtu in 1HFY22. We now raise our estimate for prices in FY23F/24F and beyond by US$1/mmbtu to US$5.5/5 per mmbtu. The rally in global gas prices has been sharper than for oil and we see greater upside to our gas price estimates if there is no change to current gas price formula.

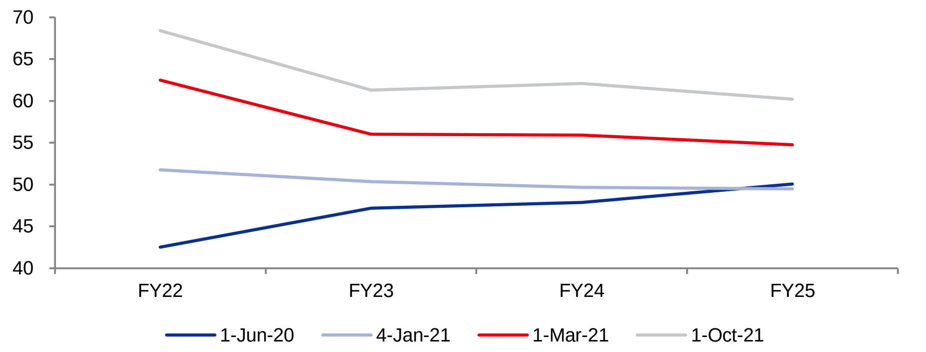
Cautious view on all operational parameters

Both ONGC and OIL continue to underdeliver on their guidance for domestic oil and gas production. We have largely kept our production estimates for both companies at conservative levels (resulting in some cut in volumes) and have also assumed an increase in per barrel operating costs of 9% for OIL and 12% for ONGC over FY22F-24F. Our capex estimates (Rs320bn pa for ONGC and Rs40bn pa for OIL) are also at the higher end of management guidance. We believe there is scope for both companies to outperform our estimates with greater scope for upside in ONGC if 98/2 block performs smoothly.

Stocks remain in play for higher oil/gas prices

ONGC and OIL stock prices more than doubled over the last 12 months based on a massive change in the perception of level of global oil and gas prices. Given prevailing stock valuations, our investment thesis is not based on a further rally in global oil/gas prices, but just a lower fall. We believe our price estimates are conservative given the prevailing expectations. We prefer ONGC to OIL as the latter has lower upside on rising global oil/gas prices due to high contribution from its subsidiary Numaligarh Refinery.

Figure 1: Trends in Brent futures curve (US$/mmbtu)



SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

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Higher for longer

We raise Brent forecasts by US$10/bbl

Brent crude was trading at US$55-60/bbl in early 2020 prior to the outbreak of Covid. Given the disruptions in economic activity arising from Covid, Brent oil's price plunged in early Mar 2020. As the full implications of the global economic lockdowns became apparent, the OPEC+ group started implementing a production cut from May 2020.

On the demand front, the International Energy Agency (IEA) estimates that global oil demand dropped to 91m b/d in CY20 from 99.7m b/d in CY19. According to its latest estimate, demand will rise by 5.5m b/d in CY21 to 96.5m b/d and by 3.3m b/d in CY22 to 99.6m b/d. This implies that demand even in CY22 will be around pre-Covid levels (CY19 level). The ongoing energy crisis has prompted a switch to oil that could boost demand by 0.5m b/d compared with normal conditions, as per IEA.

The sharp production cut implemented by the OPEC+ group produced the required impact of bringing down bloated inventories setting the stage for a rally in global oil prices. OPEC+ group has been unwinding its production cuts since Apr 2021, but supplies won't rise fast enough to keep pace with the expected demand recovery, as per IEA. We estimate OPEC+ group's spare capacity cushion at roughly 5m b/d in 4QCY21, which excludes around 1.5 mb/d of Iranian crude currently shut in by sanctions.

In our view, the biggest cause for the shortfall in supply is lack of private sector investment. Following clear guidance from investors, global oil companies (especially in the US shale) have opted to use the free cash flow from higher oil/gas prices to return cash to shareholders rather than invest to raise production. Consequently, the normal supply response to higher prices has not materialised and control over prices has largely moved to the OPEC+ group, in our view.

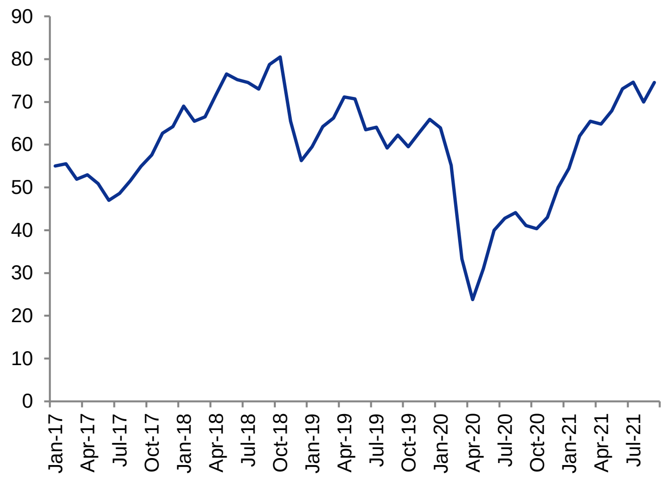
So, for example, Pioneer Natural Resources is the biggest single oil producer in the Permian Basin, the most prolific in US shale. Its CEO said that shale producers would keep using their burgeoning cash piles to pay shareholders, not fund new drilling. The Financial Times, London, on 5 Oct 2021 quoted its CEO as stating:

> "Everybody's going to be disciplined, regardless whether it's $75 Brent, $80 Brent or $100 Brent. All the shareholders that I have talked to said that if anybody goes back to growth, they will punish those companies. I don't think the world can rely much on US shale. It's really under OPEC control."

We have no special insight on the absolute level of oil prices and have always relied on the futures curve to forecast prices. However, the jump in expectations in the last few months has been too sharp (Figure 1) and we have opted to be conservative in our forecasts. Accordingly, we have raised our Brent oil forecasts by US$10/bbl to US$70/65/60 per barrel over FY22F/23F/FY24F and beyond.

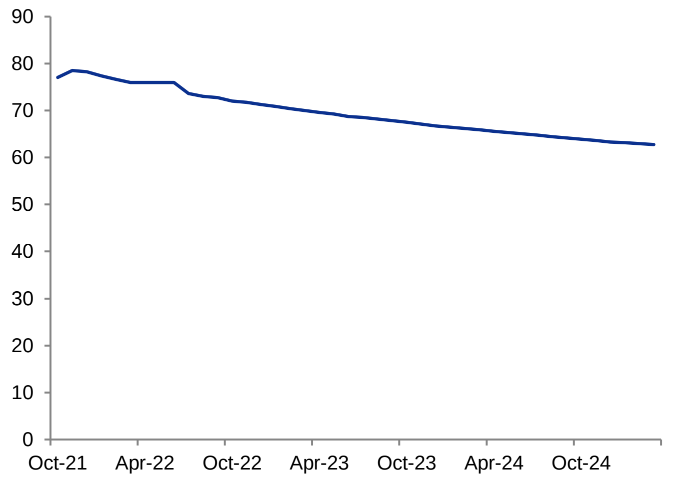
We expect the higher global oil prices to flow through to crude pricing by ONGC/OIL. Both companies did not enjoy the higher global oil prices prior to FY14 due to a subsidy sharing system, whereby they were expected to contribute to losses being made by the oil marketing companies (OMCs) on sale of retail products – diesel, gasoline, LPG and kerosene. However, diesel and gasoline prices were deregulated in Oct 2014, and since CY20 there has been no subsidy on even LPG and kerosene prices. Thus, with OMCs not taking any hit on account of higher oil prices, we see no negative impact on ONGC/OIL either.

Figure 2: Brent spot price (US$/bbl)



SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

Figure 3: Brent futures curve as of 1 Oct 2021 (US$/bbl)



SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

We raise domestic gas price forecast by US$1/mmbtu

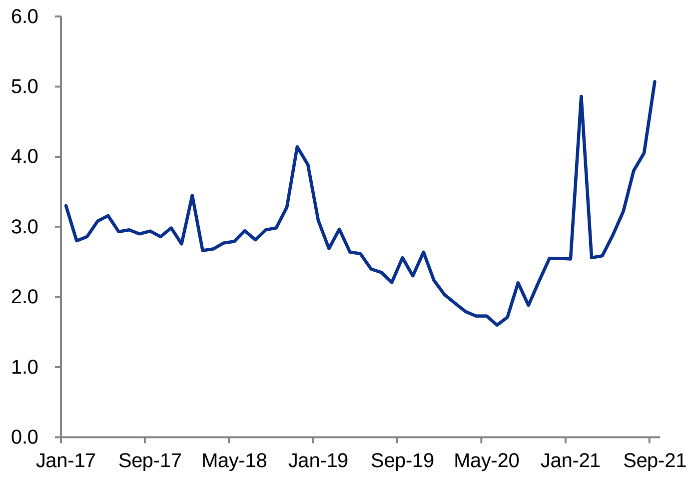
The gas pricing policy announced by the Indian government (GOI) in Oct 2014 linked the domestic gas price (currently applicable to production from all nominated fields, bulk of ONGC/OIL production) to a basket of four global gas prices – Henry Hub (HH), the UK National Balancing Point (NBP), and Russian and Canadian gas prices. LNG prices were not part of the basket, thus ensuring that the formula resulted in a relatively lower gas price. Further, domestic prices are fixed for six months and determined with a considerable lag. For example, the current domestic price of US$3.2/mmbtu (net calorific value basis) applicable for 2HFY22 is based on the average of the global basket between Jul 2020 to Jun 2021. This price rose by 60% compared to the price of US$2/mmbtu prevalent in 1HFY22 (which reflected global gas pricing in CY20).

Global gas prices have been breaking all historical records – see our note, Red hot gas markets offer opportunity, dated 2 Sep 2021. Further, two of the four benchmarks (HH and NBP) have a futures market and these indicate that prices will settle long term at levels which will be significantly above recent historical levels (see Figure 5 and 7).

