

BSE SENSEX	S&P CNX
40,324	11,908
Bloomberg	OINL IN
Equity Shares (m)	1,130
M.Cap.(INRb)/(USDb)	179.3 / 2.5
52-Week Range (INR)	207 / 140
1, 6, 12 Rel. Per (%)	7/-13/-31
12M Avg Val (INR M)	279
Free float (%)	40.4

Financials & Valuations (INR b)

Y/E March	2019	2020E	2021E
Sales	137.3	136.8	146.5
EBITDA	54.8	55.0	59.1
Adj. PAT	36.2	31.8	34.1
Adj. EPS (INR)	32.0	28.2	30.1
EPS Gr. (%)	35.6	-12.0	7.0
BV/Sh.(INR)	245.5	261.0	277.7
RoE (%)	9.3	11.1	11.2
RoCE (%)	6.8	6.4	6.7
Payout (%)	53.8	53.8	53.8
Valuations			
P/E (x)	5.2	5.9	5.5
P/BV (x)	0.7	0.6	0.6
EV/EBITDA (x)	3.6	3.5	3.2
Div. Yield (%)	6.2	7.6	8.1

Estimate change 

TP change 

Rating change 

CMP: INR165

TP: INR216 (+31%)

Buy

EBITDA miss driven by employee cost provisioning

- 2QFY20 revenue was 5% higher than est. at INR32.1b (-14% YoY), led by higher gas sale and higher than expected net realization.
- EBITDA was 12% lower than est. at INR12.4b (-16% YoY) due to higher employee cost (+37% YoY, +21% QoQ). Till 1HFY20, a total provisioning of INR4.4b has been made toward pay revision of Unionized Employees due from 1st Jan'17. Total other expenditure was lower at USD5.9/boe v/s USD9.4/boe in 2QFY19.
- PBT for the quarter was down 23% YoY to INR9.7b, led by higher depreciation cost of INR4.2b. Depreciation cost was at USD5.0/boe v/s USD4.4/boe in 2QFY19.
- Tax rate for the quarter stood at 35.6%, as company has not yet exercised the option to shift to a lower tax rate. PAT was 27% lower YoY at INR6.3b.
- For 1HFY20**, EBIDTA was down 10% YoY to INR26b and higher depreciation of INR8.1b (+16% YoY) resulted in PAT declining 20% YoY to INR12.5b.
- Production** of crude oil was 5% lower YoY at 0.82mmt, while gas was 7% higher at 0.75bcm. Total production was up 1% at 1.56mmtoe.
- Oil sales** were 5% YoY lower at 0.79mmt, while gas was 2% higher YoY at 0.66bcm. Total sales were down 2% YoY at 1.45mmtoe.
- Net realization** for the quarter stood at USD61.3/bbl v/s USD73.4/bbl in 2QFY19, with no subsidy burden during the quarter.
- Valuation and view:** We revise down our FY20/21 EPS estimate by 11%/10%, as the company is still in the process of evaluating the option of the lower tax rate.
- We model Brent price at ~USD67.7/USD70bbl and INR/USD at 71.3/73.8 for FY20/FY21. We expect EPS of INR28.2/INR30.1 in FY20/FY21. We believe USD60-70/bbl should not be a concern for return of the subsidy regime.
- The stock trades at 5.9x FY20E EPS of INR28.2. Dividend yield is attractive at 7.6%/8.1% for FY20/FY21. For OINL, we use SOTP-based fair value of 8x FY21E adj. EPS of INR26.8, and add investments of INR49 to arrive at a price target of INR216. Maintain **Buy**.