We have accordingly raised our domestic gas price estimate by US$1/mmbtu from US$4.5/mmbtu to US$5.5/mmbtu for FY23F and from US$4/mmbtu to US$5/mmbtu for FY24F and beyond. Given that the latest gas prices continue to remain at very elevated levels, we believe that our estimates are highly conservative, if there is no change in the current gas pricing formula.

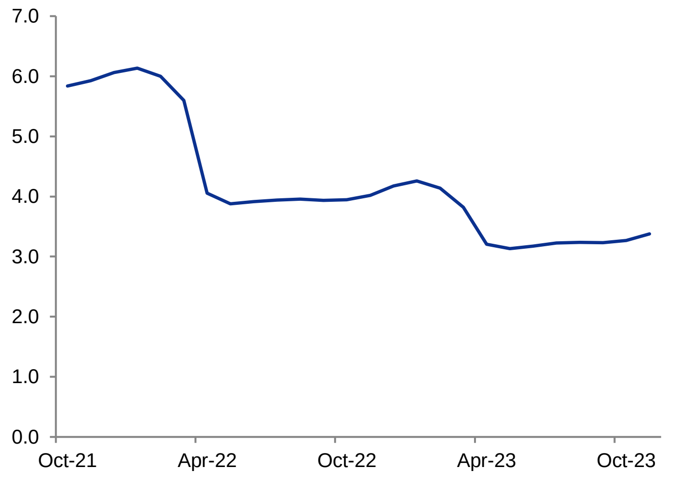
Gas production from the difficult fields enjoy free pricing, but is subject to a cap which is again fixed on a half yearly basis. A very small portion (0.3-0.4bcm) of current ONGC production comes from these difficult fields but a large portion of new production from its 98/2 block will enjoy free pricing. We estimate that the gas price for these difficult fields will be US$1/mmbtu higher than the regulated price i.e. US$6.5/mmbtu for FY23F and US$6/mmbtu for FY24F and beyond.

Figure 4: HH spot price (US$/mmbtu)



SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

Figure 5: HH futures curve as of 1 Oct 2021 (US$/mmbtu)

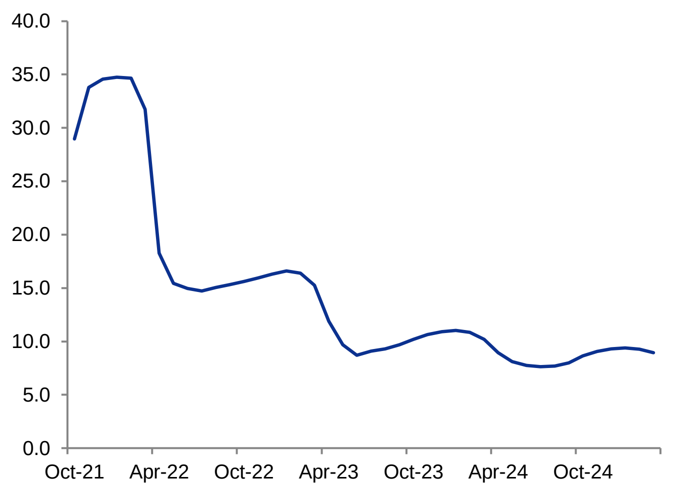


SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

Figure 6: NBP gas spot price (US$/mmbtu)

SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

Figure 7: NBP gas futures curve as of 1 Oct 2021 (US$/mmbtu)



SOURCES: INCRED RESEARCH, COMPANY REPORTS, BLOOMBERG

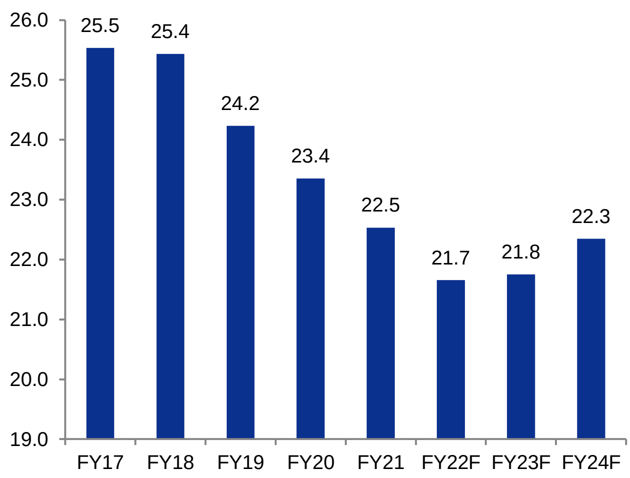
Cautious view on all operational parameters

Limited prospects for oil production growth ➤

Contrary to management guidance, both ONGC/OIL reported a declining trend in annual oil production in the last five years. Both companies are now guiding for at least flat production with ONGC's estimate for growth linked directly to the ramp up of oil production from its 98/2 block (now expected in FY23F). Historical poor trend in production over last year or so has been attributed by management to Covid-related issues and storms hitting the west coast in 1QFY22. Given the declining nature of existing oil/gas production, production from new fields/projects need to come on line to prevent overall production declining. Hence delay in projects (related to Covid) has also caused the recent production decline.

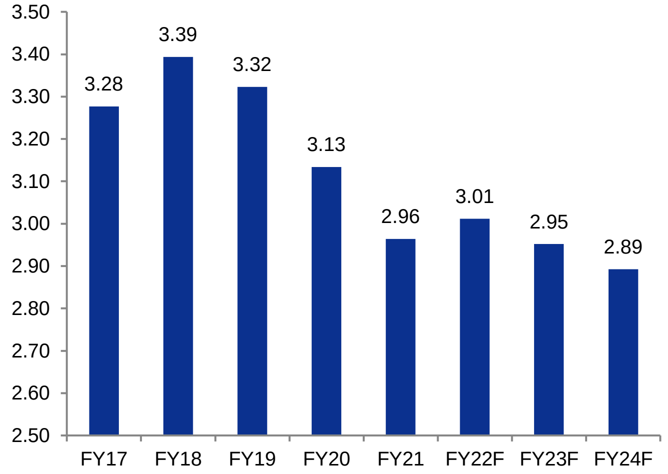
Since management forecasts for growth have largely been missed, we have tended to rely on monthly trends of production (trend more negative for ONGC), opting to assume latest monthly production rate to continue. So for both ONGC/OIL, we have assumed recent monthly run rate to sustain in FY22F, assuming a 2% annual decline in base production thereafter. In ONGC's case, we have assumed some growth in FY23F/24F due to contribution from the 98/2 block (10kbd in FY23F and 30kbd in FY24F compared to peak production expected at 78kbd).

Figure 8: ONGC's annual domestic oil production (mt)



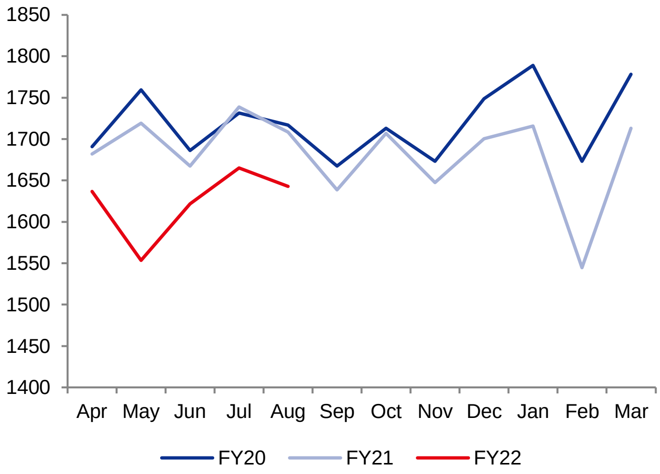
SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 9: OIL's annual domestic oil production (mt)



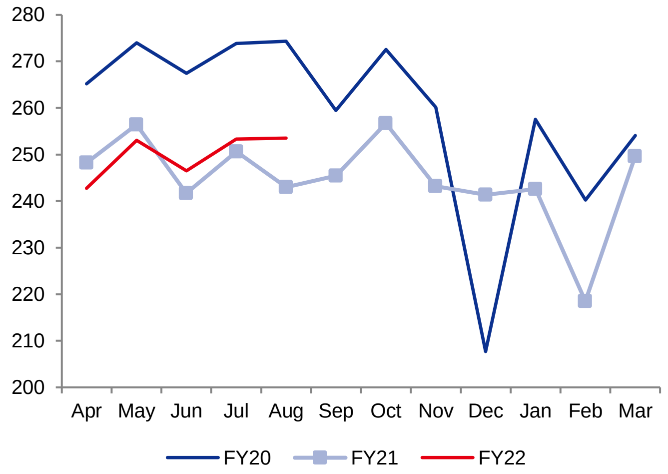
SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 10: ONGC's monthly domestic oil production ('000 t)



SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 11: OIL's monthly domestic oil production ('000 t)



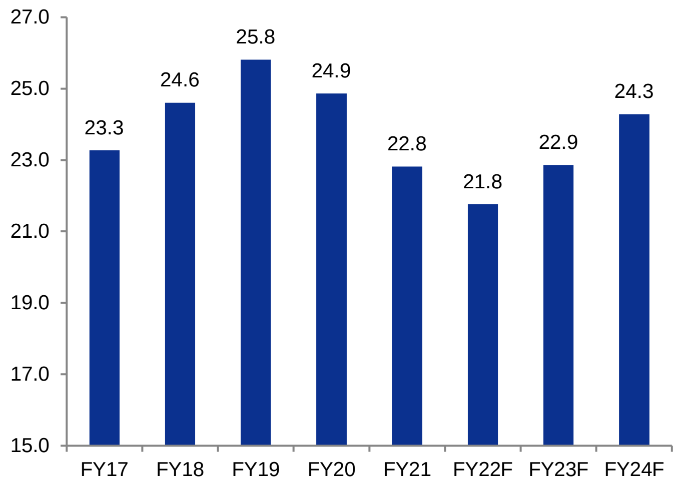
SOURCES: INCRED RESEARCH, COMPANY REPORTS

Better prospects for gas if both companies deliver

We expect prospects for gas production to be far better for gas than oil, especially for ONGC. Contrary to earlier expectations of growth, ONGC's gas production declined yoy in FY20/21 (trend has continued in FY22) which as explained above was attributable to delay in commencement of production from new fields (specifically the 98/2 block). We now expect gas production from this block to start in FY22F and estimate it at 1/5/10mmscmd of gas over FY22F/23F/24F, still well below peak production level of 15.6mmscmd. Similar to oil, we have assumed recent monthly production rates to continue for the rest of FY22F and assumed a 2% annual decline in base production. Production from the 98/2 block has been added to this base production level to estimate overall domestic production.

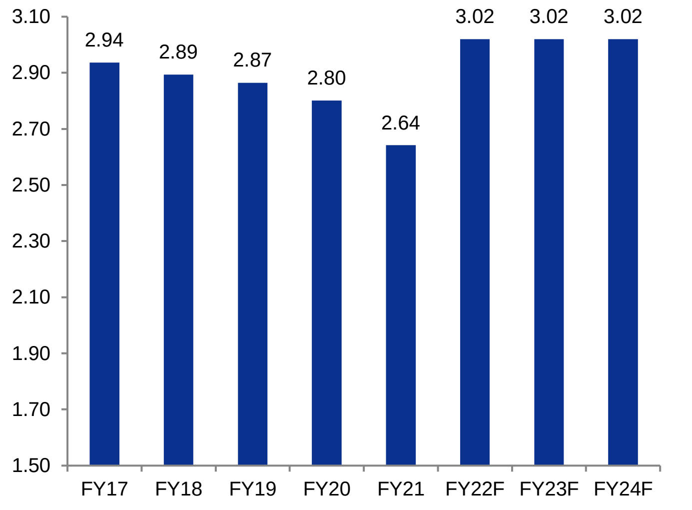
OIL's performance on the gas side has been remarkably better with monthly production at close to all-time highs in last few months. Hence we have actually estimated a sharp jump in FY22F production and maintained it at that higher level over FY23/24F.

Figure 12: ONGC's annual domestic gas production (bcm)



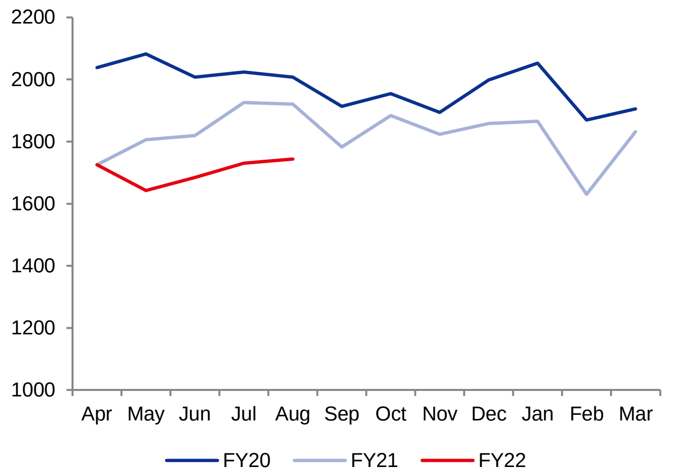
SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 13: OIL's annual domestic gas production (bcm)



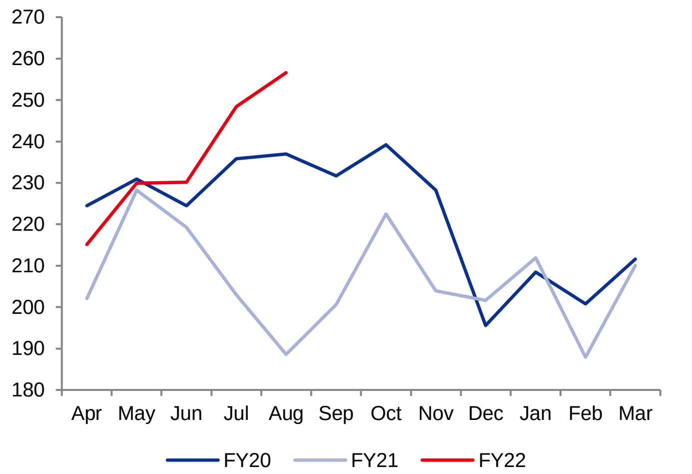
SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 14: ONGC's monthly domestic gas production (mmsm)



SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 15: OIL's monthly domestic gas production (mmsm)



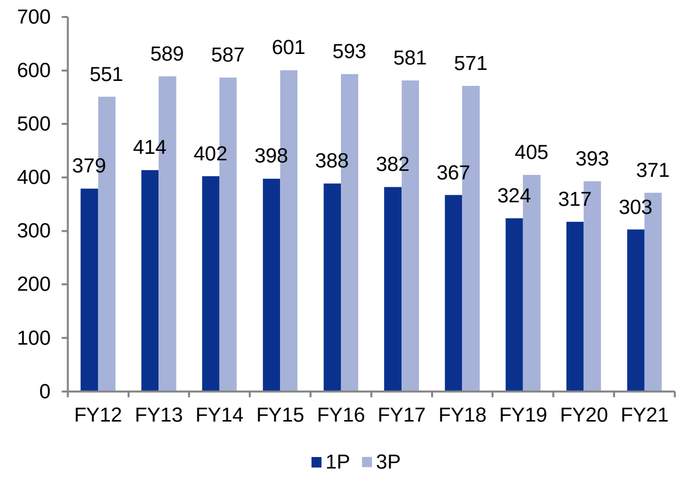
SOURCES: INCRED RESEARCH, COMPANY REPORTS

Production estimates also guided by reserve trends

The poor performance on production is mirrored by historical reserves trends. Both companies tend to stress their reserves replacement ratios (always over 100%) as well as high 2P/3P reserves. However, we find the 1P reserves trend to be a better guide on likely production trend. Whatever may be the company's reserves base, it makes no sense if projects are not being executed to convert these reserves to production (which is captured in the 1P reserves). We have valued both companies only on 1P reserves.

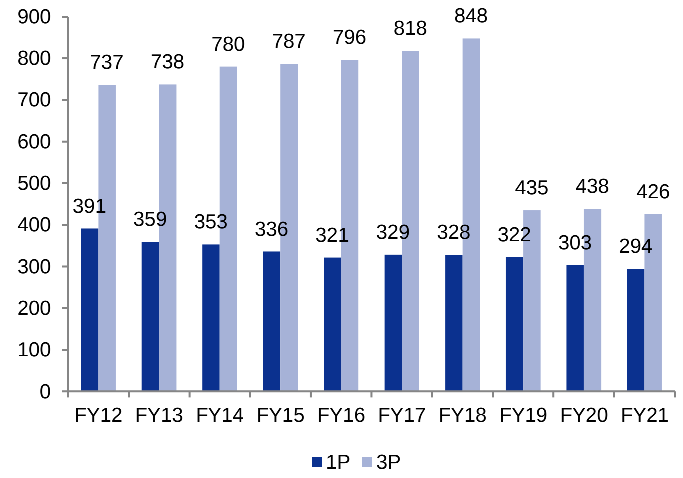
Both ONGC/OIL have been reporting a broadly declining trend in 1P reserves for both oil and gas, which partly explains our cautious outlook on production. Note that the sharp drop in 3P reserves for ONGC from FY19 is due to the change in reserves estimate methodology from Society of Petroleum Engineers (SPE) to Petroleum Resources Management System (PRMS).

Figure 16: ONGC's domestic oil reserves (mt)



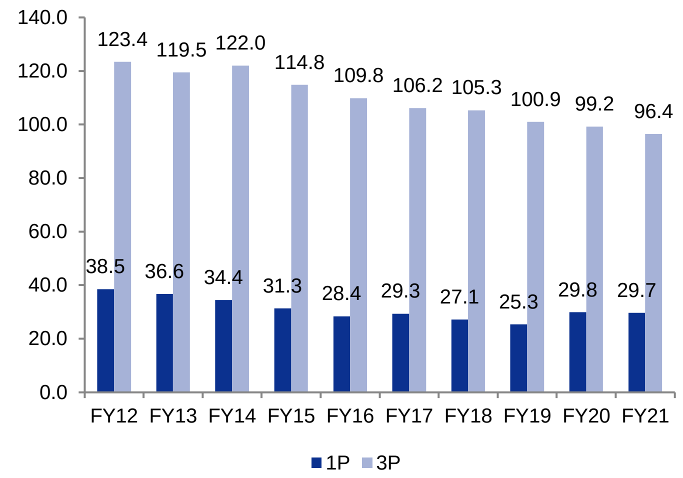
SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 17: ONGC's domestic gas reserves (bcm)



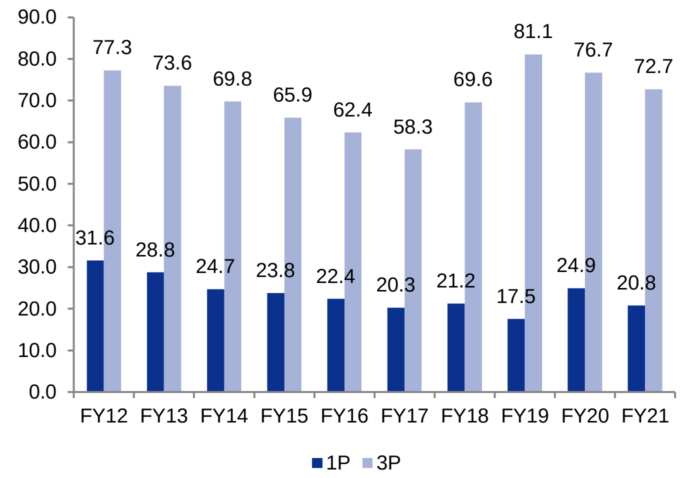
SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 18: OIL's domestic oil reserves (mt)



SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 19: OIL's domestic gas reserves (bcm)



SOURCES: INCRED RESEARCH, COMPANY REPORTS

Cautious on opex and capex ➤

While the outbreak of Covid resulted in a sharp decline in oil/gas prices in FY21, a positive aspect was a decline in cash operating costs (opex). Excluding forex, ONGC's opex declined to US$8/boe in FY21 from US$9.5/boe in FY20. Most of these opex are fixed in nature. Nevertheless, given our estimate of rising oil/gas prices (which could cause some cost inflation), we have raised our opex estimate for ONGC from US$8.5/boe (flat over FY22F-24F) to US$9.2/boe in FY22F and US$9.5/boe in FY23F-24F.