Quarterly Performance

Y/E March	FY19				FY20				(INR Million)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	FY19	FY20E	FY20	Var vs 2QE est (%)
Net Sales	33,905	37,436	35,140	30,869	33,734	32,136	35,177	35,779	1,37,350	1,36,825	30,652	5%
Change (%)	45.4	51.3	23.2	2.9	-0.5	-14.2	0.1	15.9	28.9	-0.4	-18.1	
EBITDA	14,084	14,746	15,215	10,793	13,532	12,429	14,879	14,145	54,838	54,985	14,062	-12%
Change (%)	61.1	45.7	24.3	34.8	-3.9	-15.7	-2.2	31.1	40.2	0.3	-4.6	
D,D&A	3,372	3,656	3,694	4,241	3,994	4,154	4,237	4,437	14,963	16,822	4,074	2%
Interest	1,124	1,257	1,216	1,198	1,235	1,208	1,204	1,101	4,795	4,748	1,225	-1%
OI (incl. Oper. other inc)	1,268	2,878	6,012	4,192	1,227	2,679	5,596	4,811	14,350	14,314	3,311	-19%
PBT before exceptionals	10,855	12,712	16,317	9,546	9,530	9,746	15,034	13,418	49,430	47,728	12,074	-19%
PBT after exceptionals	10,855	12,712	16,317	-722	9,530	9,746	15,034	13,418	39,162	47,728	12,074	-19%
Tax	3,823	4,092	3,983	1,363	3,282	3,473	4,961	4,191	13,261	15,908	2,753	26%
Rate (%)	35.2	32.2	24.4	14.3	34.4	35.6	33.0	31.2	26.8	33.3	22.8	
PAT	7,032	8,620	12,335	-2,085	6,248	6,272	10,073	9,227	25,901	31,820	9,321	-33%
Change (%)	56.2	33.4	74.9	-124.1	-11.2	-27.2	-18.3	-542.5	-2.9	22.9	8.1	
Exchange rate (INR/USD)	67.0	70.2	72.3	70.6	69.6	70.5	72.0	73.0	70.0	71.3	70.5	0%
Oil sales (mmt)	0.81	0.83	0.81	0.78	0.80	0.79	0.83	0.87	3.23	3.29	0.81	-2%
Gas sales (bcm)	0.60	0.65	0.65	0.62	0.61	0.66	0.63	0.56	2.51	2.46	0.63	5%
Net Oil Realization	72.0	73.4	66.7	61.8	66.3	61.3	68.8	68.8	68.5	66.3	60.7	1%

E: MOFSL Estimates

Swarnendu Bhushan- Research Analyst (Swarnendu.Bhushan@MotilalOswal.com); +91 22 6129 1529

Sarfraz Bhimani - Research Analyst (Sarfraz.Bhimani@MotilalOswal.com); +91 22 6129 1566

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

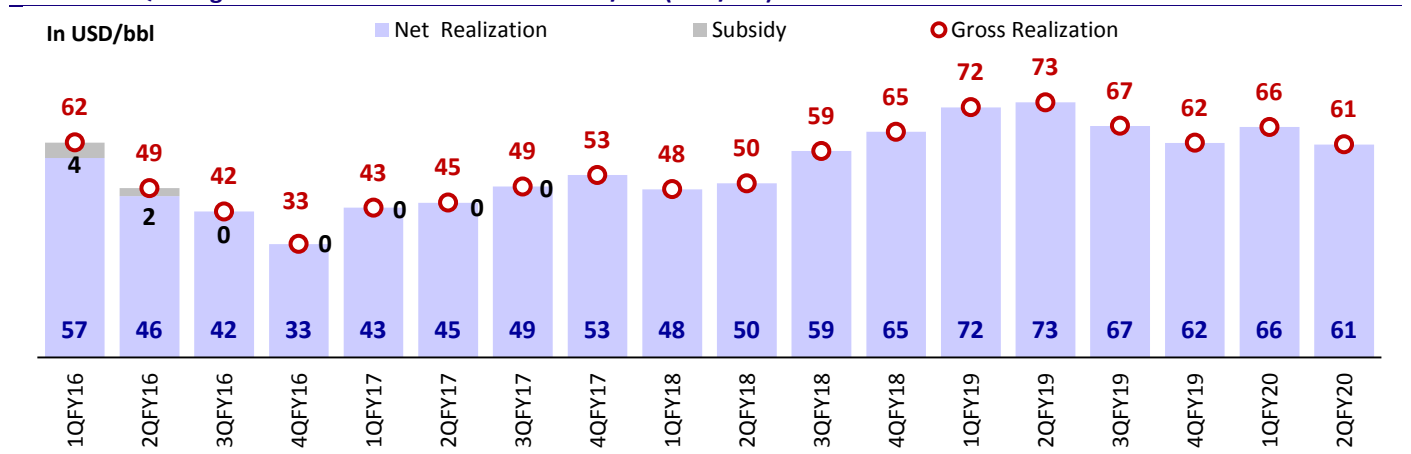
Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Exhibit 1: OINL Financial Summary

	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	2QFY20	YoY (%)	QoQ (%)
Production								
Oil (mmt)	0.84	0.86	0.84	0.79	0.81	0.82	-5%	0%
Gas (bcm)	0.67	0.70	0.70	0.66	0.71	0.75	7%	5%
Total prodn. (mmtoe)	1.51	1.55	1.53	1.45	1.53	1.56	1%	2%
Sales								
Oil (mmt)	0.81	0.83	0.81	0.78	0.80	0.79	-5%	-1%
Gas (bcm)	0.60	0.65	0.65	0.62	0.61	0.66	2%	8%
Total sales (mmtoe)	1.41	1.48	1.46	1.40	1.41	1.45	-2%	3%
Realization (USD/bbl)								
Gross Realization	72.0	73.4	66.7	61.8	66.3	61.3	-17%	-8%
Subsidy	-	-	-	-	-	-		
Net Realization	72.0	73.4	66.7	61.8	66.3	61.3	-17%	-8%
Net (INR/bbl)	4,824	5,154	4,820	4,360	4,614	4,322	-16%	-6%
Revenues (INRb)								
Oil	27.7	30.3	27.7	23.9	26.0	24.1	-20%	-7%
Gas	4.4	5.0	5.7	5.4	5.8	6.4	27%	10%
LPG	0.3	0.4	0.4	0.3	0.4	0.2	-63%	-61%
Condensate	0.1	0.1	0.1	0.1	0.1	0.1	-30%	21%
Transportation income	1.4	1.6	1.2	1.1	1.5	1.4	-11%	-1%
Total	33.9	37.4	35.1	30.9	33.7	32.1	-14%	-5%
Opex	19.8	22.7	19.9	20.1	20.2	19.7	-13%	-2%
EBITDA (pre-subsidy)	14.1	14.7	15.2	10.8	13.5	12.4	-16%	-8%
Subsidy	-	-	-	-	-	-		
Reported EBITDA	14.1	14.7	15.2	10.8	13.5	12.4	-16%	-8%
D,D&A	3.4	3.7	3.7	4.2	4.0	4.2	14%	4%
Interest	1.1	1.3	1.2	1.2	1.2	1.2	-4%	-2%
Other Income	1.3	2.9	6.0	4.2	1.2	2.7	-7%	118%
PBT	10.9	12.7	16.3	9.5	9.5	9.7	-23%	2%
Income tax	3.8	4.1	4.0	1.4	3.3	3.5	-15%	6%
PAT	7.0	8.6	12.3	8.2	6.2	6.3	-27%	0%
EPS	6.2	7.6	10.9	7.2	5.5	5.5	-27%	0%