In case of OIL, there was no similar decline with opex excluding forex inching up from US$11.1/boe in FY20 to US$11.8/boe in FY21. We have raised our opex estimate for OIL from US$11.3/boe to US$12.3/boe over FY22F-24F.

Even on the capex front, we have assumed Rs320bn pa for ONGC and Rs45bn pa for OIL over FY22F-24F, which is at the higher end of company guidance.

Still room for upside in ONGC/OIL

ONGC's and OIL's stock prices more than doubled over the last 12 months. But this rally needs to be seen in the context of a massive change in perception of the level of global oil and gas prices. Earlier the perception was for prices to remain lower due to the fall in demand as a result of the shift to electric vehicles as well as renewable sources for energy (wind/solar). While demand has not really picked up, there has been more a of supply shock as private investment in oil/gas has dried up completely. This has brought us to the current view that prices for both oil and gas could remain higher for longer.

Given prevailing stock valuations, our investment thesis is not based on a further rally in global oil/gas prices, but just a lower fall. We believe our price estimates are conservative given the prevailing expectations and at least near-term (FY22F/23F) oil/gas prices could well overshoot our estimates.

We prefer ONGC to OIL as the latter has lower upside on rising global oil/gas prices due to the high contribution from its subsidiary Numaligarh Refinery (which contributed 70% of FY21 profit). While ONGC has disappointed more in recent years (in terms of actual vs projected production levels) it continues to offer greater upside for sure given its project inventory. If there are no further delays on new projects like 98/2 block and there are no hiccups on ramp up in production (i.e. no unexpected reservoir behaviour) then the potential for actual production to exceed our forecasts is far higher in ONGC than in OIL.

Figure 20: Sensitivity for upstream companies in FY23F

	ONGC	OIL
$1/bbl change in oil price	2.2%	1.3%
$0.50/mmbtu change in gas price	3.6%	3.6%
Rs1 change in INR/USD exchange rate	1.7%	1.3%

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Oil & Natural Gas

Clear play on rising oil/gas prices

- We raise our Brent crude forecasts by US$10/bbl over FY22F-24F and domestic gas price by US$1/mmbtu over FY23F/24F.
- So we raise FY22F-24F EPS by 11-36% despite some cuts in oil and gas production. Ramp up in production from the 98/2 block is the key volume driver.
- We maintain our Add rating and raise our SOP-based target price to Rs190 from Rs150. A sharp drop in oil price is the main risk to our rating.

India

ADD *(no change)*

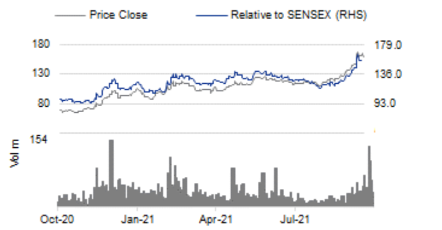
Consensus ratings*:	Buy 22	Hold 3	Sell 4

Current price:	Rs160
Target price: ▲	Rs190
Previous target:	Rs150
Up/downside:	18.8%
InCred Research / Consensus:	14.0%
Reuters:	ONGC.NS
Bloomberg:	ONGC IN
Market cap:	US$26,705m
	Rs2,012,845m
Average daily turnover:	US$43.6m
	Rs3286.5m
Current shares o/s:	12,580.1m
Free float:	39.6%

**Source: Bloomberg*

Key changes in this note

- FY22F EPS raised by 10.8%
- FY23F EPS raised by 26.7%
- FY24F EPS raised by 35.9%



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	30.0	32.9	131.5
Relative (%)	24.7	15.8	55.5

Major shareholders	% held
Government of India	60.4
LIC	10.6
Indian Oil Corporation	7.8

We raise our oil/gas price forecasts

We raise our Brent crude oil forecasts by US$10/bbl to US$70/65/60 per barrel over FY22F-24F. The Indian government has already raised the domestic gas price for 2HFY22F by 60% to US$3.2/mmbtu from US$2/mmbtu in 1HFY22. We raise our price forecasts over FY23F-24F by US$1/mmbtu to US$5.5/5 per mmbtu in view of the sharp rise in global gas prices. Our FY23F EPS would rise by 2.2% for every US$1/bbl increase in crude price and 3.6% for every US$0.5/mmbtu increase in gas price.

Scope for improvement in operating performance

ONGC's domestic oil/gas volume growth critically hinge on the pace of production ramp up from the 98/2 block. There have been delays in the start of production and we now estimate this block to produce 1/5/10mmscmd of gas over FY22F/23F/24F and 10/30kbd of oil over FY23F/24F which is well below management guidance. Given slower ramp up, we cut our FY22F-24F estimate of domestic oil/gas production by 1-3%. Our capex estimate of Rs320bn pa over FY22F-24F is at the higher end of management forecasts and we have raised our opex/boe estimate by 12% over FY22F-24F.

Sharp jump in earnings over FY22F-24F

Despite production cuts and increase in opex, we raise FY22F-24F EPS by 11-36% in view of higher oil/gas price forecasts. While the upside from higher oil prices is immediate, the impact of higher global gas prices will flow through to earnings with a lag. ONGC's standalone net debt-equity ratio has moved up to 12% in FY21 (compared to its net cash status till FY17), mainly due to the acquisition of Hindustan Petroleum (HPCL). We expect the dividend payout at around 50% of standalone net profit. There will still be free cash flow which we expect will be used to lower debt (standalone net debt equity drops to 4% by FY24F).

Maintain Add rating with higher TP of Rs190

ONGC's stock price has rallied sharply this year as investors have taken note of higher oil and gas prices. We believe there is room for further upside. Our oil/gas price forecasts are conservative in the current context. Operationally also, we believe our forecasts on production, opex and capex are conservative and there is scope for a positive surprise. Strong dividend yield (6%+ for FY23F) is a key re-rating catalyst, in our view.

Financial Summary	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue (Rsm)	3,968,029	3,040,010	4,593,160	4,303,270	4,016,403
Operating EBITDA (Rsm)	563,102	494,661	685,396	786,331	750,566
Net Profit (Rsm)	109,072	162,488	262,497	325,349	295,059
Core EPS (Rs)	8.7	12.9	20.9	25.9	23.5
Core EPS Growth	(63.7%)	49.0%	61.5%	23.9%	(9.3%)
FD Core P/E (x)	18.45	12.39	7.67	6.19	6.82
DPS (Rs)	5.0	3.6	9.0	10.0	10.0
Dividend Yield	3.76%	2.25%	5.63%	6.25%	6.25%
EV/EBITDA (x)	4.78	5.36	3.81	3.20	3.20
P/FCFE (x)	82.60	(251.97)	16.23	19.48	16.59
Net Gearing	52.3%	49.7%	47.5%	41.4%	36.1%
P/BV (x)	0.97	0.91	0.85	0.78	0.73
ROE	5.1%	7.6%	11.5%	13.2%	11.1%
% Change In Core EPS Estimates			10.78%	26.74%	35.88%
InCred Research/Consensus EPS (x)			0.94	0.99	0.88

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS, PRICED AS AT 14 OCT 2021

Analyst(s)

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Clear play on rising oil/gas prices

Around 80-85% of the consolidated EPS comes from the domestic E&P business (standalone entity) and 10-12% from the 51% stake in HPCL (Indian refining/marketing). So, despite the purchase of HPCL, ONGC's earnings are still heavily dependent on oil and gas pricing.

Figure 21: ONGC's consolidated earnings (Rs bn)

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Net sales	3,968.0	3,040.0	4,593.2	4,303.3	4,016.4
EBITDAX	653.3	566.0	756.4	854.3	821.6
Exploration expenses	90.2	71.4	71.0	68.0	71.0
EBITDA	563.1	494.7	685.4	786.3	750.6
Debt charges (incl exch losses)	-70.0	-50.8	-62.0	-73.6	-72.6
Deprn, depltn, amrtsn (DD&A)	-363.1	-246.2	-261.2	-264.7	-280.9
Other income	50.1	93.2	68.3	71.7	74.8
Profit before tax	180.1	290.9	430.5	519.7	471.9
Taxation	-75.1	-87.7	-160.2	-182.6	-165.2
Profit after tax	105.1	203.2	270.3	337.1	306.7
Share in Associate/JVs	10.5	10.2	20.9	21.3	22.5
Minority interest	6.5	50.9	28.8	33.1	34.1
Group profit	109.1	162.5	262.5	325.3	295.1
FDEPS (Rs)	8.7	12.9	20.9	25.9	23.5

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

FY21 net profit was severely impacted by the drop in oil and gas prices. We expect a sharp recovery in FY22F-24F due to higher oil and gas prices, with oil production stable to declining and gas production rising marginally.

Figure 22: ONGC standalone earnings (Rs bn)

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Net sales	962.1	681.4	959.7	1,043.5	1,007.2
EBITDAX	492.9	328.1	516.2	591.5	563.6
Exploration expenses	86.8	63.9	69.0	66.0	69.0
EBITDA	406.0	264.3	447.2	525.5	494.6
Debt charges (incl exch losses)	-28.2	-22.1	-26.4	-26.1	-24.3
Deprn, depltn, amrtsn (DD&A)	-235.2	-149.5	-163.4	-170.5	-179.0
Other income	61.1	71.4	72.3	59.4	61.3
Profit before tax	203.7	164.0	329.8	388.4	352.5
Taxation	-100.7	-72.3	-112.7	-127.3	-118.4
Profit after tax	134.4	112.5	220.9	260.2	236.2
FDEPS (Rs)	10.7	8.9	17.6	20.7	18.8

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

HPCL's FY21 net profit rose sharply on the back of very large inventory gains (Rs71bn). Without such gains, we expect profits to be lower in FY22F-24F, albeit with still higher refining margins and recovery in Indian oil demand.