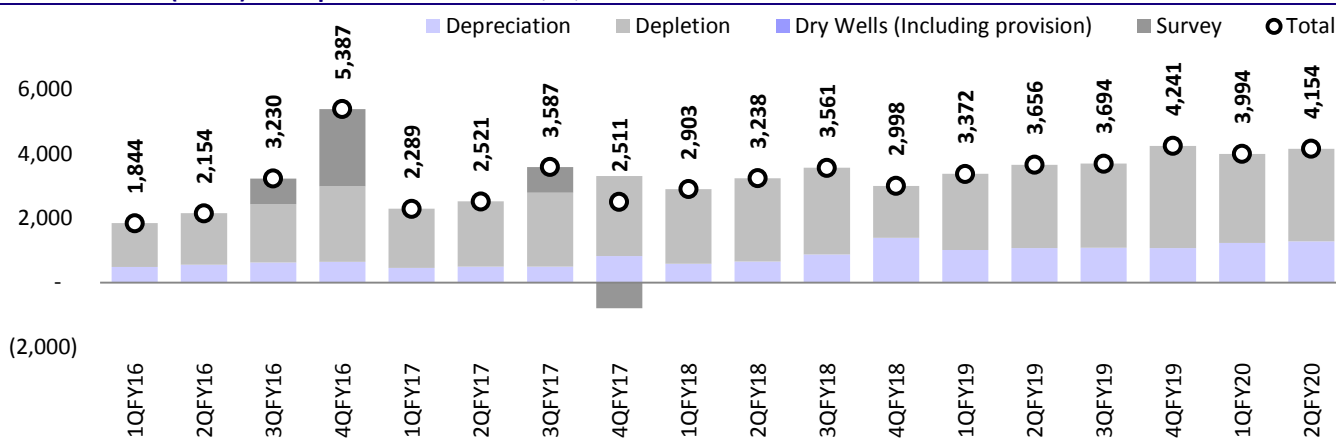
Source: Company, MOFSL

Exhibit 2: 2QFY20 gross and net realization at USD61.3/bbl (USD/bbl)



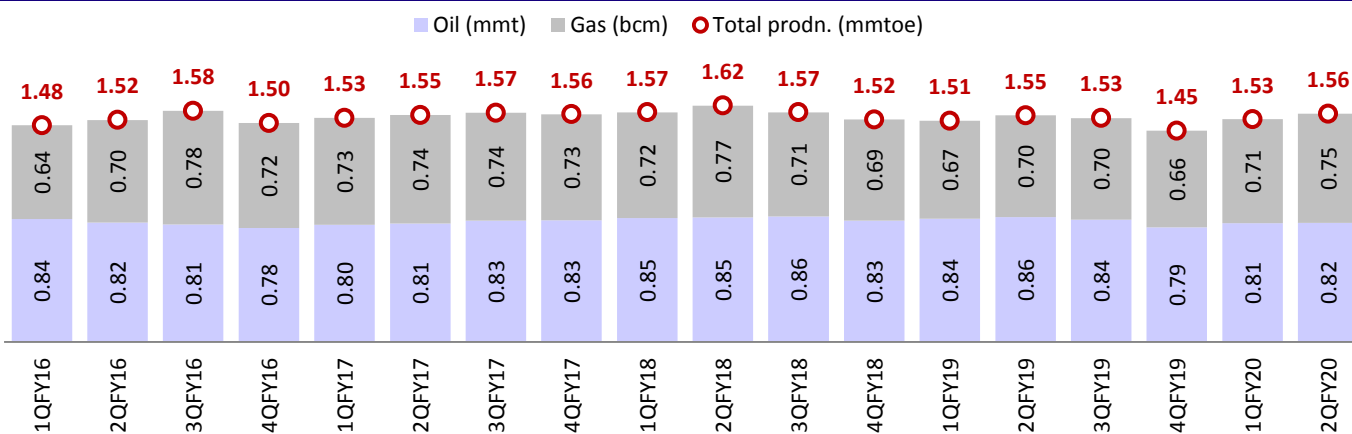
Source: Company, MOFSL

Exhibit 3: DD&A (INRm) was up 14% YoY and 4% QoQ



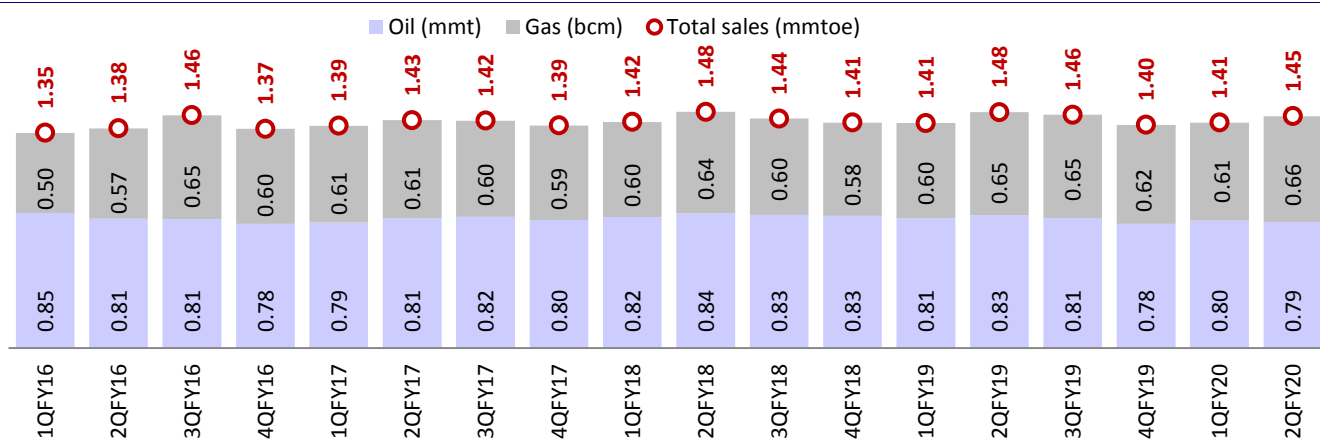
Source: Company, MOFSL

Exhibit 4: OINL's total production stood at 1.56mmtoe (+1% YoY, +2% QoQ)



Source: Company, MOFSL

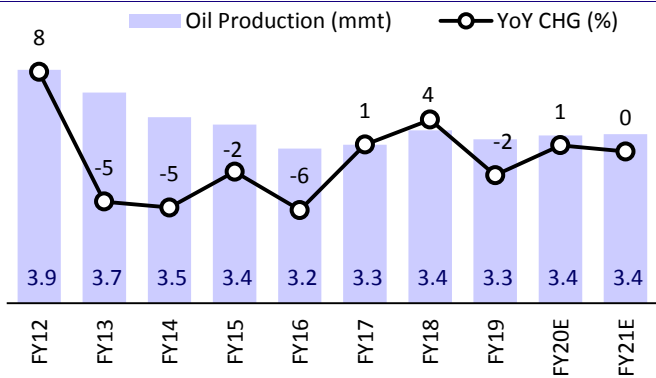
Exhibit 5: OINL's sales were down 2% YoY, up 3% QoQ



Source: Company, MOFSL

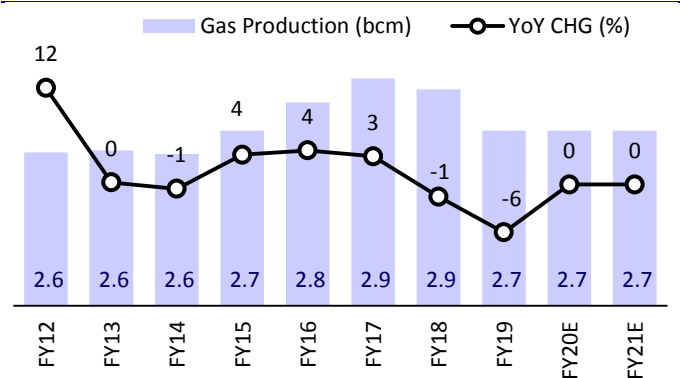
Story in charts

Exhibit 6: Oil production trend



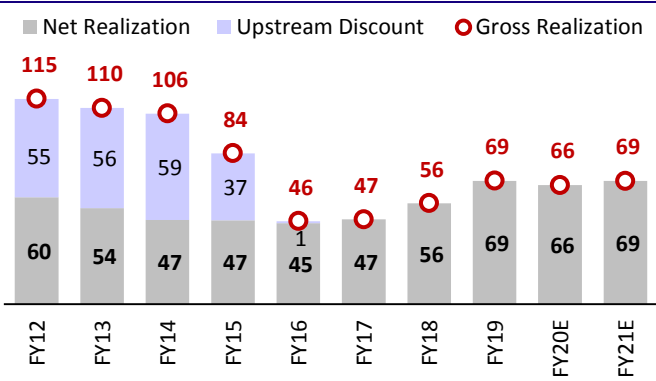
Source: Company, MOFSL

Exhibit 7: Gas production trend



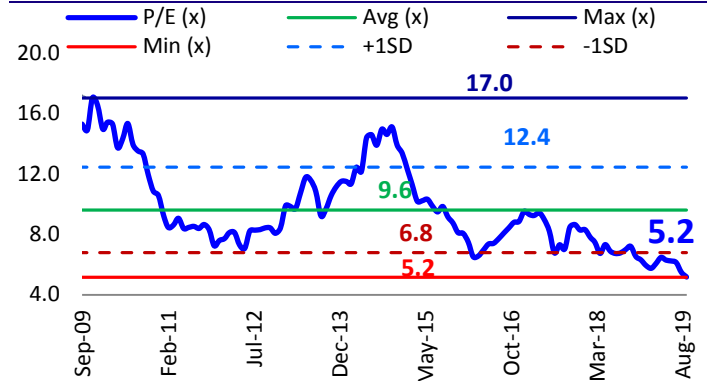
Source: Company, MOFSL

Exhibit 8: Realization trend of OINL (USD/bbl)