Figure 23: HPCL consolidated earnings (Rs bn)

Year to 31 Mar	2020	2021	2022F	2023F	2024F
EBITDA	55.3	160.0	105.6	130.7	138.4
Debt charges	-11.4	-9.6	-12.0	-24.0	-25.1
Depreciation	-33.7	-36.3	-40.8	-49.4	-55.3
Other income	8.1	26.4	16.9	17.5	18.2
Profit before tax	18.3	140.6	69.6	74.8	76.3
Taxation	12.6	-35.3	-16.9	-18.2	-18.6
Profit after tax	31.0	105.2	52.7	56.6	57.7
Associate/JV contribution	-4.6	1.4	6.0	8.9	10.4
Net profit	26.4	106.6	58.7	65.5	68.1
FDEPS (Rs)	17.3	70.6	41.2	46.1	48.0

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

We raise our Brent oil forecasts by US$10/bbl over FY22F-24F and raise our domestic gas price forecasts by US$1/mmbtu over FY23F-24F. We cut our domestic oil/gas production forecasts by 1-3% over FY22F-24F due to the delay in production from the 98/2 block.

Figure 24: Key assumptions for ONGC

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Brent oil price (US$/bbl)	61.0	44.9	70.0	65.0	60.0
Rupee US dollar average	70.9	74.2	75.0	75.0	75.0
Gas price for older fields (US$/mmbtu)	3.8	2.3	2.6	5.5	5.0
Domestic opex (US$/boe)	10.2	8.0	9.2	9.5	9.5
ONGC domestic upstream operations					
Oil production (mt)					
Own crude	20.63	20.18	19.36	19.46	20.05
Share from JVs	2.73	2.35	2.30	2.30	2.30
Total	23.35	22.53	21.65	21.75	22.35
Gas production (bcm)					
Own gas	23.75	21.87	20.77	21.86	23.29
Share from JVs	1.12	0.94	1.00	1.00	1.00
Total	24.86	22.82	21.77	22.86	24.29
ONGC Videsh production					
Oil production (mt)	9.76	8.51	8.47	7.99	7.01
Gas (bcm)	5.23	4.53	4.32	4.32	4.32
HPCL					
Consolidated refinery throughput (mmt)	43.33	37.97	45.69	52.53	55.03
Parent refinery GRM (US$/bbl)	1.02	3.86	3.30	5.40	5.50
Auto fuel volumes (mmt)	24.95	22.54	25.64	26.68	27.57
Auto fuel margins (Rs/kl)	2,439	3,465	3,000	2,676	2,679
MRPL					
Refinery throughput (mmt)	13.95	11.48	15.90	16.30	16.30
Refinery GRM (US$/bbl)	-0.23	3.71	4.00	5.00	6.00

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

The bulk of growth in ONGC's volumes (especially in gas) will come from the 98/2 block. Our estimates assume a slow ramp up in volumes from this block (10mmscmd in FY24F vs. likely peak volume of 15mmscmd)

Figure 25: Domestic gas sales volume composition

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Gas from nomination blocks at regulated price (bcm)	17.83	16.58	15.10	14.74	14.34
Gas from nomination blocks at new higher price formula (bcm)	0.70	0.40	0.30	0.30	0.30
Gas from 98/2 at new higher price formula (bcm)			0.37	1.83	3.65
Total	18.53	16.98	15.77	16.86	18.29
Gas price for older fields (US$/mmbtu)	3.84	2.33	2.60	5.50	5.00
Gas price for difficult fields (US$/mmbtu)	5.00	3.81	5.40	6.50	6.00

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 26: Change in estimates for ONGC

	Old			New			Change %		
Year to 31 Mar	2022F	2023F	2024F	2022F	2023F	2024F	2022F	2023F	2024F
Brent crude (US$/bbl)	60.0	55.0	50.0	70.0	65.0	60.0	16.7%	18.2%	20.0%
Rupee US dollar average	75.0	75.0	75.0	75.0	75.0	75.0	0.0%	0.0%	0.0%
Domestic APM gas price (US$/m	2.8	4.5	4.0	2.6	5.5	5.0	-5.5%	22.2%	25.0%
Domestic opex (US$/boe)	8.5	8.5	8.5	9.20	9.50	9.50	8.2%	11.8%	11.8%
Domestic oil production (mmt)	22.1	22.2	22.8	21.7	21.8	22.3	-2.2%	-2.1%	-2.0%
Domestic gas production (bcm)	22.5	23.2	24.5	21.8	22.9	24.3	-3.1%	-1.3%	-1.0%
EBITDAX (Rs bn)	740.5	783.4	737.8	756.4	854.3	821.6	2.1%	9.0%	11.4%
EBITDA (Rsbn)	657.5	704.1	654.8	685.4	786.3	750.6	4.2%	11.7%	14.6%
Net profit (Rs bn)	237.0	256.7	217.1	262.5	325.3	295.1	10.8%	26.7%	35.9%

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

We expect standalone 2QFY22F net profit at Rs67bn, up 55% qoq. Operational earnings (EBITDAX) will be up only 3.7% qoq due to marginal increase in oil price and flat gas price. The bulk of the qoq profit growth will come from higher dividends (from HPCL, ONGC Videsh, etc.)

Figure 27: ONGC's standalone quarterly result trends

Rs bn	Sep'20	Dec'20	Mar'21	Jun'21	Sep'21F	yoy %	qoq %
Net sales	169.2	170.2	211.9	230.2	243.4	43.9%	5.7%
EBITDAX	84.4	83.5	101.2	121.5	126.1	49.5%	3.7%
Exploration expenses	14.5	18.4	19.7	11.5	12.0	-17.0%	4.3%
EBITDA	69.9	65.1	81.5	110.0	114.1	63.2%	3.7%
Interest	(3.2)	(6.0)	(5.7)	(6.2)	(6.2)	95.5%	0.0%
DD&A	(49.2)	(44.3)	(17.9)	(41.7)	(41.5)	-15.6%	-0.4%
Other income	22.4	12.2	31.3	5.3	33.6	50.1%	528.7%
Profit before tax	39.9	27.0	89.3	67.5	99.9	150.5%	48.0%
Total Tax	(11.1)	(14.4)	(21.9)	(24.2)	(33.0)	196.5%	36.5%
Net profit	28.8	12.6	67.3	43.3	67.0	132.7%	54.5%
Quarterly EPS (Rs)	2.3	1.0	5.4	3.4	5.3	132.7%	54.5%

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Our Brent forecasts are conservative and ONGC's earnings remain positively leveraged to higher oil and gas prices.

Figure 28: ONGC's EPS sensitivity

Year to 31 Mar	2022F	2023F	2024F
EPS (Rs)	20.87	25.86	23.45
EPS sensitivity assuming:			
US$1/bbl change in oil price	2.5%	2.2%	2.6%
US$0.50/mmbtu change in APM gas price	4.6%	3.6%	3.9%
Rs1 change in INR/USD exchange rate	1.8%	1.7%	1.8%

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

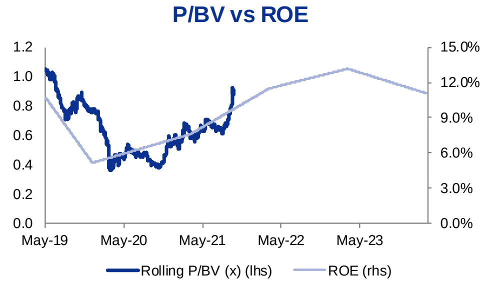
We raise our SOP-based TP to Rs190 from Rs150 mainly due to the higher valuation of its reserves. The FY24F price forecast of US$60/bbl for oil and US$5/mmbtu for gas has been used for years beyond FY24 for the calculation of DCF value.

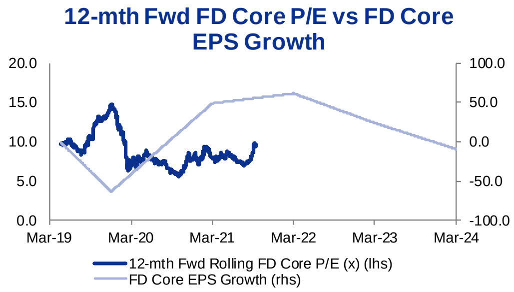
Figure 29: ONGC's SOP valuation

	Valuation		per share	Reserves	Value
	Rs m	US$m	Rs	m boe	US$/boe
Valuation of domestic P1 reserves	27,01,022	36,014	215	4,478	8.0
Valuation of overseas P1 reserves	4,46,610	5,955	36		
Subsidiary HPCL shares at 20% discount to market price	1,93,154	2,575	15		
Investments (IOC/GAIL/MRPL) at 20% discount to market price	2,54,807	3,397	20		
Net cash/(debt) (excluding abandonment deposits)	-12,02,266	-16,030	-96		
Target price			**190**		

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS





Profit & Loss

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Net Revenues	**3,968,029**	**3,040,010**	**4,593,160**	**4,303,270**	**4,016,403**
Gross Profit	**653,337**	**566,016**	**756,400**	**854,335**	**821,570**
Operating EBITDA	**563,102**	**494,661**	**685,396**	**786,331**	**750,566**
Depreciation And Amortisation	(363,098)	(246,197)	(261,180)	(264,728)	(280,885)
Operating EBIT	**200,004**	**248,464**	**424,216**	**521,603**	**469,680**
Financial Income/(Expense)	(69,998)	(50,790)	(61,977)	(73,620)	(72,598)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	50,131	93,230	68,255	71,733	74,775
Profit Before Tax (pre-EI)	**180,137**	**290,904**	**430,495**	**519,716**	**471,857**
Exceptional Items					
Pre-tax Profit	**180,137**	**290,904**	**430,495**	**519,716**	**471,857**
Taxation	(75,080)	(87,661)	(160,158)	(182,568)	(165,185)
Exceptional Income - post-tax					
Profit After Tax	**105,057**	**203,243**	**270,336**	**337,148**	**306,672**
Minority Interests	(6,530)	(50,948)	(28,788)	(33,140)	(34,143)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax	10,544	10,193	20,948	21,341	22,530
Net Profit	**109,072**	**162,488**	**262,497**	**325,349**	**295,059**
Recurring Net Profit	109,072	162,488	262,497	325,349	295,059
Fully Diluted Recurring Net Profit	**109,072**	**162,488**	**262,497**	**325,349**	**295,059**