Source: Company, MOFSL

Exhibit 9: 1-year forward P/E for OINL (trades at ~45% discount to 10-year long-term average)



Source: Company, MOFSL

Financials and Valuations

Income Statement							(INR Million)	
Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
Net Sales	91,267	92,301	92,655	93,645	1,06,565	1,37,350	1,36,825	1,46,479
Change (%)	-4.2	1.1	0.4	1.1	13.8	28.9	-0.4	7.1
Change in Stocks	79	-191	258	-492	490	1,821	0	0
Production Costs	26,922	34,208	34,871	39,261	37,672	42,311	41,235	42,534
Statutory Levies	28,789	28,144	26,833	25,287	29,290	38,380	40,605	44,877
EBITDA	35,478	30,141	30,692	29,589	39,113	54,838	54,985	59,068
% of Net Sales	38.9	32.7	33.1	31.6	36.7	39.9	40.2	40.3
D,D&A	11,770	10,609	9,515	10,907	12,700	14,963	16,822	17,449
Interest	688	3,407	3,652	3,967	4,157	4,795	4,748	4,685
Other Income	21,084	17,971	18,847	18,266	14,842	14,350	14,314	14,139
Prior period & other adj.	0	0	2,151	11,517	0	10,268	0	0
PBT	44,105	34,095	34,220	21,463	37,098	39,162	47,728	51,073
Tax	14,291	12,185	11,190	5,976	10,419	13,261	15,908	17,023
Rate (%)	32.4	35.7	32.7	27.8	28.1	33.9	33.3	33.3
PAT	29,813	21,910	23,030	15,487	26,679	25,901	31,820	34,050
Adj. PAT	29,813	21,910	25,181	27,004	26,679	36,169	31,820	34,050
Change (%)	-16.9	-26.5	14.9	7.2	-1.2	35.6	-12.0	7.0

Balance Sheet							(INR Million)	
Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
Share Cap. (incl sh. suspense)	6,011	6,011	6,011	8,015	7,566	10,844	10,844	10,844
Reserves	2,01,070	2,33,656	2,43,183	2,82,890	2,71,528	2,66,608	2,84,194	3,03,014
Net Worth	2,07,082	2,39,667	2,49,195	2,90,905	2,79,094	2,77,452	2,95,039	3,13,858
Total Loans	97,827	82,646	91,328	89,475	73,656	72,668	78,077	78,077
Deferred Tax	13,142	17,589	21,806	30,795	34,390	34,127	34,127	34,127
Well Abandonment	-	-	-	-	-	-	-	-
Capital Employed	3,18,051	3,39,903	3,62,329	4,11,175	3,87,139	3,84,246	4,07,242	4,26,061
Gross Fixed Assets	43,062	73,164	80,104	1,06,669	1,35,722	1,49,026	1,69,026	1,89,026
Less: Depreciation	29,270	10,450	9,440	20,803	33,503	48,466	65,288	82,737
Net Fixed Assets	13,793	62,714	70,664	85,866	1,02,219	1,00,561	1,03,739	1,06,290
Capital WIP	9,727	16,660	18,049	18,936	9,881	12,674	21,638	30,551
Producing/pre-producing	52,040	10,663	11,116	15,442	17,380	20,719	21,755	22,843
Investments	1,14,566	1,37,680	1,44,530	2,19,504	2,27,856	2,20,029	2,20,029	2,20,029
Curr. Assets, L & Adv.								
Inventory	9,687	10,242	10,016	10,965	10,783	12,199	12,153	13,010
Debtors	4,657	23,775	13,252	10,056	14,078	13,135	13,085	14,008
Cash & Bank Balance	1,15,437	92,176	99,082	65,423	30,926	61,358	71,148	77,917
Loans & Adv. and Other CA	28,839	25,417	24,784	27,204	27,221	33,978	33,848	36,237
% of sales	31.6	27.5	26.7	29.0	25.5	24.7	24.7	24.7
Current Liab. & Prov.								
Liabilities	15,228	30,361	20,314	30,484	40,738	66,434	66,180	70,850
Provisions	15,466	9,065	8,849	11,736	12,464	23,973	23,973	23,973
Net Current Assets	1,27,926	1,12,186	1,17,970	71,427	29,804	30,264	40,081	46,349
Application of Funds	3,18,051	3,39,903	3,62,329	4,11,175	3,87,139	3,84,246	4,07,242	4,26,061