Cash Flow

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
EBITDA	563,102	494,661	685,396	786,331	750,566
Cash Flow from Invt. & Assoc.	50,131	93,230	68,255	71,733	74,775
Change In Working Capital	56,587	44,365	15,478	12,769	21,732
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(15,185)	(7,656)	30,827	35,301	31,807
Other Operating Cashflow	(144,237)	(16,216)	6,362	19,051	20,316
Net Interest (Paid)/Received	(69,998)	(50,790)	(61,977)	(73,620)	(72,598)
Tax Paid	(75,080)	(87,661)	(160,158)	(182,568)	(165,185)
Cashflow From Operations	**365,321**	**469,933**	**584,182**	**668,996**	**661,413**
Capex	(681,665)	(417,488)	(479,361)	(477,134)	(456,134)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	124,346	(105,371)	(59,365)	(55,796)	(56,051)
Other Investing Cashflow					
Cash Flow From Investing	**(557,320)**	**(522,859)**	**(538,727)**	**(532,930)**	**(512,185)**
Debt Raised/(repaid)	216,586	44,938	78,529	(32,734)	(27,911)
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(84,351)	(22,015)	(119,513)	(123,916)	(125,803)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	**132,235**	**22,922**	**(40,983)**	**(156,650)**	**(153,714)**
Total Cash Generated	(59,764)	(30,004)	4,472	(20,584)	(4,487)
Free Cashflow To Equity	**24,588**	**(7,988)**	**123,985**	**103,331**	**121,316**
Free Cashflow To Firm	**(122,001)**	**(2,136)**	**107,432**	**209,686**	**221,825**

SOURCES: INCRED RESEARCH, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Cash And Equivalents	110,490	126,099	184,571	214,987	264,499
Total Debtors	115,475	185,788	198,591	194,047	180,968
Inventories	330,512	445,733	441,710	427,882	413,873
Total Other Current Assets	502,813	426,147	445,728	462,883	480,197
Total Current Assets	**1,059,290**	**1,183,767**	**1,270,601**	**1,299,799**	**1,339,538**
Fixed Assets	2,880,540	3,026,350	3,187,886	3,346,544	3,464,969
Total Investments	675,790	781,161	840,526	896,323	952,374
Intangible Assets	142,367	135,386	135,386	135,386	135,386
Total Other Non-Current Assets					
Total Non-current Assets	**3,698,696**	**3,942,897**	**4,163,799**	**4,378,253**	**4,552,729**
Short-term Debt	315,745	306,576	302,092	240,706	231,542
Current Portion of Long-Term Debt					
Total Creditors	669,983	810,873	854,711	866,262	878,221
Other Current Liabilities					
Total Current Liabilities	**985,729**	**1,117,449**	**1,156,803**	**1,106,968**	**1,109,763**
Total Long-term Debt	971,187	1,025,294	1,108,307	1,136,959	1,118,211
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	**971,187**	**1,025,294**	**1,108,307**	**1,136,959**	**1,118,211**
Total Provisions	553,266	557,953	588,781	624,081	655,888
Total Liabilities	**2,510,182**	**2,700,696**	**2,853,891**	**2,868,008**	**2,883,863**
Shareholders Equity	2,069,677	2,209,811	2,364,097	2,573,120	2,749,965
Minority Interests	178,128	216,158	216,412	236,924	258,439
Total Equity	**2,247,805**	**2,425,969**	**2,580,509**	**2,810,043**	**3,008,404**

Key Ratios

	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue Growth	(5.9%)	(23.4%)	51.1%	(6.3%)	(6.7%)
Operating EBITDA Growth	(26.1%)	(12.2%)	38.6%	14.7%	(4.5%)
Operating EBITDA Margin	14.2%	16.3%	14.9%	18.3%	18.7%
Net Cash Per Share (Rs)	(93.51)	(95.85)	(97.44)	(92.42)	(86.27)
BVPS (Rs)	164.52	175.66	187.92	204.54	218.59
Gross Interest Cover	2.86	4.89	6.84	7.09	6.47
Effective Tax Rate	41.7%	30.1%	37.2%	35.1%	35.0%
Net Dividend Payout Ratio	69.4%	27.9%	43.1%	38.7%	42.6%
Accounts Receivables Days	13.34	18.09	15.27	16.65	17.04
Inventory Days	37.54	57.26	42.21	46.01	48.08
Accounts Payables Days	76.66	109.24	79.23	91.07	99.65
ROIC (%)	4.5%	5.5%	8.9%	10.5%	9.3%
ROCE (%)	6.4%	8.4%	11.4%	13.0%	11.4%
Return On Average Assets	3.6%	5.1%	6.4%	7.4%	6.6%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

CGSCIMB

InCred Equities

Company Note | Oil & Gas Exp & Prodn | India | October 14, 2021

India

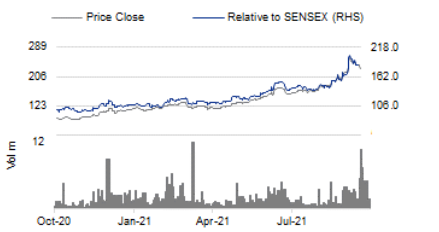
ADD *(no change)*

Consensus ratings*:	Buy 15 Hold 5 Sell 2
Current price:	Rs230
Target price: ▲	Rs265
Previous target:	Rs200
Up/downside:	15.2%
InCred Research / Consensus:	17.8%
Reuters:	OILI.NS
Bloomberg:	OINL IN
Market cap:	US$3,305m
	Rs249,088m
Average daily turnover:	US$4.2m
	Rs314.2m
Current shares o/s:	1,084.4m
Free float:	43.3%

Source: Bloomberg

Key changes in this note

- FY22F EPS raised by 6.2%.
- FY23F EPS raised by 11.9%.
- FY24F EPA raised by 12.6%.



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	18.8	35.9	164.3
Relative (%)	13.9	18.4	77.5

Major shareholders	% held
Government of India	56.7
LIC	11.9
Indian Oil	4.9

Oil India

Attractive dividend yield

- We raise our Brent crude forecasts by US$10/bbl over FY22-24F and domestic gas price by US$1/mmbtu over FY23/24F.
- With higher prices, we raise our FY22-24F by 6-13%. EPS is now less sensitive to oil/gas pricing post NRL acquisition (which contributed 70% to FY21 EPS).
- We maintain ADD rating and increase our SOP-based target price from Rs200 to Rs265. Any sharp drop in crude oil price is the main risk to our rating.

We raise our oil/gas price forecasts

We have raised our Brent crude oil forecasts by US$10/bbl to US$70/65/60 per bbl over FY22-24F. Domestic gas price for 2HFY22F has already been raised by 60% to US$3.2/mmbtu from US$2/mmbtu in 1HFY22. We raise our price forecasts by US$1/mmbtu to US$5.5/5 per mmbtu over FY23/24F in view of the sharp rise in global gas prices. Our FY23F EPS would rise by 1.3% and 3.6% for every US$1/bbl increase in crude price and US$0.5/mmbtu increase in gas price, respectively.

Numaligarh Refinery can fund its own expansion

Oil India (OIL) bought a 54.16% stake in Numaligarh Refinery (NRL) on 26 Mar 2021, increasing its total stake in the company from 26% to 80.16%. Consequent to a pre-agreed stake sale to the Assam government, OIL's stake will ultimately drop to 69.63%. NRL is executing a refinery expansion from 3mt to 9mt, whose cost has moved up from Rs226bn to Rs280bn (Rs6.9bn spent till Mar 2021). Due to tax benefits, NRL is extremely profitable with earnings (Rs38-Rs40bn over FY22-24F) less sensitive to refining margins. We expect NRL's dividend payout at 30% and with 70:30 debt equity for refinery expansion, there would be no need for any additional equity infusion from OIL, as per our estimates.

We raise EPS estimates by 6-13% over FY22-24F

While the upside from higher oil prices is immediate, the impact of higher global gas prices will flow through to OIL's earnings with a lag. We believe that our estimates on oil/gas production are conservative. OIL's standalone net debt-equity ratio has moved up to 49% in FY21 (compared to net cash status a few years ago), especially with the recent NRL stake acquisition. We expect dividend payout at around 50% of standalone net profit and capex at Rs40bn pa. There will still be free cash flow which we expect will be used to lower debt.

Maintain ADD rating with a TP of Rs265

OIL's stock price has rallied sharply this year as investors have taken note of the cheap NRL stake acquisition as well as prospects of higher oil and gas prices. We believe there is room for a further upside. Our oil/gas price forecasts are conservative in the current context. Operationally also, we believe our forecasts on production, opex and capex are conservative and there is scope for a positive surprise. Strong dividend yield (6% for FY23F) is a key re-rating catalyst, in our view.

Financial Summary	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue (Rsm)	186,125	176,295	308,801	315,586	295,240
Operating EBITDA (Rsm)	54,339	57,533	93,289	106,464	97,873
Net Profit (Rsm)	47,010	35,279	49,159	57,264	50,294
Core EPS (Rs)	43.4	32.5	45.3	52.8	46.4
Core EPS Growth	51.5%	(25.0%)	39.3%	16.5%	(12.2%)
FD Core P/E (x)	5.30	7.06	5.07	4.35	4.95
DPS (Rs)	10.6	5.0	10.0	14.0	12.0
Dividend Yield	5.55%	2.18%	4.35%	6.09%	5.22%
EV/EBITDA (x)	1.61	3.21	1.91	2.22	3.03
P/FCFE (x)	(17.66)	(20.74)	10.08	(22.69)	24.27
Net Gearing	27.1%	64.1%	49.5%	58.9%	68.1%
P/BV (x)	1.07	1.05	0.95	0.83	0.75
ROE	18.0%	15.1%	19.7%	20.3%	15.9%
% Change In Core EPS Estimates			6.21%	11.89%	12.59%
InCred Research/Consensus EPS (x)			1.07	1.09	0.80

SOURCES: INCRED RESEARCH, COMPANY REPORTS, PRICED AS AT 14 OCT 2021

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Attractive dividend yield

While OIL has acquired an additional stake in NRL in Mar 2021, its consolidated earnings reflecting NRL as a subsidiary (vs. JV accounting earlier) has been done retrospectively from FY20. The contributions from JVs reflect post-tax earnings from overseas operations (mainly Russian assets) which will rise in line with higher global oil prices.

Figure 30: OIL's consolidated earnings (Rsbn)

Year ending March	2020	2021	2022F	2023F	2024F
Total sales	186.13	176.30	308.80	315.59	295.24
EBITDAX	66.53	74.56	106.20	118.84	110.01
Exploration expenses	12.19	17.03	12.91	12.38	12.14
EBITDA	54.34	57.53	93.29	106.46	97.87
Interest exp	-6.47	-6.61	-9.72	-8.59	-7.91
DD &A	-21.34	-18.95	-19.91	-20.63	-21.18
Other income	13.20	6.43	9.51	9.39	9.55
Associates/JVs	10.57	5.28	7.78	6.92	6.15
Profit before tax	50.30	43.69	80.94	93.55	84.48
Tax	-3.29	-8.41	-31.78	-36.28	-34.19
Net profit	47.01	35.28	49.16	57.26	50.29
EPS (Rs)	43.35	32.53	45.33	52.81	46.38
DPS (Rs)	10.60	5.00	10.00	14.00	12.00

SOURCES: INCRED RESEARCH, COMPANY REPORTS

After a sharp drop in earnings in FY21, we expect OIL's standalone earnings to rise significantly over FY22-24F on the back of improvement in oil and gas prices. FY21 EPS has been boosted by a large write-back of tax, consequent to the settlement of old disputes.

Figure 31: OIL's standalone earnings (Rsbn)

Year ending March	2020	2021	2022F	2023F	2024F
Total sales	**121.29**	**86.18**	**129.45**	**137.34**	**125.40**
EBITDAX	**51.03**	**31.31**	**54.87**	**64.78**	**56.49**
Exploration expenses	12.06	17.03	12.91	12.38	12.14
EBITDA	**38.98**	**14.28**	**41.96**	**52.40**	**44.35**
Interest exp	-4.99	-4.99	-8.20	-7.07	-6.38
DD &A	-15.70	-15.38	-17.07	-17.75	-18.26
Other income	2.91	13.31	13.87	14.80	15.47
Profit before tax	21.20	7.23	30.56	42.38	35.18
Tax	4.64	10.19	-7.70	-10.68	-8.86
Net profit	**25.84**	**17.42**	**22.86**	**31.70**	**26.31**
EPS (Rs)	23.8	16.1	21.1	29.2	24.3
Book value per share (Rs)	225	242	253	269	281
ROE	10%	7%	9%	11%	9%
Net debt equity	14%	49%	41%	38%	36%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

NRL's earnings have nearly doubled in FY21 and will sustain at higher levels due to an increase in its tax benefit (captured in its gross refining margin or GRM). Given the enhanced profitability, OIL has acquired an additional stake at just 4.3x FY22F P/E. Consequently, the acquisition is highly EPS-accretive for OIL, though it will raise its gearing due to NRL's ongoing expansion plans.

Figure 32: NRL's earnings (Rsbn)

Year ending March	2020	2021	2022F	2023F	2024F
Total sales	**120.45**	**136.76**	**179.35**	**178.25**	**169.84**
EBITDA	**18.14**	**43.47**	**51.33**	**54.06**	**53.52**
Interest exp	-0.02	-0.09	-0.02	-0.02	-0.02
DD &A	-2.49	-3.47	-2.84	-2.88	-2.92
Other income	3.24	1.73	1.79	2.28	2.28
Profit before tax	18.87	41.63	50.26	53.44	52.85
Tax	-3.53	-10.47	-12.66	-13.47	-13.32
Net profit	**15.33**	**31.16**	**37.59**	**39.97**	**39.53**
EPS (Rs)	20.8	42.4	51.1	54.3	53.7
Book value per share (Rs)	73.3	78.3	117.4	156.8	194.5
ROE	**28%**	**56%**	**52%**	**40%**	**31%**
Net debt equity	-6%	-4%	-2%	49%	81%
Refinery throughput (mmt)	2.4	2.7	2.8	2.9	2.9
GRM (US$/bbl)	23.6	36.7	39.4	40.0	40.0

SOURCES: INCRED RESEARCH, COMPANY REPORTS

We have raised our Brent crude estimates by US$10/bbl over FY22-24F and also our domestic gas price estimates by US$1/bbl over FY23-24F.

Figure 33: OIL - key assumptions

Year to 31 March	2019	2020	2021	2022F	2023F	2024F
Domestic oil production (mmt)	3.32	3.13	2.96	3.01	2.95	2.89
Domestic gas production (bcm)	2.87	2.80	2.64	3.02	3.02	3.02
Brent crude price (US$/bbl)	70.20	61.00	44.85	70.00	65.00	60.00
Gas price including subsidy (US$/mmbtu)	3.57	3.84	2.33	2.60	5.50	5.00
Rupee/US dollar average	69.92	70.90	74.23	75.00	75.00	75.00

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 34: Earnings revision for OIL

	Old			New			Change %		
Year to 31 March	2022F	2023F	2024F	2022F	2023F	2024F	2022F	2023F	2024F
Domestic oil production (mmt)	2.96	2.96	2.96	3.01	2.95	2.89	1.9%	-0.2%	-2.2%
Domestic gas production (bcm)	2.60	2.50	2.50	3.02	3.02	3.02	16.2%	20.8%	20.8%
Brent crude (US$/bbl)	60.0	55.0	50.0	70.00	65.00	60.00	16.7%	18.2%	20.0%
Domestic gas price (US$/mmbt	2.8	4.5	4.0	2.60	5.50	5.00	-5.5%	22.2%	25.0%
Rupee US dollar average	75.0	75.0	75.0	75.00	75.00	75.00	0.0%	0.0%	0.0%
EBITDAX (Rs bn)	100.1	106.2	98.5	106.2	118.8	110.0	6.1%	11.9%	11.7%
EBITDA (Rs bn)	88.2	97.2	89.5	93.3	106.5	97.9	5.8%	9.6%	9.4%
Net profit (Rs bn)	46.3	51.2	44.7	49.2	57.3	50.3	6.2%	11.9%	12.6%
EPS (Rs)	42.7	47.2	41.2	45.33	52.81	46.38	6.2%	11.9%	12.6%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Sensitivity to oil/gas prices has reduced due to a large contribution from NRL's earnings.

Figure 35: OIL - sensitivity analysis

Year to 31 March	2022F	2023F	2024F
EPS (Rs) under existing assumptions	45.3	52.8	46.4
EPS sensitivity assuming:			
$1/bbl change in oil price	1.6%	1.3%	1.5%
$0.50/mmbtu change in gas price	4.2%	3.6%	4.1%
Rs1 change in INR/USD exchange rate	1.3%	1.3%	1.3%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

We expect OIL to report 18.5% qoq increase in standalone profits in 2QFY21F, largely on the back of slightly higher global oil prices. Gas prices in 2HFY22F will go up by 60%, in our view.

Figure 36: OIL - standalone quarterly result trends (Rsm)

Quarter ended	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22F	yoy %	qoq %
Net sales	21,690	21,260	25,795	30,070	32,763	51.1%	9.0%
EBITDAX	8,366	7,562	7,922	13,681	14,537	73.8%	6.3%
Exploration expenses	993	8,500	3,675	1,350	2,000	101.5%	48.1%
EBITDA	7,373	-938	4,247	12,331	12,537	70.0%	1.7%
Interest	-1,217	-1,223	-1,270	-2,221	-1,900	56.1%	-14.4%
DD&A	-3,737	-3,879	-4,176	-3,975	-4,000	7.0%	0.6%
Other income	1,112	3,712	13,301	638	1,500	34.9%	135.1%
Exceptional	-1,341	-1,514	-701	0	0	0.0%	0.0%
Profit before tax	2,190	-3,842	11,402	6,774	8,137	271.6%	20.1%
Total Tax	200	12,879	-2,926	-1,694	-2,116	0.0%	24.9%
Net profit	2,390	9,037	8,476	5,079	6,021	152.0%	18.5%
Quarterly EPS (Rs)	2.2	8.3	7.8	4.7	5.6	152.0%	18.5%
Crude sales volume (mmt)	0.724	0.723	0.703	0.722	0.738	1.9%	2.2%
Gas sales volume (bcm)	0.553	0.586	0.555	0.608	0.675	22.1%	11.0%
INR/USD	74.38	73.76	72.89	73.77	74.08	-0.4%	0.4%
Crude price US$/bbl	42.74	44.09	59.80	67.15	71.43	67.1%	6.4%
Gas price US$/mmbtu	2.74	2.03	2.09	2.02	2.05	-25.1%	1.5%
Lifting costs, US$/boe	10.90	11.82	15.48	10.52	11.00	0.9%	4.5%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Our SOP-based target price rises from Rs200 to Rs265 largely on the back of higher valuation of domestic reserves, following the upgrade in our oil and gas price estimates.

Figure 37: OIL - SOP valuation

	Rsm	Rs/share	Value (US$/boe)
DCF value of domestic proved reserves	2,16,744	200	8.5
Net cash	-1,59,080	-147	
NRL stake at transaction value	1,11,160	103	
IOC stake at discount to market value	53,659	48	
Mozambique valuation	16,950	16	
Russian assets valuation	48,000	44	
Total	**2,87,433**	**265**	

SOURCES: INCRED RESEARCH, COMPANY REPORTS

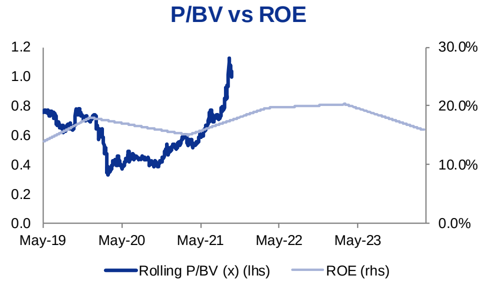
On 26 Mar 2021, BPCL sold its 61.65% stake in NRL to OIL, Engineers India (EIL) and the Government of Assam (GoA) for Rs98.76bn. GoA intends to raise its stake in NRL to 26% and, hence, will buy an additional 10.53% stake from OIL in FY22F at the same valuation (3.1% bought in 1Q). GoA implemented the first phase (3.1% stake) on 1 Jun 2021. Post all transactions, OIL's ultimate stake in NRL will be 69.63%.