E: MOFSL Estimates

Financials and Valuations

Ratios

Y/E March	2014	2015	2016	2017	2018	2019	2020E	2021E
Basic (INR)								
EPS (Adj)	26.4	19.4	22.3	23.9	23.6	32.0	28.2	30.1
Cash EPS	36.8	28.8	28.8	23.4	34.8	36.2	43.0	45.6
Book Value	183.2	212.0	220.5	257.4	246.9	245.5	261.0	277.7
DPS	11.4	10.6	9.6	11.0	10.3	10.3	12.6	13.5
Payout (incl. Div. Tax.)	50.7	65.8	56.5	96.5	52.7	53.8	53.8	53.8
Valuation (x)								
P/E	6.3	8.6	7.5	6.9	7.0	5.2	5.9	5.5
Cash P/E	4.5	5.8	5.8	7.1	4.8	4.6	3.9	3.6
EV / EBITDA	4.8	5.9	5.9	7.2	5.9	3.6	3.5	3.2
EV/Sales	1.9	1.9	1.9	2.3	2.2	1.4	1.4	1.3
EV / BOE (1P Reserves) USD	6.0	7.7	4.2	4.5	5.0	4.3	3.8	3.6
Price / Book Value	0.9	0.8	0.8	0.6	0.7	0.7	0.6	0.6
Dividend Yield (%)	6.9	6.4	5.8	6.6	6.2	6.2	7.6	8.1
Profitability Ratios (%)								
RoE	14.9	9.8	9.4	5.7	9.4	9.3	11.1	11.2
RoCE	6.0	3.8	4.1	3.5	4.8	6.8	6.4	6.7
RoIC	21.6	14.6	14.7	13.0	16.8	25.3	27.6	28.9
Turnover Ratios								
Inventory (No. of Days)	39	41	39	43	37	32	32	32
Debtors (No. of Days)	19	94	52	39	48	35	35	35
Fixed Asset Turnover (x)	2	2	1	1	1	1	1	1
Creditor (No. of Days)	61	120	80	119	140	177	177	177
Leverage Ratio								
Net Debt / Equity (x)	-0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0

Cash Flow Statement

Y/E March	2014	2015	2016	2017	2018	2018	2020E	2021E
(INR Million)								
OP/(Loss) before Tax	44,105	34,095	34,220	21,463	37,098	39,162	47,728	51,073
Change in deferred tax	956	4,448	4,217	8,989	3,594	-263	0	0
Depreciation	11,770	10,609	9,515	10,907	12,700	14,963	16,822	17,449
Interest /Other Income								
Direct Taxes Paid	-14,291	-12,185	-11,190	-5,976	-10,419	-13,261	-15,908	-17,023
(Inc)/Dec in Wkg. Capital	-3,021	-7,521	1,121	12,885	7,125	29,973	-27	501
Other op activities								
CF from Op. Activity	39,518	29,446	37,883	48,268	50,099	70,574	48,615	52,000
(Inc)/Dec in FA & CWIP	-19,690	-25,088	-19,307	-31,323	-21,935	-19,437	-30,000	-30,000
Free Cash Flow	19,828	4,359	18,577	16,945	28,164	51,137	18,615	22,000
(Pur)/Sale of Investments	-95,995	-23,114	-6,851	-74,974	-8,352	7,827	0	0
Other In activities								
CF from Inv. Activity	-1,15,686	-48,201	-26,157	-1,06,297	-30,287	-11,610	-30,000	-30,000
Change in Equity	0	0	0	0	0	0	0	0
Inc / (Dec) in Debt	87,249	-15,181	8,682	-1,853	-15,820	-988	5,409	0
Others	-4,049	22,698	-2,682	38,639	-26,810	-15,957	0	0
Dividends Paid	-12,925	-12,023	-10,821	-12,416	-11,680	-11,586	-14,234	-15,231
CF from Fin. Activity	70,275	-4,505	-4,821	24,371	-54,310	-28,531	-8,825	-15,231
Inc / (Dec) in Cash	-5,893	-23,260	6,905	-33,658	-34,498	30,432	9,790	6,769
Add: Opening Balance	1,21,329	1,15,437	92,176	99,082	65,423	30,926	61,358	71,148
Closing Balance	1,15,437	92,176	99,082	65,423	30,926	61,358	71,148	77,917

E: MOFSL Estimates

Corporate profile

Company description

Oil India (OIL), established in 1959, is a 'Navratna' state-owned company, engaged in exploration, development, production and transportation of crude oil and natural gas in India. OIL has 2P reserves of 944mmboe, ~94% of these located in the north-east. It owns 1,157km of common carrier cross-country crude oil pipeline, and the 660km product pipeline and the 192km pipeline to Numaligarh refinery.

Exhibit 1: Sensex rebased

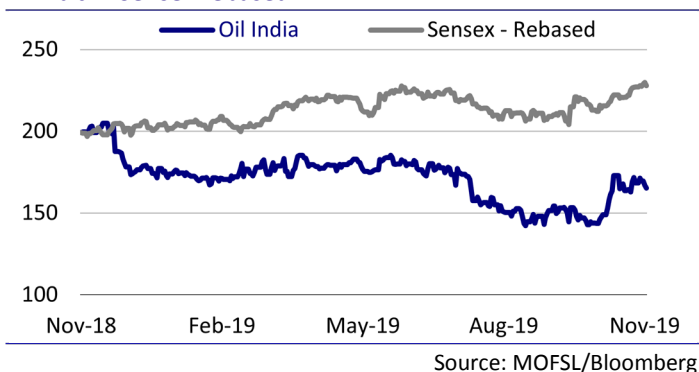


Exhibit 2: Shareholding pattern (%)

	Sep-19	Jun-19	Sep-18
Promoter	59.6	61.6	66.1
DII	18.1	16.4	14.3
FII	6.4	5.8	4.5
Others	16.0	16.1	15.1

Note: FII Includes depository receipts Source: Capitaline

Exhibit 3: Top holders

Holder Name	% Holding
LIFE INSURANCE CORPORATION OF INDIA	12.0
INDIAN OIL CORPORATION LIMITED	4.9
BHARAT PETROLEUM CORPORATION LTD	2.5
HINDUSTAN PETROLEUM CORPORATION LIMITED	2.5
ICICI PRUDENTIAL DIVIDEND YIELD EQUITY FUND	2.1

Source: Capitaline

Exhibit 4: Top management

Name	Designation
Utpal Bora	Chairman & Managing Director
Harish Madhav	Director (Finance)
Bishwajit Roy	Director (HR & BD)
P K Sharma	Director (Operation)
P Chandrasekaran	Director(Exploration & Devel.)
Ajaya Kumar Sahoo	Company Secretary

Source: Capitaline

Exhibit 5: Directors

Name	Name
Amina R Khan*	S Manoharan*
Asha Kaul*	Amar Nath#
Priyank Sharma*	Rohit Mathur#

Govt. nominee; *Independent

Exhibit 6: Auditors

Name	Type
B N Misra & Co	Statutory
Dhananjay V Joshi & Associates	Cost Auditor
Kumar Naresh Sinha & Associates	Secretarial Audit
N C Banerjee & Co	Statutory

Source: Capitaline

Exhibit 7: MOFSL forecast v/s consensus

EPS (INR)	MOFSL forecast	Consensus forecast	Variation (%)
FY20	28.2	31.0	-9.1
FY21	30.1	29.9	0.5

Source: Bloomberg

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

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months
- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com.CIN no.: L67190MH2005PLC153397. Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance Products and IPOs. Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.:022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.