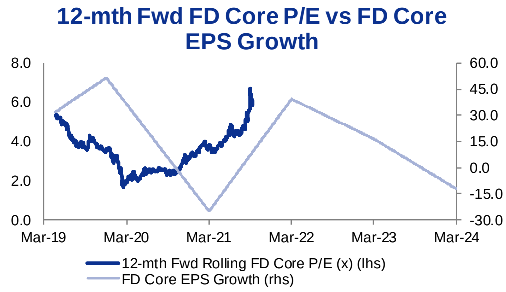
Figure 38: Chronology of NRL transactions

NRL shareholding pre transaction	Shares	% stake	value Rsm
BPCL	453.55	61.65%	
OIL	191.28	26.00%	
Assam govt	90.86	12.35%	
NRL transaction on 25 Mar 21			
Sale by BPCL	453.55	61.65%	98760
Bought by OIL	398.44	54.16%	86760
Bought by EIL	32.15	4.37%	7000
Bought by Assam govt	22.96	3.12%	5000
Second stage transaction in FY22			
Purchase by Assam govt/sale by OIL	77.46	10.53%	16866
Final shareholding			
OIL	512.26	69.63%	
Assam govt	191.28	26.00%	
EIL	32.15	4.37%	

SOURCES: INCRED RESEARCH, COMPANY REPORTS

BY THE NUMBERS





Profit & Loss

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Net Revenues	**186,125**	**176,295**	**308,801**	**315,586**	**295,240**
Gross Profit	**66,527**	**74,562**	**106,200**	**118,844**	**110,015**
Operating EBITDA	**54,339**	**57,533**	**93,289**	**106,464**	**97,873**
Depreciation And Amortisation	(21,340)	(18,954)	(19,913)	(20,631)	(21,184)
Operating EBIT	**32,999**	**38,579**	**73,376**	**85,833**	**76,690**
Financial Income/(Expense)	(6,467)	(6,605)	(9,725)	(8,594)	(7,906)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	13,202	6,431	9,514	9,394	9,551
Profit Before Tax (pre-EI)	**39,734**	**38,405**	**73,165**	**86,634**	**78,334**
Exceptional Items					
Pre-tax Profit	**39,734**	**38,405**	**73,165**	**86,634**	**78,334**
Taxation	(248)	(2,227)	(20,365)	(24,146)	(22,184)
Exceptional Income - post-tax					
Profit After Tax	**39,486**	**36,178**	**52,801**	**62,488**	**56,151**
Minority Interests	(3,042)	(6,181)	(11,416)	(12,139)	(12,006)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax	10,566	5,282	7,775	6,915	6,150
Net Profit	**47,010**	**35,279**	**49,159**	**57,264**	**50,294**
Recurring Net Profit	47,010	35,279	49,159	57,264	50,294
Fully Diluted Recurring Net Profit	**47,010**	**35,279**	**49,159**	**57,264**	**50,294**

Cash Flow

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
EBITDA	54,339	57,533	93,289	106,464	97,873
Cash Flow from Invt. & Assoc.	13,202	6,431	9,514	9,394	9,551
Change In Working Capital	90,364	(95,695)	11,626	(7,890)	(5,745)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(6,989)	2,272	162	192	176
Other Operating Cashflow	(58,869)	(7,131)	2,285	3,373	3,782
Net Interest (Paid)/Received	(6,467)	(6,605)	(9,725)	(8,594)	(7,906)
Tax Paid	(4,448)	(436)	(20,203)	(23,955)	(22,008)
Cashflow From Operations	**81,132**	**(43,631)**	**86,948**	**78,984**	**75,723**
Capex	(82,741)	(37,967)	(59,540)	(115,540)	(115,540)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	10,900	2,963	(5,301)	(5,700)	(6,200)
Other Investing Cashflow					
Cash Flow From Investing	**(71,841)**	**(35,004)**	**(64,841)**	**(121,240)**	**(121,740)**
Debt Raised/(repaid)	(23,704)	66,627	2,613	31,280	56,280
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(23,407)	(20,472)	(10,302)	(14,314)	(13,447)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	**(47,111)**	**46,155**	**(7,689)**	**16,966**	**42,833**
Total Cash Generated	(37,820)	(32,480)	14,418	(25,290)	(3,183)
Free Cashflow To Equity	**(14,413)**	**(12,008)**	**24,720**	**(10,976)**	**10,263**
Free Cashflow To Firm	**15,758**	**(72,030)**	**31,832**	**(33,662)**	**(38,111)**

SOURCES: INCRED RESEARCH, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Cash And Equivalents	61,624	34,980	53,506	30,182	28,108
Total Debtors	15,020	18,556	20,661	21,317	19,760
Inventories	30,636	32,216	36,490	36,354	35,621
Total Other Current Assets	38,961	40,089	27,278	33,858	40,438
Total Current Assets	**146,241**	**125,841**	**137,935**	**121,711**	**123,927**
Fixed Assets	173,975	182,078	213,969	301,498	388,713
Total Investments	237,867	234,904	240,205	245,905	252,105
Intangible Assets					
Total Other Non-Current Assets					
Total Non-current Assets	**411,842**	**416,982**	**454,174**	**547,403**	**640,818**
Short-term Debt	738	43,005	25,001	1	1
Current Portion of Long-Term Debt					
Total Creditors	145,255	61,477	67,469	66,679	65,223
Other Current Liabilities					
Total Current Liabilities	**145,993**	**104,482**	**92,469**	**66,679**	**65,224**
Total Long-term Debt	126,695	151,055	171,673	227,953	284,233
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	**126,695**	**151,055**	**171,673**	**227,953**	**284,233**
Total Provisions	42,590	39,189	38,553	38,744	38,920
Total Liabilities	**315,278**	**294,726**	**302,694**	**333,376**	**388,377**
Shareholders Equity	232,108	236,664	263,176	300,711	332,910
Minority Interests	10,696	11,433	26,239	35,027	43,459
Total Equity	**242,804**	**248,097**	**289,415**	**335,738**	**376,368**

Key Ratios

	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue Growth	35.1%	(5.3%)	75.2%	2.2%	(6.4%)
Operating EBITDA Growth	(2.8%)	5.9%	62.1%	14.1%	(8.1%)
Operating EBITDA Margin	29.2%	32.6%	30.2%	33.7%	33.2%
Net Cash Per Share (Rs)	(60.69)	(146.70)	(132.02)	(182.38)	(236.19)
BVPS (Rs)	214.04	218.24	242.69	277.31	307.00
Gross Interest Cover	5.10	5.84	7.55	9.99	9.70
Effective Tax Rate	0.6%	5.8%	27.8%	27.9%	28.3%
Net Dividend Payout Ratio	29.4%	15.4%	22.1%	26.5%	25.9%
Accounts Receivables Days	27.65	34.76	23.18	24.28	25.39
Inventory Days	65.36	112.75	61.89	67.57	70.92
Accounts Payables Days	256.34	370.86	116.15	124.44	129.96
ROIC (%)	21.8%	13.6%	23.8%	19.7%	13.7%
ROCE (%)	10.5%	10.3%	16.7%	17.1%	13.4%
Return On Average Assets	10.2%	8.4%	12.0%	12.0%	9.5%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

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Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2020, Anti-Corruption 2020

ADVANC – Excellent, Certified, **AMATA** – Excellent, Certified, **ANAN** – Excellent, n/a, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Excellent, n/a, **AU** – Good, n/a, **BAM** – Very Good, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** - Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Excellent, n/a, **BEAUTY** – Good, n/a, **BH** - Good, n/a, **BJC** – Very Good, n/a, **BLA** – Excellent, Certified, **BTS** - Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – n/a, n/a, **CENTEL** – Excellent, Certified, **CHAYO** – Very Good, n/a, **CHG** – Very Good, n/a, **CK** – Excellent, n/a, **COM7** – Very Good, Certified, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** - Excellent, Certified, **CPNREIT** – n/a, n/a, **CRC** – Very Good, n/a, **DELTA** - Excellent, Certified, **DDD** – Very Good, n/a, **DIF** – n/a, n/a, **DOHOME** – Very Good, n/a, **DREIT** – n/a, n/a, **DTAC** – Excellent, Certified, **ECL** – Excellent, Certified, **EGCO** - Excellent, Certified, **EPG** – Excellent, Certified, **ERW** – Very Good, Certified, **GFPT** - Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **HANA** - Excellent, Certified, **HMPRO** - Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Certified, **III** – Excellent, n/a, **INTUCH** - Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** - Excellent, Certified, **JASIF** – n/a, n/a, **JKN** – Excellent, Declared, **JMT** – Very Good, Declared, **KBANK** - Excellent, Certified, **KCE** - Excellent, Certified, **KEX** – n/a, n/a, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** - Excellent, Certified, **KTC** – Excellent, Certified, **LH** - Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MAKRO** – Excellent, Certified, **MC** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** - Excellent, Certified, **MTC** – Excellent, Certified, **NETBAY** – Very Good, n/a, **NRF** – n/a, n/a, **OR** – n/a, n/a, **ORI** – Excellent, Certified, **OSP** – Very Good, n/a, **PLANB** – Excellent, Certified, **PRINC** – Very Good, Certified, **PR9** – Excellent, n/a, **PSH** – Excellent, Certified, **PTT** - Excellent, Certified, **PTTEP** - Excellent, Certified, **PTTGC** - Excellent, Certified, **QH** – Excellent, Certified, **RBF** – Good, n/a, **RS** – Excellent, n/a, **RSP** – Good, n/a, **S** – Excellent, n/a, **SAK** – n/a, n/a, **SAPPE** – Very Good, Certified, **SAWAD** – Very Good, n/a, **SCB** - Excellent, Certified, **SCC** – Excellent, Certified, **SCGP** – n/a, n/a, **SHR** – Very Good, n/a, **SIRI** – Excellent, Certified, **SPA** – Very Good, n/a, **SPALI** - Excellent, Declared, **SPRC** – Excellent, Certified, **SSP** - Good, Declared, **STEC** – n/a, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, n/a, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIDLOR** – n/a, n/a **TISCO** - Excellent, Certified, **TKN** – Very Good, n/a, **TMB** - Excellent, Certified, **TOP** - Excellent, Certified, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Certified, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – n/a, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

- CG Score 2020 from Thai Institute of Directors Association (IOD)
- Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of January 30, 2021) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.

Recommendation Framework

Stock Ratings	Definition:
Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings	Definition:
Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings	Definition:
Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.